



International Civil Aviation Organization

ICAO

**Thirtieth Meeting of the Regional Airspace Safety Monitoring
Advisory Group (RASMAG/30)**

Bangkok, Thailand, 14 – 17 July 2025

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

APAC CONSOLIDATED LTHM COMPLIANCE STATUS

(Presented by MAAR)

SUMMARY

This paper provides a consolidated overview of the Long-Term Height Monitoring (LTHM) compliance status across the Asia Pacific (APAC) Region. The assessment, drawing on data from five Asia Pacific RMAs – AAMA, CHINA RMA, JASMA, PARMO, and MAAR. As of 2024, the remaining monitoring burden in the APAC region stands at **324** aircraft, which represents an increase of approximately **6%** from the previous year. It is observed that five States – **DPRK (China RMA)**, **Afghanistan (MAAR)**, **India (MAAR)**, **Nepal (MAAR)**, and **Malaysia (MAAR)** – continue to have a remaining monitoring burden exceeding 30% of their total required aircraft.

1. INTRODUCTION

1.1 During the 7th Meeting of the Monitoring Agency Working Group (MAWG/7) in February 2020, APAC RMAs agreed to present a consolidated report of LTHM compliance status to the next RASMAG meeting. Being responsible for the largest number of APAC States, MAAR has been volunteering consolidating the LTHM compliance report since RASMAG/25.

1.2 The APAC Consolidated LTHM compliance status is also summarized in a presentation format attached to this paper.

2. DISCUSSION

Consolidated Results

2.1 The following table presents the consolidated results of remaining monitoring burden from all APAC RMAs, based on RVSM approval data as of **31 May 2025**:

Table 1: Summary of Remaining Monitoring Burden by States and RMAs as of 31 May 2025

RMA	State	Monitoring Requirement	# Remaining Monitoring Burden	% Remaining Monitoring Burden
MAAR	Afghanistan	8	4	50%
	India	246	113	46%
	Nepal	11	5	45%

RMA	State	Monitoring Requirement	# Remaining Monitoring Burden	% Remaining Monitoring Burden
	Malaysia	62	19	31%
	Bangladesh	14	4	29%
	Maldives	4	1	25%
	Pakistan	38	9	24%
	The Philippines	63	14	22%
	Mongolia	18	4	22%
	Cambodia	10	1	10%
	Viet Nam	39	4	10%
	China (Taiwan)	47	3	6%
	Thailand	61	1	2%
	Bhutan	5	0	0%
	Brunei Darussalam	7	0	0%
	China (Hong Kong)	31	0	0%
	China (Macau)	4	0	0%
	Lao PDR	2	0	0%
	Myanmar	6	0	0%
	Singapore	26	0	0%
	Sri Lanka	8	0	0%
MAAR Total		710	182	26%
AAMA	Indonesia	94	17	18%
	Australia	367	55	15%
	Papua New Guinea	13	1	8%
	Solomon Islands	2	0	0%
	Vanuatu	1	0	0%
AAMA Total		477	73	15%
JASMA	Japan	164	15	9%
JASMA Total		164	15	9%
China RMA	China	545	42	10%
	DPRK	4	4	100%
China RMA Total		549	46	8%
PARMO	New Zealand	28	4	14%
	Republic of Korea	90	4	4%
	Cook Islands	1	0	0%
	Fiji/Tonga	8	0	0%
PARMO Total		127	8	6%
APAC Grand Total		2,027	324	16%

2.2 The remaining monitoring burden in the APAC region in 2024 totals 324 aircraft, indicating a 6% increase compared to the previous year (RASMAG/29). The distribution percentages are as follows: MAAR accounts for 56%, AAMA for 23%, China RMA for 14%, JASMA for 5%, and PARMO for 2%, based on approval data as of 31 May 2025.

2.3 Following RASMAG/28 recommendations for State CAAs to report aircraft meeting the 1,000 flight-hour criteria, MAAR continues to receive updates from Bangladesh and Pakistan.

2.4 MAAR has been informed by some Indian operators that they are applying the 1,000 flight-hour criterion; however, no formal notification or corresponding aircraft list has been provided by the DGCA of India. While the authority to apply this criterion lies solely with the State, it would be helpful if such information could be formally shared with MAAR. This would support more accurate monitoring burden calculations and potentially reduce the monitoring burden number of the State.

2.5 From September 2024 to date, MAAR has delivered EGMU services for a total of 24 aircraft. This comprises 20 aircraft from India and 4 from the Philippines.

2.6 India's remaining monitoring burden stands at 46%, remaining relatively stable compared to 48% in the previous year (RASMAG/29).

2.7 MAAR proactively contacted Indian aircraft operators directly due to inconsistencies in the approval status updates from the DGCA of India. Upon observing that some aircraft showed no recent flight activity, MAAR assumed they might have been grounded or deregistered. This assumption was confirmed when operators responded, verifying that certain aircraft contributing to their burden had indeed been grounded, with intentions to conduct HKPM as soon as operations resumed. Several operators also confirmed that their aircraft had been deregistered. Based on these confirmations, MAAR updated its approval database to ensure the data remains accurate and up to date.

2.8 Furthermore, MAAR has identified several Indian aircraft operators on the burden list who are believed to have ceased operations. However, formal notifications regarding these entities and their associated aircraft have not yet been received from the DGCA of India. As a result, MAAR has not removed these aircraft from the monitoring burden, pending official confirmation from the State.

2.9 Nepal maintains a monitoring burden of 45% this year, consistent with its status in the previous RASMAG/29.

2.10 The aircraft operator responsible for the remaining monitoring burden from Nepal had initiated contact with MAAR to inquire about monitoring services. However, despite MAAR proposing available monitoring slots, no further response or confirmation has been received from the operator.

2.11 Malaysia's monitoring burden stands at 31%, likely elevated due to the CAA of Malaysia not updating the approval status of non-operational aircraft. MAAR has already informed CAAM of this issue; however, no response has been received to date.

2.12 The monitoring burden for the Philippines has significantly decreased from 40% reported in RASMAG/29 to 22% this year. This notable reduction can be attributed to two main factors. Firstly, a number of Philippine-registered aircraft successfully underwent HKPM. Secondly, several aircraft that previously contributed to the State's monitoring burden have been de-registered.

2.13 DPRK currently has a remaining monitoring burden of **100%**. However, DPRK has actively coordinated with China RMA and has plans in place to have its aircraft monitored for height-keeping performance within this year.

APANPIRG List of Deficiencies Consideration

Removal

Table 2: List of States Reducing Their Monitoring Burden to Below 30% as of 31 May 2025

State	2023	2024
The Philippines (MAAR)	40%	22%

2.14 As the remaining monitoring burden for **the Philippines (MAAR)** has significantly dropped to below 30%, MAAR would like RASMAG to propose to APANPIRG that the Philippines be removed from the APANPIRG List of Deficiencies in the State Responsibility to comply with the Annex 6 Height-Keeping Monitoring Requirement Annex 6 Part I Section 7.2.9 (12th Ed.) and Part II Section 2.5.2.10 (11th Ed.) for Non-compliance with LTHM requirement (remaining monitoring burden more than 30%)

Remain

Table 3: List of States Having Monitoring Burden 30% or More with the Same Status as in 2023

State	2023	2024
Afghanistan (MAAR)	50%	50%
India (MAAR)	48%	46%
Nepal (MAAR)	45%	45%

2.15 Since **Afghanistan (MAAR)**, **India (MAAR)**, and **Nepal (MAAR)** still have their remaining monitoring burden over 30%, MAAR would like RASMAG to propose to APANPIRG to consider keeping Afghanistan, India, and Nepal on the APANPIRG List of Deficiencies in the State Responsibility to comply with the Annex 6 Height-Keeping Monitoring Requirement Annex 6 Part I Section 7.2.9 (12th Ed.) and Part II Section 2.5.2.10 (11th Ed.) for Non-compliance with LTHM requirement (remaining monitoring burden more than 30%)

Inclusion

State	2023	2024
DPRK (China RMA)	0%	100%
Malaysia (MAAR)	25%	31%

Table 4: List of States Having Monitoring Burden 30% or More as New Entries in 2024

2.16 **DPRK (China RMA)** and **Malaysia (MAAR)** have their remaining monitoring burden over 30% this year, MAAR would like RASMAG to propose to APANPIRG to consider adding DPRK and Malaysia on the APANPIRG List of Deficiencies in the State Responsibility to comply with the Annex 6 Height-Keeping Monitoring Requirement Annex 6 Part I Section 7.2.9 (12th Ed.) and Part II Section 2.5.2.10 (11th Ed.) for Non-compliance with LTHM requirement (remaining monitoring burden more than 30%) **if their percentages remain 30% or more before the next APANPIRG (APANPIRG/36)**

Recommendations for States and Operators

2.17 APAC States are encouraged to inform their RMAs about any changes (such as transferred or de-registered aircraft) in a timely manner, as this will affect the number of aircraft required to be height-monitored.

2.18 APAC States are encouraged to provide their RMA with a list of aircraft meeting the 1,000 flight hour criteria. This will enable the RMA to subtract these aircraft from the remaining monitoring burden calculation, thereby decreasing the overall percentage.

2.19 APAC States should encourage aircraft operators to consider retrofitting ADS-B-Out capability where feasible, as it would provide a more efficient and more cost-effective solution for height monitoring in the long run.

2.20 The operators that have ADS-B-Out equipped aircraft but still have not fulfilled their monitoring requirements should consult the respective RMAs for other feasible arrangements.

2.21 APAC States are encouraged to actively engage in sharing their ADS-B data with their designated RMA as another means to alleviate the monitoring burden for aircraft operators.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) endorse the proposal in 2.14 - 2.16;
- b) note the information contained in this paper; especially the recommendations in 2.17 - 2.21 and
- c) discuss any relevant matters as appropriate.

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