2020 Asia Pacific

Consolidated Long-Term Height Monitoring Compliance Status Report

Asia Pacific EMAs/RMAs

Prepared by MAAR for RASMAG/26

Objective

To provide an overview of LTHM compliance status for the Asia Pacific region in terms of the remaining monitoring burden of States under each Asia Pacific RMA based on RVSM approval data as of **the 30th of June, 2021**

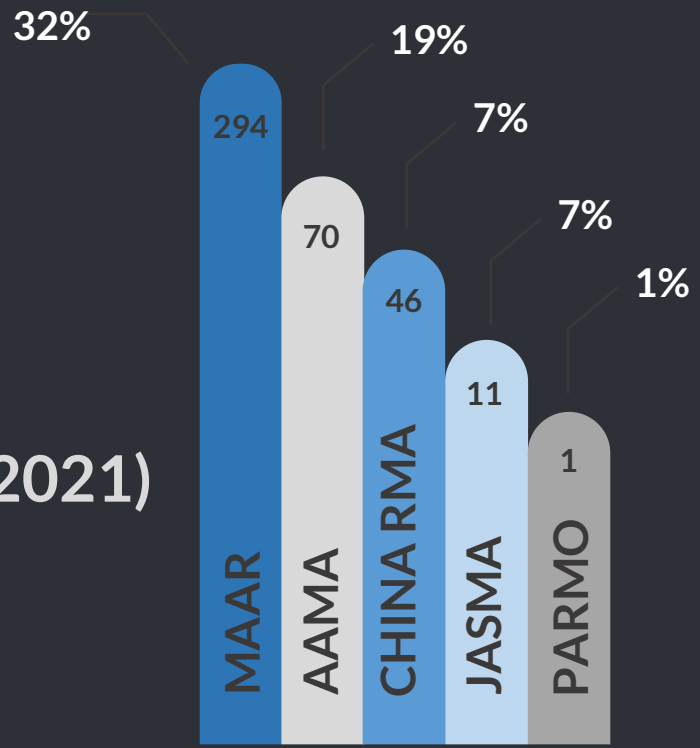
No. of Aircraft Remaining to be Monitored 2018-2020

In 2020, the total number of aircraft remaining to be monitored in APAC increased from 2019 by

5%

% = A/C remaining to be monitored / A/C required to be monitored

2020
(Up to June 2021)



# of Aircraft remaining to be monitored

% = # Aircraft remaining to be monitored /
# Aircraft required to be monitored

Total 422 aircraft

MAAR

294 aircraft remaining to be monitored

- Accounts for 70% of all aircraft remaining to be monitored in APAC
- Pakistan has the highest percentage of remaining monitoring burden at 61%.
- A number of aircraft operators from India, Malaysia and the Philippines contacted MAAR for AEROTHAI's EGMU service. However, due to the COVID-19 travel restrictions, the EGMU service has been on a hiatus.
- Some Indian and Afghanistan aircraft were EGMU monitored by MIDRMA.
- Nepal, Bhutan and Bangladesh, whose aircraft were monitored by AHMS on a regular basis, also have difficulties flying to airspace with AHMS coverage due to travel restrictions.

AAMA

70 aircraft remaining to be monitored

- Accounts for 17% of all aircraft remaining to be monitored in APAC
- Australia has a 13% decrease in remaining monitoring burden.
- Solomon Islands has 50% remaining monitoring burden. AAMA is working with the State to confirm the approval status of the outstanding aircraft. The remaining burden of Solomon Islands is expecting to be soon resolved.
- Indonesia has 41% remaining monitoring burden (2% decrease from RASMAG25).
    - Some of Indonesian registered aircraft were successfully monitored via AAMA's AHMS in April 2021.
    - However, a smaller number of flight due to the COVID-19 pandemic, inability to operate outside the Indonesian FIR and inaccessibility to the MAAR EGMU service contribute to the high outstanding burden still.

China RMA

46 aircraft remaining to be monitored

- Accounts for 11% of all aircraft remaining to be monitored in APAC (44% decrease from RASMAG25)
- A majority of China RMA aircraft have been successfully monitored via ADS-B ground-based system, which significantly reduced the monitoring burden.
- EGMU service can still be conducted domestically, which further helped reduce the remaining burden.

JASMA

11 aircraft remaining to be monitored

- Accounts for only 3% of all aircraft remaining to be monitored in APAC

PARMO

1 aircraft remaining to be monitored

- Accounts for only 0.2% of all aircraft remaining to be monitored in APAC
- Space-Based ADS-B (SBA) data was used to monitor several aircraft and could clear all unmonitored aircraft from the monitoring burden list.

States with >30% remaining burden

Same Status as in 2019

States	2019	2020
Pakistan (MAAR)	46%	61%
India (MAAR)	46%	51%
The Philippines (MAAR)	43%	48%
Nepal (MAAR)	45%	46%
Afghanistan (MAAR)	85%	42%
Indonesia (AAMA)	42%	41%
Bhutan (MAAR)	40%	40%

States with >30% remaining burden

New Entries in 2020

States	2019	2020
Solomon Islands (AAMA)	0%	50%
Bangladesh (MAAR)	14%	36%
Malaysia (MAAR)	26%	33%
Papua New Guinea (AAMA)	8%	31%
Mongolia (MAAR)	14%	30%

Deficiency List Proposal

- RASMAG/23 agreed that States with remaining burden >30% will be proposed to be listed on the APANPIRG List of Deficiencies (ANS).
- However, according to past correspondence, MAAR observed that operators did try to fulfil their height monitoring requirements but could not do so due to unavailability of EGMU services during the pandemic.
- Therefore, MAAR would like to propose delaying the deficiency list consideration until an alternative means of height monitoring becomes available.

Recommendations for States and Operators

- States should provide an update to their RMAs regarding any changes to their fleets as it will affect the monitoring burden calculation.
- Operators with ADS-B-Out capable aircraft that have not fulfilled their monitoring requirements should consult their RMAs regarding ADS-B height monitoring.