



ICAO

International Civil Aviation Organization  
**Twenty-Fifth Meeting of the Regional Airspace Safety  
Monitoring Advisory Group (RASMAG/25)**

Video Teleconference, 27 – 30 October 2020

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

### CONSOLIDATED LTHM COMPLIANCE STATUS

(Presented by MAAR)

#### SUMMARY

This paper presents the overview of Long-Term Height Monitoring (LTHM) compliance status in the Asia Pacific (APAC) Region, including assessments of five Asia Pacific RMAs - AAMA, CHINA RMA, JASMA, PARMO and MAAR. The assessment, which was based on RVSM approval data as of 31st August 2020, yields the remaining monitoring burden in the APAC region of **375**, 19% increase from 2018:

- States under CHINA RMA, JASMA, and PARMO have reduced remaining monitoring burden. China shows the biggest improvement in their compliance level (9% in 2019, reduced from 31% in 2018).
- States under MAAR and AAMA have increased remaining monitoring burden. Most aircraft remaining to be monitored could not obtain EGMU services due to travel restrictions during the COVID-19 pandemic.

## 1. INTRODUCTION

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. MAAR volunteered to prepare the first consolidated LTHM compliance report for RASMAG/25.

## 2. DISCUSSION

2.1 The APAC Consolidated LTHM compliance status is compiled in a presentation format, which is attached to this paper.

### APANPIRG List of Deficiencies

2.2 As Malaysia's remaining monitoring burden has significantly dropped to below 30%, MAAR would like RASMAG to propose to APANPIRG to remove Malaysia from the APANPIRG List of Deficiencies in the ATM/AIS/SAR fields for failure to demonstrate compliance with LTHM requirement in Annex 6 Part I 7.2.9 (10th Ed.) and Part II Section 2.5.2.10 (9th Ed.).

2.3 RASMAG/23 agreed to propose the States that fail to meet monitoring requirements with the remaining burden of 30% or more to be listed in the APANPIRG List of Deficiencies. In 2019 – 2020, **six States - Indonesia, India, Nepal, the Philippines, Bhutan and New Zealand** have remaining monitoring burden over 30%. However, the main factor was that the unavailability of EGMU services due to travel restrictions during the COVID-19 pandemic.

2.4 Due to the current challenges, MAAR would like to propose delaying the proposal to include States in the APANPIRG List of Deficiencies to next RASMAG. However, MAAR would like to urge all APAC States to notify their RMAs of the de-registered aircraft in a timely manner.

### **3. ACTION BY THE MEETING**

3.1 The meeting is invited to:

- a) note the information contained in this paper;
- b) endorse the proposal outlined in 2.2 and 2.4; and
- c) discuss any relevant matters as appropriate.

— END —



# Asia Pacific Consolidated Long-Term Height Monitoring Compliance Status

Presented By MAAR

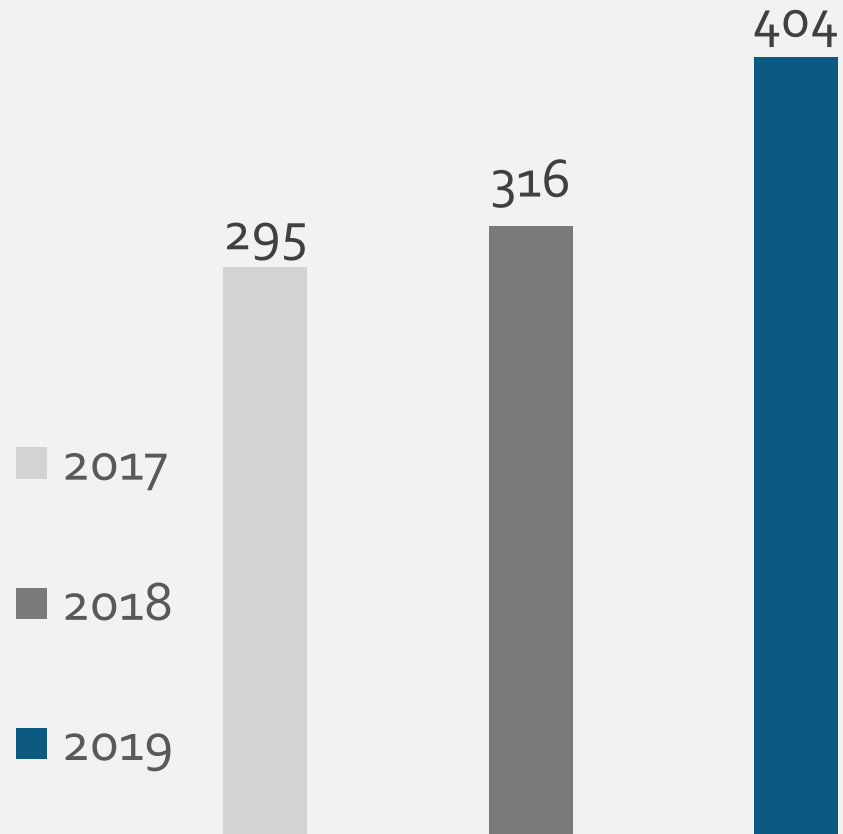
RASMAG/25



# Objective

To give 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 31st August 2020.

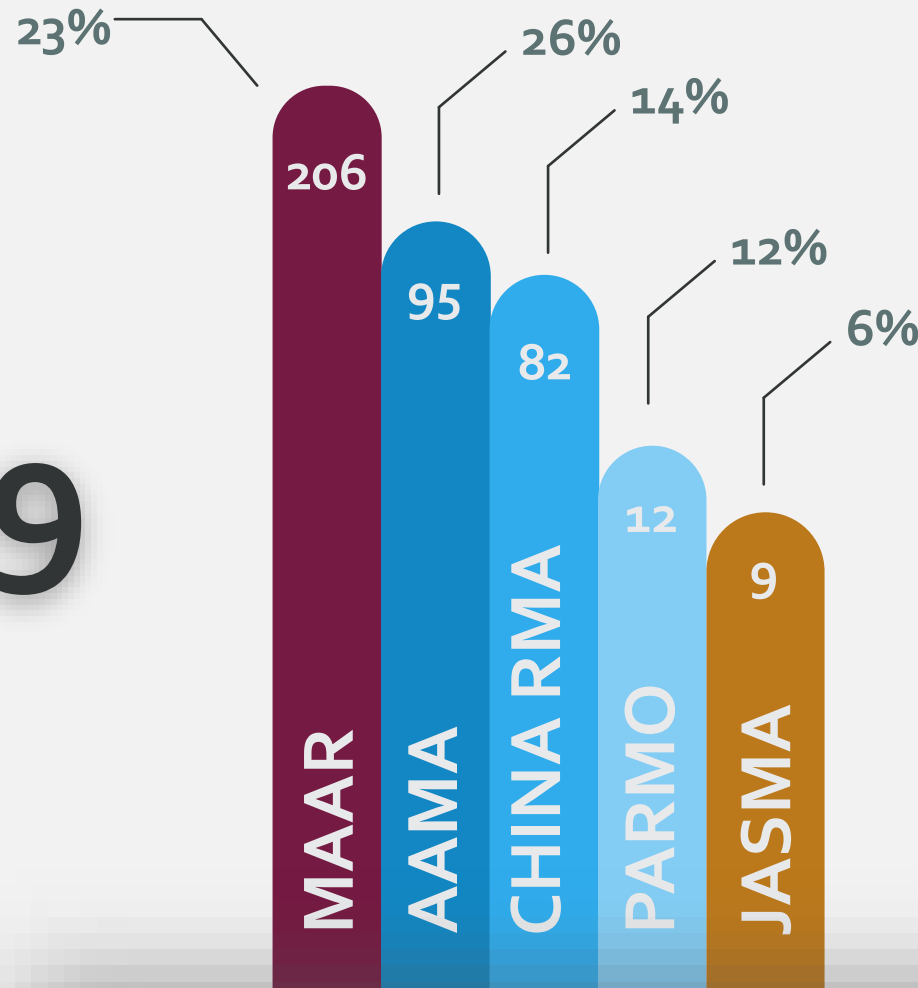
# No. of Aircraft Remaining to Be Monitored 2017-2019



In 2019, the total number of aircraft remaining to be monitored in APAC increased from 2018 by

**28%**

2019



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

Total **404** aircraft

# of Aircraft remaining to be monitored

# MAAR

## 206 aircraft remaining to be monitored

- Accounts for **51%** of all aircraft remaining to be monitored in APAC
- Pakistan CAA indicates that the flight hours of some aircraft have not reached 1,000 hours yet, so they consider these aircraft compliant to the MMR.
- Afghanistan has the highest percentage of remaining monitoring burden at 85%.
- Small fleet operators from India, the Philippines, and Afghanistan only have EGMU as the only height monitoring option. Due the travel restrictions during the COVID-19 pandemic, AEROTHAI is unable to provide them with the services.
- Nepal and Bhutan, whose aircraft on a regular basis conduct the monitoring via AHMS, also have difficulties with the operation during COVID-19.

# AAMA

## 95 aircraft remaining to be monitored

- Accounts for **24%** of all aircraft remaining to be monitored in APAC
- Australia has a 56% increase in remaining monitoring burden, predominantly due to military aircraft being unable to be detected using AAMA's ADS-B Height Monitoring System (AHMS).
- Indonesia has 54% remaining monitoring burden (22% increase)
  - Unavailability of EGMU monitoring for aircraft that are not ADS-B equipped
  - AAMA is currently engaging with Indonesian Authorities to establish sharing of aircraft specific ADS-B data so that more effective monitoring of Indonesian aircraft can take place.
- The remaining monitoring burden of Solomon Islands and PNG remains unchanged since MAWG/7 in January 2020.

# China RMA

## 82 aircraft remaining to be monitored

- Accounts for 20% of all aircraft remaining to be monitored in APAC
- The aircraft remaining to be monitored are those aircraft not equipped with ADS-B Out, which gives EGMU as the only remaining height monitoring option. Due the travel restrictions during the COVID-19 pandemic, EGMU service could not be performed for these aircraft.

# JASMA

## 9 aircraft remaining to be monitored

- JASMA has relatively very small remaining monitoring burden, only 9.
- Most of the remaining aircraft are operated by small operators, coast guard, and military, of which flight hours are not likely to have reached 1,000 hrs.

# Deficiencies: Removal proposal

% of remaining monitoring burden

State	2018	2019
Malaysia (MAAR)	38%	26%

Malaysia has updated a massive list of de-registered aircraft to MAAR, causing a decrease in monitoring burden.

# Deficiencies: Possible Inclusion Proposal

% of remaining monitoring burden

State	2018	2019
Afghanistan (MAAR)	38%	85%
*Indonesia (AAMA)	21%	54%
Pakistan (MAAR)	56%	46%
*India (MAAR)	25%	46%
*Nepal (MAAR)	0%	45%
*The Philippines (MAAR)	26%	43%
*Bhutan (MAAR)	0%	40%
*New Zealand (PARMO)	0%	33%

\* Indicates new entries according to RASMAG/23 (>30% → proposed to be listed on the APANPIRG List of Deficiencies)

However, inaccessibility to EGMU monitoring is one of the main causes for operators not being able to comply with HKPM.

This inclusion proposal could be delayed until the next RASMAG.



Q & A