



ICAO

International Civil Aviation Organization

**Thirty-First Meeting of the Regional Airspace Safety
Monitoring Advisory Group (RASMAG/31)**

Bangkok, Thailand, 29 June – 03 July 2026

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

NAARMO RVSM LONG TERM HEIGHT MONITORING BURDEN

(Presented by PARMO)

SUMMARY

This paper presents an assessment of the monitoring burden associated with the long-term height monitoring requirements for airframes for which the NAARMO is the responsible Regional Monitoring Agency (RMA). NAARMO RVSM approval records as of March 2026 were used to assess the monitoring burden.

1. INTRODUCTION

1.1 The North American Approvals Registry and Monitoring Organization (NAARMO), a service provided by the U.S. Federal Aviation Administration's William J. Hughes Technical Center for Advanced Aerospace, has served since 2003 as the Regional Monitoring Agency (RMA) for the airspace covering the United States, Canada, and Mexico.

1.2 To support compliance with the ICAO Annex 6 Long-Term Height Monitoring (LTHM) requirements, NAARMO maintains a database containing RVSM approvals and height-monitoring records for aircraft registered in States under its responsibility. The monitoring burden presented in this paper is based on the approvals recorded in the NAARMO database and the global monitoring data available at the time of preparation.

2. DISCUSSION

2.1 The NAARMO approvals database as of March 2026 was examined to determine the current NAARMO monitoring burden. First, the approvals for the countries under NAARMO responsibility (Canada and the United States) were compiled. Subsequently, U.S. aircraft were grouped by Operator(s), derived from aggregating the corresponding designators listed in the Letters of Authorization (LOA). Each airframe having a current full approval was paired with the appropriate monitoring category by applying the most current version of the Minimum Monitoring Requirements (MMR) table (as of 23 May 2025). Any aircraft types missing from the current MMR table were assigned to MMR Category 3: RVSM Monitoring Non-Group Aircraft. Finally, each airframe was then paired to its last successful monitoring (if it exists) occurring within the past 2 years from March 2024 to March 2026.

2.2 Due to incomplete information provided within the RVSM approvals data as well as the limited number of approvals received from the Federal Civil Aviation Agency (Agencia Federal de Aviación Civil, "AFAC") Mexico, a monitoring burden calculation was not performed for Mexico for this reporting period.

2.3 The total number of unique airframes identified as having a full RVSM approval from a State of Registry under NAARMO responsibility was **25,158** with a resultant monitoring burden of **13,461** and a total of **660** aircraft or **5%** of the total approved airframes not successfully monitored within the past two years. This total may include airframes under the 1,000-hour monitoring requirement; it is the responsibility of the aircraft operator to provide proof of compliance with the 1,000-hour requirement. **Table 1** provides a summation by State of Registry of airframes that require monitoring due to having no successful monitoring record within two years as of March 2026.

Table 1. Summary of NAARMO Monitoring Burden

State	Total # of Approved Airframes	Resultant Monitoring Burden (# Airframes)	Total # of Airframes Not Monitored within two years as of March 2026
CANADA	1,493	673	48
US – *Section 3	23,665	12,788	612
NAARMO Total	25,158	13,461	660

**Section 3 = Operators who operate in airspace where RVSM specific authorization is required.*

2.4 Each airframe having a current full RVSM approval was categorized under either Commercial or IGA operations. **Table 2** presents NAARMO monitoring burden summaries by type of operator and State of Registry.

2.5 For Canada there are **337** unique Canada IGA airframes. The remainder of airframes to be monitored is **25** or a burden of **8%** of the total of Canada IGA approved airframes. There are **1,156** unique Canada Commercial airframes. The remainder of airframes to be monitored is **23** or a remaining burden of **6%**.

2.6 For the U.S. there are **15,420** unique IGA airframes. The remainder of airframes to be monitored is **605** or a burden of **5%** of the total of U.S. IGA approved airframes. There are **8,245** unique U.S. Commercial airframes operated by **56** unique operators. The remainder of airframes to be monitored is **seven** or a remaining burden of **1%**.

2.7 The NAARMO has notified the responsible States regarding the airframes in this information paper.

Table 2. Itemized NAARMO Monitoring Burden

CANADA	Total # of Approved Airframes	Resultant Monitoring Burden (# Airframes)	Total # of Airframes Not Monitored within two years as of March 2026
IGA	337	304	25
Commercial	1,156	369	23
Total Canada	1,493	673	48
US	Total # of Approved Airframes	Resultant Monitoring Burden (# Airframes)	Total # of Airframes Not Monitored within two years as of March 2026
IGA	15,420	12,243	605
Commercial	8,245	545	7
Total US	23,665	12,788	612
NAARMO Total	25,158	13,461	660

3. ACTION BY THE MEETING

- 3.1 The meeting is invited to note the information contained in this paper.

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