

International Civil Aviation Organization

# The Twentieth Meeting of the Regional Airspace Safety Monitoring Advisory Group (RASMAG/20)

Bangkok, Thailand, 26-29 May 2015

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

#### PARMO ASSESSMENT OF NON-RVSM APPROVED AIRCRAFT

(Presented by PARMO)

#### **SUMMARY**

This working paper presents an assessment of non-State-approved operators using the Reduced Vertical Separation Minimum (RVSM) airspace overseen by the PARMO in the Pacific and a portion of North East Asia. The assessment process is described and the results for period from December 2014 are presented.

#### 1. INTRODUCTION

- 1.1 The Pacific Approvals Registry and Monitoring Organization (PARMO), a service provided by the U.S. Federal Aviation Administration's Technical Center, serves as the regional monitoring agency (RMA) for Pacific and for a portion of North East Asia airspace.
- 1.2 As part of the duties and responsibilities of an RMA (reference 1), the PARMO performs regular checks on the operator compliance with State approval requirements in Pacific and North East airspace where the RVSM is applied.
- 1.3 The purpose of this paper is to provide an assessment of operators who identified themselves as having State RVSM approval but for whom a record of RVSM approval was not found during the data collection period of December 2014.

#### 2. **DISCUSSION**

- 2.1 The PARMO receives an annual one-month traffic movement sample in addition to all of the large height deviation reports from the ATS providers in Pacific and North East Asia airspace. The traffic sample data (TSD) for December 2014 for Pacific and North East Asia airspace was received from five of the six FIRs under PARMO responsibility: Auckland (New Zealand), Incheon (Republic of Korea), Tahiti, Oakland (United States) and Anchorage (United States). The Nadi (Fiji) FIR did not provide a December 2014 TSD.
- 2.2 Appendix K of ICAO Doc 9937 (reference 1) contains the sample content and format for collection of sample of traffic movements. In this table the aircraft registration number is listed as optional. Therefore, the registration number is not available in some of the traffic samples. For the operations without a registration number, the operator-aircraft combination is used when matching the traffic data to the approvals.

- 2.3 The aggregate approvals database containing the approval records provided by the collective RMAs is used to verify the RVSM approval status of the operations identified in the traffic movement data sample. Updates to the aggregate database are provided by most of the RMAs on a monthly basis.
- 2.4 All civil aircraft operations observed in each of the December 2014 traffic samples were compiled into one master traffic sample, or superset, consisting of approximately 36,000 operations. The superset was compared against the collective approvals database as of 31 January 2015. The registration numbers and operator-aircraft combinations identified in the superset as asserting approval for operations in RVSM airspace ("/W" in Field 10 of the ICAO flight plan) were cross-examined with the collective approvals database. Any of these operations for which an RVSM approval was not found was placed on a list for further examination and verification.
- 2.5 The verification process involves the exploration of systematic reasons for removing entries from the list. These reasons include but are not limited to:
  - lags in State notification of approval to the RMA
  - lags in updates to the approvals database and the local version of ICAO Doc8585
  - mistakes and typographical errors in the original traffic data
  - code-sharing and lease arrangements between airlines
- 2.6 A total of 45 civilian operations from 8 States remain on the list of non-approved operations within RVSM airspace in the Pacific and the portion of North East Asia region under the PARMO responsibility following the initial verification process. These entries consist of 26 operator/aircraft type pairs for which no registration number is available in the traffic samples.
- 2.7 Table 1 contains the detailed summary of these results, including responsible RMA, State of registry, agency name, ICAO operator code and/or registration number, aircraft type, count of observation in the December 2014 traffic samples and traffic data source. These operations will be further investigated and the appropriate parties will be queried if no additional information is obtained. The results do not include Nadi since the TSD was not provided.
- 2.8 Experience has shown that the primary systematic reason for failure to match operations and approvals is a delay in State notification of the approval status of some operators to the appropriate RMA. Thus, the importance of timely notification by States of operator approval status to RMAs is emphasized by these results.

**Table 1.** RVSM operations within the PARMO responsibility for which RVSM approvals were not found

RMA	State of Registry	Agency Name	REG#	OPR	Aircraft Type	Dec 2014 Count of Operations	Data Source
AAMA	AUSTRALIA		VHFIZ		B350	2	TAHITI
AAMA	AUSTRALIA		VHPNM		E50P	2	AUCKLAND
AAMA	AUSTRALIA		VHLAA		DHC6	1	TAHITI
EUR_RMA	FRANCE		FHFIP		GLEX	1	ZAK
EUR_RMA	FRANCE		FOIQK		BE20	2	TAHITI
EUR_RMA	FINLAND	FINNAIR	FIN78		A333	1	ROK
MAAR	MALAYSIA	MALINDO AIRWAYS SDN. BHD.	9MLNP	MXD	B738	1	ZAK
MAAR	THAILAND		HSDBR		B738	1	ZAK
NAARMO	UNITED STATES	PRIME JET		JPT	GLF3	1	ZAK

RMA	State of Registry	Agency Name	REG#	OPR	Aircraft Type	Dec 2014 Count of Operations	Data Source
NAARMO	MEXICO		XAICU		LJ35	4	ZAK
NAARMO	MEXICO		XAGZZ		C25C	2	ZAK
NAARMO	MEXICO		XAJYL		LJ25	2	ZAK
NAARMO	UNITED STATES	SOUTHERN AIR TRANSPORT, INC.	SJM06	SJM	GALX	2	ROK
NAARMO	CANADA	NORTH CARIBOU FLYING SERVICE, LTD.	CFPDR	NCB	CL60	1	ZAK
NAARMO	UNITED STATES		N604ED		LJ60	1	ZAK
NAARMO	MEXICO		XACIA		C680	1	ZAK
NAARMO	MEXICO		XAJGC		LJ60	1	ZAK
NAARMO	MEXICO		XAJUL		H25B	1	ZAK
NAARMO	MEXICO		XAUTV		LJ25	1	ZAK
NAARMO	MEXICO		XBNZF		C650	1	ZAK
NAARMO	UNITED STATES	FEDERAL EXPRESS CORP. (LITTLE ROCK, AR)		FDX	B744	1	ZAK
NAARMO	CANADA	NORTH CARIBOU FLYING SERVICE, LTD.		NCB	CL60	1	ZAK
NAARMO	UNITED STATES	SOUTHERN AIR TRANSPORT, INC.		SJM	GLF4	1	ZAK
NAARMO	UNITED STATES	TATONDUK OUTFITTERS, LTD. D/B/A EVERTS AIR ALASKA / EVERTS AIR CARGO (FAIRBANKS, AK)		VTS	MD80	1	ZAK
PARMO	FRANCE	AIR TAHITI	FORVC		AT46	8	TAHITI
PARMO	FRANCE	AIRTAHITI	FORVB		AT46	4	TAHITI

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

- 3.1 The meeting is invited to:
  - a) note and review the contents of the PARMO traffic scrutiny work presented in this paper and
  - b) provide any relevant updates on the records contained within the results

## References

1. Doc 9937 - Operating Procedures and Practices for Regional Monitoring Agencies in Relation to the Use of a 300 m (1000 ft) Vertical Separation Minimum Between FL 290 and FL 410 Inclusive, International Civil Aviation Organization, First Edition - 2010.

-END-