Monitoring Operator Compliance with State Approval Requirements

ASE Workshop 2017

NextGEN

Prepared by:
North American Approvals Registry and
Monitoring Organization (NAARMO)
WJH Technical Center

FAA

Federal Aviation Administration

Presentation Overview

- RMA background - purpose

- Monitoring operator compliance with State approval requirements

- Traffic Data

- Summary of annual RVSM Approval Status

RMA Duties and Responsibilities Applicable to Monitoring RVSM Approvals

1. Establish and maintain a database of aircraft approved by the respective State authorities for operations within RVSM airspace in that region

8. Initiate checks of the "approval status" of aircraft operating in the relevant RVSM airspace, identify non-approved operators and aircraft using RVSM airspace and notify the appropriate State of Registry/State of the Operator accordingly

3. Take the necessary action with the relevant State and operator to:

   b) Verify the approval status of the relevant operator

Reference: ICAO Doc 9937, Appendix A

Monitoring Operator Compliance with State Approval Requirements (Traffic Scrutiny)

- When conducting compliance monitoring, the filed RVSM approval status shown on the flight plan of each traffic movement is compared to the database of State RVSM approvals.

- Accomplished through systematic analysis of air traffic movement data and airframe approval records

- When a flight plan shows an aircraft as RVSM-approved, but the approval is not recorded in the database, the appropriate State authority should be contacted for clarification of the discrepancy.

- An RMA is not a regulatory authority, it is the responsibility of the State authority to take appropriate action should an operator be found to have filed a false declaration of RVSM approval status.

FAA
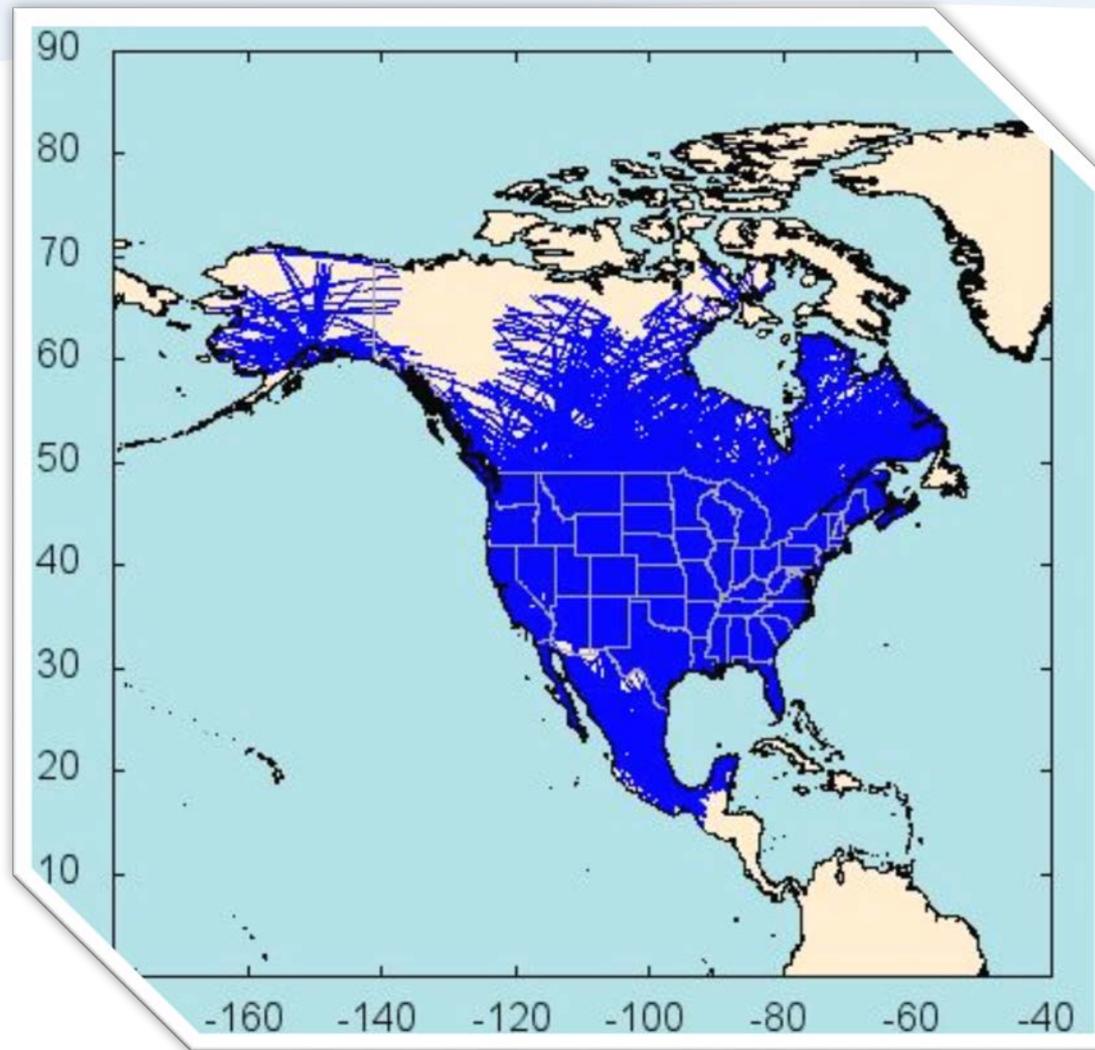
Next**GEN**

Traffic Movement Data

- The FAA's Traffic Flow Management System (TFMS) merged with NASQuest is the source for the air traffic movement data used for the traffic scrutiny

  - TFMS processes all available data sources such as flight plan messages, flight plan amendment messages, and departure and arrival messages

  - TFMS records containing position and flight plan data are used for the traffic scrutiny

  - TFMS includes operations in Canadian and Mexican airspace

  - TFMS records do not always include aircraft registration number. Those that do not are merged with NasQuest to obtain registration. NasQuest is a database of Common Message Set (CMS) data from 20 Air Route Traffic Control Centers.(ARTCCs)

FAA

Next**GEN**

TFMS Data Coverage – North America

Source data: Feb 2016

December 2016 Traffic Scrutiny Results

- In preparation for the Regional Monitoring Agency Coordination Group (RMACG/12) in May 2017, a traffic scrutiny survey was conducted for all North American operations observed in the December 2016 traffic sample. There were a total of 373,416 Operations within RVSM airspace in December 2016.

State of Registry	Airframes with Approval Not Identified by **December 2016**	
United States	1356	0.36%
Canada	238	0.06%
Mexico	613	0.16%

FAA

NextGEN

Verification

- This process involves the exploration of systematic reasons for removing entries from the list, including:

  - ✦ Lag in State notification of approval to the RMA

  - ✦ Lag in updates to the approvals database

  - ✦ Mistakes in the original traffic movement data

  - ✦ "Code-sharing" between airlines

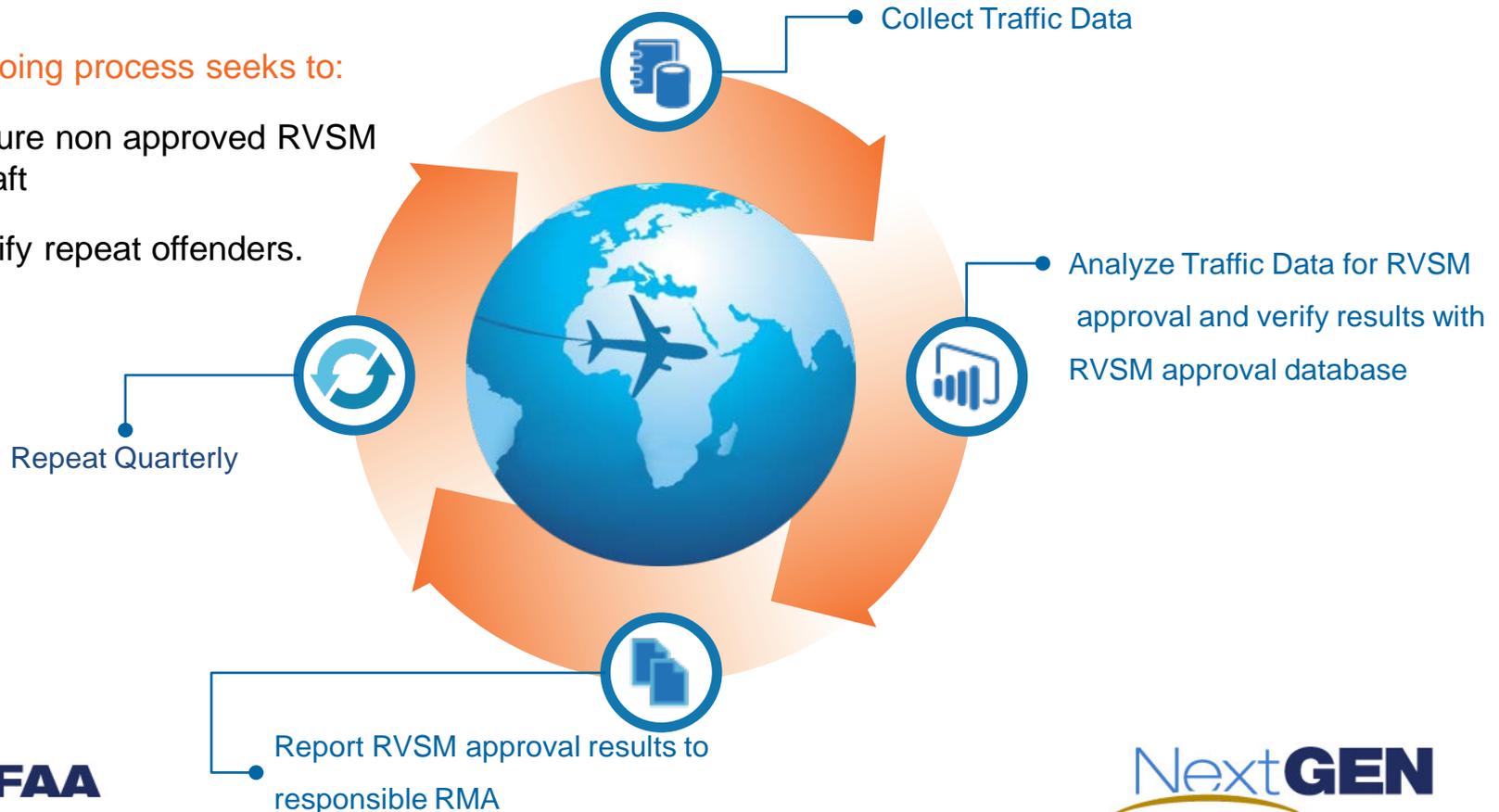 - ✦ Newest operator codes not contained in reference sources

Summary

Monitoring RVSM approval records is an constant process. The number of airframes included in the December 2016 traffic scrutiny results require ongoing coordination to reconcile the remaining airframes in question. NAARMO conducts quarterly RVSM approval monitoring to help determine repeat offenders.

This ongoing process seeks to:

✓ Capture non approved RVSM aircraft

✓ Identify repeat offenders.

Collect Traffic Data

Analyze Traffic Data for RVSM approval and verify results with RVSM approval database

Repeat Quarterly

Report RVSM approval results to responsible RMA

FAA

Next**GEN**