



## CIRCULAR 02-2019

### AFI RVSM LONG TERM MINIMUM MONITORING REQUIREMENTS

Long Term Minimum Monitoring Requirements is an ongoing RVSM height monitoring program which is a requirement for the maintenance of RVSM safety. It should be recalled that States shall ensure that the Globally accepted Minimum Monitoring Requirements, incorporating the ICAO Annex 6 Standard, Operation of Aircraft, as published by Regional Monitoring Agencies, including ARMA are continuously met.

ARMA is periodically made aware that some States and Operators do not always fully understand the Long Term Minimum Monitoring Requirements and associated processes. This circular serves to provide a brief overview for enlightening those States and Operators of the requirements.

As in all Global RVSM regions height monitoring data, information, requests relating to height monitoring are co-ordinated and managed by the appointed RMA for the region and in the case of AFI this is ARMA. Requests made by AFI States and Operators to RMA's outside of AFI will be referred back to ARMA.

Height Monitoring in the AFI region will be accomplished via the GMU method for those aircraft not overflying terrestrial based monitoring units in other regions. The ARMA now provides height monitoring and receives additional support from African Express based in Nairobi in meeting the height monitoring demand in the Africa Indian Ocean Region and African Express operates under the jurisdiction of ARMA.

The following should be emphasized to the benefit of States and Operators alike:

- Height Monitoring prior to the issue of RVSM Operational is not a requirement.
- All operators that operate or intend to operate in airspace where RVSM is applied are required to participate in the regional RVSM monitoring program. This program monitors the height-keeping performance of aircraft in order to meet regional safety objectives. In their application to the appropriate State authority for RVSM approval, operators must show a plan for meeting the applicable monitoring requirements. Initial monitoring should be completed as soon as possible but not later than 6 months after the issue of RVSM approval and thereafter as directed by the regional RVSM monitoring program. Note: Recurrent height monitoring in AFI shall take place once every 24 months or 1000 flight hours per nominated aircraft whichever the longer. Ad hoc height monitoring in the interests of RVSM safety due to extra ordinary circumstances can be planned in conjunction with the relevant CAA.
- Monitoring data obtained from RVSM monitoring programs from other regions can be used to meet regional monitoring requirements. The RMA's, which are responsible for administering the monitoring program, have access to monitoring data from other regions and will coordinate with States and operators to inform them on the status of individual operator monitoring requirements.
- If an operator adds new RVSM compliant airframes of a type for which it already has RVSM operational approval and has completed monitoring requirements for the type in accordance with the Minimum Monitoring Requirements, the new airframes are not required to be monitored. If an operator adds new RVSM compliant airframes of an aircraft type for which it has NOT previously received RVSM operational approval, then the operator should complete monitoring in accordance with the requirements.
- The requirement for GMU monitoring flights is 30 - 45 minutes level cruise at an RVSM flight level, (FL290 - FL410 inclusive). The straight and level cruise portion should be conducted within the aircrafts normal operating envelope and with an absolute minimum of heading changes. Whilst small heading changes are allowed, large deviations from track may increase the potential for invalid raw data. There is no need for a speed decrease or any other abnormal aircraft attitude. Only the altimetry system performance in the RVSM airspace is relevant for this program. The flown profile in this section must be a horizontal flight at the same altitude without any climbs or descents. The horizontal flight path (ground track) must not show any turns, since turns will result in an increased wing load resulting in an increased angle of attack, which might influence the airflow around the static ports. Additionally, the autopilot will be forced to increase the thrust of the engines to compensate the additional drag due to the increased attack angle. This may lead to a control process that also could influence or affect the height keeping performance of the aircraft.
- GMU Height Monitoring flights can be scheduled for normal revenue flights or dedicated flights for this purpose. Flights are weather dependent. The GO/NO GO decision is made 24 hours prior to the flight taking place, based on the British MET Office forecast specifically developed for the AFI region and GMU flights in particular. Frontal

patterns, wind speed and turbulence areas in the region are forecast enabling the GMU management organization to ensure that the route of flight does not cross or parallel too closely the area of frontal activity which can corrupt the collected raw data. Other available weather forecast charts produced by the operator have no bearing on the GO/NO GO decision as these charts may not show the required information needed for this decision. Flights undertaken in spite of MET NO GO decisions at the operator's request may or may not be approved.

- Flights undertaken on the insistence of the operator whilst ignoring the unfavourable weather conditions will be fully responsible for the invalid results and will be required to re-fly the follow –up mission at their own cost.
- Operators are requested to refrain from contacting African Express directly for height monitoring results as African Express will not release this information. All height monitoring results will be forwarded to the ARMA by CSSI and released officially to the applicable operator by the ARMA. Results will not be released by ARMA until payment is made in full.

In the event that States and Operators require further information please dispatch an email to [afirma@atns.co.za](mailto:afirma@atns.co.za) and [armad@atns.co.za](mailto:armad@atns.co.za) and an applicable response will follow. Further to this it is recommended that the ARMA webpage should be periodically visited by opening the following webpage [www.atns.co.za/afi-rvsm](http://www.atns.co.za/afi-rvsm)

In order to enhance RVSM safety the accurate and comprehensive monitoring of altimetry systems of approved RVSM aircraft as per the above requirements is essential.

RVSM vigilance should be maintained at all times.

END