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INTERNATIONAL CIVIL AVIATION ORGANIZATION
ATM COMMITTEE OF THE GREPECAS ATM/CNS/ SUBGROUP

SECOND MEETING OF THE RVSM TASK FORCE
(San Jose dos Campos, Sao Paulo Brazil, 8 to 12 July 2002)

(Presented by Colombia)

Agenda Item 4: Study and develop the necessary procedures to accomplish the system performance monitoring.

Proposal of the altitude monitoring method, based on the SSR MODE C

Summary

This working paper presents a proposal of the altitude monitoring method, based on the SSR Mode C.

1 Introduction

1.1 Our CAR/SAM Region, is not characterized by possessing abundant economical resources. It is because of this reason that we should achieve the maximum possible efficiency of our limited resources. Though the commitment of the States is evident, due to the growing demands of the users of the international aviation, we have to be aware of the fact that not always we can advance at the same rate as the NAM or EUR Regions, since in most cases, we do not have the same technological development or financial capacity.

1.2 On the other hand, we have the necessary elements to obtain similar results with current tools and at a lower cost.

2 Analysis

2.1 Colombia accomplishes periodically altimeter checkups for the aircraft, achieving to determine which of them are out of tolerances. A similar checking methodology would be led in the following way:

a) The precision in the indication of manner C of an aircraft that is found en-route leveled is verified.

b) Known the value of the atmospheric pressure QNH of a specific point that will be reference for the en/route navigation (VOR, NDB), and under radar alertness, SSR with manner C, it is requested to an aircraft to fly on the vertical of said point, that momentarily adjusts to the current QNH of the station

c) The manner reading mode C with the new adjustment. Is observed and registered.

d) It is recalled to the pilot that he must adjust again to standard pressure.

e) The altitude reported by the pilot is registered

f) The distance between the isobar standard and the isobar of the QNH station is calculated

g) It is determined which should the altitude of the aircraft be

h) It is compared with the reading indicated by the radar in manner C

i) The obtained data is incorporated into a database.

3 Suggested action

3.1 The meeting is asked to evaluate the validity and reliability of the method and to consider the possibility of Colombia accomplish crossed monitoring with HMU or GMU methods in our airspace, since it has modern radar system and total coverage in the territory and a strategic location that allows us to monitor a lot of the region fleet.