PROPOSAL FOR IGC PLENARY 2015

by Poland

Subject: changing GPS altitude limits for Position Recorders (SC3)

It is proposed that rule A-7 in Appendix to Chapter 4 of SC3 should read (changes highlighted):

A-7 **Altitude** Where the type of PR does not record pressure altitude, GPS altitude evidence may be used for a flight provided that a 100 metre or 10% error margin (whichever is greater) is applied to all pressure height requirements of the Code (example: the gain of height is at least 1100 metres for Silver altitude) and it can be shown that the GPS altitude figures are reliable to be used for measurement purposes.

Reasons supporting proposal:

In certain meteorological conditions (especially high temperature) GPS-calculated altitudes ("geometric altitude") may have its <u>vertical gradient</u> differ significantly from barometric data. As barometric values are used as basic reference in aviation, GPS altitude anomalies should not allow a pilot to achieve result which would not be valid with barometric data.

Present "100m rule" covers both this problem and GPS accuracy for 1000m gains and loses, however is not sufficient for 3000m gain. Proposed additional "10% rule" would require all 3000m gains to be 3300m if measured by GPS only. 1000m gains and all lost of height requirements will remain unchanged.

Note:

This proposal is not meant to change any of HAFR rules and procedures.