



## **GAC PLENARY MEETING Cordoba Spain 2013**

### **Flight Recorder Report**

#### **Flight Recorder Approvals:**

There were no new flight recorders subject to approval.

I would like to share some experience gained during the 21st World Precision Flying Championship.

- We noticed 4 failures of GNNS loggers during the whole competition.
- All types of loggers were represented.
- In all the four cases, the backup logger was okay so that the flight could be rated. No flight was lost because of a logger failure.
- One logger was switched on shortly before take-off. The time to determine a valid position was too short (up to 15 minutes are required in some cases) and passing the take-off gate (centre of runway) was not recorded. However, we rated this gate as passed as it is physically not possible to miss this gate.
- Time to download the GAC files varies between 30 seconds and 4 minutes. As far as the Air Observer Loggers are concerned, it took too much time to download the file. This resulted in a waiting time for some of the competitors. Nowadays, it should be possible to download the file within less than one minute.
- For most of the loggers, we had to install a complete set of software which is not really necessary. I already contacted the logger manufacturers and asked for a small software just capable of downloading the last flight and creating the GAC file. The Aflos Reader is a good example for this kind of software.

Many thanks for the input from Martin Hrivna.

For a look into the future, I am currently checking the possibility of using the new SBAS (Satellite Based Augmentation System) technology, implemented as WAAS (Wide Area Augmentation System) in the U.S. and as EGNOS (European Geostationary Navigation Overlay System) in Europe, for our sport. This would not only improve the accuracy but also the reliability of position determination considerably.

In future, it will be more and more difficult to find airplanes for our sport. The good old Cessna 152 will be replaced by more modern aircraft in the years to come. I know this will not happen tomorrow but we should have a look into this subject now. Every new aircraft is well equipped with modern technology such as primary flight displays, integrated navigation and communication systems, traffic avoidance systems with ADS-B and so on. It is very difficult and in some cases not even possible to deactivate the electronic equipment without impacting flight-essential information. I highly recommend adjusting our rules and regulations to these new-generation aircraft.

#### **FAI website:**

#### **Section GNNS Flight Recorders:**

This section has now been linked to Annex 4. This document is approved and valid. Only the instructions for sending an application for approval of GNSS equipment are still referring to Jan Hanekom's e-mail address. This should be easily changed.

A handwritten signature in blue ink, appearing to read 'R. Grunwald'.

Ralf Grunwald