

## **Report from Mr. Heinrich Schawalter, Chairman GAC – Air Nav Race Subcommittee, for the GAC plenary meeting 2009 in Palma**

The developing team for the Air Navigation Race, consisting sole of Swiss, performed a great job during the last 12 month. During hundreds of working hours all pending problems had been solved in a most competent manner. All involved persons worked for no money in order not to charge the tight GAC budget of 10'000 CHF. Even transportation, food and accommodation were paid by the team members out of there own pocket. All of you, having experience in software planning and development, know the price of such voluminous software. I'd like to express my thanks to my substitute Maurice Ducret, to the specialist for AutoCAD John Ducret, to Martin Frieden and his students from the Technical University of Berne and to Esther Rimensberger, president of PFA (precision flying association) Switzerland, and here pilots.

The development of the software for Air Navigation Race was divided in 2 phases. At first phase1 was generated and tested. This phase 1 consisted of the development of the evaluating software which, with the help of AutoCAD and with WGS84 coordinates, automatically calculates adequate corridors and transfers them onto the competition map. Further all the organisation software is part of this phase 1 including automatic analysis, scoring and ranking list.

At the end of phase 1 also phase 2 was started together with on other team of the Technical University of Berne. This phase 2 got the label "Air Navigation Race LIVE". Different systems for the transfer of data had been evaluated. To minimize the costs a mobile wireless system was settled. The selected GPS/GSM tracker was tested and it met the requirements. The software shows the online sent data from the GPS/GSM tracker together with the defined corridors and calculates a provisional online ranking list. To prevent from possible cheating the data are presented on a big screen with a defined time shift. The basis for the presentation is Google Map. Google Map gives the possibility to view the Air Navigation Race in 2D and 3D. Additional it contains features like persecution mode or free choice of the eye point.

On 29<sup>th</sup> of August 2009 the approval test took place at Birrfeld airport (LSZF) in Switzerland. With 4 airplanes, piloted by members of PFA Switzerland, a real competition was held. ANR LIVE created an unbelievable racing atmosphere, the spectators were fascinated and the pilots showed their enthusiasm! The balance-sheet of this test: complete success!!

Rules and Regulations had been adapted continuously. So we like to present you version 9 like binding version.

To carry out a competition you will need the necessary software including operating manual. Both, the software and the manual, will be made available on the FAI server under conditions defined by the GAC. Maurice Ducret is convinced that the software will be installed on the FAI server by February 2010.

Air Navigation Race was also officially presented to the delegates of AeCS (Aero Club of Switzerland). They have been fascinated.

In 2010 Switzerland will celebrate "100 years of aviation". With ANR LIVE the Air Navigation Race will have a leading position in media presentation. The first Swiss Championship in Air Navigation Race will be held on 25<sup>th</sup> and 26<sup>th</sup> of June at Biel-Kappelen airport (LSZP). It would be desirable to have somewhere a European or even a World Championship in 2010. In 2011 Air Navigation Race will be present at the World Air Games.

Zürich, November 02, 2009

Heinrich Schawalder, Chairman