IGC Agenda 2008 Item

Year ? Proposal 2008 – Standards in Air-to-Air data communications

This proposal by FIVV asks for a declaration of interest by the FAI Gliding Commission about the **creation of a common, stable standard in data communications over radio frequencies.** The IGC might as a consequence assign such objective to one of the existing committees (for example, the GFAC), or establish a new committee, and/or promote the communications standard as a desirable objective for the FAI’s TCAN (airspace and navigation).

Traffic and Airspace

- In the last few years, new devices such as the Flarm have become available, that broadcast information about position and flight path over radio frequencies, and compare such data in order to provide a new element of awareness to the pilot.
- The airspace structure is changing and becoming more and more intrusive, limiting the space available for gliding activities. Access to such areas is (or, should be) easier if gliders were equipped with position reporting devices (XPDR, ADS-b).
- The trend is clearly set towards a future when all aircraft will have to carry such devices, which can trigger automatic collision alerts, not dependent of human control from the ground.
- The probability of traffic conflicts is constantly increasing between gliders and other gliders, light aircraft, military and even commercial aircraft.

Technology and standards

- A device that broadcasts its position at low cost with minimal power drain, would be beneficial to all airsports. Existing devices have the potential to fulfil these requirements.
- However, as no standard communication protocol has been established, at the moment all existing units MUST be updated regularly, whenever the producer releases a new firmware that radically changes the communications protocol. This produces a certain number of missed updates (i.e.: useless devices, as compatibility is not retained) and most of all, we believe, reduces the potential of penetration into the general, world-wide aviation market.
- The FIVV believes that for such or similar devices to be accepted by the authorities, and thus add a much higher value to the system, an open and stable standard is desirable.

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