IGC Safety.

Background

Although gliding not is considered a dangerous sport, we still have a number of serious accidents. The IGC Bureau has therefore decided to start a more structured work on gliding safety.

It should be understood that this work not is intended to replace work done by national or international organisations related to education and training, but should be seen as an additional activity, focussing mainly on gliding competition flying, even if the two subjects not can be completely separated. Cooperation is therefore foreseen with relevant bodies.

Main Risks

Following discussions at the last Bureau meeting, the following main risks have been identified for gliding competition flying:

- Stall/Spin/Controlled flight into terrain
- Mid-air collisions
- Outlandings

Lines of action

Two main lines of actions will be initiated:

- Reduction of number and severity of accidents
- Improved survival change in case of accidents

<u>Reduction of number of accidents</u>

In order to reduce the number and severity of accidents, the following measures could be considered:

- General Information campaigns: using e.g. new information channels like U-tube, Twitter, to reach as many pilots as possible.
- Procedures: Review of competition procedures in order to minimise risk of mid-air collisions, e.g. during task start and finish and possibly minimum flying heights
- Information during gliding competitions: Stewards and Scrutineers at gliding championships must be briefed about the consequences of e.g. removing headrests, not using seatbelts correctly, or simply having a cockpit filled with wires and equipment hindering a rapid evacuation in flight.
- Equipment (anti collisions): Require equipment such as Traffic Proximity Warning, Anti collision markings, Anti-collision lights
- Equipment (flight into terrain): Stall warning systems, Piggott hook preventing unlocked airbrakes from fully extending
- Communication of scientific results: A lot of useful safety information is available in scientific papers, but not really accessible for the ordinary pilot, e.g through funding of university students to write papers to be published addressing major risks
- Educational tools: Generate educational tools such as flyers, cartoons, videos.

Improve chance of survival

In order to reduce the survival change, the following measures could be considered:

- Improved glider design or retrofit to old gliders: Cockpit crash worthiness, Energy Absorbing Foam, Honeycomb reinforcement, 5 or 6 point harness, Emergency rescue and cockpit jettison systems, Total rescue systems, Pilot rescue systems, Canopy jettison, Spine shells.
- Improved Search and Rescue potential by mandating installation of Emergency Location Transmitters in gliders.
- Research in new concepts: IGC to work with the OSTIV SDP and manufacturers for the longer term ideas and concepts to get them further developed.
- Bonus/Malus: Move towards a bonus/malus system for gliders equipped with safety systems in order to expedite the introduction of safety equipment in new gliders.
- Training: We could introduce safety drills, such as cockpit evacuation, at sporting events.

Links to other organisations

The following links have been identified to other bodies/organisations:

Other FAI Sports Commissions: Cooperation on procedures, information campaigns, collision avoidance.

Gliding manufactures: Design of new gliders, retrofit of old.

OSTIV: Training, Human Limitations, Research of improved glider design.

Europe Air Sports/EGU: Coordination of policy and activities.

Proposal

The IGC Plenary is asked to:

- Provide comments to the proposal raised by the Bureau
- Endorse that the Bureau continues its work on establishing an IGC Safety policy and Action Plan including the related cost
- Actively support the continued work on the Safety Action Plan by adopting IGC measures at a national level.