Competition Rules & Safety Proposal

Introduction

Recent events at international gliding competitions have triggered intensive discussions on how to improve safety at FAI Category 1 events. This has led to the new "Safety pays" initiative and an extensive review of jury, steward and event organization guidelines. However, except for some changes to the recommended finishing procedures as a result of the horrible accident in Szegded severely injuring a non-involved member of the public no related significant changes to the competition rules in Annex A have been implemented so far.

This proposal is build on the recognition that the underlying principal causes for unsafe flying, unnecessary risk taking and resulting accidents are very often found in the incentives created by the competition rules themselves and their application. Almost all competition pilots are very rational in their decision making and personal risk taking and will adjust their flying to the incentives and/or disincentives created by the general competition rules and local procedures.

Safety briefings and increased penalties imposed for disciplinary or safety reasons by the CD will do little if we don't address the unsafe and sometimes unfair incentives/disincentives currently created by the underlying competition rules contained in Annex A. If we are serious about safety we need to make sure this contradictory situation is being addressed.

Gliding is on a decline almost everywhere, and the perception – not incorrect – that it is a dangerous sport does not help us to attract and retain pilots. World & Continental Championships are the premier events in gliding, yet they have featured a steady stream of crashed gliders, and injured or killed pilots. Those evaluating whether to take up or continue the sport look at these high profile crashes as do regulating and local authorities. Making FAI championships a model of safety, rather than accepting an accident rate as part of an inherently dangerous sport, should be part of our overall effort to arrest the decline of soaring.

Apart from our moral obligation to prevent unnecessary and easily avoidable accidents especially involving the general public, accidents such as the one in Szegded will eventually expose us to serious legal liabilities if we can't clearly point to our rules, procedures and the incentives/disincentives they create and answer a question such as "did the scoring formula give this pilot a huge benefit in score if he made it just over the last fence?" with a resounding "No". We can keep blaming pilots for giving in to such temptations, but it is not wise to continue to assume that courts will keep holding us blameless for e.g. our scoring and finishing rules creating big incentives for unsafe pilot behavior that endangers other pilots and the public.

The events and actions that have led to the critical situation with various fatalities and subsequent temporary suspension of Open Class competitions in Paragliding should serve as a further wake-up call for us to do our utmost to ensure as safe competitions as possible. We have to recognize that many factors determine a pilot's decision to fly safe or unsafe as much as the causes of accidents rarely are related to a single factor. We have to make a serious effort to address all potential safety factors as much as we can to ensure safe and fair competitions rewarding individual and superior pilot performance and judgment.

Today's Annex A

In its current form Annex A only makes a vague general references to safety, it refers in 1.1.e to "Encourage the development of safe operational procedures...". All other safety references are consequently limited to technical or procedural rules: 1.4.1/1.4.1.1– Organizer's responsibility/Safety Committee, 2.11 – CD's responsibilities, 3.4.4 – Entry limits, 4.1.1 – Sailplane/equipment safety, 5.2. – Safety briefing, 5.3.1.c – Radio procedures, 7.2.4 – Suspension of launching, 7.2.5 – Delaying/canceling tasks, 7.3.3 – Release areas, 7.7.2 – Finish options & 8.6.4 – Penalties.

Annex A however doesn't contain anywhere any general guidelines that put us as the IGC and rules body to the task of ensuring that the entire competition rules framework recognizes safety as being of paramount importance. As is we are nowhere reminded and obligated by our own rules framework to verify that none of the rules implemented shall create incentives/disincentives that encourage unsafe flying practices and/or unnecessary risk taking.

Proposal for IGC Plenary 2012

Part 1 – Initial Annex 1 Amendment to implement guiding principles

Amendment of Annex A with the purpose of including explicit overall guiding principles for the soaring championship rules contained therein.

Amendment of Annex A - Addition of paragraph to Part 1 - General

1.2 Guiding Principles

- 1.2.1 The Rules for World and Continental Soaring Championships shall:
- a. Ensure the safety of all participants including pilots, crews, officials, organizers and visitors as well as the general public of the host community.
- b. Promote safe flying and eliminate as much as possible any incentives that encourage unsafe flying practices and unnecessarily increase the risk of accidents. Particularly task setting, start, finish and scoring rules and their application strongly influence pilot behavior and should therefore not create incentives that encourage unsafe flying practices and unnecessary risk taking by participating pilots. c. Encourage and reward individual and superior pilot performance over tactical gaggle flying. 1.2.2 The Annex A Subcommittee together with the Chief Stewards shall be responsible to ensure the continued compliance of the Annex A rules and competition guidelines with the Guiding Principles.

Amendment of Annex A - Renumbering of paragraphs

Renumber the following paragraphs to allow for inclusion of the new paragraph 1.2 Guiding Principles:

- Paragraph 1.2 to 1.3
- Paragraph 1.3 to 1.4
- Paragraph 1.4 to 1.5
- Change reference in paragraph 3.3 from 1.2.1 to 1.3.1
- Change references in Part 11 A from 1.2.3 to 1.3.3
- Change reference in Part 11 B from 1.3.1 to 1.4.1
- Change reference in Part 11 B from 1.4.1 to 1.5.1
- Change reference in Part 11 B from 1.4.4.2 to 1.5.5.2

Part 2 – Establishment of Task Force to initially review the existing Annex A for compliance with the new Guiding Principles

Establishment of a temporary task force of experts to review Annex A rules with one or two select members of the Annex A Subcommittee, one or two experienced chief stewards as well as a small number of outside experts that have extensive experience in the development of national gliding competition regulations to address systematic safety issues and evolve scoring and tasking rules. The task force will look for conformity of the Annex A rules with the new guiding principles with the goal of developing proposals for recommended changes for approval by the IGC as soon as possible (latest by the IGC plenary in 2013). After the initial complete review cycle of Annex A the ongoing task of ensuring compliance with the newly established guiding principles shall rest with the Annex A Subcommittee and Chief Judges.

Terms of Reference

The task force shall specifically focus on Task Setting, Start, Finish & Scoring Rules and guidelines with a detailed analysis of the historical/potential incentives/disincentives they have created in the past to outline the necessary changes needed to ensure the rules are fully aligned with the new guiding principles.

Particular attention should be paid to:

Part 6 – Tasks

Review of tasking philosophy to encourage greater use of airspace available (e.g. through turn area tasks) with the goal to spread out gliders and encourage flying and weather assessment rather than tactical gaggle flying and allowing pilots to avoid areas of bad or dangerous weather, with more pilots returning home rather than landing out (with consequent damage, expense, and inconvenience).

Part 7 - Competition Procedures

- 7.4 Starting Prohibition of starting procedures that encourage huge gaggles, cloud flying and VNE dives (e.g. unlimited start heights/limited start height with no time limit below limited start height 2010 Szegded gaggles into clouds, VNE dives out of clouds)
- 7.5 Turn Points Discouragement of turn points that create a significant risk of opposing traffic (e.g. steering points 2010 Uvalde fatal accident at US competition). Also applies to 7.7.2. Final turn point recommendations.
- 7.7 Finishing Unless special circumstances make it safe (e.g. very large airfield with many landable fields in the last 10 km) an elevated finish line or finish cylinder with a minimum height for a safe pattern landing should be the norm (e.g. 200m AGL). Strong penalties for violations which result e.g. in the loss of speed points should be considered.

Part 8 - Scoring System

Analyze and correct the incentives the current combination of Speed and Distance points create to avoid:

- Incentives for large gaggles
- Incentives for pilot induced mass landouts (late gaggle starts despite marginal/deteriorating weather)
- Incentives for pilots in assigned area tasks to do the minimum distance necessary to complete the minimum time knowing that if someone else does more distance they will get that person's distance points (even in case of an outlanding), not just theirs.
- Discouraging individual pilot performance by awarding relatively few extra points for single or few finishers with a large number of outlandings while heavily penalizing individual oulandings with a large group finishing (which heavily encourages tactical gaggle flying/leaching)
- Unfair scoring e.g. 2006 Worlds Esklistuna, single finisher would have gotten more points if he had orbited before the finish line and finished a few minutes later than he did (could potentially cost someone a World Championship win...)

Any other part of Annex A the task force or IGC bureau deems in need of revision to conform with the guiding principles.