HG-C proposals to be added to agenda for CIVL Plenary 2015

Leading points

The proposal is to change the way the leading coefficient is calculated for Hanggliding in GAP2014, to award pilots who lead out earlier in the task, as was done in PG two years ago. The change to the new formula for Leading Points in Paragliding seems successful and to be working as intended, so we should adapt the same formula for Hanggliding.

The proposal is to remove the HG Leading Points formula from the CIVL GAP scoring document.

This is to be removed from 11.3.1;

In hang gliding, the original formula for the leading coefficient is used, which is based on the pilot's remaining distance to ESS.

$$LC_p = \frac{\sum_{i:tp_i \in TrackPointsInSS_p} \text{taskTime}(tp_i) * (\text{bestDistToESS}(tp_{i-1}) - \text{bestDistToESS}(tp_i))}{1800 * LengthOfSpeedSection}$$

$$\forall p : p \in PilotsLandedOut \wedge \text{taskTime}(tp_{\max}) < ESSTime_{LastPilotAtESS} :$$

$$LC_p = LC_p + LastTime_{LastPilotAtESS} * \text{bestDistToESS}(tp_{\max})$$

$$\forall p : p \in PilotsLandedOut \wedge \text{taskTime}(tp_{\max}) \geq ESSTime_{LastPilotAtESS} :$$

$$LC_p = LC_p + \text{taskTime}(tp_{\max}) * \text{bestDistToESS}(tp_{\max})$$

$$\text{taskTime}(tp) = \min(TaskDeadline, \text{time}(tp))$$

$$\text{bestDistToESS}(tp_0) = LengthOfSpeedSection$$

$$\forall i : i > 0 \wedge tp_i \in TrackPointsInSS_p :$$

$$\text{bestDistToESS}(tp_i) = \min(\text{bestDistToESS}(tp_{i-1}), LenghtOfSpeedSection - \text{distanceFlown}(tp_i))$$

And consolidated to this;

$$LC_p = \frac{\sum_{i:tp_i \in TrackPointsInSS_p} \text{taskTime}(tp_i) * (\text{bestDistToESS}(tp_{i-1})^2 - \text{bestDistToESS}(tp_i)^2)}{1800 * LengthOfSpeedSection^2}$$

$$\forall p : p \in PilotsLandedOut \wedge \text{taskTime}(tp_{\max}) < ESSTime_{LastPilotAtESS} :$$

$$LC_p = LC_p + LastTime_{LastPilotAtESS} * \text{bestDistToESS}(tp_{\max})^2$$

$$\forall p : p \in PilotsLandedOut \wedge \text{taskTime}(tp_{\max}) \geq ESSTime_{LastPilotAtESS} :$$

$$LC_p = LC_p + \text{taskTime}(tp_{\max}) * \text{bestDistToESS}(tp_{\max})^2$$

$$\text{taskTime}(tp) = \min(TaskDeadline, \text{time}(tp))$$

$$\text{bestDistToESS}(tp_0) = LengthOfSpeedSection$$

$$\forall i : i > 0 \wedge tp_i \in TrackPointsInSS_p :$$

$$\text{bestDistToESS}(tp_i) = \min(\text{bestDistToESS}(tp_{i-1}), LenghtOfSpeedSection - \text{distanceFlown}(tp_i))$$

In tasks where CESS is used, the CESS's centre point is considered the last point of the speed section. For LC calculations, any pilot crossing into the CESS's cone is immediately awarded the remaining distance to the cone's centre.

Change would take effect 1. May 2015.

Barometric vs. GPS altitude

The proposal from the joint meeting was discussed as the error with GPS only altitude in the GAP document valid from 1. January affects the Mexico meet, overriding the local regulations. HG-C propose that the tracklog part it is changed to *primarily using QNH* and effective immediately after the plenary.

Stating that we primarily will use QNH and that the pilots may use GPS height only in case of backup instruments will be the same practice as we had for many years in hanggliding. This change will fix the immediate problem for Mexico worlds, making the local regulations valid again, and will not be in conflict with the general idea to move to the new system of only QNH (Or GPS corrected QNH) in the future.

Proposed change to CIVL GAP scoring document section 4.3 ;

Old text;
Altitude evaluation is based on GPS altitude, as given in GPS tracklogs.

New text;
Altitude evaluation is primarily based on barometric altitude, as given in the flight instrument tracklog. Pilots may submit a GPS altitude log as a backup log only in case of failure of the primary barometric log. Effective 21.02.2015

Proposed change to CIVL GAP scoring document section 4.3.1;

Old text;
Airspace violation checks rely exclusively on GPS altitude for the time being..

New text;
Airspace violation checks rely primarily on barometric altitude. Pilots may submit a GPS altitude log as a backup log only in case of failure of the primary barometric log. Effective 21.02.2015