

# INTERNATIONAL GLIDING COMMISSION (IGC) - PROPOSAL FORM

*Submit the proposal via email to IGC Secretary.*

**Date:** 21 January 2019

**Proposal submitted by:** IGC Bureau

**This proposal is a:**

Year-1	<input checked="" type="checkbox"/>	Year-2	<input type="checkbox"/>	Other	<input type="checkbox"/>
--------	-------------------------------------	--------	--------------------------	-------	--------------------------

*mark the boxes with **x** as appropriate*

**Type the text changes in the space below** (show deletions as ~~strike-through~~ and additions as **bold underlined**):

The Year 1 proposal contains two options:

**Option 1:** An excess LoH will not invalidate the claim. A distance equal to 100 times the excess LoH shall be subtracted from the course distance in the calculation of the achieved speed.

**Option 2:** Any LoH from the start height will invalidate the claim.

Detailed text of the proposal could be found in the Annex.

**Type the reasons in the space below:**

The reasons for the proposal could be found in the Annex.

**Provide supporting data or reference to external documents for the proposed technical amendments in the space below:**

Annex to the proposal contains all necessary details (proposed text, reasons, etc.).

<b>The proposal should be applicable from:</b>	<b>October 2020</b>
<b>Sporting Code Volume:</b>	<b>SC3</b>
<b>Version/Edition:</b>	<b>2018</b>
<b>Heading of section:</b>	<b>Chapter 3 RECORDS and RECORD PROCEDURES</b>
<b>Number &amp; heading of the paragraph:</b>	<b>3.1.6 Speed records</b>
<b>Page number(s) if appropriate:</b>	<b>9</b>

**See the next page!**

**Approved Amendment (if applicable):**

**Final Wording of Proposal:**

**To define a new method for calculating scores in FAI-sanctioned gliding competitions.**

Overall Votes Cast:  For:  Against:  Abstain:

ADOPTED: Yes:  No:

## **SPEED RECORD CLAIMS**

### ***A year 1 proposal to either include an excess Loss of Height or eliminate any Loss of Height***

#### **Background**

1. As well as simplifying the Sporting Code, the Sporting Code committee has a mandate to rationalize it in light of current technology and practise (“why do we still have this rule?”).
2. Historically, record distance flights finished with a landing long after convention had ceased, and there was no ability to start or finish at altitude as is possible using today’s GPS, so an allowed Loss of Height (LoH) of 1000m from start to finish was a necessary feature of the flight since a launch to some initial soaring height was required. The excess LoH penalized the distance to prevent starts from an extreme altitude.
3. Later, when speed records were introduced, the same allowed LoH was permitted, but any excess invalidated the claim. The reason for this disparity is now not known. Today, there is *no* sporting justification why this difference should continue or even, given the current state of sailplane and navigation technology, that *any* LoH should be allowed.

#### **Proposal**

Two possible changes to the LoH rule offered to IGC delegates for consideration are: (1) an excess LoH may be included exactly as in distance records to calculate the official distance used in the claim, or (2) the pilot must finish at or above the start height.

**Option 1 An excess LoH will not invalidate the claim. A distance equal to 100 times the excess LoH shall be subtracted from the course distance in the calculation of the achieved speed.**

This penalty distance is used only in the speed calculation ( $v = d/t$ ) – it would not change the actual task distance claimed, even if it brought the distance under the task type distance.

The proposed penalty factor of 100 is an arbitrary choice; however, this value is a very strong incentive not incur an excess LoH. It could be modified based on modern speed record pilot experience.

The advantage of this option is that, given the speed penalty for exceeding the allowed LoH is very expensive, it does not introduce the need to have any change between current and future speed record sets. There would be no tactical advantage to deliberately exceeding the allowed LoH. The pilot does not have to be concerned about the current punishment for a small LoH excess while speeding to the finish line, but is still very aware of the speed penalty for doing so.

**Option 2 Any LoH from the start height will invalidate the claim.**

This option removes the unknown factors that affect the advantage of having a 1000 m LoH to work with on the flight. The pilot’s claimed speed relies more on the tactics available to them using the modern technology now at hand. However, having to finish the task no lower than the start entirely changes the nature of the attempt.

The disadvantage of this option is that the suite of speed record task claims would have to restart. It might be argued that one could no longer compare results between the old and new achievements, but the pilot’s only goal is to exceed the most recent speed, whatever the rules are.

It would be necessary to establish “starter” values for each record type so that the first claims have *some* relationship to prior results. Consideration of the incremental speed that starting with a “free” 1000m gives the pilot suggests the starter values should be reduced from the current value in inverse proportion to the distance of the record type. For example, a 1000m LoH in a modern glider provides a much higher “free” speed increment to the 100 km speed triangle than for the same pilot flying the 500 km triangle. The starter values would be set following expert advice.