

INTERNATIONAL GLIDING COMMISSION (IGC) - PROPOSAL FORM

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Submit the proposal via the automatic submission process
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<https://www.fai.org/igc-documents/proposals>

Date: 27 December 2019

Proposal submitted by: USA

This proposal is a:

Year-1	<input checked="" type="checkbox"/>	Year-2	<input type="checkbox"/>	Other	<input type="checkbox"/>
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mark the boxes with as appropriate

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

4.2.1b 18 M Class – ~~600 kg.~~

600 kg for gliders not capable of self launch;
700 kg for gliders capable of self launch

Type the reasons in the space below:

Summary: Raise MTOM in the 18 Metre Class to 700 kg for self-launching motorgliders.

MTOM in the 18 Metre class has been 600 kg since the introduction of the class into World and Continental Championships twenty years ago. This limit was imposed in consideration of safe launching by aerotow.

One important reason for the 18 Metre class was to facilitate the use of engines, which are increasingly popular. Gliders with some sort of engine now account for the vast majority of new gliders.

However, though there is a strong demand for self-launching, such gliders have not been popular in the 18 Metre Class in World and Continental Championships. Motorized 18 Metre gliders in these championships are almost entirely powered by sustainer engines. These engines tend to be less reliable, unusable at altitudes above 2000m, and of course do not satisfy the strong demand for self-launch ability.

Designers of 18 metre self-launchers have faced a conundrum: if they make the wing area large enough to provide acceptably low wingloadings, then they cannot achieve a competitive wingloading at 600kg. If they use a small wing area to achieve a competitive high wingloading, then it is very heavy with no water ballast, to the detriment of soaring in weak conditions, and launch performance.

As a result, the available self-launchers in this class are not much used in our competitions.

In the marketplace, there is a clear demand for self-launching motorgliders in the 18 Metre Class. The demand is not restricted to competitions. But the market is inhibited by the fact that these versatile aircraft cannot reach a competitive wingloading at a MTOM of 600 kg.

Raising the MTOM to 700 kg for self-launchers will make our competitions more fair, it will encourage more pilots to compete, and it will stimulate the development of gliders in this class.

Finally, with the weight of batteries, this rule change would encourage the development of electric self-launching gliders that could be used in competition.

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

The proposal should be applicable from: October 2021

Sporting Code Volume: 3, Annex A

Version/Edition: 2021

Heading of section: MAXIMUM TAKEOFF MASS

Number & heading of the paragraph: 4.2.1b 18 M Class

Page number(s) if appropriate: 18 in the 2019 Edition of SC3A

See the next page

Approved Amendment (if applicable):

Final Wording of Proposal:

Overall Votes Cast: For: Against: Abstain:

ADOPTED: Yes: No: