

IGC 2018 Plenary Meeting Agenda Item 6.2.2



Sporting Code Section 3D, Annex A Handicaps

Mr Christof Geissler, IGC Handicap Committee Chairman December 2017

Handicap Committee Report to IGC Plenary 2018

Thanks to active committee members:

Russell Cheetham, Tobias Geiger, Denis Guerin, Kai Rohde-Brandenburger

1 MAIN ACTIVITIES IN 2017 HAVE BEEN:

1.1 20M MULTI SEATER CLASS:

no activities

1.2 CLUB CLASS:

Preparation and publication of new IGC Club Class handicap list with October, 1st, 2017 SC3AH.

Handicaps of gliders from the IGC Club Class handicap list have been recalculated (at IGC ref. mass) and re-assessed. However there are no new types of gliders in the new handicap list

Basis for the new handicap list is measured glider performance over the years by idaflieg (Academic Aviator Group, http://idaflieg.info/idaflieg/?lang=en) and modified weather model and analysis tool for competition from Kai Rode-Brandenburger (DLR institute of aerodynamics and flow technology, Germany).

Intention and background for new handicap list:

- Some gliders of the lower range handicap had been privileged in past club class competitions and some newer ones (only 25- 30 years old) have not been competitive with the old handicaps.
- The spread of handicaps has been decreased from 0,10 to 0,07 (roughly by 30%).
- There is intent to provide a competitive handicap to as many gliders as possible that are listed in today's IGC club class handicap list.
- like equivalent chance to Cirrus ... Discus, ASW15 ... ASW24, LS1 ... LS7, Libelle ... HPH304C, Jantar ... which covers a huge spread of glider designs and built dates.
- pilots tactics in competition do not play any role in calculation of handicaps; and there might be more pilots flying LS4, Discus, ASW20 and they must not necessarily fly long time in same gaggle of Libelle, Cirrus and ASW19.
- any market price of club class gliders and their potential price development in future and any
 investment in tuning club class gliders to the max do not play any role for setting the new
 handicaps.
- The handicap committee does not motivate for modifications on club class gliders; therefore retrofitting with winglets will be taken into consideration, as before. Also other significant modifications might ask for a change in handicap as soon as such modification improve the glider performance in a certain way (subject to handicap committee).

Like modification with fairings from wing to fuselage and any modification on wing profile (which might be difficult to identify).

Other modification/tuning like taping gaps, masking tape and sealing of gaps from wing to ailerons and similar, are accepted.

Also trying to optimize airfoil by using zick-zack tape is accepted; as well as end plates to ailerons and flaps. Bug wipers are accepted as well.

Some gliders are difficult to "control" in terms of later on modifications as there has already been a lot of modification and versions during their original built. Like Libelle 201B... with different profiles on horizontal stabilizer with and without pitch trim possibility of stabilizer ... and normal or racing (very small) canopy. But with no fairing from wing to fuselage in original built.

IGC and local organizers cannot control too many of such performance improving details.

- But any well maintained club class glider should have an equal chance to compete without any cost or labour intensive modification.
- as soon as there will be glider types showing a specific competitive advantage over others with the new handicap list, the handicap committee will interfere and will have a closer look, and correct with one of the next updates as soon as it proves to be necessary.
- There should not be a specific type of club class glider as the "must fly" to win.

2 FURTURE OUTLOOK:

- IGC delegates can support the handicap committee by providing feedback after next IGC sanctioned club class championship with is the WGC2018 in Ostrow/Poland; by naming types of gliders where they really see a problem or discrepancy which can be shown by evidence, fact and figures (IGC files and /or daily results or just what it really makes it obvious)
- There has already been a lot of valuable input since the publication of the new handicap list.
- There will be an update of the handicap list early 2018 (before 2018 plenary); only adjustments to the bonus/minus point for light/heavy weight and adjustment for retrofitting with winglets.

Concluding, many thanks for the allegiant support from the members of the committee, especially for the support from Kai Rode-Brandenburger and his time consuming data collection of glider measurements, programming, computing and assessment.



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