

# BGA Handicap changes for 2026

## **BGA Handicap system - Background**

The system and handicap list was overhauled in 2002 by Henry Rebbeck when a large raft of measured Idaflieg data became available. The test method involves pair flying against a calibrated glider many times. A very powerful University super-computer was used to number crunch the optimal wing loading, bank angle and hence circling sink rate for the idealised UK thermal that was already defined as a 4.2 knot peak strength air mass thermal of 1000 ft radius and specific profile. The method assumed standard climb and glide conditions at the McCready setting appropriate to the climb rate achieved. Once some of the variables had been deduced it became possible to utilise a spreadsheet that achieved almost identical results to the super-computer and so has been used ever since.

The process has some limitations in that it neglects possible influence of dolphin flying, gaggle effect, variable thermal choice dependant on performance, the fact that pilots tend to fly slower than optimum McCready and finally the realisation that newer gliders tend to match the test data straight out of the box with little option for improvement whereas older glider designs can usually be carefully improved to exceed the performance of the test data.

The thermal strength used is an approximation to whole day average expected by non elite pilots and so is deemed suitable for Ladder purposes and Regional Competitions although it must be understood that the model may work less well for racing tasks where the task duration allows finding average flight climb rates significantly in excess of the 2.5 knot average defined for the LS8 as datum glider. The data suggests that variations to climb rates have little effect on required handicap for 15m gliders but an increased effect as span goes up with the larger span gliders being proportionally disadvantaged on stronger days but conversely advantaged on very weak days.

In 2002, only approximately 50% of gliders had measured data – factory data or marketing data was specifically avoided due to many examples being shown to be as much as 5% optimistic. However, the 50% created a solid framework that allowed other glider types to be introduced to the list based on known similarity and experience.

In recent years, on request further gliders have been added to the handicap list with the actual handicap based on measured data if available, or based on estimation in the absence of measured data. Periodically more measured data is released by Idaflieg that allows revalidation of the previously estimated handicaps.

## **Performance Analysis for 2026 season**

For 2026, with more data available for a number of designs, we have concentrated on revalidating the very latest and previous generation of 18m flapped gliders which had estimated handicaps as well as reviewing the Duo Discus on request. It should be noted that any changes found necessary will impact any other peer gliders that have their handicaps estimated and not based on measured data.

Due to restrictions imposed by Idaflieg, the CC is not able to republish their data here. Pilots wishing to analyse the measured data will find that data is available to purchase from Idaflieg at <https://idaflieg.de>

Measured data for AS33 18m, ASG29, Duo Discus and Ventus 3 Sport 18m was analysed and the results and conclusions for these variants and their peers are as below:-

#### **Measured Performance Data Analysis**

<b>Type</b>	<b>BGA Hc.</b>	<b>Calculated</b>	<b>Var.</b>	<b>Change</b>	<b>Revised</b>	<b>Consideration</b>
Duo Discus	101	102.13	1.13	+1	102.0	Increase based on measured Idaflieg data
ASG29	111	111.29	0.29	0	111.0	Close to current handicap - considered increase by 0.5 but decided against
AS33 18m	111.5	113.18	1.68	+1.5	113.0	Increase based on measured Idaflieg data
Ventus 3S 18m	111.5	113.80	2.30	+1.5	113.0	113.0 based on above peer glider
ArcusT *	109	109.25	0.25	0	109.0	Matches current handicap - control only
ASH26 *	110	109.91	-0.09	0	110.0	Matches current handicap - control only

\*control check

#### **Peer Glider considerations**

<b>Type</b>	<b>BGA Hcp.</b>	<b>Change</b>	<b>Revised</b>	<b>Consideration</b>
JS3 18m	111.5	+1.5	113.0	Matching peers Ventus 3S and AS33
AS33 15m	104.5	+1	105.5	Latest gen 15m gliders increase by 1.0 only as not optimised for 15m and no data
JS3 15m	104.5	+1	105.5	Latest gen 15m gliders increase by 1.0 only as not optimised for 15m and no data
Ventus 3S 15m	104.5	+1	105.5	Latest gen 15m gliders increase by 1.0 only as not optimised for 15m and no data
DuoDiscus (other var.)	101.5 and 102	+0.5 to 1	102.5	0.5 added for wingletted variants but no further increase for heavier derivatives as not relevant to UK 2.5 knot model
Ventus 3P 18m	111.0	+1.5	112.5	Matching peer 1.5 increase
Ventus 3S FES 15m	103.5	+1	104.5	1.0 added to FES variant matching peer
Ventus 3S FES 18m	110.5	+1.5	112.0	1.5 added to FES variant matching peer
Antares 18m	111.0	0	111.0	No change - although no data to support - type is regarded as inferior to ASG29 by German handicap list
JS1 18m	111.0	0	111.0	No change - design thought to be similar to ASG29
JS1 18m Evo	not on list		111.5	0.5 added due to aerodynamic improvement of outer panels and winglet
DG1000 20m	102.0	0	102.0	Peer Duo increased to 102.5 when fitted with winglets, the DG1000 is regarded as inferior - sentiment is matched by respected German handicap list
DG1000 20m neo	not on list		102.5	0.5 added -acknowledgement of increased performance of well designed Neo winglets compared to older winglet variant.

The above changes will be included in the 2026 Rules for Rated Competition. Representations, including reliable measured data should be made to the Competitions Committee in writing to [compscommittee@gliding.co.uk](mailto:compscommittee@gliding.co.uk)