Fédération
Aéronautique
Internationale

IGC PROCEDURES FOR HANDICAPPED CLASSES

TO BE USED IN CONJUNCTION WITH SPORTING CODE SECTION 3, ANNEX A

CLASS D (gliders)
Including Class DM (motorgliders)

This edition is valid from 1 October 2014

Maison du Sport International
Av. de Rhodanie 54
CH-1007 Lausanne
(Switzerland)
Tél. +41 (0)21 345 10 70
Fax +41 (0)21 345 10 77
E-mail: sec@fai.org
Web: www.fai.org

FEDERATION AERONAUTIQUE INTERNATIONALE

MSI - Avenue de Rhodanie 54 – CH-1007 Lausanne – Switzerland

INTRODUCTION

This document is a collection of the rules specific to the glider classes that use handicaps in World and Continental Championships. Rules that apply to all competition classes are not here. They are in FAI Sporting Code Section 3, Annex A.

As a supplement to Annex A, this document shall be considered to be a part of the rules for World and Continental Championships.

This document contains the current handicap lists.

Unlike Annex A, this document may be republished at any time. New versions will be announced to the NACs and the current version will always be available on the IGC website.

There is the possibility that special handicap lists will be created for particular Championships. These special lists will be announced to the NACs and published on the IGC website, but they will not be included in this document.

PART 1

CLUB CLASS

1.1 Definitions and References

TCDS	Type Certificate Data Sheet from the country of registration, the country of manufacture, or EASA
RM	IGC Reference Mass, from Appendix 1
MTOM	Maximum Takeoff Mass allowed. To receive a score, the takeoff mass of the glider must be equal to or less than MTOM. MTOM is defined in para. 1.5, below.
Hmin	Minimum Handicap. (Hmin = 0,98)
Hmax	Maximum Handicap. (Hmax = 1,09)

1.2 Eligibility

1.2.1 In order to enter a Club Class competition, the glider to be used must

- be listed on the Club Class Handicap List (Appendix 1); or
- be listed on an IGC-approved list created for that Championship; or
- receive approval from the IGC Bureau

1.3 Documents

1.3.1 In addition to providing the documents required by Annex A, competitors wishing to enter a Club Class Championship must provide or refer to a valid Type Certificate Data Sheet (TCDS) issued by the country of registry, the country of manufacture, or EASA.

1.4 Equipment

1.5 Maximum Takeoff Mass (MTOM)

1.5.1 The takeoff mass must be

less than or equal to the IGC Reference Mass (RM)

- or –

less than or equal to the least of:

- Maximum certificated takeoff mass, according to TCDS
- Maximum certificated takeoff mass without waterballast, according to TCDS

and an adjustment to the handicap applies.

1.6 Adjustments to handicaps

1.6.1 Mass

If the takeoff mass is greater than RM, then the handicap will be increased by 0,005 for each 10 kg or part thereof that the takeoff mass exceeds RM.

~~The handicap will be reduced by 0,004 for each whole multiple of 10 kg that the takeoff mass is less than "RM minus 10 kg."~~ *Not yet implemented*

1.6.2 Winglets

The addition of winglets to a glider that was not originally certificated with winglets will increase the handicap by 0.01.

1.6.3 Limits to handicap adjustments

a. The minimum handicap that can be assigned to a glider is Hmin. If an adjustment to the handicap results in a value less than Hmin, the glider will be assigned a handicap of Hmin.

b. The maximum handicap that can be assigned to a glider is Hmax. If an adjustment to the handicap results in a value greater than Hmax, the glider will not be eligible to enter the competition.

1.7 Procedures

1.8 Penalties

1.9 Notes

This paragraph contains explanatory material.

1.9.1 Reference Mass for Club Class gliders

The IGC reference mass (RM) for each glider is determined by IGC and is listed in Appendix 1. RM is normally equal to the least of:

- Maximum certificated takeoff mass for the type, according to EASA TCDS
- Maximum certificated takeoff mass without waterballast for the type, according to EASA TCDS
- MMNLP + A * SWM, where

  MMNLP = Maximum Mass of Non-lifting Parts for the type, according to EASA TCDS

  A = Wing Area, from Appendix 1

  SWM (Specific Wing Mass) = 12 kg/m^2 for unflapped gliders, or 13

kg/m^2 for flapped gliders.

Also note that, in the case of motorgliders, the maximum certificated takeoff masses referenced above are taken from the non-motorized versions.

PART 2

20 METRE MULTI-SEAT CLASS

2.1 Definitions and References

2.2 Eligibility

2.2.1 All 20 Metre Multi-seat gliders are eligible. Handicaps are listed in Appendix 2. Gliders not appearing in Appendix 2 will receive a handicap of 1,00.

2.3 Documents

2.3.1 In addition to the documents required in Annex A, competitors wishing to enter a 20 Metre Multi-seat Class Championship must provide or refer to a Type Certificate Data Sheet (TCDS) issued by the country of of registry, the country of manufacture, or EASA.

2.4 Equipment

2.5 Maximum Takeoff Mass (MTOM)

2.5.1 The takeoff mass must be less than or equal to the least of:

- Maximum certificated takeoff mass, according to TCDS
- 750 kg

Note: Individual gliders of the same type have been certificated with different maximum takeoff masses. It is important to check the serial numbers of each glider and refer to the applicable TCDS.

2.6 Adjustments to handicaps

2.6.1 Addition of winglets does not affect handicaps.

2.6.2 The IGC Bureau may approve the adjustment of handicaps of gliders equipped with modified controls and flown by pilot(s) with disabilities.

2.7 Procedures

2.8 Penalties

IGC Handicap	Glider Type	Flaps (f)	max. mass of non lifting parts [kg]	wing area [m^2]	IGC Reference Mass [kg]	wing loading at New IGC Reference Mass [kg/m^2]	remarks
1.08	**ASW 20, F**	f	235	10.50	**372**	35.4	not eligible: ASW 20 b, c
1.07	**Discus a,b,CS**		240	10.58	**367**	34.7	
1.07	**ASW 24**		230	10.00	**350**	35.0	
1.07	**ASW 24** (with increased mass)		245	10.00	**365**	36.5	Schleicher ASW 24 TN-No. 2 from S/N 24068 serial standard
1.07	**ASW 24 B**		245	10.00	**365**	36.5	
1.07	**DG 200 (15m)**	f	250	10.00	**380**	38.0	
1.07	**Mini Nimbus**	f	240	9.86	**368**	37.3	
1.07	**Mosquito, B**	f	240	9.86	**368**	37.3	
1.07	**LS 3**	f	240	10.50	**377**	35.9	
1.07	**LS 3 a**	f	230	10.50	**367**	35.0	
1.07	**Genesis 2**		241	11.15	**366**	32.8	
1.07	**Glasflügel 304,B, HPH 304 CZ (15m)**	f	240	9.90	**369**	37.3	
1.06	**SZD 55-1**		248	9.60	**363**	37.8	
1.06	**LS 7**		235	9.80	**353**	36.0	
1.06	**Speed Astir II, IIb**	f	260	11.47	**400**	34.9	
1.05	**CB-15 CRYSTAL**		240	9.77	**350**	35.8	
1.04	**HPH 304 C**		240	9.90	**359**	36.3	
1.04	**DG 300, Elan**		246	10.27	**369**	35.9	
1.04	**LS 4, a, b**		230	10.50	**356**	33.9	
1.03	**Pegase 101, A**		235	10.50	**361**	34.4	
1.03	**Pegase 101 B, C**		230	10.50	**356**	33.9	
1.03	**Pegase 101 D**		225	10.50	**351**	33.4	
1.03	**Pegase 101 P, AP**		235	10.50	**361**	34.4	
1.03	**PIK 20 A**	f	250	10.00	**380**	38.0	
1.03	**PIK 20 B**	f	240	10.00	**370**	37.0	
1.03	**PIK 20 D**	f	225	10.00	**355**	35.5	
1.02	**SZD 59 ACRO (15m)**		248	9.60	**363**	37.8	w. winglets only, already accounted for in handicap
1.02	**H301 Libelle**	f	200	9.80	**300**	30.6	
1.02	**H301 Libelle** (with increased mass)	f	200	9.80	**315**	32.1	TM Nr. 301-42, EASA.A.241
1.02	**Std. Cirrus B (16m)**		220	10.36	**344**	33.2	winglets not allowed
1.02	**Std. Cirrus B (16m)** (with increased mass)		233	10.36	**350**	33.8	winglets not allowed see TCDS EASA.A.278
1.01	**ASW 19**		225	11.00	**357**	32.5	
1.01	**ASW 19 B**		230	11.00	**362**	32.9	
1.01	**Jantar Std. 2, 2M**		245	10.66	**373**	35.0	
1.01	**Jantar Std. 3**		245	10.66	**373**	35.0	
1.01	**SZD-48-3M "Brawo"**		240	10.90	**360**	33.0	
1.01	**SZD-48-3M1 "Brawo"**		240	10.66	**365**	34.2	
1.01	**LS 1f, LS 1f(45)**		230	9.75	**347**	35.6	
1.00	**DG 100, G, Elan, G Elan**		265	11.00	**385**	35.0	
1.00	**Hornet, C**		225	9.80	**343**	35.0	
1.00	**Jantar Std.**		236	10.66	**364**	34.1	
1.00	**Std. Cirrus**		220	10.04	**330**	32.9	
1.00	**Std. Cirrus** (with increased mass)		240	10.04	**361**	36.0	with winglets MTOM 350kg see TCDS EASA.A.278
1.00	**Std. Cirrus B (15m)**		220	10.04	**330**	32.9	
1.00	**Std. Cirrus B (15m)** (with increased mass)		233	10.04	**354**	35.3	with winglets MTOM 350kg see TCDS EASA.A.278
1.00	**Std. Cirrus CS11-75L**		220	10.04	**341**	34.0	
1.00	**Std. Cirrus CS11-75L** (with increased mass)		240	10.04	**361**	36.0	with winglets MTOM 350kg see TCDS EASA.A.278
1.00	**Std. Cirrus G**		220	10.04	**341**	34.0	
1.00	**Std. Cirrus G** (with increased mass)		240	10.04	**361**	36.0	with winglets MTOM 350kg see TCDS EASA.A.278
0.98	**ASW 15**		198	11.00	**318**	28.9	
0.98	**ASW 15B**		220	11.00	**352**	32.0	
0.98	**LS 1 0,a,b,c**		212	9.74	**312**	32.0	
0.98	**LS 1 d**		212	9.74	**329**	33.8	
0.98	**Std. Libelle**		200	9.80	**290**	29.6	
0.98	**Std. Libelle 201B**		210	9.80	**328**	33.5	
0.98	**Std. Libelle 202**		210	9.80	**328**	33.5	
0.98	**Std. Libelle 203**		210	9.80	**328**	33.5	

Appendix 2

IGC 20 Metre Multi-seat Class Handicap List 2014 Ver. 1.0

1 October 2014

IGC Handicap	**Glider Type**	Flaps (f)	**MTOM [kg]**	wing area [m^2]	wing loading [kg/m^2]	remarks
1.04	**Arcus (all verisons)**	f	**750**	15.60	48.1	
1.04	**ASG 32 (all verisons)**	f	**750**	15.70	47.8	
1.01	**Duo Discus XL**	-	**750**	16.40	45.7	
1.01	**Duo Discus X**	-	**750**	16.40	45.7	some with 750kg; some with 700kg
1.01	**LAK 12R 20m**	f	**750**	14.50	51.7	
1.00	**Duo Discus XL**	-	**700**	16.40	42.7	few repaired ones with old wings
1.00	**Duo Discus X**	-	**700**	16.40	42.7	some with 750kg; some with 700kg
1.00	**Duo Discus**	-	**700**	16.40	42.7	baseline for handicap
1.00	**DG1000/1001**	-	**750**	17.53	42.8	baseline for handicap