

Fédération Aéronaulique 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)

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¹ FAI Statutes, Chapter 1, para. 1.6

² FAI Sporting Code, General Section, Chapter 3, para 3.1.3.

³ FAI Statutes, Chapter 1, para 1.8.1

⁴ FAI Statutes, Chapter 2, para 2.1.1

⁵ FAI Bylaws, Chapter 1, para 1.2.1

⁶ FAI Sporting Code, General Section, Chapter 3, para 3.4

⁷ FAI Bylaws, Chapter 1, para 1.2.3

⁸ FAI Statutes, Chapter 5, para 5.2

⁹ FAI Sporting Code, General Section, Chapter 3, para 3.1.7

¹⁰ FAI Sporting Code, General Section, Chapter 1, paras 1.2. and 1.4

¹¹ FAI Statutes, Chapter 5, para 5.2.3.3.7

¹² FAI Bylaws, Chapter 1, para 1.2.2

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						
МТОМ	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 <u>certificated</u> takeoff mass, according to TCDS
- Maximum <u>certificated</u> takeoff mass without waterballast, according to TCDS

and an adjustment to the handicap applies.

1.6 Adjustments to handicaps

1.6.1 <u>Mass</u>

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. Examples:

Takeoff Mass – RM	Handicap is increased by		
0	0		
1 – 10	0,005		
11 – 20	0,010		
etc.			

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." Examples:

RM – Takeoff Mass	Handicap is reduced by		
< 10	0		
10 – 19	0,004		
20 – 29	0,008		
etc.			

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 <u>Reference Mass for Club Class gliders</u>

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 <u>certificated</u> takeoff mass for the type, according to EASA TCDS
- Maximum <u>certificated</u> 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 <u>certificated</u> 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 Club Class Handicap List 2014 Ver. 1.0 1 October 2014

IGC	Glider Type	Flaps	max. mass	wing area	IGC	wing loading at	remarks
Handicap		(f)	of non	[m ²]	Reference Mass	New IGC	
			lifting parts	[]	[kg]	Reference Mass	
			[kg]			[kg/m ²]	
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		245	10.00	365	36.5	Schleicher ASW 24 TN-No. 2
	(with increased mass)						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	t	240	10.50	377	35.9	
1.07	LS3a	t	230	10.50	367	35.0	
1.07	Genesis 2	2	241	11.15	366	32.8	
1.07	Glastiugel 304,B,	г	240	9.90	369	37.3	
1.06			249	0.60	262	27.0	
1.06	320 33-1		240	9.00	252	37.0	
1.00	Speed Astir II. IIb	f	233	9.80 11.47	400	34.9	
1.05	CB-15 CRYSTAI		200	9.77	350	35.8	
1.04	HPH 304 C		240	9,90	359	36.3	
1.04	DG 300 Flan		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	РІК 20 В	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	f	200	9.80	315	32.1	TM Nr. 301-42, EASA.A.241
	(with increased mass)			10.00			
1.02	Std. Cirrus B (16m)		220	10.36	344	33.2	winglets not allowed
1.02	Std. Cirrus B (16m)		233	10.36	350	33.8	winglets not allowed
1.01	(With Increased mass)		225	11.00	257	22 5	see TCDS EASA.A.278
1.01			225	11.00	357	22.5	
1.01	lantar Std 2 2M		245	10.66	372	35.0	
1.01	Jantar Std. 3		245	10.00	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		240	10.04	361	36.0	with winglets MTOM 350kg
	(with increased mass)						see TCDS EASA.A.278
1.00	Std. Cirrus B (15m)		220	10.04	330	32.9	
1.00	Std. Cirrus B (15m)		233	10.04	354	35.3	with winglets MTOM 350kg
1.00	(with increased mass)		220	40.04	244	24.0	see TCDS EASA.A.278
1.00	Std. Cirrus CS11-75L		220	10.04	341	34.0	with winglets MTOM 250kg
1.00	Sta. Cirrus CS11-75L		240	10.04	301	36.0	
1.00	Std Cirrus G		220	10.04	2/1	24.0	SEE TEDS LASA.A.278
1.00	Std. Cirrus G		220	10.04	361	34.0	with winglets MTOM 350kg
1.00	(with increased mass)		270	10.04	501	50.0	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	1	212	9.74	312	32.0	
0.98	LS 1 d	1	212	9.74	329	33.8	
0.98	Std. Libelle	l	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	Glider Type	Flaps	MTOM [kg]	wing area	wing loading	remarks
Handicap		(f)		[m ²]	[kg/m ²]	
					_	
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