

WORLD - E&A - SWISS RECORDS (updated 29.05.2011)

SLALOM

WORLD	2.00/9.75/58	Chris Parrish (USA)	Ski Ranch, Louisiana, USA, 13.06.2010
	1.50/10.25/55	Regina Jaquess (USA)	Santa Rosa Beach, USA, 24.10.2010
E&A	1.00/9.75/58	Andrew Mapple (GBR)	Miami Slalom USA, 04.10.1998
	3.25/10.75/55	Nicole Arthur (GBR)	Diablo Shores, USA, 19.09.2010
SWISS	3.00/10.25/58	Frédéric Halt	Charleston (USA) 27.11.2008
	1.00/10.75/55	Cristina Muggiasca	Recetto (ITA) 29.06.2002
			Rocquebrune (FRA) 22.09.2002

TRICKS

WORLD	12570 points	Alexi Zharnasek (BLR)	Hancock Lake, Florida, USA, 29.05.2011
	9690 points	Natalia Berdnikova (BLR)	Winter Garden, USA, 26.10.2010
E&A	12570 points	Alexi Zharnasek (BLR)	Hancock Lake, Florida, USA, 29.05.2011
	9690 points	Natalia Berdnikova (BLR)	Winter Garden, USA, 26.10.2010
SWISS	9540 points	Daniel Käppeli (SUI)	Floride (USA) 28.04.02
	7190 points	Elena Thomsen (SUI)	Linz (AUT) 02.09.07, Recetto (ITA) 23.09.07

JUMP

World	75.20 meters	Freddy Krueger (USA)	Seffner, FL, USA, 02.11.2008
	57.10 meters	June Fladborg (DEN)	Hazelwood Ski World, 24.08.2010
E&A	71.50 meters	Jason Seels (GBR)	Ski Fluid, Polk City, USA, 16.05.2010
	57.10 meters	June Fladborg (DEN)	Hazelwood Ski World, 24.08.2010
SWISS	68.20 meters	Sébastien Di Pasqua (SUI)	Floride (USA) 29.09.02 + 05.10.03
	53.10 meters	Elena Thomsen (SUI)	Linz (AUT) 02.09.07

OVERALL

World	2818.01 points	Jaret Llewellyn (CAN)	McCormick Fall Open, FLA, USA 29.09.2002
		5.00/11.25/58, 10730pts,	71.70m
	2945.85 points	Regina Jaquess (USA)	Santa Rosa Beach USA, 20.06.2010
		4.00/10.75/55, 7920pts,	53.60m
E&A	2741.75 points	Patrice Martin (FRA)	Sunset Trop., Okahumpka, FLA, USA, 21.05.2001
		4.00/10.75/58, 11550pts,	62.50m
	2902.70 points	Natalia Berdnikova (BLR)	Sunset L., Okahumpka, USA, 03.10.2010
		2.00/11.25/55, 8890pts,	54.60m

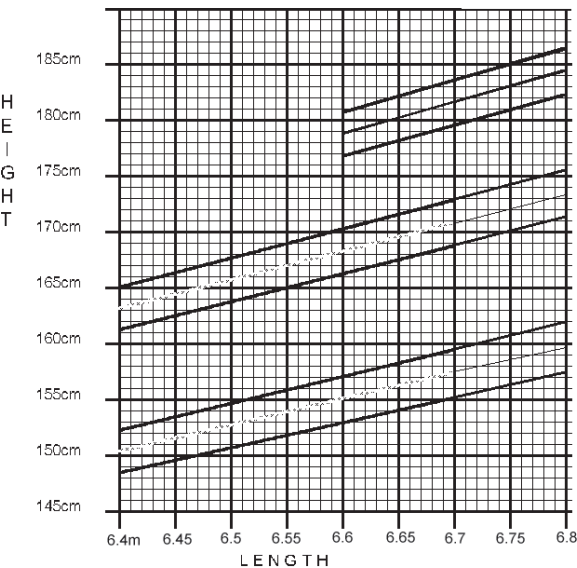
SKI FLYING RECORDS

World	91.1 meters	Jaret Llewellyn (CAN)	Orlando USA, 25.05.2000
	69.4 meters	Elena Milakova (RUS)	US Masters, GA, 26.05.2002
E&A	85.4 meters	Jason Seels (GBR)	Orlando, USA, 21.05.2004
	69.4 meters	Elena Milakova (RUS)	US Masters, GA, 26.05.2002

Edited by Fred Dupanloup, 01.07.2011
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IWSF & E&A WATERSKI AND WAKEBOARD AGE CHART 2011

	55 +	45 +	35 +	OPEN	UNDER 21	UNDER 17	UNDER 14	WATERSKI		MASTER II	MASTER I	OPEN	JUNIOR	GIRLBOY	YOUNGTERS	WAKEBOARD
	1955 - ...	1965 - 1966	1975 - 1966	...	1993 - 1990	1996 - 1994	... - 1997	For 2011, born in	WOMEN Slalom max speed							For 2011, born in
	52 km/h	55 km/h	55 km/h	55 km/h	55 km/h	55 km/h	55 km/h		MEN Slalom max speed							
	55 km/h	55 km/h	51 km/h	54 km/h	54 km/h	51 km/h	45 km/h		WOMEN Jump max speed /							
	48 km/h	48 km/h	1.50 m	1.50 / 1.65m	1.50 / 1.65m	1.50 m	1.50 m		Ramp height							
	51 km/h	54 km/h	57 km/h	57 km/h	1.65 / 1.80m	1.50 / 1.65m	1.50m		MEN Jump max speed /							
	1.50 m	1.50 m							Ramp height							



Number of skiers started in Preliminary round	Number of skiers in Finals
1 - 5	All
6 - 10	first 5
11 - 12	first 6
13 - 15	first 8
16 - 19	first 10
20 and more	first 12

Women
.235

BUOYS TOLERANCES (IWSF 2008 rule 14.06 & 14.18)							
Slalom				number of buoys for type of slalom			
diameter (cm)	min	max	rec*	out of water (cm)	min	max	rec*
Skier	20	28	20	17	10	red	6
Gate	22	28	23	11	17	11.5	red
Boat path	22	-	-	-	-	yellow	12
Pre-Gate (55)	22	-	-	-	-	green	4
*recommended							26
							32
If "All Buoys Timing" is being used, the green timing buoys at buoy 3 are not required.							
source : http://www.iwsf.com/rules2004/rulebook2004/rules08v1.0.f.htm							
25.06.2008 - Fred Dupanloup							

Speed Control Parameter Adjustment Chart

Updated speed control parameters may be posted on the USA WS website, accompanied by a revision date, and will supersede the speed control parameters printed in the AWSA Rule Book. No changes shall be made between July 1 and the conclusion of Nationals.

JUMP

Parameter	Who	When	Perfect Pass	Zero Off
BOAT SPEED	Skier	Before each pass	Speed in MPH/KPH	Speed in MPH/KPH
SKIER - JUMP LETTER	Driver/Judge - with input from skier	Before each jump Boat crew may adjust as necessary including for the first jump	Select NEW JUMPER and input speed, skier weight and rated distance. Skier may adjust initial setting +/- 3 letters. Adjust as necessary	Hold "SEL" while jump letter is highlighted Enter skier weight and rated distance. Skier may adjust initial setting +/- 4 letters. Adjust as necessary.
41METER SEGMENT	Skier selects Fast or RTB	Before each skier based on type of 41 meter segment pull requested	S2% - Fast segment = 40 to 60 Return to Baseline = Zero	Letter Only = faster segment Letter with "RTB" above = return to baseline
SKIER - FAST or RTB (Return to Baseline)	Driver/Judge	Boat crew may adjust as necessary	S2 FINE - Fine adjust additional RPM as needed to speed up 41Meter segment for actual times.	ADDER - Range = 0 to 9. Start at 0. Adjust as needed for actual times. This number follows "Power Factor". Example: 6/0 - Where 6 is the Power Factor and 0 is the "adder"
BOAT ADJUST (Raises speed in the 41 Meter segment. Adds to the target speed)	Driver/Judge - with input from skier	Start at 6 or 7 with 5.7 liter engine Start at 4 with 6.0 liter engine Boat crew may adjust as necessary	N/A	Range 0 to 15 - Raises or lowers the base speed. A lower number result in boat entering the course slower. At 3 or below there is no additional decrease in baseline (adjustments are then made to the ramp rate for the letter)
BOAT - POWER FACTOR	Driver	Before event May be adjusted as necessary to control speed during counter cut w/head or tail wind	Recommended: 175 Head Wind 190 Tail Wind 170 ¼ Cut 160	Recommended: 180 Head Wind 190 Tail Wind 170 ¼ Cut 160
COUNTER CUT TIME (CT)	Driver/Judge	Before event As needed	Weight in lbs Adjust for conditions	N/A
CREW WEIGHT	Driver	Before event	Controls rate of additional rpm added. With a higher number, it will take longer for the full additional rpm to be reached (softer at the start/stronger at the base).	N/A
RPM ADJUST	Skier	The manufacturer's setting may be adjusted up or down within the range as published for that towboat. One additional adjustment may be made after the skier's 1 st jump only.	Recommended: 180 Head Wind 190 Tail Wind 170 ¼ Cut 160	N/A
X8u	Driver/Judge - with input from skier	The manufacturer's setting may be adjusted up or down within the range as published for that towboat. Before each skier	Controls the timing of the rpm drop once the skier has unloaded the switch. With a higher number, the longer it will take for the boat to begin to slow.	N/A
X8d				N/A

SLALOM

Parameter	Who	When	Perfect Pass	Zero Off
OPERATING MODE	Driver/Judge	Before event	TOURNAMENT MODE ONLY	TOURNAMENT MODE ONLY
BOAT SPEED	Skier	Before each pass	Speed in MPH/KPH	Speed in MPH/KPH
A1, A2, A3 B1, B2, B3 C1, C2, C3	Skier - skier's option. Set to default - B2 unless skier asks for other setting	Before each pass No adjustment between passes	N/A	A = Slowest engine response out of buoy B = Moderate engine response out of buoy C = Fastest engine response out of buoy 1 = Softest feel behind the boat 2 = Moderate feel behind the boat 3 = Firmest feel behind the boat
CREW WEIGHT	Driver/Judge	Before event	Enter total crew weight in lbs	N/A
SKIER WEIGHT	Driver/Judge	Before each skier No adjustment between passes	Set skiers weight: Zero - no skier Feather - < 120 lbs Light - 120 to 160 lbs Normal - 160 to 200 lbs X - 200 lbs KX - = softer KX NORMAL = default KX + / KX ++ = firmer	N/A
(PP CLASSIC) KX	Skier - should be set to Normal unless skier asks for other setting	Before each pass	PX = 0 to 40	N/A
(PP CLASSIC) PX	Skier - should be set to zero unless skier asks for other setting	Before each skier No adjustment between passes	Zero eliminates the switch	N/A
(PP CLASSIC) RPM ADJUST	Driver	Adjust as necessary for conditions	Adjust for conditions	N/A
(PP CLASSIC) SSB	Driver	Adjust as necessary to balance speed between first and second segments of the course	Initial setting for each boat from mfg suggested settings - adjust as needed	N/A

TRICKS

Parameter	Who	When	Perfect Pass	Zero Off
BOAT SPEED	Skier	Before each pass	Speed in MPH/KPH	Speed in MPH/KPH
A1, A2, A3 B1, B2, B3 C1, C2, C3	Skier - skier's option. Set to default - B2 unless skier asks for other setting	Before each pass	N/A	See ABC in slalom Above
Kd	Skier - skier's option. Set to default - unless skier asks for other setting	Before each pass	Default = 28	N/A

NOTE: If the designated towboat has multiple GPS systems available, the skier has the option to select from available GPS systems. If the

SLALOM : 14.03: Boat Times									
	Score:	0-0.5	1-1.5	2-2.5	3-3.5	4-4.5	5-5.5	All 6	Driver
KPH	Fm/To:	E-1	E-2	E-3	E-4	E-5	E-6	E-X	Times
58	Fast	1.64	4.15	6.67	9.20	11.73	14.25	16.00	16.04
	Ideal	1.68	4.22	6.77	9.31	11.86	14.40	16.08	16.08
	Slow	1.71	4.28	6.84	9.41	11.97	14.53	16.16	16.12
55	Fast	1.73	4.37	7.03	9.69	12.35	15.02	16.86	16.90
	Ideal	1.77	4.45	7.13	9.82	12.50	15.19	16.95	16.95
	Slow	1.80	4.51	7.23	9.93	12.64	15.34	17.04	17.00
52	Fast	1.83	4.62	7.43	10.24	13.05	15.87	17.72	
	Ideal	1.87	4.71	7.55	10.38	13.22	16.06	17.93	
	Slow	1.91	4.78	7.65	10.52	13.39	16.25	18.13	
49	Fast	1.94	4.90	7.87	10.85	13.83	16.81	18.78	
	Ideal	1.98	5.00	8.01	11.02	14.03	17.04	19.03	
	Slow	2.03	5.08	8.13	11.18	14.22	17.27	19.27	
46	Fast	2.06	5.21	8.37	11.54	14.71	17.88	19.98	
	Ideal	2.11	5.32	8.53	11.74	14.95	18.16	20.27	
	Slow	2.16	5.42	8.68	11.93	15.18	18.42	20.56	
43	Fast	2.20	5.56	8.94	12.33	15.71	19.10	21.34	
	Ideal	2.26	5.69	9.13	12.56	15.99	19.42	21.68	
	Slow	2.32	5.81	9.30	12.78	16.27	19.75	22.03	
40	Fast	2.36	5.97	9.60	13.23	16.86	20.50	22.89	
	Ideal	2.43	6.12	9.81	13.50	17.19	20.88	23.31	
	Slow	2.50	6.26	10.02	13.78	17.53	21.27	23.74	
Timing used for boat speed verification, shall be from the entrance gate to the boat gate following the buoy at which the last full point is scored in the pass.									
Where the applicable speed is slower than allowable, a rerun shall be mandatory. If the pass was not a perfect pass, the skier may not improve his score over that obtained on the slow pass, unless the speed is so slow that it is equal to or below the fast tolerance of the next slower pass. If the pass was a perfect pass (score is 6, skier to continue), the skier may choose to proceed to the next pass instead of repeating the pass. If the skier then makes a perfect pass, he receives credit for both passes. If the pass is missed, he will receive credit for the buoys made as if it were the lower, skipped pass. (2002)									
Missed times - if the applicable segment time is missed the skier may accept the highest scores with a good applicable segment time, or receive an optional reride with a protected score equal to the highest score with a good applicable segment time. Note if no times are recorded rule 8.02 applies. Additionally, if the skier has made a complete pass, the skier may opt up at his own risk. (2007)									

Normal Mode Jumping Reride Chart

seg1+2	seg2	action
OK	OK	none
OK	F	mandatory reride only if distance is best distance in skiers turn
OK	S	optional reride (protected score)
S	OK	optional reride (protected score)
S	F	mandatory reride only if distance is best distance in skiers turn, otherwise optional with protected score
S	S	optional reride (protected score)
F	OK	mandatory reride
F	S	mandatory reride
F	F	mandatory reride

!!! JUMP RULES 2010 !!!

KPH	3 segments 2 segments	1st (52m)	1st&2nd 1st (82m)	3rd (41m)	2nd (41m)
57	Fast	3.25	5.11	2.36	2.52
	Ideal		5.18	2.40	2.59
	Slow	3.36	5.25	2.46	2.66
54	Fast	3.43	5.39	2.54	2.66
	Ideal		5.47	2.59	2.73
	Slow	3.54	5.55	2.66	2.81
51	Fast	3.63	5.70	2.68	2.81
	Ideal		5.79	2.73	2.89
	Slow	3.75	5.88	2.81	2.98
48	Fast	3.86	6.05	2.84	2.98
	Ideal		6.15	2.89	3.08
	Slow	3.98	6.25	2.98	3.17
45	Fast	4.11	6.45	3.01	3.17
	Ideal		6.56	3.08	3.28
	Slow	4.25	6.68	3.17	3.39
42	Fast		6.90		3.39
	Ideal		7.03		3.51
	Slow		7.17		3.64
39	Fast		7.42		3.64
	Ideal		7.57		3.78
	Slow		7.73		3.94

Jump Timing Reride Chart at Maximum Division Speed

seg1	seg2	seg3	action	protected score
OK	OK	OK	none	n/a
--	S	--	optional reride	yes
S	F	--	mandatory reride	no
OK/F	F		mandatory reride only if best jump	no
F	OK	S/OK	optional reride	yes
S	OK	OK/F	mandatory reride only if best jump	no
S	OK	S	mandatory reride	no
F	OK	F	optional reride	no
OK	OK	F	mandatory reride only if best jump	no
OK	OK	S	optional reride	yes

The first row from the top that matches the situation is used

Jump Timing Reride Chart below Maximum Division Speed

seg1	seg2	seg3	action
OK	OK	not F for max speed	none
one segment is F for max speed and no segment is S+2			mandatory reride only if distance is best distance in skiers turn
one segment is F for max speed and at least one segment is S			mandatory reride only if distance is best distance in skiers turn, otherwise optional with protected score
No segment is F for max speed and seg1 or seg2 is S or F for requested speed			optional reride (protected score)

In the case where multiple rerides may apply due to fast second segment these shall be resolved taking the longest distance first (2007)