
NEW ZEALAND TOURNAMENT WATER SKI ASSOCIATION

TOURNAMENT HOMOLOGATION REPORT

Tournament:	_____
Venue:	_____
Dates:	_____

The purpose of the homologation report is to provide a reference and process for checking all technical preparations for NZ “A” & “B” category tournaments or IWWF World ranking tournaments. The objective of this exercise is to ensure that the event is conducted in a professional manner using systems, courses and administration in accordance with IWWF and NZTWSA Rules, Bylaws and specifications.

The following shall be returned for homologation audit:

Category of Tournament	Sections to be completed & returned
Three event tournaments	All sections (1, 2, 3, 4 & 5) slalom and jump course survey reports, slalom end-course videotape, results report.
Slalom tournaments	Sections 1, 2, 5, slalom course survey report, end course videotape, results report
Jump tournaments	Sections 1, 3, 5, jump course survey report, results report.
Trick tournaments	Sections 1, 4 & 5, results report.

Return the homologation report of your tournament complete with survey report sheets, and tournament results to:

Trevor Fowler
 65b Portal St
 Wanganui 4500

Or email to: ski.venturer@xtra.co.nz

IWWF Reference material available:

IWWF Tournament rules: <http://www.IWSF.com/>

Survey assistance spreadsheets and other downloads: <http://www.IWSF.com/download.htm>

NZTWSA Results spreadsheets: These are circulated to regular users but are available from the above email address. *[Envisaged future availability on NZTWSA website]*

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Amendments summary:

Version	Date	Amendments
V2.14	8-Feb-06	Slalom rope diagram and Slalom course buoys diagram & chart updates - Reference updates – NZTWSA 1.2m ramp setting chart added.
V2.15	Nov-09	General update following issue of 2009 IWWF Tournament Rules

SECTION 1 –ADMINISTRATION & OFFICIALS

Tournament Details

Tournament Name: _____

Date(s): _____ Venue: _____ Site Code: _____

Events conducted (✓):	SLALOM ()	TRICKS ()	JUMP ()
Number of Rounds:			

Tournament Classification: _____ NZTWSA Tournament Code: _____
(Refer NZTWSA Bylaw 2A)

Tournament Hosts: _____

Address: _____

Contact Person: _____ Phone: _____ Fax: _____

Contact E-mail address (if available) _____

Key Officials

Chief Judge: _____ Tournament Director: _____

Tournament Homologator: _____ Chief Scorer _____

Event Judges Panel - Minimum Requirements

B Class Tournaments:

Slalom event	2 x 3rd Class	3 x 2 nd Class
Jump event	1 x 3 rd Class	2 x 2 nd Class
Tricks event	2 x 3rd Class	3 x 2 nd Class
[Tricks panel must have minimum trick grades of: (3 x B)+(2 x C). Boat Judge - 3 rd Class.]		

A Class Tournaments:

Slalom event	1 x 3rd Class	2 x 2 nd Class	2 x 1 st Class
Jump event	1 x 3 rd Class	1 x 2 nd Class	1 x 1 st Class
Tricks event	2 x 3rd Class	3 x 2 nd Class	
[Tricks panel must have minimum trick grades of: (2 x A)+(3 x B) or (4 x A)+(1 x C)]. Boat Judge 2 nd Class			

IWWF Ranking List Class (LC) Tournaments: (15.11)

Slalom event	2 x 2nd Class	3 x 1st Class
Jump event	1 x 2nd Class	2 x 1st Class
Tricks event	2 x 3rd Class	3 x 1st Class
[Tricks panel must have minimum trick grades of: (3 x A)+(2 x B). Boat Judge - 2nd Class.]		

Boat Drivers Register

Driver	Slalom (✓)	Tricks (✓)	Jump (✓)

'Jump' and 'Last Trick in Time' Video Judges Register

Judge	Jump (✓)	Trick (✓)

Boat Judges Register

Boat Judge	Slalom (✓)	Tricks (✓)	Jump (✓)

Tournament Boats Scrutineering Check

(Refer Rule 10.01)

	Boat No 1	Boat No 2	Boat No 3	Boat No 4
Identifier/Make				
Owner/Skipper				
NZTWSA/IWWF Approved (✓)				
No modifications since last NZTWSA/IWWF Approval. (✓)				
Events used (S, T, J)				
Inboard/Outboard				
Power rating satisfactory (✓)				
Length (5.0m - 6.5m) (✓)				
Beam (1.8m - 2.5m) (✓)				
Pylon Height (0.65m - 1.2m) (✓) Above W.L at anchor.				
Pylon Strength & Design in compliance to Rule 10.01c (✓)				
Pylon position amidships (✓)				
Trick release fitted (✓)				
Red & Green flags (✓)				
1 Driver + 2 forward seats (✓)				
Twin Speedo's + twin pickups (✓)				
Auto timing device fitted (✓) / Type				
Cruise Control fitted (✓) / Type				
Cruise control software version:				
2 nd speed control display used (S/J) (✓)				

Rescue Boats Scrutineering:

RESCUE BOAT 1 CHECKS	(✓)
Boarding method satisfactory	
Safe loading for up to 4 persons	
Small idle wash	
Fuel tank check	
Outboard power check	
Rescue floater available	
Crew lifejackets on board	

RESCUE BOAT 2 CHECKS	(✓)
Boarding method satisfactory	
Safe loading for up to 4 persons	
Small idle wash	
Fuel tank check	
Outboard power check	
Rescue floater available	
Crew lifejackets on board	

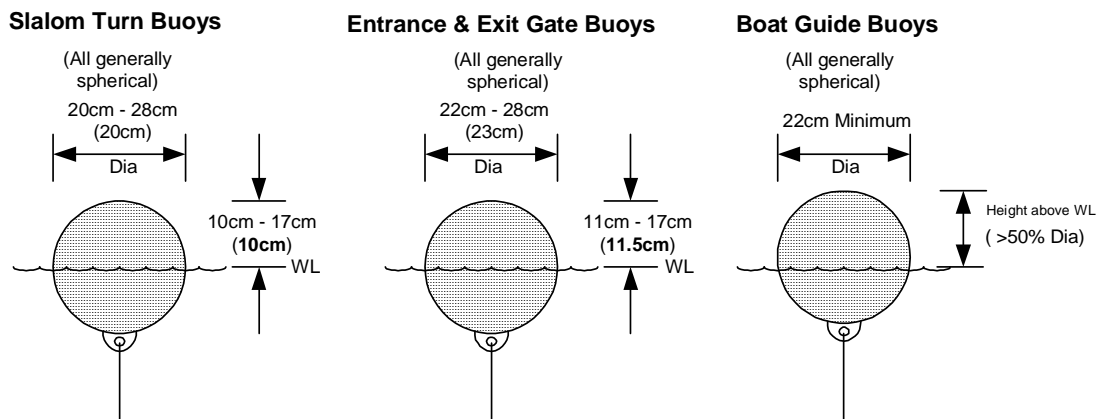
SECTION 2 – SLALOM EVENT

Slalom Course Buoys Check

(Rule 14.06)

Slalom buoys generally spherical above W.L. (✓)	
Slalom turn buoys lightweight (✓)	
Slalom turn buoys of soft pliable material (✓)	
Slalom turn buoys have smooth surface (✓)	
Slalom entrance and turn buoys colour Orange (✓)	
Boat guide gate buoys colour Yellow (✓)	
3rd Timing boat guide buoys colour Green (✓)	

Conventional slalom buoy dimensions (14.06)

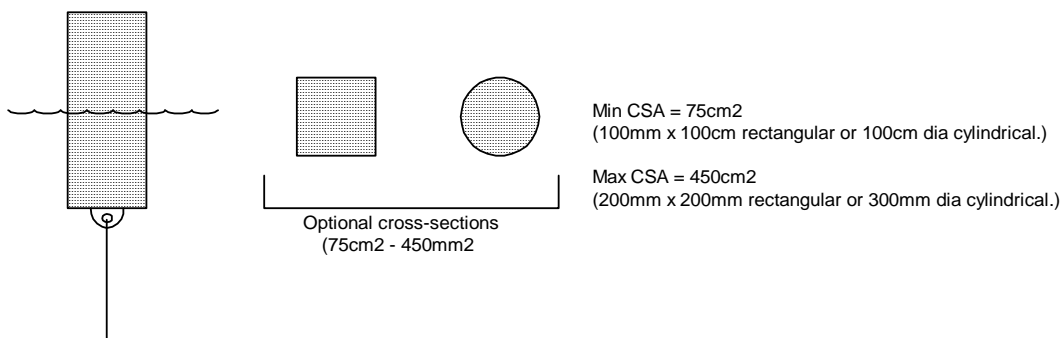


Notes:

- All skier buoys are set the same
- Boat guide buoys must be greater than 22cm diameter and can float higher than skier buoys
- Diameter 23cm can be checked at 72.3cm circumference
- Diameter 20cm can be checked at 62.8cm circumference
- Recommended height above water line for turn and gate buoys are shown in bold font

Cylindrical or rectangular boat guide buoy dimensions

Where rectangular or cylindrical boat guide buoys are used the course must be set so that the distance between the inside edge of the buoys is 2.05m +/- 15cm



Slalom course buoys dimension checks (14.06)

Slalom turn buoys: (Generally spherical above WL)		Diameter (20cm - 28cm) (20cm recommended)		Height above W.L. (10cm - 17cm) (10.0cm ideal)	
Turn buoy No.	1				
	2				
	3				
	4				
	5				
	6				
Entrance/Exit Gate buoys:		Diameter (22cm - 28cm) (23cm recommended)		Height above W.L. (11cm - 17cm) (11.5cm ideal)	
End 1 gate buoys:	1				
	2				
End 2 gate buoys:	3				
	4				
All boat guide buoys:	Spherical	Spherical	Cylin/Rectang.	Cylin/Rectang.	
	Diameter (22cm min.)	Height above W.L. (15cm - 30cm)	Height above W.L. (15cm - 30cm)	CSA 75cm ² – 450cm ²	
Measured distance between inside faces of Cylind. or Rectang. guide buoys if this type were used (2.05m ±15cm) :					

Slalom end-course video set-up to Rule 14.17 (✓): _____

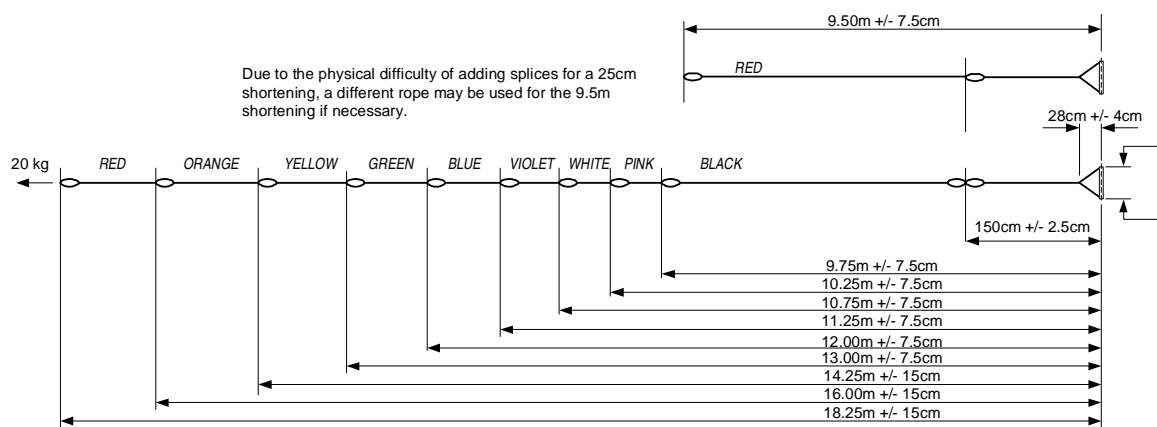
Copy of end course tapes attached with report (✓): _____

Slalom judging towers generally as per diagram 6 [IWWF Rules] (✓): _____

Optional boat-path alignment gates installed (Y/N): _____

Optional boat-turn buoys installed (Y/N): _____

Slalom Rope Dimensions (10.04f,g)



Slalom Rope Dimensions (Rule 10.04)

Note: A protective shock tube must be used on the rope in slalom. (10.04h)

Slalom Rope Measurement Checks

Loop	Rope No 1	Rope No 2	Rope No 3
9.50m ± 7.5cm			
9.75m ± 7.5cm			
10.25m ± 7.5cm			
10.75m ± 7.5cm			
11.25m ± 7.5cm			
12.00m ± 7.5cm			
13.00m ± 7.5cm			
14.25m ± 15cm			
16.00m ± 15cm			
18.25m ± 15cm			

Tournament Issued Slalom Handles Measurement Checks

Dimension	Handle No 1	Handle No 2	Handle No 3
Handle width (28cm ± 4cm)			
Bridle length (28cm ± 4cm)			
Handle – Loop (1.50m ± 15cm)			

Slalom course Survey Report (Spreadsheet)

Ensure survey certificate is completed and signed in section 5 of this homologation report.

Standard master spreadsheet [slalsurv.xls] (endorsed by the NZTWSA) is available for use on MS Excel.

Completed survey report attached (✓) _____

(Attach the spreadsheet report of the slalom course survey to this homologation report. Ensure that the Surveyor has endorsed this.)

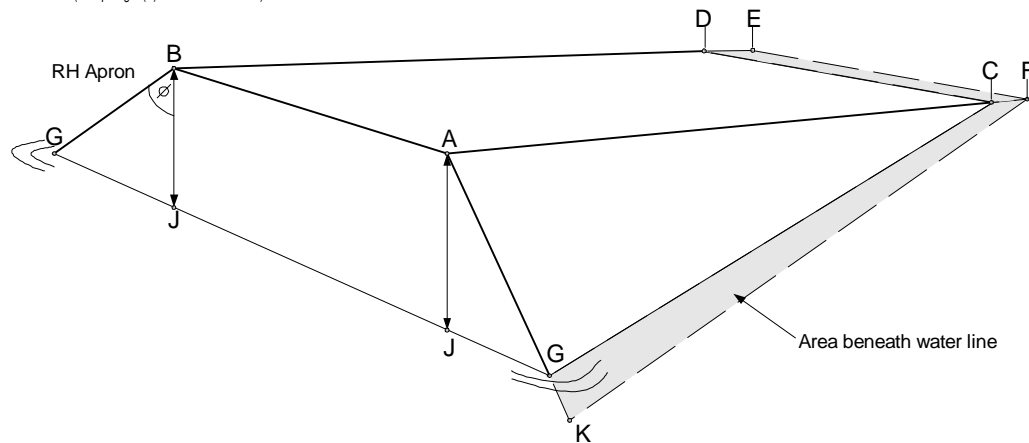
SECTION 3 – JUMP EVENT

Jump Ramp Measurement Record

Ramp height:
Ramp Height (H) = (B - J) = (A - J). (Where J = water level)
Refer to setting record over page.

Ramp Length:
Ramp length (L) = (A - C) = (B - D)
Refer to setting record over page.

RH Apron angle(θ) = 28° Min, 50° Max, 45° recommended.
(Ramp angle (θ) = $\text{Cos}^{-1} B - J / B - G$)



Ramp below W.L. Safety Measurement Check (13.02c & 13.02g)

Measurement Points	Allowable Tolerance	1.2m Ramp	1.5m Ramp	1.65m Ramp	1.85m Ramp
D - E	60cm (min)				
C - F	60cm (min)				
G - K	30cm (min)				

Ramp Surface Deviation Check (13.02f)

Surface Deviation Between Points:	Allowable Tolerance (Refer Rule 13.02f)	Measured Maximum Surface Deviation
A - B	± 2.5cm	
C - D	± 2.5cm	
B - D	± 2.5cm	
A - C	± 2.5cm	
A - D	± 2.5cm	
B - C	± 2.5cm	

Ramp Deck Width & Apron Angle record (13.02a & 13.02k)

Ramp Deck Width A - B (13.02a)	Apron angle (28° - 50°) check (13.02k) ($\text{Cos}^{-1} \theta = B-J/BG$)	
	Nominal Ramp Height B-J:	Apron Length B-G:
Width A - B = _____m	1.2m	1.8m

Ramp Height Ratio Check (13.02c & 13.02d)

(Refer IWWF & NZTWSA Ramp setting charts. Rule 13.02.)

Nominal Ramp Height	Prescribed H/L Ratio	Setting Range		Actual Ramp Setting (Measure at setting)		Calculated H/L Ratio	Ramp setting within ratio (✓)
		Height (H) (m)	Length (L) (m)	H (m)	L (m)		
1.2m (NZ)	0.190 ± 0.003	1.20 min 1.31 max	6.40 min 6.80 max				
1.5m	0.235 ± 0.003	1.48 min 1.60 max	6.40 min 6.80 max				
1.65m	0.255 ± 0.003	1.61 min 1.73 max	6.40 min 6.80 max				
1.8m	0.271 ± 0.003	1.74 min 1.86 max	6.40 min 6.80 max				

Ramp length mark clearly visible on ramp deck or apron: (✓): _____ (13.02h)

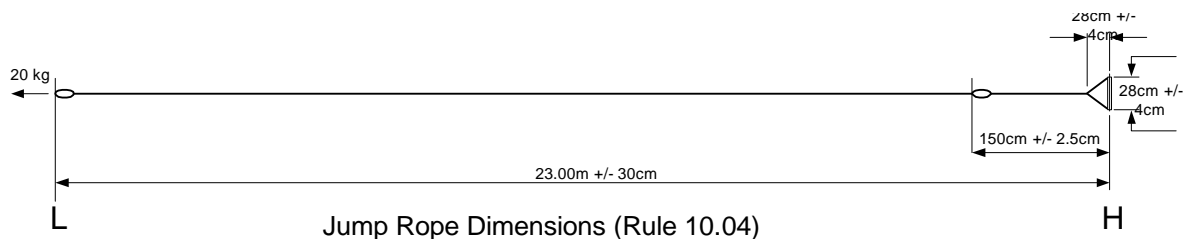
Jump Course Survey Report (Spreadsheet)

Ensure survey certificate is completed and signed in section 5 of this homologation report.

Standard AWSA master spreadsheet jumpsurv.xls (endorsed by NZTWSA) is available for use on MS Excel .

Completed jump course survey report attached (✓): _____

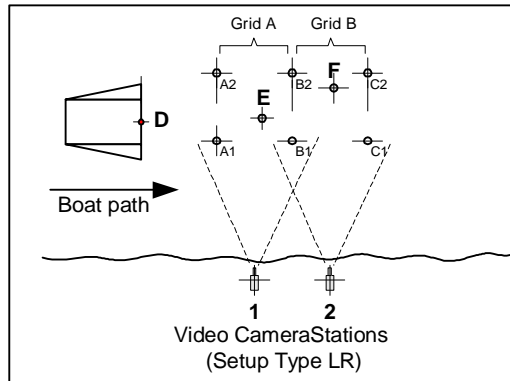
Jump Rope Measurement Check (10.04g)



Rope:	#1	#2	#3
Length H – L:			

Video Jump Measurement System Set-up Record (13.10)

Example of a typical video setup:



TEST BUOY COORDINATE CHECKS	Test buoy "E"		Test buoy "F"	
	X-pos	Y-pos	X-pos	Y-pos
Coordinates from survey spreadsheet:				
Readings from video plot:				

General Record of Video Jump Measurement System:

Type of IWWF approved video measuring system used: _____

Test buoys (E & F) installed to verify video system measurements (✓): _____

Video plots of test buoys compared to survey coordinates (✓): _____

No of cameras / grids: _____

Approx. height of cameras above water level: _____m

Approximate distance cameras located from centre of grids: _____m

Camera placed centrally opposite each grid (✓): _____

Location of grids placed generally as per diagram (✓): _____

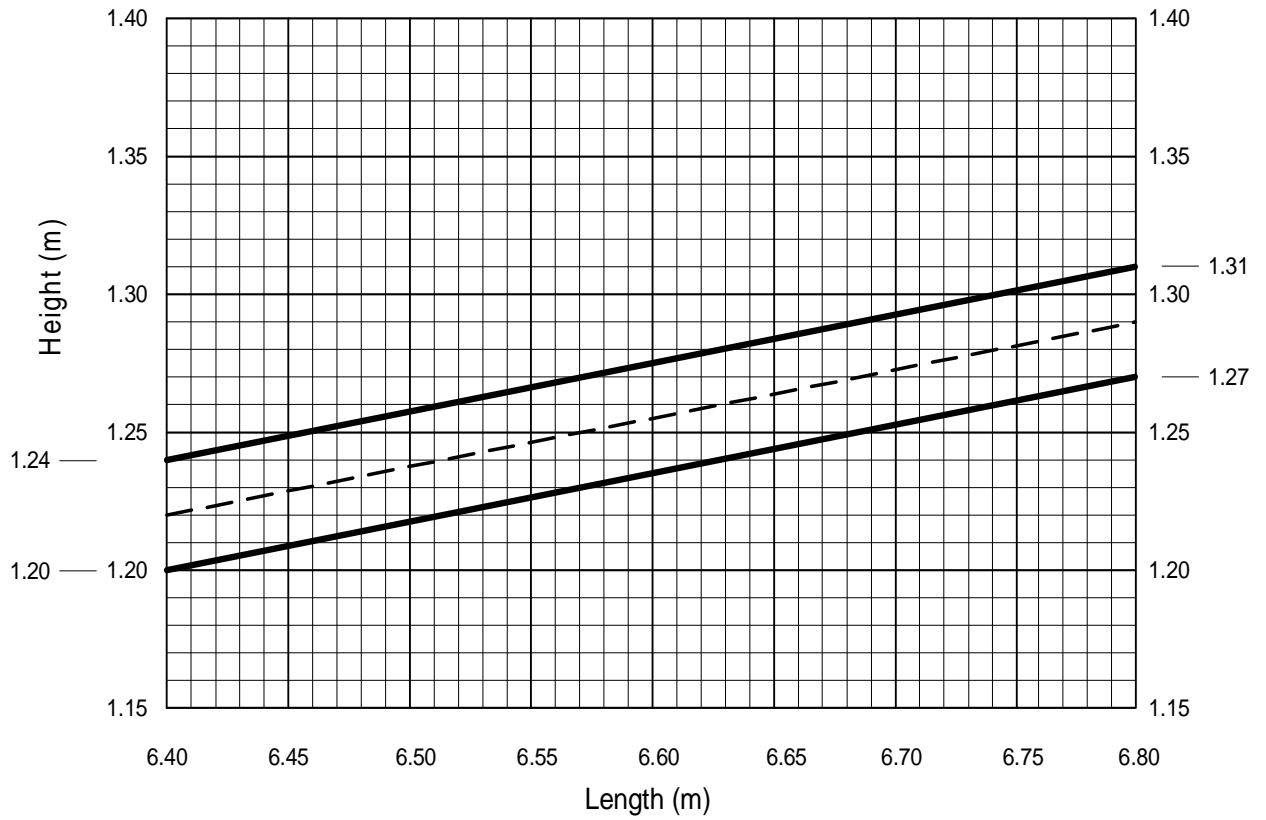
X-Pos & Y-Pos coordinates of the grid buoys required by the video computer system set-up obtained from survey report (✓): _____

New Videotapes installed into video recorders (✓): _____

Full system operation confirmed for both grids (✓): _____

NZTWSA 1.2m Ramp Setting Chart

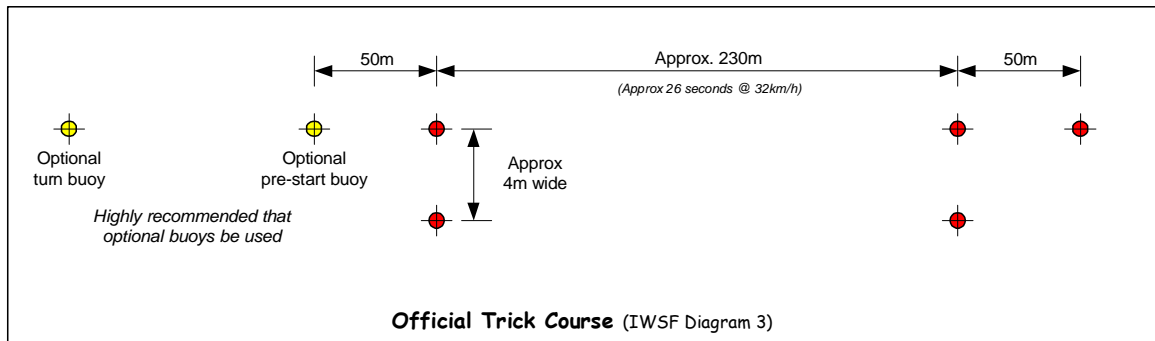
The chart below covers the NZTWSA 1.2m (nominal) ramp setting. The 1.5m, 1.65m and 1.8m nominal settings shall be as prescribed in the IWWF rules.



NZTWSA - 1.2m ramp setting chart

SECTION 4 - TRICKS EVENT

Trick Course Checks



Course set-up checked as correct (✓)	
Auto timing device used:	
Tricks auto-timing device functioning correctly (✓)	
Main audible devices functioning correctly from auto-timer (✓)	
Video camera in boat and comms. functioning correctly (✓)	
Video judge system functioning correctly (✓)	
Last trick in time video system functioning correctly (✓)	

SECTION 5 – TOURNAMENT CERTIFICATION

Chief Judge Approval

I certify that the following conditions were met:

- 1) The competitions were conducted in accordance with the appropriate IWWF or NZ tournament rules.
- 2) The competitions were conducted to the NZTWSA tournament sanction rating prescribed for this tournament.
- 3) That all official judges for each event were qualified to the required grade applicable to the NZTWSA tournament sanction rating prescribed for this tournament.

Signed _____ Chief Judge Date _____

(Print Name) _____

Homologation Approval

We certify that the following conditions were met:

- 1) That the courses were not modified in any way following the measurement survey approval.
- 2) That if any course was modified that it was resurveyed (or in part) to verify the adjustments.
- 3) That if any course buoy was dislodged it was replaced without affecting the correctness of its original position or nullifying the survey results.
- 4) That the tournament ropes were measured in accordance with the NZTWSA tournament rules with the correct tension applied.
- 5) That all timing and auto-speed devices functioned correctly.
- 6) That all tournament boats met the specifications approved by the NZTWSA and/or IWWF.
- 7) That the general tournament site and administration facilities were established in a manner appropriate for the grade of tournament conducted and to NZTWSA and/or IWWF requirements.

Signed: _____ Date _____

_____ Tournament Director (Print Name) _____

_____ Tournament Homologator (Print Name) _____

Slalom & Jump Courses Survey Certification

I certify that:

- 1) The slalom and jump courses were surveyed using the three-point survey method points on a line approximately parallel to the courses.
- 2) That the survey equipment used was of a standard as prescribed by the IWWF homologation guidelines (Instrument accuracy < 20sec).
- 3) The computer spreadsheet results (attached) show a true and correct record of the sightings and that the course dimensions were within the tolerances prescribed in the IWWF rules.
- 4) That the survey results were computed in accordance with homologation guidelines prescribed in the IWWF tournament rules.

Signed: _____ Homologator

Survey Approval

I certify that the survey instrument equipment, methods and computations employed to determine the accuracy of the slalom and/or jump course was of a competent standard and in accordance with that prescribed by the IWWF and NZTWSA.

Signed: _____ Registered Surveyor

Homologation Audit Approval:

_____ For NZTWSA Date: _____
