

International Water Ski Federation



**WORLD CABLESKI
TECHNICAL RULES**

Edition 1998

World Cableski Commission

Contents

Rule 1. General.....	7
Rule 1.1. Applicability of these rules.....	7
Rule 1.2. Exceptions to the rules.....	7
Rule 1.3. Interpretation of the rules.....	7
Rule 1.4. Amendments to the rules.....	7
Rule 1.5. Cableski World Championships Dates.....	7
Rule 1.6. Effectivity of the Cableski World Championships.....	7
Rule 1.7. Drug testing.....	8
Rule 1.8. Unsportsmanlike conduct.....	8
Rule 2. Competition entry requirements.....	8
Rule 2.1. Cableski World Championships entry and administration.....	8
Rule 2.2. Team selection.....	8
Rule 2.3. Qualification levels.....	9
Rule 2.4. Non-team skiers.....	9
Rule 2.5. Minimum team qualification.....	9
Rule 2.6. Rating effectivity.....	9
Rule 2.7. Skier eligibility.....	9
Rule 3. Competition events and divisions.....	10
Rule 3.1. Events.....	10
Rule 3.2. Divisions.....	10
Rule 3.3. Rounds.....	10
Rule 3.4. Schedule of events.....	10
Rule 3.5. Schedule changes.....	10
Rule 3.6. Completion.....	10
Rule 3.7. Starting order.....	10
Rule 3.8. Familiarization.....	11
Rule 4. Overall and team competition.....	11
Rule 4.1. Overall scoring.....	11
Rule 4.2. Qualification for Overall scoring.....	11
Rule 4.3. Overall placement.....	11
Rule 4.4. Team scoring.....	11
Rule 5. Officials.....	11
Rule 5.1. Chief Judge - Appointed Officials.....	11
Rule 5.2. Choosing Appointed Judges.....	12
Rule 5.3. Event Judges.....	12
Rule 5.4. Voting of the judges.....	12
Rule 5.5. Scoring sheet availability.....	12
Rule 5.6. Placement of judges.....	12
Rule 5.7. Homologator.....	12
Rule 5.8. Technical Officer.....	12
Rule 5.9. Secondary positions.....	13
Rule 5.10. Tolerances.....	13
Rule 6. Safety of competition and security of technical installations.....	13
Rule 6.1. Safety Director.....	13
Rule 6.2. Safety competition stoppages.....	13
Rule 6.3. Equipment safety.....	13
Rule 6.4. Unsafe skier disqualification.....	13
Rule 6.5. Safety boats.....	13
Rule 6.6. Safety boat personel.....	13
Rule 6.7. On site medical facilities.....	14
Rule 6.8. Life jackets.....	14
Rule 7. Rerides.....	14
Rule 7.1. Reride criteria.....	14
Rule 7.2. Granted reride procedure.....	14
Rule 7.3. Request for rerides.....	15
Rule 8. Protests.....	15

Cableski Technical Rules

Rule 8.1. Procedure.....	15
Rule 8.2. Reasons for protests.....	15
Rule 8.3. Protest submission.....	15
Rule 8.4. Computation errors.....	15
Rule 9. Installation, skis, tow lines.....	15
Rule 9.1. Installation.....	15
Rule 9.2. Skis.....	15
Rule 9.3. Tow lines.....	16
Rule 9.4. Prestretching of Tow lines.....	16
Rule 9.5. Tow lines and handles for the Trick event.....	17
Rule 9.6. Handles in the Slalom and the Jump event.....	17
Rule 9.7. Bibs.....	17
Rule 9.8. Not competition supplied equipment.....	17
Rule 10. Speeds and tolerances.....	17
Rule 10.1. Tolerances.....	17
Rule 10.2. Accuracy of timing devices.....	17
Rule 10.3. Timing for Slalom and Jumping.....	17
Rule 10.4. Position of Timers.....	17
Rule 11. Definitions.....	18
Rule 11.1. Competition area.....	18
Rule 11.2. Definition of a fall.....	18
Rule 11.3. Definition of skiing position.....	18
Rule 11.4. Start of the skier.....	18
Rule 11.5. Disqualification of the skier at the start.....	18
Rule 11.6. Team representative.....	18
Rule 11.7. Time of posting.....	18
Rule 11.8. Usage of a run off.....	19
Rule 12. Jumping.....	19
Rule 12.1. General Jump Event Conditions.....	19
Rule 12.2. Refusal of the skier.....	19
Rule 12.3. Jump course.....	19
Rule 12.4. Description of the Jump Ramp.....	19
Rule 12.5. Jumping speeds.....	20
Rule 12.6. Officials stopping a jump.....	20
Rule 12.7. Scoring of a jump.....	20
Rule 12.8. The result of a skier falling.....	20
Rule 12.9. Officials.....	20
Rule 12.10. Timing.....	20
Rule 12.11. Safety Equipment.....	21
Rule 12.12. Jump distance measuring.....	21
Rule 12.13. Description of the Johnson system.....	21
Rule 12.14. Use of a video jump measurement system.....	21
Rule 12.15. Scoring.....	22
Rule 12.16. Ties.....	22
Rule 13. Slalom.....	22
Rule 13.1. General.....	22
Rule 13.2. Refusal of a skier.....	22
Rule 13.3. Slalom Course.....	23
Rule 13.4. Buoys.....	23
Rule 13.5. A fall in Slalom.....	23
Rule 13.6. Scoring buoys.....	23
Rule 13.7. End of the slalom run.....	23
Rule 13.8. A miss or „riding over“.....	23
Rule 13.9. Slalom towers.....	23
Rule 13.10. Officials.....	24
Rule 13.11. Timing.....	24
Rule 13.12. Safety equipment.....	24
Rule 13.13. Scoring.....	24
Rule 13.14. Ties.....	24
Rule 14. Tricks.....	24
Rule 14.1. General.....	24

Rule 14.2. Refusal of a skier	25
Rule 14.3. Trick course	25
Rule 14.4. Speed.....	25
Rule 14.5. Start of trick pass timing	25
Rule 14.6. End of the trick pass	25
Rule 14.7. A fall before the pass	25
Rule 14.8. Use of a release or braking the cable	25
Rule 14.9. Officials	25
Rule 14.10. Communication with the Judges.....	25
Rule 14.11. Timing the trick pass.....	26
Rule 14.12. Use of the video camera.....	26
Rule 14.13. Credit for tricks.....	26
Rule 14.14. Tricks at the end of the pass.....	26
Rule 14.15. Trick lists	26
Rule 14.16. Calculation of the trick result.....	27
Rule 14.17. Trick descriptions	27
Rule 14.18. Scoring.....	28
Rule 14.19. Ties	28
Rule 15. Records	28
Rule 15.1. What records are recognized.....	28
Rule 15.2. Competitions where records may be set.....	28
Rule 15.3. Jump records	28
Rule 15.4. Slalom records.....	28
Rule 15.5. Trick records	29
Rule 15.6. Ties in an event.....	29
Rule 15.7. Record forms and criteria	29
Rule 15.8. Record administration	29
Rule 16. Homologation Guidelines	30
Rule 16.1. General	30
Rule 16.2. Jump	30
Rule 16.3. Slalom	30
Rule 17. Additional Rules.....	31
Appendix 1. Trick values.....	32
Appendix 2. General diagrams	33
Diagram 1 / Measuring the height	33
Diagram 2 / Calculation of AB	33
Diagram 3 / Handle dimensions in Slalom and Jump	33
Appendix 3. Calculation of Francor Tables	34
Appendix 4. Computer Benchmark for computed distances	35
Appendix 5. Jump diagrams	36
Diagram 4 / Jump Course	36
Diagram 5 / Ramp Angle.....	36
Diagram 6 / Ramp setting chart	37
Appendix 6. Slalom diagrams	38
Diagram 7 / Slalom Course	38
Diagram 8 / Scoring of buoys	38
Appendix 7. Trick diagrams	39
Diagram 9 / Trick Course	39

Cableski Technical Rules

Updates, revisions and corrections for these rules can be found on the IWSF Home Page at:
<http://www.iwsf.com>
Contact: juergen.pitz@usa.net

Issued February 1998

These rules have been drafted in English. In the case of a translation and conflicting interpretation only the English text shall be considered authentic.

Rule 1. General

Rule 1.1. Applicability of these rules

The rules set forth here govern cableski competitions sanctioned by the International Water Ski Federation (IWSF). With the exception of entry requirements and other administrative matters, the Regions shall follow these rules for their sanctioned competitions. It is requested that Federations establish rules as close to these rules as possible.

Whenever the masculine is used, the same shall be construed as meaning the feminine where the context so requires.

Rule 1.2. Exceptions to the rules

Where compliance with the rules is not feasible, the Chief Judge shall, with the approval of a majority of the Appointed Judges, make the necessary changes, inform each skier by posting and send a report to the IWSF Cableski Council. Where the rules are definite and feasible, a vote of the judges to decide whether to enforce any provision is prohibited.

Rule 1.3. Interpretation of the rules

Questions of interpretation of the rules shall be referred to the IWSF Cableski Council when possible. Any interpretation made by the IWSF Cableski Council as a whole shall be considered final. Otherwise the interpretation shall be made by the majority vote of the Appointed Judges, and the Chief Judge shall make a report to the IWSF Cableski Council concerning the question.

Rule 1.4. Amendments to the rules

Amendments must be approved by a two-thirds (2/3) majority of the members of the IWSF Cableski Council. The rules may be amended at any time by the IWSF Cableski Council. The amended rules shall become effective 60 days after they are sent to each affiliated Federation.

Until such time as a new edition of the rules is published, the current rules, as amended by the IWSF Cableski Council, remain in effect. A unanimous decision of the members of the IWSF Cableski Council is immediately applicable.

All new tricks submitted must include a video showing the trick. If there are new tricks accepted by the IWSF Tournament Council, they can be accepted by the IWSF Cableski Council.

Rule 1.5. Cableski World Championships Dates

The Cableski World Championships shall be held biennially in even numbered years.

Rule 1.6. Effectivity of the Cableski World Championships

The inability of a country to attend the Cableski World Championships for one reason or another (including political reasons) does not require that the entire competition be cancelled or postponed or that the titles are any less world titles.

Rule 1.7. Drug testing

All competitors must agree to be subject to doping control. Specific policies and procedures regarding doping control shall be detailed in the Medical Regulations of the IWSF.

N.B. For reference

Sanctions for deliberate doping:

e.g. anabolic steroids, amphetamine type stimulants, caffeine, cocaine, narcotics and designer drugs;
3 years for the first offence;
life ban for the second offence.

Sanctions for inadvertent use of banned drugs:

e.g. ephedrine, codeine;
3 months for the first offence;
2 years for the second offence including the next Cableski World Championships;
life ban for the third offence.

Rule 1.8. Unsportsmanlike conduct

Any skier or his representative, or official whose conduct is deemed unsportsmanlike or whose conduct may cause discredit to the IWSF, either on or off the competition site, before, during or after the competition, may be disqualified from all or part of the competition including completed events and/or be subject to a fine to be determined by the IWSF Executive Board, by a two-thirds (2/3) majority vote of the Appointed Judges. The affected individual will be given an opportunity to present his case before a disqualification decision is made. In the case of a finding of unsportsmanlike conduct, a report must be submitted by the Chief Judge to the Chairman of the IWSF Cableski Council. If the Executive Board assess a fine, it will be paid by the skier's federation.

Rule 2. Competition entry requirements

Rule 2.1. Cableski World Championships entry and administration

Each Federation which is affiliated to the IWSF shall have the right to select a team of skiers to represent their Federation in the Cableski World Championships.

Each Federation shall certify to the Chairman of the IWSF Cableski Council and to the organizing committee, not later than 60 days before the scheduled start of the familiarization of the Cableski World Championships, its intent to compete. Any Federation not meeting this requirement will not be allowed to compete until they pay a fine of 200 Swiss Francs to the IWSF. Any Federation shall certify to the Chairman of the IWSF Cableski Council, the Chairman of the Region Cableski Council, and the organizing committee, not later than 10 days before the scheduled start of familiarization of the Cableski World Championships, the names of the members of its team, the events each will enter, the ratings of each skier, as well as the names of the official reserves. Any Federation not meeting this requirements will not be allowed to compete until the Federation pays a fine of 10 Swiss Francs per skier per day after the 10-day deadline to the IWSF for each skier not officially entered. If the official entry forms are not received prior to the 24 hours before the start of official familiarization, the Federation shall not be entitled to official familiarization and its skiers's places in the draw shall be determined by the Chief Judge without reference to their qualifying scores.

Rule 2.2. Team selection

The team shall consist of a maximum of 6 skiers, with the further limitation that no team may have more than 4 men or 4 women.

Each Federation shall furthermore have the right to nominate two reserve skiers to its team, to replace any injured skier.

Rule 2.3. Qualification levels

Each skier entered in any event, except when entered under Rule 2.5, shall have in his possession a rating card or performance booklet showing the following skiing classification in each event he enters:

	Trick	Slalom	Jump
Level 1 skier			
Men:	2.500 pts	6/58/16,00	32,0 m
Women:	1.800 pts	6/55/18,25	25,0 m
Level 2 skier			
Men:	2.000 pts	6/55/18,25	27,0 m
Women:	1.500 pts	6/49/18,25	20,0 m
Specialist			
Men:	3.500 pts	6/58/14,25	40,0 m
Women:	2.500 pts	6/55/16,00	30,0 m

A skier being a Level 1 skier in at least two events may participate in those events. To participate in the third event he has to be at least a Level 2 skier in that event. If a skier is a specialist in one event, he may participate in that event without having to qualify for the other events.

Rule 2.4. Non-team skiers

Skiers not selected for their national team may qualify to compete in the Cableski World Championships as individuals in their event if they meet one or more of the following criteria:

- World Cableski Record Holder, provided the World Record was performed after the closing date of the most recently published World Ranking List. The Skier must have performed the record at least 45 days before the first day of familiarization of the Cableski World Championships and have his performance ratified by the IWSF Cableski Council 15 days before the first day of familiarization of the Cableski World Championships.
- Ranked in the IWSF World Cableski Ranking List in the top 8 men or top 8 women in any event excluding overall. The Standing List shall be the most recently published list.
- Reigning World Cableski Champion in that event (Slalom, Tricks or/and Jump) in which they defend their title.

All skiers qualified as individuals must be entered by their federation.

Skiers entering as individuals shall not receive overall points.

Rule 2.5. Minimum team qualification

Each Federation shall be entitled to a team of 2 competitors, male or female, whether qualified under Rule 2.3 or not. Such a skier who is qualified in only 1 event or not qualified in any event may compete in only 2 events.

Rule 2.6. Rating effectivity

Rating cards or performance booklets shall be certified under the responsibility of the Chairman of the Cableski Council of the Region or his designated representative, based on performance in competitions sanctioned by the IWSF, a Region or an Affiliated Federation. Performances recorded in the current calendar year and the previous calendar year are valid for this purpose. Rating cards or performance booklets so certified shall be accepted by the Judges without further examination.

Rule 2.7. Skier eligibility

A Federation may select its team in any manner it desires; however each team member must be a citizen or applying for citizenship of the country the Federation represents. In case of doubt as to the nationality of a competitor, the Judges normally will refer to his passport. If the competitor does not have a passport from the country for which he is skiing, he must prove residence in that country for at least 5 years and membership of an affiliated club of that Federation. Each Federation shall certify to the Judges that all members of its team meet these qualifications.

Rule 3. Competition events and divisions

Rule 3.1. Events

The events in a competition are Jumping, Slalom and Tricks, with a champion and succeeding places determined in each event. A champion and succeeding places shall also be determined for the Overall as described in Rule 4.1 and for the national teams as described in Rule 4.4.

Rule 3.2. Divisions

Competition in each event shall be separated into a Men's and a Women's division. There shall be no division by age.

Rule 3.3. Rounds

Each event shall consist of two rounds: a preliminary round and a final round.

All skiers qualified in an event must ski in the preliminary round of that event in order to be eligible for the final round.

Only the first 8 skiers, based on the results of the preliminary round, shall be qualified to ski in the final round of that event. If there is a tie for 8th place the Chief Judge shall decide whether to:

- have a run-off between the tied skiers,
- have less than 8 skiers in the finals,
- have more than 8 skiers in the finals.

In the case where non-team skiers as described in Rule 2.4 are entered in the competition on an individual basis and place in the first 8 in the preliminary round, they will participate in the finals in addition to the 8 best team skiers.

Rule 3.4. Schedule of events

Not later than 2 months before the start of the competition, the Competition Chairman shall send to each affiliated Federation, by air mail, a schedule showing the days on which official familiarization and the days on which the competition events will be held. The schedule of events for both preliminary and final round shall be drawn up by the Chief Judge, the Chairman on the IWSF Cableski Council and the Competition Chairman and posted prior to the start of official familiarization. This list shall include starting times for each day. A schedule of starting times for individual events, if shown, shall be a guidance of the skiers only and any deviation shall not constitute a change. It is recommended that jumping be scheduled as the last event in both the preliminary and final rounds.

Rule 3.5. Schedule changes

Changes in the schedule during the competition shall be made only for weather, water conditions, safety, or a similar reason. A majority of the Appointed Judges must approve the change and all affected skiers shall be notified by posting. Although schedule changes are to be discouraged, the judges should not hesitate to make adjustments required for safety.

Rule 3.6. Completion

Once the competition has started, the judges do not have the authority to cancel any event, except in the case of a definite safety hazard; and, if possible, the competition must be completed, even if the judges are obliged to continue it on another cable, unless the IWSF Cableski Council decides otherwise on the recommendation of the Jury.

Rule 3.7. Starting order

At noon of the day before the start of a preliminary round the entry list shall be closed and thereafter the order of skiers made by random draw and posted. No change in this order is allowed except that

a team representative may:

- Withdraw a skier from competition.
- Replace, with the authority of the Chief Judge and before the start of the first event, that is to say before the first skier taking part in the first event has started, an injured skier by a qualified official reserve from the same team. The substitute skier shall start first in the seed in which he is qualified unless the draw has not yet been completed.

The competitors will be drawn in the following manner: List of competitors will be drawn up in order of performance in each event for both men and women. Skiers will then be divided into seeded groups of a size decided by the Chief Judge and each group will then be drawn separately (c.f. however Rule 12.1 for jumping order in the Jump event).

The Event Judges may reverse or change the starting order of these groups according to the prevailing conditions.

The order of the skiers qualified for the final round in any event shall be the reverse of their order of placement in the preliminary round of that event.

The order of skiers tied in placement shall be settled by random draw.

Rule 3.8. Familiarization

The skiers will be permitted to familiarize themselves with the installation and jump ramp under the authority and the responsibility of the Chief Judge. Each skier participating in familiarization shall be allotted either a set number of rounds or a certain amount of time at the discretion of the Chief Judge based on the principle that every skier shall receive an equal opportunity for familiarization.

The schedule for familiarization shall be decided by the Chief Judge. The Chief Judge shall have the discretion to change the start time of an individual's or team's familiarization based on extraordinary circumstances.

Rule 4. Overall and team competition

Rule 4.1. Overall scoring

Each team skier shall be awarded in each event a certain number of overall points according to the computation of his better score in either the preliminary or final round according to the Francor Tables, based on the current world records.

Rule 4.2. Qualification for Overall scoring

To be considered for Overall standings, a skier must have received points in all three events.

Rule 4.3. Overall placement

Places in the Overall Championship shall be determined by adding each skier's Overall points in all three events.

Rule 4.4. Team scoring

In team competition, the best three Overall scores, men or women, in each event, in the preliminary or final, shall be summed up to obtain the team score. The performance by a skier who is entered as an individual shall not be taken into consideration in the calculation of the team score.

Rule 5. Officials

Rule 5.1. Chief Judge - Appointed Officials

At least 6 months prior to the start of official familiarization at the Cableski World Championships, the

President of the IWSF shall appoint the Chief Judge for the Cableski World Championships from among the Chief Judges proposed by each Region Cableski Council.

The President of the IWSF Cableski Council shall appoint for the Cableski World Championships the Homologator, the Chief Calculator, the Technical Officer and the Assistant of the Chief Judge from among the officials proposed by each Region Cableski Council.

The appointment of the Assistant to the Chief Judge must be made with the Chief Judge's approval.

The Appointed Judges shall be selected by each Regional Cableski Council.

Rule 5.2. Choosing Appointed Judges

The judges chosen for the Cableski World Championships must represent the Regions as follows: A minimum of 2 judges from each region.

A total of 8 judges shall be selected.

The Chief Judge and his Assistant are not included in the above number.

If a region is unable to propose the specified number of qualified judges, the IWSF Cableski Council can appoint additional judges from other regions.

Rule 5.3. Event Judges

The Event Judges must be chosen by the Chief Judge from the Appointed Judges, preferably as follows:

For Slalom: at least one judge from any one Region.

For Tricks: the best panel appropriate for the level of trick performances.

For Jumping: one judge per Region

Rule 5.4. Voting of the judges

Every vote of the Appointed Judges or the Event Judges shall be decided by a simple majority of the judges voting. In the event of a tie, the Chief Judge shall cast the tie-breaking vote. If a person has more than one function, he will not have more than one vote.

All issues for the actual event should be settled before the next skier starts.

Rule 5.5. Scoring sheet availability

The scoring sheets of each Judge shall be made available for inspection by the Team Captains as soon as the results are posted. Under the Team Captain's responsibility, a skier may view his own scoring sheets.

If the results are not available 30 minutes after the last skier of the day, the official posting will be delayed to one hour prior to the first skier of the next day. The unofficial results should be posted as soon as they are available.

Rule 5.6. Placement of judges

Where practical, judges shall be separated to ensure completely independent opinions.

Rule 5.7. Homologator

His functions are among others:

- a) To assure himself of the technical comparability of the competition with other competitions.
- b) To assure himself of the fact that during the competition any changes of the Cableski installation do not cause advantage or disadvantage to any competitor.

Rule 5.8. Technical Officer

The Technical Officer shall ensure the fairness and impartiality of the competition as far as the cable operation is concerned. The Technical Officer is under the authority of and responsible to the Chief Judge.

Rule 5.9. Secondary positions

Personnel to fill secondary positions shall be selected by the Chief Judge from among other experienced Judges and Officials in attendance. Wherever possible, Officials filling complementary positions (e.g. timer, top and bottom meter readers, etc.) should be of different nationalities.

Rule 5.10. Tolerances

All tolerances are to allow for human error and the intentional use of tolerances by competition officials to improve skier performance will not be tolerated. In any activity involving the performance of an official where a tolerance is involved, it is the official's responsibility to attempt to be as close as possible to the actual specification.

Rule 6. Safety of competition and security of technical installations

Rule 6.1. Safety Director

At least 2 months before the competition, the organizing Region Cableski Council shall appoint a Safety Director, who will appoint such assistants as appear necessary, and inform the President of the IWSF and the Chairman of the IWSF Cableski Council. The Safety Director shall be responsible for the safe conditions of all equipment, facilities and operation of the competition; but this shall not prevent him from delegating specific responsibilities to his assistants as approved by the Chief Judge. He shall have the authority to take whatever action is necessary including stopping the competition whenever he observes a condition he believes unsafe. The Chief Judge may overrule any contemplated action or decision of the Safety Director on his own responsibility.

Rule 6.2. Safety competition stoppages

Should the Safety Director stop a competition for any reason, disqualification time periods shall not run as long as the competition is stopped.
The Safety Director should remain near the competition area as much as possible.

Rule 6.3. Equipment safety

The Safety Director shall determine whether equipment to be used by a skier meets safety specifications.

Rule 6.4. Unsafe skier disqualification

No skier shall be allowed to compete or to continue to compete if, in the opinion of the Safety Director and a majority of the Event Judges, his competing would be a danger to himself or other skiers in the competition. During the competition, the Safety Director may, at any time, request the Chief Judge to halt the competition for a poll of the Event Judges in regard to a skier's actions or conditions. Whenever practical, the advice of the medical officer should be obtained.

Rule 6.5. Safety boats

It is recommended to use one safety boat positioned in the inside of the cable during all events and familiarization times, facing the competition area or the skier's anticipated point of landing in jumping. In jumping an additional swimmer is recommended. The motor of the rescue boat shall be running during the competition and the familiarization.

Rule 6.6. Safety boat personnel

The safety boat will be manned by:

- a) An experienced driver who is familiar with the conduct of all competition events and familiarization.

- b) A swimmer, also familiar with all competition events and familiarization and ideally being fully trained in First Aid, Emergency Resuscitation and Water Rescue Techniques (as outlined in the IWSF Safety Manual).

The swimmer will wear a life jacket at all times and, in the event of a serious fall, will jump into the water to assist the skier. If the injured skier is unable to climb into the safety boat with little or not assistance, the skier will be floated to the shore and lifted from the water on a suitable board or stretcher. Under no circumstances will an injured skier be lifted passively over the side of the safety boat.

IT IS EMPHASIED THAT, IN INTERNATIONAL COMPETITION, LANGUAGE DIFFICULTIES MAY INTERFERE WITH COMMUNICATION; AND FOR THIS REASON, THE SWIMMER MUST GET INTO THE WATER TO ASSIST THE INJURED SKIER.

Rule 6.7. On site medical facilities

The Safety Director will appoint a Competition Medical Officer who will undertake to provide the following services:

- a) A suitably qualified medical officer will be in attendance during all familiarization and competition events.
- b) A suitably equipped medical station prepared to deal with any sort of medical emergency will be conveniently located at the competition site.
- c) Suitable transportation facilities that will allow an injured skier to be moved safely and promptly to the best local medical unit for further care.
- d) A working relationship will be established between the local hospital or medical unit the Competition Medical Officer, such that casualties will get prompt and expert treatment when required.

Rule 6.8. Life jackets

A life jacket must meet the following specifications:

- a) It must be smooth and soft and free from attachments or material likely to cause injury in a fall.
- b) It must be constructed and fastened in such a manner that it is unlikely to be torn loose or damaged so as to render it useless in a hard fall.
- c) It must float the skier.
- d) It must not be an inflatable device.
- e) It must be constructed so as to provide adequate protection from impact damage to the ribs and internal organs. A normal wet suit shall not be considered adequate protection in this respect.

Rule 7. Rerides

Rule 7.1. Reride criteria

When unfair conditions or a malfunction of the equipment supplied by the organisers occurs, which, in the opinion of a majority of the Event Judges adversely affect a skier, he shall be granted the option of a reride only on the passes affected. When the skier receives an unfair advantage, the reride is mandatory. When taken, the reride is scored except in the specific cases in Jumping and Slalom (see Rule 12.10, Rule 12.13 and Rule 13.11).

Rule 7.2. Granted reride procedure

Rerides must be taken as soon as technically possible after they are granted (c.f. Rule 12.10 for Jump rerides and Rule 13.11 for Slalom rerides). If consecutive rerides are granted, the skier has the option for a 5 minute rest before continuing. If the skier elects to take a 5 minute rest, the next skiers in order shall ski, and the reride shall be taken at the conclusion at the skier's run during which the 5 minute rest period expires.

Rule 7.3. Request for rerides

Request for rerides may be initiated by an Event Judge or the Technical Officer before the next skier starts or may be initiated, as soon as possible, by the skier or his team representative and shall be decided as soon as practicable thereafter. If, in the opinion of the Event Judges, the request was not initiated as soon as possible after the skier skied, the request shall be denied.

Rule 8. Protests

Rule 8.1. Procedure

Protests shall be made to the Chief Judge only by a team representative and shall be considered by the Event Judges. Protests must be in writing, must state the reason(s) for the protest and must be filed as soon as possible, but not later than 30 minutes after the results of the event are announced and the Judges' scoring sheets are available for inspection.

Rule 8.2. Reasons for protests

Protests shall be allowed only for failure of the Organisers or Officials to comply with these rules and only if this non-compliance with the rules has an adverse effect on a skier. No protest shall ever be permitted on a judgement decision by the Judges.

Rule 8.3. Protest submission

Protests must be accompanied by the approximate equivalent in local currency of 25 Swiss Francs. This amount will be refunded if the protest is considered reasonable by the Event Judges.

Rule 8.4. Computation errors

A correction of an error in the computation of scores shall not be considered a protest and the correction shall be made on the approval of the Chief Judge and Chief Calculator if requested within 2 hours after the results of the event are announced and the Judges' scoring sheets are available for inspection.

Rule 9. Installation, skis, tow lines

Rule 9.1. Installation

The installation shall be a 10 mm cable with a competition area between two deflection pulleys with a minimum distance of 300 m, shall turn counterclockwise and shall have the power necessary to attain and maintain the required speeds.

At least half of the carriers should be prepared for the competition. Should a carrier disconnect twice, the tension should be retensioned immediately or another carrier should be tensioned for competition conditions. Either the even or odd carriers should be trimmed.

From the organising committee at least 1 person should be present who knows the installation and is responsible for it. The installation must be in optimal technical condition, in order to guarantee a smooth running of the competition.

The installation must have a speedometer calibrated at least at the speeds of 28 km/h, 43 km/h and 58 km/h.

Rule 9.2. Skis

The maximum ski width shall not exceed 30 percent of the overall length.

Any type of fixed foot bindings may be used.

Any type of fixed fins may be used.

Devices affixed to the ski intended to control or adjust the skiing characteristics of the ski are allowed as long as they are fixed in that they do not move or change during actual skiing.

No other devices are permitted.

Skis must be safe. There must be no unnecessary sharp or abrasive (to the touch) attachments to the ski which could, in the opinion of the Safety Director, inflict injury to the skier should he come in contact with the ski in a fall.

Rule 9.3. Tow lines

This rules mention two type of lengths of tow lines; the effective and the horizontal length. The effective length is calculated, based on the given horizontal length and the measured average height of the cable.

Calculation of the average height of the main running cable „AB“ = (Height of the entry wheel „H1“ + height of the main running cable in the middle „H2“ + height of the exit wheel „H3“) : 3.

$$AB = \frac{H1 + H2 + H3}{3}$$

When „H2“ is measured with a loading of 70 kg on the cable (see Diagram 1).

Diagram 2 shows the relations between the horizontal length of a line, the effective length and the height of the cable. The distance AB is the height of the cable. The corner ABC is a 90° angle. Point A is the end of the line which is fastened to the main running cable. Point C is the handle. The distance AC is the effective length of the line. The distance BC is the horizontal length of the line.

When the height AB of the cable and the horizontal length BC is given, the effective length shall be calculated with the help of the next formula:

$$AC = \sqrt{AB^2 + BC^2}$$

All line lengths given in this rules are the horizontal lengths.

The organizer shall furnish single-handle tow lines as in (d) below, made of 6 mm, single braided, monofilament line of plastic material, with the handles and line meeting the following specifications:

a) Number of strands = 12.

Number of yarns each strand = 60.

Diameter at 5,5 kg load = 6,3 mm.

Weight per meter = 16,0 g to 23,0 g.

Breaking load, minimum = 590 kg.

Elongation at 115 kg tensile load = 3,2 % maximum.

All measurements of tow lines shall be made at 20 kg tension and shall be made between the centre line of handle at the point furthest from the end of the trimball.

b) The handle shall be made of 2,50 to 2,80 cm outside diameter material with no sharp edges or projections, with a non-slip surface or coating. The attaching ropes must in all cases go through the handle and must be attached so there is no possibility of movement between the rope and the handle when in use. The minimum certified breaking load of the handle shall be 270 kg applied at the rate of 290 kg for a minute at two load points 9 cm apart at the centre of the handle with the ends supported at the rope holes.

c) Tow lines should be prepared as follows: 6 lines of 18,25 m, 3 of 16,00 m and 14,25 m and 2 of the shorter lengths. A tolerance of ± 15 cm on the distance from the end of the trimball to the middle of the handle is allowed for ropes till 14,25 m. From the 13,0 m rope on the tolerance is reduced to ± 7,5 cm.

d) The tow rope shall consist of the following three parts:

- the handle with a length of 1,50 m

- the tow rope

- the trimball and cable

e) Dimensions shall be as in Diagram 3.

Rule 9.4. Prestretching of Tow lines

All ropes should be prestretched to insure tightness of the splices before measurement.

Rule 9.5. Tow lines and handles for the Trick event

The skier has the choice to use his own line (with trimball) of any length he desires or to use the competition supplied 18,25 m lines. The skier must furnish his own handle for the trick event of any length, dimension or material.

Rule 9.6. Handles in the Slalom and the Jump event.

Skiers in Slalom and Jump are required to use competition supplied handles. Organizers shall furnish a minimum of 6 identical handles as described in Rule 9.3.

Rule 9.7. Bibs

It may be required that skiers must wear identifying bibs while skiing. The bibs must be of a design approved by the Chairman of the IWSF Cableski Council. The central feature of the bib will be an identifying number on both the front and back of the bib. The individual digits of the number must be a minimum of 15 cm in height and be clearly visible from a distance. The design must allow for use of an arm sling in jumping and also be snug so that it does not interfere with the free movement required in tricks. The bibs will be given to each team captain before the competition for distribution to his team. Spare bibs, with no numbers, should be available at the starting jetty in case a skier's bib is damaged and unusable. Skiers must wear the bib with the number assigned to them only.

Rule 9.8. Not competition supplied equipment

The use of any not competition supplied equipment is at the skiers own risk.

Rule 10. Speeds and tolerances

Rule 10.1. Tolerances

All speeds in Slalom, Tricks and Jumping shall be accurate to $\pm 0,5$ km/h. For a speed to be considered accurate in any event, the speeds recorded in the course, as noted by the official, must be within the tolerances allowed. The speed may vary a maximum of $\pm 0,5$ km/h for a distance before entering the competition area and has to be maintained until the skier is out of the competition area, for the exception of Rule 12.5.

Rule 10.2. Accuracy of timing devices

Any timing device used in a competition must be checked for accuracy by the Homologator or the Chief Judge.

Rule 10.3. Timing for Slalom and Jumping

The timing for Slalom shall start when the skier's carrier passes the last deflection pulley before the slalom course and ends when the skier's carrier passes the first deflection pulley after the slalom course.

Timing for Jumping will be taken between the two carriers immediately following the skier's carrier. The timing starts when the first carrier after the skier's carrier passes the deflection pulley before the ramp and ends when the second carrier after the skier's carrier passes that deflection pulley.

An automatic timing should be used during the same periods.

Rule 10.4. Position of Timers

There shall be two officials for timing in Slalom and Jumping. The Official Timer shall be located at the most appropriate position. The Backup Timer shall be located on one of the judges towers and shall govern in the event that the Official Timer fails to get an accurate time for some reason. The timer

shall observe and record all timings, and deviations, on each pass, and shall inform the responsible official about any deviations.

Rule 11. Definitions

Rule 11.1. Competition area

The competition layout and dimensions are shown in Diagram 4, Diagram 7 and Diagram 9. No buoys or markers other than those indicated are permitted within the competition area except to mark safety hazards, landing or starting areas or turning buoys. Any such buoys shall be distinguishable from competition buoys and shall be pointed out to the skiers at the start of the competition.

Rule 11.2. Definition of a fall

A fall in any event is defined as accomplished at the moment any one of the following occurs:

- a) The skier loses possession of the tow line.
- b) The skier does not have at least one ski on one foot.
- d) The weight of the skier is not supported by his ski or skis; and in addition, the skier is ultimately unable to regain skiing position. The skier may not recover by making a tumble turn.

Rule 11.3. Definition of skiing position

Skiing position is defined as that position in which all of the following exists:

- a) The skier has possession of the tow line.
- b) The skier is riding forward or backward with a ski or skis on his feet.
- c) The weight of the skier is entirely supported by his ski or skis, or the skier is ultimately able to regain good balance.

Rule 11.4. Start of the skier

The skier is considered to have started when the marked carrier of the main running-cable connects with the ski line.

Rule 11.5. Disqualification of the skier at the start

Each skier who is not ready to start when the marked carrier connects with the ski line shall be disqualified for the remainder of that event.

In the case where a skier has been disqualified or has been scratched the next skier shall start as soon as technically possible.

In Slalom there shall always be a skier ready to ski in case an unforeseen empty run occurs. This forerunner will then ski one round before the next competitor starts.

The skiers will make every effort to return to the starting jetty without undue delay when they are still skiing in the same event.

Rule 11.6. Team representative

Each Federation shall select a team representative whose name shall be given to the Chief Judge before familiarization starts. The team representative shall represent all skiers from his federation. An alternative team representative may also be named.

Rule 11.7. Time of posting

The time of posting is when the Chief Judge signs the results.

Rule 11.8. Usage of a run off

The result performed in a run off will only be used for determination of final placement for the event. This means that this result will not be used for overall score, record setting, ranking list performances and performance booklets entries.

Rule 12. Jumping**Rule 12.1. General Jump Event Conditions**

Each skier shall be entitled to two registered jumps or passes or falls in the preliminary round and three registered jumps or passes or falls in the final round.

The jumps must be done singly. The skier is not allowed to take the jumps one after the other.

Women will have the option of choosing an average height of either 1,50 m or 1,65 m. Skiers jumping at 1,50 m will be drawn together and will ski before those jumping at 1,65 m in both the preliminary and final rounds.

Men will have the option of choosing an average height of either 1,65 m or 1,80 m. Skiers jumping at 1,65 m will be drawn together and will ski before those jumping at 1,80 m in both the preliminary and final rounds.

A skier may not change his chosen height of the ramp for the final round if he qualifies.

Only the length of the jump will be considered no matter what ramp height is chosen by the skier.

A fall shall not eliminate the skier from the following pass provided that fall is a result of a jump.

Rule 12.2. Refusal of the skier

A skier may refuse to enter the jump course on each jump by raising one arm in the air. He shall not be penalized for so doing providing this refusal was for a reason judged acceptable by the Event Judges. The skier must be ready to ski immediately after the decision of the Event Judges. Should the skier not be ready or should the reason be judged not acceptable by the Event Judges, the jump shall be deemed to have been taken.

A jumper shall receive no further jumps in a round, if on a definite cut to the ramp, the jumper elects to pass between the ramp and the main running cable, whether or not he retains the tow rope.

Rule 12.3. Jump course

The jump course begins at the last deflection pulley before the ramp and finishes at the next deflection pulley after the ramp (see Diagram 4).

The ramp must be situated between 180 m and 190 m after the first deflection pulley of the jump course. There shall be a buoy at 140 m and one at 160 m before the ramp. These buoys will act as guide buoys for the skiers, to start their cut.

Rule 12.4. Description of the Jump Ramp

The jump ramp shall be an inclined plane with an apron on the right-hand side. The ramp shall meet the following specifications:

- a) Width: 3,70 m to 4,30 m at all points. 4,20 m to 4,25 m is recommended.
- b) Length out of water: 6,40 m to 6,70 m at all points.
- c) Length under water: 60 cm minimum.
- d) Ratio of ramp height at take off edge to ramp length out of water: $0,235 \pm 0,003$ or $0,255 \pm 0,003$ for Women; $0,255 \pm 0,003$ or $0,275 \pm 0,003$ for Men, at the skier's option.
- e) Ratios are to be computed on both sides of the ramp, and the ramp height at the take off edge at the two corners may differ by no more than 2,5 cm (see Diagram 6).
- f) The surface must be flat with a maximum deviation of 2,5 cm from plane.
- g) An apron shall extend the full length of the ramp on the right-hand side and be at least 30 cm under water when the ramp is set for the 1,80 m height in Men's divisions. Ramp aprons shall be of different color or shade from the ramp surface so as to provide a satisfactory contrast between apron, water and ramp surface. The apron shall have a minimum angle of 40° and a maximum of

50°. The recommended angle is 45°.

- h) 6,40 m and 6,70 m length markings, clearly identified, shall be placed on the ramp surface so that they are readily visible. A line visible from shore shall be painted at the center of and just below the take off edge for meter sighting purposes.
- i) The jumping ramp must be securely anchored in place so that the center take off edge will not vary more than the sighted width of the crosshair on both meters after coming to static rest. „Static rest“ is the position assumed by the ramp in ambient water not affected by skier's wakes or backwash.
- j) All measurements of the ramp shall be made under competition conditions, including the weight of watering equipment and not including the weight of a skier.

Rule 12.5. Jumping speeds

The speeds for the jumping event shall be at the option of the skier up to the following maximum speeds:

- a) Men: 57 km/h
- b) Women: 51 km/h

The maximum jump speed will be lowered only by increments of 3 km/h. Following jump speeds will be used: 39 km/h, 42 km/h, 45 km/h, 48 km/h, 51 km/h (max. for women), 54 km/h, 57 km/h.

The skier can elect his startspeed, provided that it is not more than 15 km/h lower than the elected jumpspeed. Immediately after the carrier has passed the last deflection pulley before the ramp, the speed will be brought from the startspeed to the jumpspeed. Decelerations of the cable from jumpspeed to startspeed starts immediately after the skier hits the water after the jump. The rate of deceleration will be the same as the rate of acceleration from startspeed to jumpspeed and should be as fast as possible.

N.B.: The startspeed is the speed the cable has to have before the skier enters the competition area, means before the carrier passes the last deflection pulley before the ramp. The skier can leave the starting jetty with a lower speed.

Rule 12.6. Officials stopping a jump

A jump shall not be registered should the Judges decide that there is a hazard because of dangerous water conditions or other reasons. A judge shall then inform the Technical Official to lower the speed.

Rule 12.7. Scoring of a jump

A jump shall be scored when the skier passes over the ramp, lands and skies until the carrier passes the pulley after the ramp without falling.

Rule 12.8. The result of a skier falling

Every time a skier falls from the time he has started until the carrier goes around the deflection pulley after the ramp, it shall count as a registered jump, for which he receives no score.

Rule 12.9. Officials

There will be four judges for the event: three judges will be stationed on shore. The fourth judge will be at the timing device. He is authorized to give reruns under Rule 12.10.

Rule 12.10. Timing

The fourth judge of Rule 12.9 shall observe the accuracy of the Technical Officer by checking the speed.

When the speed is above the maximum allowable a rerun is mandatory. If the speed chosen is below the maximum and the speed is out of tolerance, the skier shall have the option of a reride as long as the maximum speed tolerance was not exceeded, in which case the reride is mandatory. In case of a mandatory reride, the pass leading to the reride will not be scored.

If the speed is below the minimum allowable, the skier has an optional reride. In case of an optional reride, the jump shall not be scored less than the distance obtained in the pass leading to the reride. If a rerun is given because of an error in speed, it must be taken immediately, or, in the case of a fall, when the skier returns to the start dock.

Rule 12.11. Safety Equipment

All skiers in jumping events must wear approved life jackets and suitable helmets.

Rule 12.12. Jump distance measuring

There are three approved jump measuring systems:

- The Johnson system.
- The Böttcher Video measurement system.
- The Corson Video measurement system.

All systems must be checked and approved by the Homologator after installation.

Also other system can be used if checked and approved by the Homologator.

Rule 12.13. Description of the Johnson system

When using the Johnson system the jump distances are measured by a system of meters measuring the subtended angles provided by 3 meter stations, each consisting of two meters.

To insure accuracy, it is recommended that each meter station be no more than 70 m from the point of landing.

Jump distances are to be calculated through the use of a computer. Any computer program used for this purpose must be verified by passing the benchmark tests included in this rules. The ramp setup must give proper triangles as described in the benchmark.

The point of landing is defined as the center of the inscribed circle which is tangent to all three sides of the triangle formed by the three average sightings from the meter stations. The distance is calculated from the landing point back to the ramp. The size of the triangle is defined as the diameter of that inscribed circle.

If the top and bottom sightings from any single meter station are more than 0,6 m apart at the point of landing, then the average value and the single sighting with the smaller value will each be tried in turn, and whichever of these produces the smaller triangle will be used to derive the official distance.

If the official resolution of a particular set of sightings, according to the above rules, produces an official wide triangle, and that set of sightings included a spread in excess of the 0,6 m test limit AT ONLY ONE of the meter stations, which yielded the smaller triangle size by using the average rather than the shorter reading alone, then the longer reading from that station may be tried alone, and used as official, if it eliminates the wide triangle.

On a given jump when the diameter of the inscribed circle obtained by the angular measuring system is greater than 0,6 m, the skier will have the option to either take the jump over again or accept the shortest distance measured from a corner of the triangle provided that on any of his preceding or following jumps, the measured distance does not exceed the distance to the furthest corner of the large triangle. In the case where one of the preceding or following jumps does exceed the distance to the furthest corner, the official score of the wide triangle jump will be the shortest vertex.

In the case where a competitor decides to take the jump over again, the competitor's distance on the reride may not exceed the distance measured to the furthest corner of the large triangle of the disputed jump but will not be less than the distance measured to the nearest corner of the large triangle of the disputed jump. Multiple rerides are to be resolved sequentially in the order in which they occurred.

Jump distances shall be measured from a point at the water line directly below the center of the top edge of the ramp to the point where the heels of the skier reach their maximum depression in the water (as normally indicated by the „spout“ of water rising after the skier's landing).

Rule 12.14. Use of a video jump measurement system

If video jump measurement is used, the distance shall be measured to the skier's point of impact in the water closest to the ramp (first point of impact) and then an adjustment offset of 2,1 m shall be added.

For the video system, there shall be two designated officials operating the system who shall jointly agree on the impact point. The calculated distance shall not be displayed until the impact point is decided upon.

If video jump measurement is used, video methods (video taping) or a standard meter system may be used as backup.

Rule 12.15. Scoring

Jump distance may not be scored in increments of less than 10 cm.

The longest jump of each round will be the only one counted. The skier's result from the final round will determine his placement in the event.

The better result obtained by the skier, in either the preliminary or the final round, shall count towards the overall.

To be considered for placement and receive overall points, skiers must have at least one successful jump on their credit.

Rule 12.16. Ties

If a tie exists for first place, it shall be run off. If a tie exists for second or third place, placement shall be decided on the basis of the higher preliminary round score. If a tie still exists, it shall be run off. The run off shall have a new drawing of order. Each tying skier shall be allowed two jumps with the longer jump being scored according to Rule 12.15. Repeated ties shall be run off in the same manner until broken.

Rule 13. Slalom

Rule 13.1. General

The skier shall follow the main running cable around the deflection pulley before the slalom course, pass around the outside of all 6 buoys at his discretion, and after rounding the 6th buoy, proceed through the end gate, and ski until the carrier has passed the deflection pulley after the slalom course.

The following speeds and tow lengths shall be used for Slalom:

		Men	Women
1 st pass	18,25 m rope	58 km/h	55 km/h
2 nd pass	16,00 m rope	58 km/h	55 km/h
3 rd pass	14,25 m rope	58 km/h	55 km/h
4 th pass	13,00 m rope	58 km/h	55 km/h
5 th pass	12,00 m rope	58 km/h	55 km/h
6 th pass	11,25 m rope	58 km/h	55 km/h

In any further passes, the rope shall be shortened by half a metre. If, in the opinion of the majority of the Event Judges, the water or weather conditions require it, the first speed may be lowered to 55 km/h or 52 km/h for men and 52 km/h or 49 km/h for women, and then proceed upward in speed in 3 km/h increments. The skier has to do one pass after another without falling until the maximum speed has been achieved. Then the skier will proceed as shown in the table.

The finals shall start one pass higher than in the preliminary round unless changed by the Event Judges.

The skier may choose rope length (or speed) any time before he starts his run. A skier wishing to start on a shorter rope, shall inform the Technical Officer of his wishes at least three skiers before. Except in the case of the first and second skier on the startlist who shall give notice 5 minutes before. Further the skier has to inform the Technical Officer at which speed he desires to leave the starting jetty.

Rule 13.2. Refusal of a skier

A skier may refuse to enter the slalom course by raising one arm in the air. He shall not be penalized for so doing providing this refusal was for a reason judged acceptable by the Event Judges. The skier

must be ready to ski immediately after the decision of the Event Judges. Should the skier not be ready or should the reason be judged not acceptable by the Event Judges, he should be disqualified from the remainder of the event.

Rule 13.3. Slalom Course

The slalom course begins at the last deflection pulley before the 1st slalom buoy and finishes at the next deflection pulley (see Diagram 7).

Rule 13.4. Buoys

Color of buoys shall be selected for maximum visibility. A fluorescent yellow or red paint is recommended.

Middle buoys within the slalom course shall be a different color from the gate and slalom buoys and shall be a minimum of 22 cm in diameter.

Slalom and gate buoys shall be 22 to 28 cm in diameter. 23 cm is recommended.

All buoys shall be of a lightweight, pliable material with smooth exposed surface.

Each buoy shall have a strong loop for attaching anchor lines. The buoys must be attached to the anchor line by the use of a system that will tighten the buoy in such a way as to ensure that it does not move around from its position.

Slalom buoys shall be fastened so that they have 11 to 17 cm of height out of the water. 11,5 cm is recommended. The exit gate and middle line buoys shall be fastened so that they have 16 to 22 cm of height out of the water. 17 cm is recommended.

Rule 13.5. A fall in Slalom

A fall before or in the course concludes the performance of the skier, but he shall receive credit for buoys scored before the fall.

Rule 13.6. Scoring buoys

A buoy not missed is scored as follows, up to the point of the first miss:

- a) $\frac{1}{4}$ buoy when the skier crosses the line C-D, in a skiing position (Rule 11.3), before the buoy to be rounded. The skier shall not receive the $\frac{1}{4}$ buoy if he passes inside the buoy.
- b) $\frac{1}{2}$ buoy when the skier has recrossed line C-D in a skiing position (Rule 11.3), before the level of the next buoy or exit gate.
- c) 1 buoy when the skier has crossed the middle-line under the main-running cable, marked by middle-buoys, before passing the level of the next buoy or the gate without falling (Rule 11.2).

(see Diagram 8)

A deflection pulley or the end gate is not scored at all.

Rule 13.7. End of the slalom run

A skier in either a preliminary or final round may continue to run the course as provided in Rule 13.1 until he misses a buoy or end gate, at which point his scoring ends for that round.

Rule 13.8. A miss or „riding over“

It is a miss to ride inside the buoy or outside the end gate or to ride over, straddle or jump over a buoy or a gate buoy or to jump through the end gate; but there is no penalty for grazing a buoy with a ski or part of the body.

„Riding over“ shall be defined as hitting a buoy with the ski so as to move it significantly from its position or temporarily sink it. Hitting a buoy less severely shall be considered as „grazing“.

Rule 13.9. Slalom towers

The slalom judging towers shall be braced structures having a platform with railing approximately 2 m

above the water surface. They may either rest on the bottom or be securely anchored in position. The use of two slalom judging towers is mandatory, located on different sides of the slalom course, in suitable viewing positions.

The jump ramp may be used as a slalom judging tower.

Rule 13.10. Officials

There shall be three judges on the first judging tower. There shall be two judges on the second judging tower placed in a suitable position to judge the exit gate. Skier buoys shall be judged by all five judges. The exit gate shall be judged only by the two judges on the exit gate tower unless they are not in agreement, in which case all five judges will vote on the exit gate.

Rule 13.11. Timing

The Timer shall inform the responsible official of wrong speeds to take the necessary action.

Where the applicable speed is slower than allowable on any pass, a rerun shall be mandatory. If the pass was not a perfect pass, the skier may not improve his score over that obtained in 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.

Where the speed is faster than allowable and the skier has not made a perfect pass, he shall have an optional reride. If taken, it shall not be scored less than the score obtained on the pass leading to the reride.

Rule 13.12. Safety equipment

All skiers in Slalom events shall be required to wear an approved life jacket.

Rule 13.13. Scoring

The skier's result from the final round will determine his placement in the event.

The better result obtained by the skier, in either the preliminary or the final round, shall count towards the overall. He shall get credit for his score on the speed he was skiing at, under the provisions of Rule 13.1 provided his first pass is perfect. A skier who waives one or more passes and whose first pass is not perfect shall receive the points as they would have been scored at the starting speed.

Overall points obtained at starting speed are calculated using separate tables (,'First pass not perfect').

To be considered for placement and receive overall points, skiers must have more than 0 buoys on their credit.

Rule 13.14. Ties

If a tie exists for first place, it shall be run off. If a tie exists for second or third place, placement shall be decided on the basis of the higher preliminary round score. If a tie still exists, it shall be run off. The run off shall have a new drawing of order. The tie breaking run shall begin with the scheduled speed and rope length of the last complete pass and conclude with the first miss. Repeated ties shall be run off in the same manner until broken.

Rule 14. Tricks

Rule 14.1. General

Each skier shall be allowed two passes through the trick course during which time he may perform as many tricks as he desires. The trick skier is not allowed to take the two passes consecutively.

Rule 14.2. Refusal of a skier

A skier may refuse to enter the trick course by raising one arm in the air. He shall not be penalized for so doing providing this refusal was for a reason judged acceptable by the Event Judges. The skier must be ready to ski immediately after the decision of the Event Judges. Should the skier not be ready or should the reason be judged not acceptable by the Event Judges, he should be disqualified from the remainder of the event.

Rule 14.3. Trick course

A set of buoys after the deflection pulley shall establish the area of the beginning of the trick pass (see Diagram 9). The end of the pass shall be signified by the 20-second time interval only.

Rule 14.4. Speed

The skier shall receive his choice of a constant speed through the course for each pass. The speed in trick skiing, assuming it is held constant from the deflection pulley before entering the course, is the skier's responsibility.

The skier shall inform the Technical Officer what speed he desires on each pass.

Rule 14.5. Start of trick pass timing

Timing for the trick pass will start:

- a) at the skier's first movement towards doing a trick after reaching the position of the first trick buoy.
- b) if the skier fails to make any such movement, as the skier passes the second trick buoy.

A first movement shall be considered as any movement towards making a turn. Wrapping the line for a turn shall not be considered such a movement in itself.

Rule 14.6. End of the trick pass

The trick pass shall end:

- a) on the sound of a short, loud audible device 20 seconds after the start of the pass. The 20-second intervals shall be timed and indicated by an automatic device.
- b) when the skier falls in the course.

Rule 14.7. A fall before the pass

If a skier falls while practicing before the pass, he loses the right to that pass.

Rule 14.8. Use of a release or braking the cable

If a skier wishes to use a release he must inform the Technical Officer beforehand. The skier uses the release entirely at his own risk.

The skier may provide an observer to instruct the Technical Officer to stop the cable. The skier is fully responsible for any braking of the cable and no request for a ride will be granted upon premature or accidental braking.

Rule 14.9. Officials

There shall be five judges scoring tricks. Each judge shall watch and record the tricks independently. He shall list each trick attempted by the skier and decide with respect to each trick:

- a) if it was performed according to the rules governing that trick.
- b) if it was started after the beginning or completed before the end of the pass.

Rule 14.10. Communication with the Judges

Skiers in the Trick event or other persons shall not communicate with the Event Judges between

passes for the purpose of determining whether a trick or tricks attempted in the pass were scored.

Rule 14.11. Timing the trick pass

There shall be a timer and a backup timer located at a point that will allow them to best determine the start of the trick pass. The timer shall start the timing device at the beginning of the trick pass as defined in Rule 14.5. At the end of 20 seconds the audible device shall sound. Some form of backup device for the audible signal must be provided in the event that the official device fails to operate.

The audible device to signal the end of the pass shall be located in the center of the course, so that it is most audible for the judges.

An audible signal different from the end of pass signal indicating the start of each pass shall be given by the timer to the judges.

In the event that there is a malfunction and the time is missed, the skier will be given the option of a reride.

Where an automatic timing device is available which can select the median of five separate triggering signals, the Event Judges may collectively serve as the official timer.

Rule 14.12. Use of the video camera

The tricks shall be filmed by a video camera from a position as close as possible to the position of the Event Judges. If more than one video camera is used, the Chief Judges shall declare one as official prior to the event. The video film may only be shown as an aid to the Event Judges under the following circumstances:

- a) At the request of the Chief Judge or the Chief Calculator, if it is not possible for the Calculators to obtain a majority decision as to the trick or tricks performed.
- b) At the request of the Chief Judge or the Chief Calculator, if it is not possible for the Calculators to obtain a majority decision as to whether or not credit is to be given for a trick.
- c) In circumstances which the Chief Judge regards as exceptional. This request should not be granted if the intention is to change a Judges's decision under Rule 14.9.

The video will only be shown at normal speed.

The audio of the video camera recorder shall pick up the sound of the audible signal, which indicates the end of the 20 seconds.

Rule 14.13. Credit for tricks

To receive credit for any trick the skier must remain in or return to skiing position.

Only tricks listed in the rules will be scored in a competition.

A skier shall receive credit for a trick performance only if it is performed in the order as declared on his trick list (see Rule 14.15). Tricks performed not listed or performed in a different order than on the trick list score zero. The order shall not be regarded as broken for the failure to perform a listed trick, the failure of the judges to give credit for a trick performed, or the performance of one or more tricks not listed before resuming the listed sequence. The skier may choose which pass he wishes to perform first.

If a skier falls on his first pass, he may choose to repeat it as his second pass.

Rule 14.14. Tricks at the end of the pass

A trick not completed before the end of a pass shall not be scored.

A trick completed before the end of a pass shall not be scored if the skier ultimately falls as a result of that trick, even if the fall is after the conclusion of the pass.

Rule 14.15. Trick lists

A list of declared tricks to be attempted by the skier shall be required from each competitor in the trick event before the event starts. The Chief Judge and the Chief Calculator shall determine the exact time when the list must be submitted for the preliminary and the final rounds. The trick list shall be prepared using the official codes shown in the table of trick values. In each declared trick pass, the skier may list only one trick and its associated reverse, if any, on two skis and one trick and its associated reverse, if any, on one ski under each number in the table, except that any type of 180⁰

turn may be listed more than once. A contestant who fails to submit a trick list shall be disqualified from that trick round. A skier may submit a different trick list for the event finals if he so desires. The declared list shall be made available to the officials at the discretion of the Chief Judge.

Rule 14.16. Calculation of the trick result

The Calculators shall receive the tabulations and, in the event of a discrepancy, shall decide the tricks to be scored on the basis of a simple majority from among the Judges' individual tabulations as to:

- a) what trick was performed;
- b) if it was performed according to the rules governing that trick; and
- c) if it was started after the beginning or completed before the end of a pass; and
- d) if it was declared by the skier in his submitted trick list according to Rule 14.15

If there is more than one sequence that can be scored, the sequence that gives the maximum points shall be used.

Each trick shall be credited to the competitor with the points as given in Appendix 1

Rule 14.17. Trick descriptions

- a) Except in the case of attempted side slide turns, a trick is any activity which occurs between two hesitations. In the case of an attempted side slide, the hesitation in the 90° position is to be ignored in applying this rule. Credit may be received for performance of only one trick and the associated reverse, if any, on one ski under each number in the table. If this rule is violated, only the higher scoring of the repeated tricks shall be scored.
- b) An air turn not completely done in the air scores zero. Equally a water turn not completely done on the water scores zero.
- c) A reverse trick must immediately follow the basic turn in the same pass; however, any type of 180° turn is allowed between two such turns. The reverse shall not be disallowed simply because it follows an attempted trick which has not been credited or because the basic trick is a repeated trick. Reverse turns under Trick 5 are limited to 360° but may follow a 360°, 540° or 720°. Reverse tricks under Trick 12 are limited to 540° but may follow a 540° or 720°. On one ski and two skis only one basic trick and one reverse are allowed under Trick 27 and under Trick 28, but may be any reverse trick listed, i.e. the original may be a WL5, WLL5 or a WL7, and the reverse may be any reverse of any of the above. On one ski and two skis only one basic trick but no reverse are allowed under Trick 13, 34, 36, 37, 38, 42, 43, 45, 46, 47 and 49.
- d) Stepmover line tricks are complete only when the free foot touches ski or water or the lifted ski touches water after the turn before the next trick or the end of the pass. The skier may not lay his leg or lifted ski across or on top of the line, the handle, or either arm until he begins to execute the trick. The stepover and turn actions must be simultaneous.
Immediately on completion of a FB stepover turn, the skier must have at least one arm between his legs holding the handle.
A jump stepover 360° consists of a 180° stepover and a 180° jump combined, in either order, all done in the air, in a continuous turn. A jump stepover 540° consists of a 180° jump stepover and a 360° jump combined, in either order, or a 180° jump stepover preceding and followed by a 180° jump combined, all done in the air in a continuous turn. A jump double stepover 540° consists of a 180° jump stepover and a jump stepover 360° combined in either order, all done in the air in a continuous turn.
A stepover turn not performed according to the rules for a stepover but according to the rules for a 180° or 360° surface or jump turn shall be scored zero.
Toehold stepover tricks must be a simultaneous action. The towing foot may not touch the water during execution of the toehold stepover.
- e) All side slides include a 90° turn from skiing position, a hesitation in the 90° position and a return to the skiing position in the original direction.
- f) In ski line tricks, both feet must be on the ski and pass over the line while in mid-air. The feet may pass over the line at any point during the execution of the trick. The line must be out of the water during the execution of the trick.
- g) To receive credit for a flip, it is required that both feet must be higher than the head and in approximately the same vertical plane at some point during the execution of the trick. A Front Flip shall be defined as a forward somersault done in the air in which the tail of the ski passes up and over the head as the head goes down and forward. Both feet must be above the head and in approximately the same vertical plane at some point during the execution of the trick. For flips with

body rotation the body rotation must be done simultaneously with the flip, not before or after. A Flip Front-Back is not considered a 180⁰ turn either for purposes of declared tricks as referenced in Rule 14.15 or for reverse turns as described in Rule 14.17c). The reverse Back Flip is defined as a Back Flip leading with the opposite shoulder and travelling in the opposite direction (right to left vs. left to right) from the original Back Flip. Additionally, for the WFLIPBFB, the reverse must land in the opposite wrap or turn in the opposite direction.

Rule 14.18. Scoring

The skier's result from the final round will determine his placement in the event.

The better result obtained by the skier, in either the preliminary or the final round, shall count towards the overall.

To be considered for placement and receive overall points, skiers must have a score of more than 0 points.

Rule 14.19. Ties

If a tie exists for first place, it shall be run off. If a tie exists for second or third place, placement shall be decided on the basis of the higher preliminary round score. If a tie still exists, it shall be run off. The run off shall have a new drawing of order. Each tying competitor shall be allowed one pass until the tie is broken. Repeated ties shall be run off in the same manner until broken.

Rule 15. Records

Rule 15.1. What records are recognized

The IWSF shall recognize World Records for jump distances, slalom performances and trick points for the Men's and Women's divisions. The Regions may, in addition, recognize Region Records under the same standards provided for World Records. The Regions may, however, recognize Records for divisions other than those recognized by the IWSF. The Region in which a record may be recognized shall be determined by the nationality of the skier rather than the location of the competition.

Rule 15.2. Competitions where records may be set

Records may be set only at competitions homologated by the IWSF, a Region, a Federation, or the Cableski Council of the IWSF.

In any one competition, no more than three rounds are eligible for setting records. The eligible rounds must be declared before the start of the competition.

Rule 15.3. Jump records

The longest officially authenticated distance jumped in a round of a competition shall be a new record if it exceeds the official record performed on a date before the competition. If the distance equals the established record, the skier will become co-holder of the established record.

For jump records only the distance will be considered whether the performance was at a ramp height of 1,50 m or 1,65 m for women or 1,65 m or 1,80 m for men.

Rule 15.4. Slalom records

The highest officially authenticated scoring slalom performance performed in a round of a competition shall be a new record if it exceeds the official record performed on a date before the competition. If the score equals the established record, the skier will become co-holder of the established record.

Rule 15.5. Trick records

The highest officially authenticated trick result performed in a round of a competition shall be a new record if it exceeds the official record performed on a date before the competition. If the result equals the established record, the skier will become co-holder of the established record.

Rule 15.6. Ties in an event

In the event of equal performances in a round of a competition, the record shall be co-held no matter which skier may be the ultimate winner of the event.

Rule 15.7. Record forms and criteria

Specifications of equipment, courses and measuring devices shall be set by the IWSF Record Application Forms, which must be completed and certified by the Region Cableski Council Chairman, by the Chief Judge, by the Homologator and other required officials.

These record forms shall require that for a slalom or trick record, the performance must be video taped.

- a) Slalom. Video will be taken from the end of the slalom course centerline, starting with 10,25 m ropelength. The five Event Judges will examine the passes to recalculate the number of buoys.
- b) Tricks. Video will be taken as per Rule 14.12. This video will be viewed in regular speed by the Event Judges for record verification. Although the record verification cannot change the score recorded in the competition, the score may be changed for the record submission

In case a video measurement system is used in Jumping the homologator should send the video tape and the gif files for control by the IWSF Cableski Council.

All videos will be sent with the record forms to the Chairman of the IWSF Cableski Council. All submitted videos will be VHS. The format that the tape was recorded in will be clearly marked on the tape.

Rule 15.8. Record administration

- a) World Records may only be set at competitions sanctioned by the IWSF, a Region, or an affiliated National Federation. In some instances, a Region or Federation may specify specific events as record capability. In this instance, only performances from such specified events shall be considered for World Records.
- b) At competitions where World Records may be set, the Homologator shall be responsible for supplying the Chief Judge with the technical information required by the IWSF Record Application Form.
- c) The Chief Judge shall be responsible for the completion of the required application. The completed form shall be sent by the Chief Judge within one week of the completion of the competition to:
 - The skier's National Federation.
 - The Chairman of the Region Cableski Council where the record was performed.
 - The Chairman of the IWSF Cableski Council.

Under no circumstances will a record application be considered unless the appropriate record application forms are completed and all rules conformed to within the the stated time limits of one week (7 days)
- d) Upon receipt of the form and the necessary support documentation, the Chairman of the IWSF Cableski Council will either approve or disapprove the application and will advise the members of the IWSF Cableski Council and the IWSF President of his decision.
- e) The record will then be official, pending final ratification by the IWSF Cableski Council and the President of the IWSF.
- f) The IWSF Cableski Council and the President of the IWSF must advise the Chairman of the IWSF Cableski Council of their ratification or disapproval within 30 days of their receipt of the information.
- g) Records shall be retified if approved by a two-thirds majority of the IWSF Cableski Council. There shall be no proxy voting.
- h) Should the Homologator and/or Chief Judge fail in the responsibilities of these duties, sanction shall be determined and levied by the IWSF Executive Board following receipt of a report by the Region Cableski Council Chairman.

- i) In the unusual instance where a potential World Record performance occurred and it was intentionally not applied for as a World Record, the Homologator, Chief Judge, skier, and Federation may be subject to the IWSF Constitution.

Rule 16. Homologation Guidelines

Rule 16.1. General

The surveying instrument must have an accuracy of 20 seconds or better. All slalom and jump courses shall be checked with that instrument.

Rule 16.2. Jump

In case of the use of the Johnson system:

- a) Protractors should be in degrees with a gradation of 0,2 degrees. Minimum radius of the protractor shall be 25 cm.
- b) The maximum difference of readings between top and bottom stations on a fixed sighting point (on land) shall not exceed 0,1 degree. This is to be checked at several points through the range and include the other stations.
- c) Angles may be called in to 0,1 degree of accuracy.
- d) A recommended check is to sight the 6th slalom buoy for a small triangle and check against actual distance.

Rule 16.3. Slalom

All skier buoys and end gates must be measured (diameter and height) for record submission.

Rule 17. Additional Rules

	World Record	Ranking List	National
Prior Announcement	YES	YES	YES
Region Approved Panel	YES	YES	NO
Number of Rounds	3	3	3
Conflict of Interest Rule	YES	YES	National Federation Rule
Chief Judge	1st Class	1st Class	2nd Class
Homologator	International	International	International
Calculator	International	International	National
JUMP			
Course Check	SURVEY	SURVEY	SURVEY
Tolerances	Per Rule Book	Per Rule Book	Region Rules
Timing	Automatic	Automatic	Region Rules
Judges	3 1st class	1 1st class / 2 2nd class minimum	Region standard
SLALOM			
Course Check	SURVEY	SURVEY	SURVEY
Tolerances	Per Rule Book	Per Rule Book	Region Rules
Buoys	Measured	Measured	Region Rules
Timing	Automatic	Automatic	Region Rules
End course video	Required	Required	Region Rules
Judging Towers	Both sides	Both sides	Region Rules
Judges	5 1st class	3 1st class/ 2 2nd class minimum	Region standard
TRICKS			
Course Check	Visual	Visual	Visual
Tolerances	Per Rule Book	Per Rule Book	Per Rule Book
Timing	Automatic	Automatic	Region Rules
Video	YES	YES	Region Rules
Judges	5 1st class	3 1st class/ 2 2nd class minimum	Region standard

Appendix 1. Trick values

Description	Water Turns				Air Turns			
	Trick		Skis		Trick		Skis	
	No.	Code	2	1	No.	Code	2	1
Side Slide	1	S	20*	40*				
Toehold Side Slide	2	TS		130*				
180° FB	3	B	30*	60*	14	WB	50*	80*
180° BF	4	F	30*	60*	15	WF	50*	80*
360° FF	5	O	40*	90*	16	WO	110*	150*
360° BB		BB	40*	90*	17	WBB	110*	150*
540° FB		5B	50	110	18	W5B	310*	310*
540° BF		5F	50	110	19	W5F	310*	310*
720° FF		7F	60	130	20	W7F	800*	800*
720° BB		7B	60	130	21	W7B	480*	480*
900° FB					22	W9B	850*	850*
900° BF						W9F	850*	850*
Stepover 180° FB	6	LB	70*	110	23	WLB	110*	160
Stepover 180° BF	7	LF	70*	110	24	WLF	110*	160
Stepover 360° FF					25	WLO	200*	260*
Stepover 360° BB					26	WLBB	200*	260*
Stepover 540° FB					27	WL5B	300*	420*
Double Stepover 540° FB						WL5LB	-	500*
Stepover 720° FF						WL7F	700*	700*
Stepover 900° FB						WL9B	800*	800*
Stepover 540° BF					28	WL5F	300*	420*
Double Stepover 540° BF						WL5LF	-	500*
Stepover 720° BB						WL7B	550*	550*
Stepover 900° BF						WL9F	800*	800*
Toehold 180° FB	8	TB		100*	29	TWB		150*
Toehold 180° BF	9	TF		100*	30	TWF		150*
Toehold 360° FF	10	TO		200*	31	TWO		300*
Toehold 360° BB	11	TBB		200*	32	TWBB		330*
Toehold 540° FB	12	T5B		350*	33	TW5B		500*
Toehold 720° FF		T7F		450	35	TW7F		650*
Toehold 540° BF	13	T5F		350	34	TW5F		500
Toehold 720° BB					36	TW7B		650
Toehold Stepover 180° FB					37	TWL5B		320
Toehold Stepover 180° BF					38	TWLF		380
Toehold Stepover 360° FF					39	TWLO		480*
Toehold Stepover 360° BB					40	TWLBB		480*
Toehold Stepover 540° FB					41	TWL5B		600*
Toehold Stepover 540° BF					42	TWL5F		700
Front Flip					43	WFLIPF	800	800
Back Flip					44	WFLIPB	500*	500*
Double Back Flip					45	WDFLIPB	1000	1000
Back Flip Full Twist FF					46	WFLIPBFF	800	800
Back Flip Full Twist BB					47	WFLIPBBB	800	800
Back Flip Half Twist FB					48	WFLIPBFB	750*	750*
Back Flip Line Back					49	WFLIPBLB	800	800
Ski Line 180° FB					50	SLB		350*
Ski Line 180° BF					51	SLF		400*
Ski Line 360° FF					52	SLO		400*
Ski Line 360° BB					53	SLBB		450*
Ski Line 540° FB					54	SL5B		550*
Ski Line 540° BF					55	SL5F		550*
Ski Line 720° BB					56	SL7B		750*
Ski Line 720° FF					57	SL7F		800*

* Denotes tricks with allowable reverses. Reverses are the same value as basic trick.

Appendix 2. General diagrams

Diagram 1 / Measuring the height

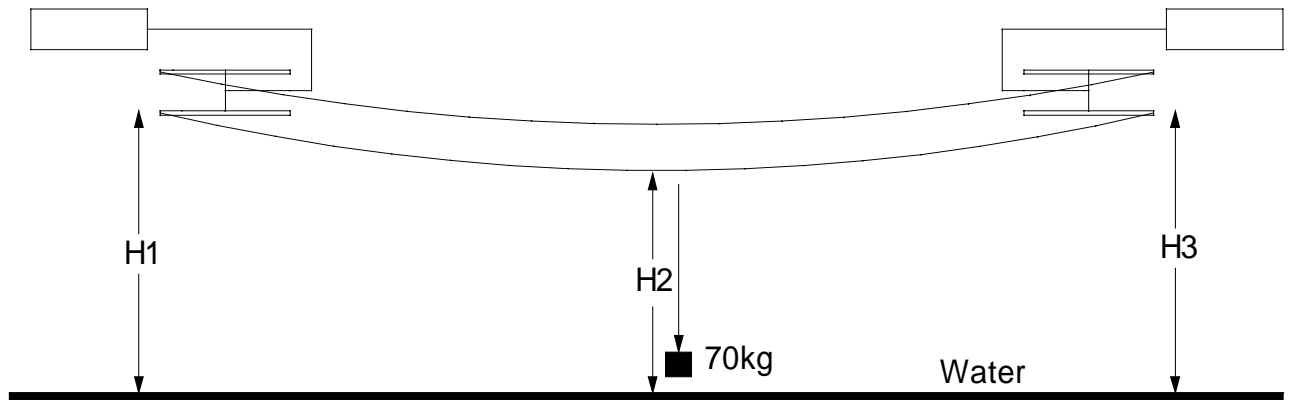


Diagram 2 / Calculation of AB

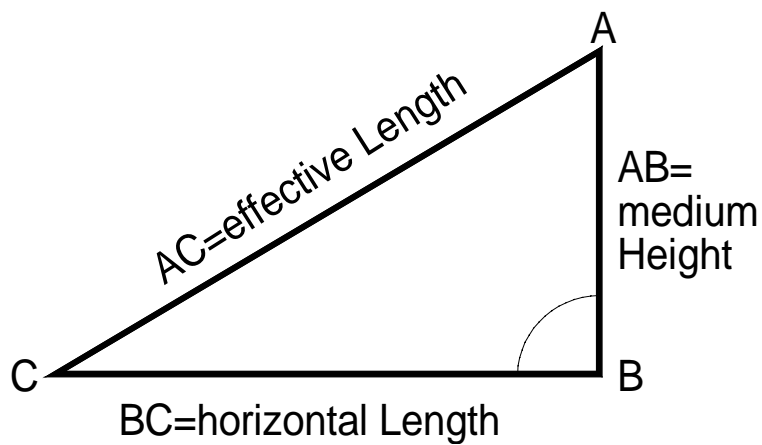
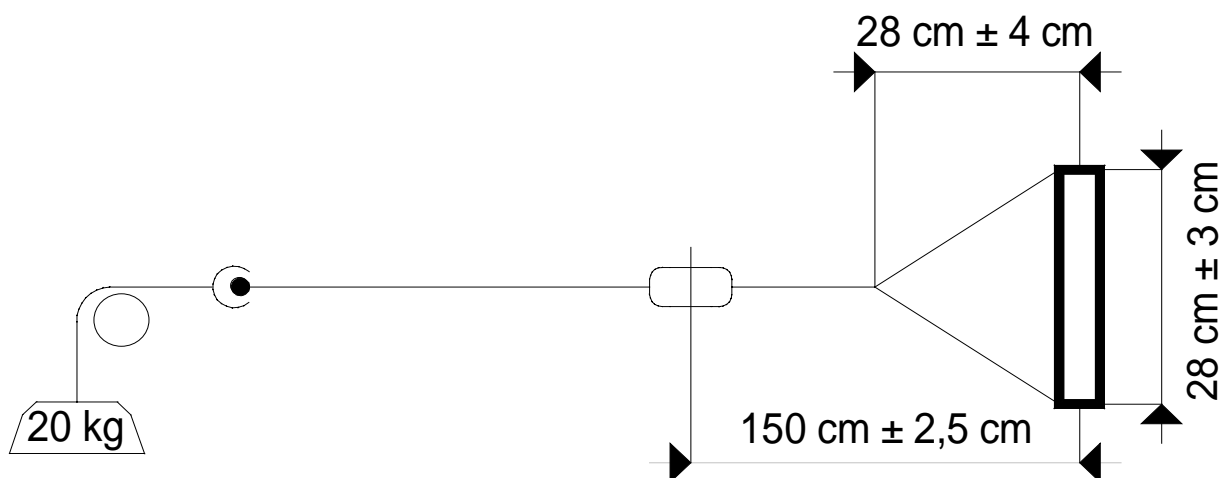


Diagram 3 / Handle dimensions in Slalom and Jump



Appendix 3. Calculation of Francor Tables

Important note: Overall points must be rounded to one decimal place.

P = Overall points

S = either jump distance in meter or number of buoys counted from 34 km/h for women, 37 km/h for men or trick points.

W = current World Record

Score

$$S \leq (W \times 0,80)$$

$$(W \times 0,80) < S \leq (W \times 0,88)$$

$$(W \times 0,88) < S \leq (W \times 0,95)$$

$$(W \times 0,95) < S$$

Formula

$$P = \frac{S}{W} \times \frac{700}{0,80}$$

$$P = 700 + \left(\frac{S}{W} - 0,80\right) \times \frac{100}{0,08}$$

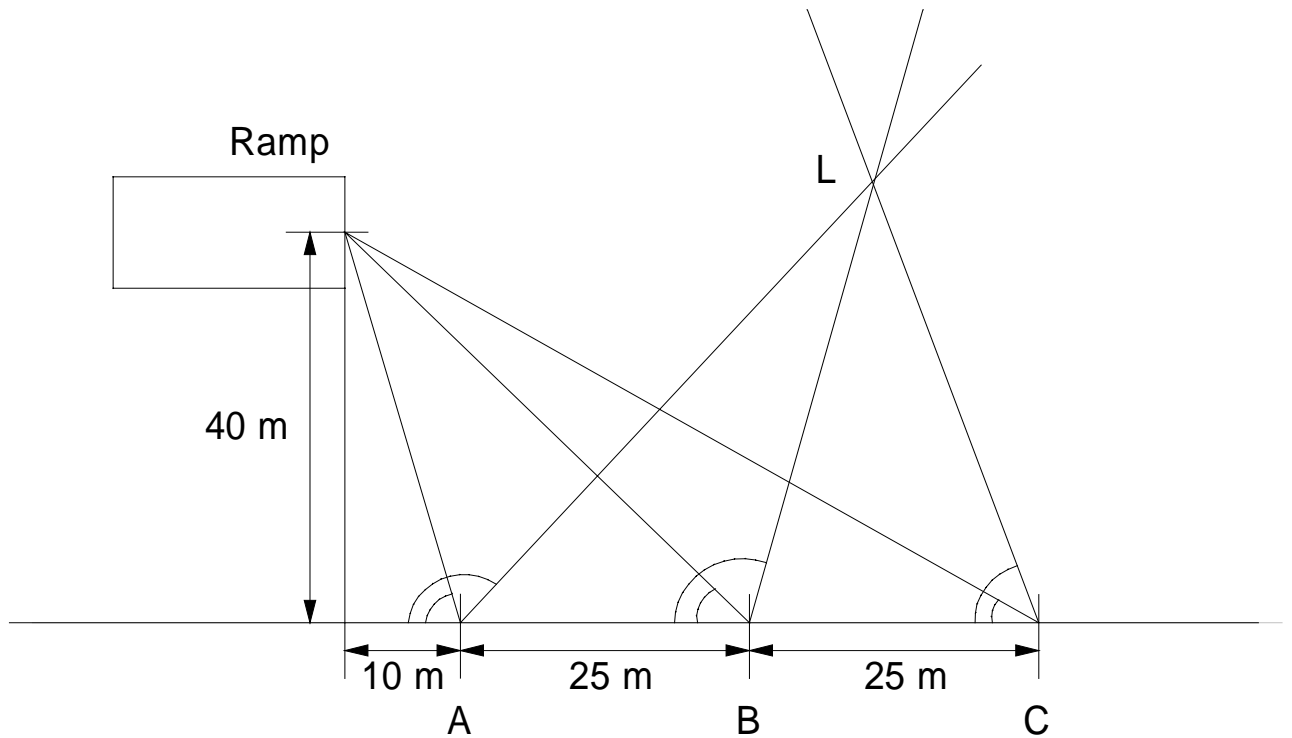
$$P = 800 + \left(\frac{S}{W} - 0,88\right) \times \frac{100}{0,07}$$

$$P = 900 + \left(\frac{S}{W} - 0,95\right) \times \frac{100}{0,05}$$

Additional calculation for Slalom if first pass is not perfect:

- a) Let PP be the overall points, rounded to one decimal place, corresponding to a perfect pass at the minimum starting pass (using the above formula).
- b) Let B be the number of buoys scored by the skier (between 0 and 6).
- c) Calculate $P = \frac{B}{6} \times PP$ and round P to one decimal place.

Appendix 4. Computer Benchmark for computed distances



Distance AB = BC = 25 m.
 ABC is a straight line.
 Jump position relative to A: 10 m back, 40 m out.
 Jump is exactly parallel to ABC.

Note: The example shown is theoretical and does not imply that jump setups must conform to this diagram.

For jump distances and record to be certified, the jump meters must be set up so that the angles read from each station, using the official protractors, to the sighting mark produce an error triangle with an inscribed circle diameter of less than or equal to 15 cm.

Note: This does not apply if an alternative measurement system has been approved for use.

For the setup shown, some examples might be as follows:

Angle A	Angle B	Angle C	X	Y	Triangle	Result
75,9638	48,8141	33,6901	10,0	40,0	0,00	OK
76,0	48,8	33,7	9,99	39,99	0,031	OK
75,9	48,9	33,6	9,94	39,93	0,169	BAD

Note: X and Y positions are rounded to 0,01 m.

To verify that a computer program, using the Johnson system, is computing distances according to the IWSF rules, the operator must show that it produces identical results with the test cases that follows based on the setup given in the diagram. Note that triangle size is rounded to 0,001 m.

	A		B		C		Distance	Triangle
	Upper	Lower	Upper	Lower	Upper	Lower		
1.	136,6	136,6	106,8	106,8	65,6	65,6	45,5	0,0
2.	136,0	136,0	106,0	106,0	67,0	67,0	45,5	0,56
3.	136,9569	136,2431	107,2972	106,3028	66,073	65,127	45,5	0,0
4.	136,96	136,24	107,3	106,3	66,1	65,1	45,5	0,0
5.	136,6	137,32	106,8	107,8	66,6	65,6	45,5	0,0
6.	137,751	137,751	106,8	106,8	65,6	65,6	45,7	0,6
7.	137,753	137,753	106,8	106,8	65,6	65,6	45,3	0,601
8.	136,6	135,8	106,8	106,8	65,6	65,6	45,5	0,211
9.	136,7963	136,7963	106,8	106,8	65,6	65,6	45,5	0,103
10.	136,7964	136,7964	106,8	106,8	65,6	65,6	45,6	0,104

Case 7. Possible reride!
 Longest Vertex 46,1
 Shortest Vertex 45,3

Appendix 5. Jump diagrams

Diagram 4 / Jump Course

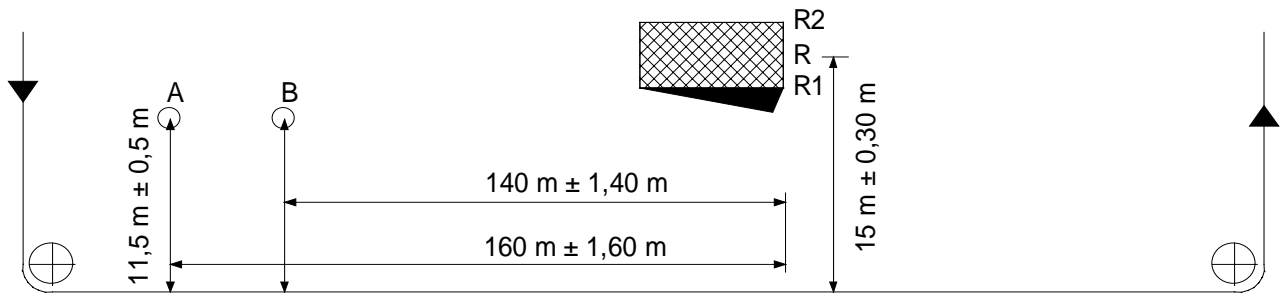
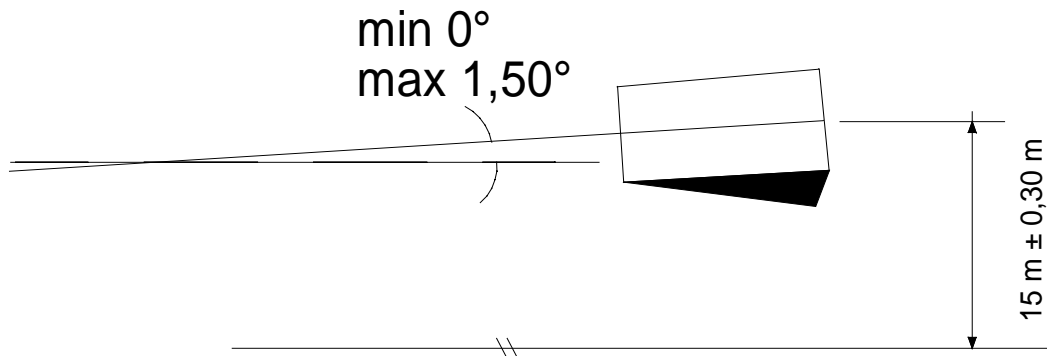
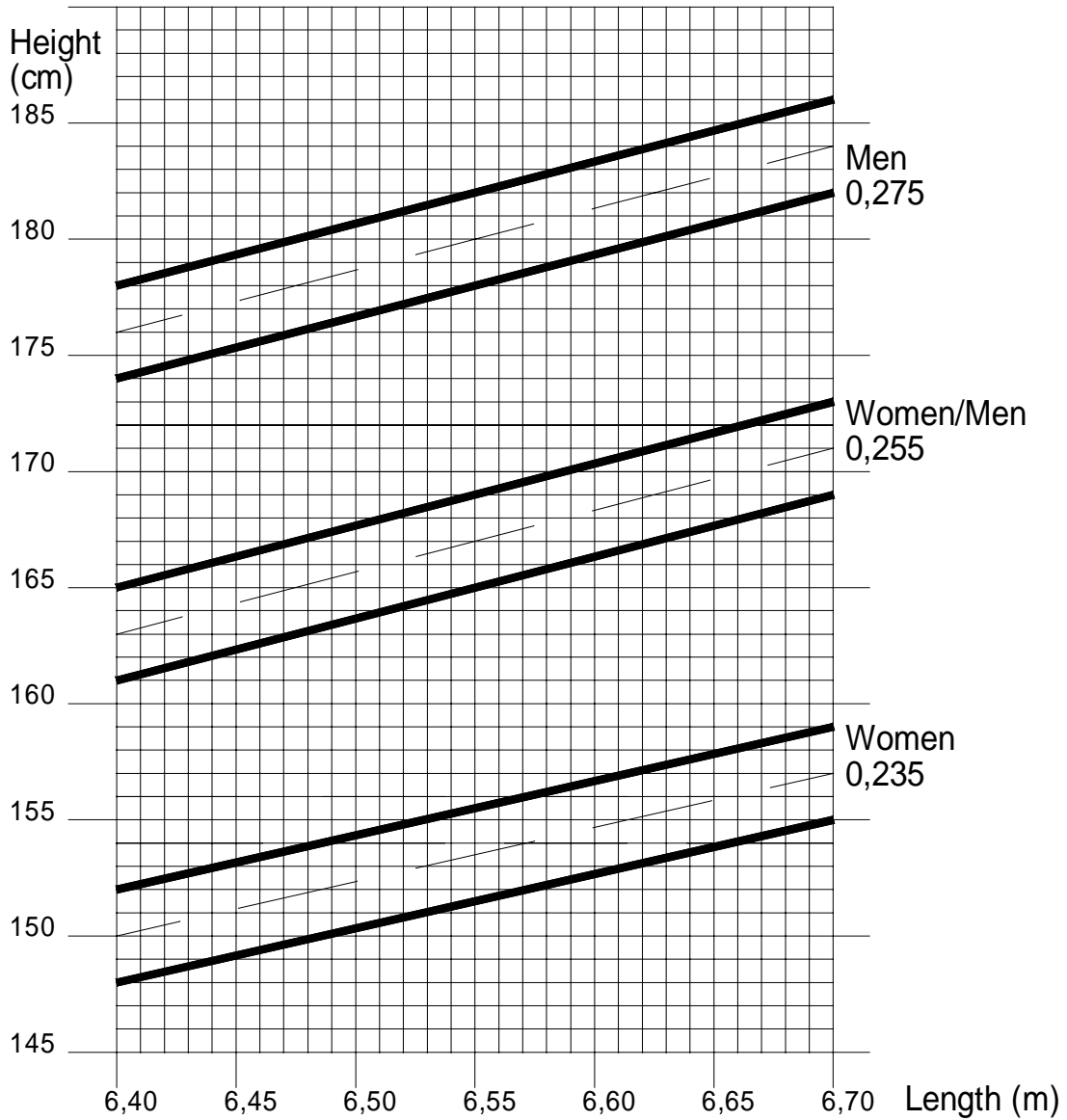


Diagram 5 / Ramp Angle



The ramp must be parallel to the main running cable with a tolerance of +1,5° open and -0° closed. Open means that the high end of the ramp is turned away from the main running cable.

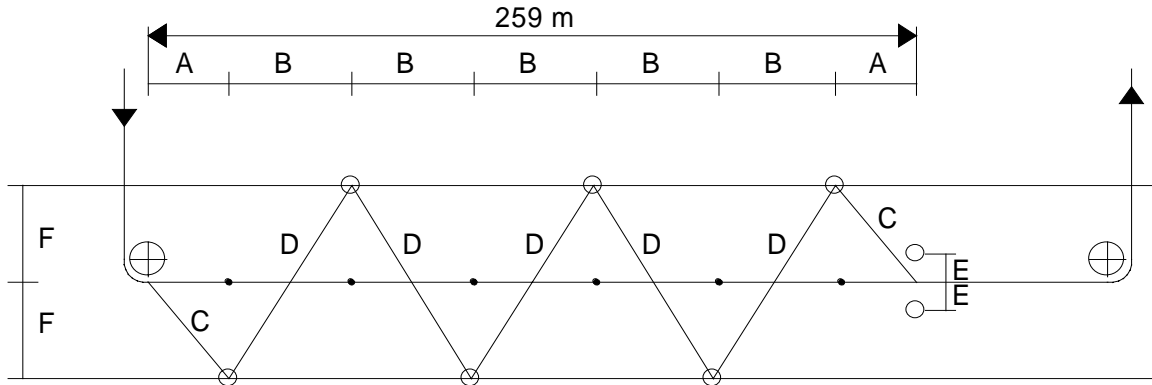
Diagram 6 / Ramp setting chart



Instructions: For any particular ramp setting, a combination of HEIGHT at the top edge and LENGTH out of the water enclosed within the solid line is allowable. A combination that lies on the dotted line is the most desirable.

Appendix 6. Slalom diagrams

Diagram 7 / Slalom Course



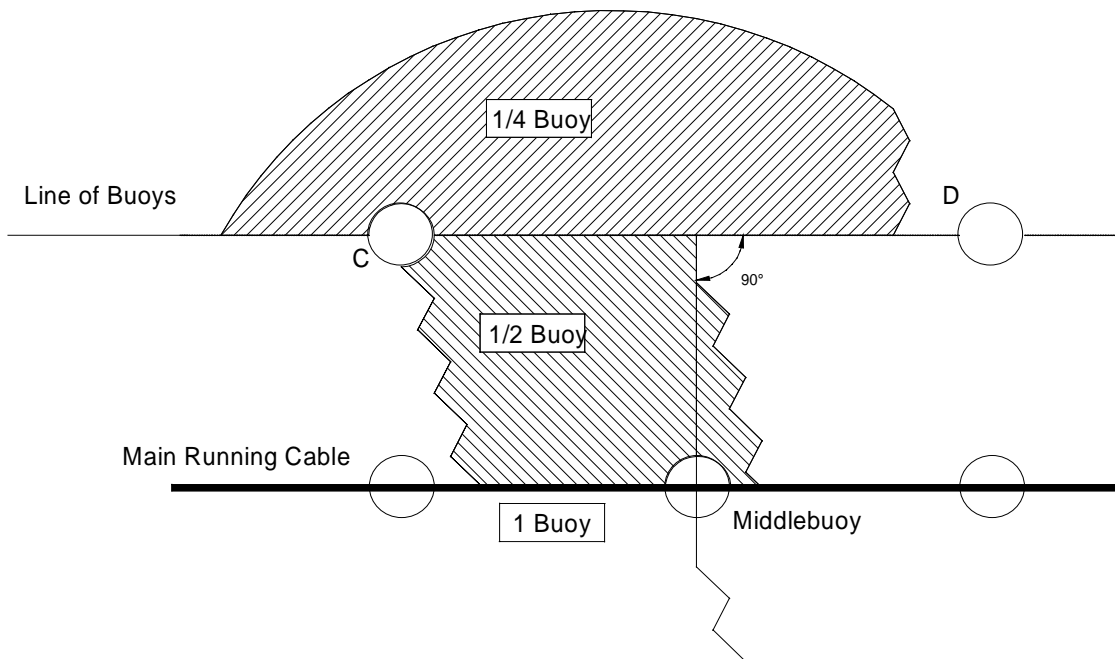
Overall =	259 m	± 1/4 %	258,353 m - 259,648 m
A =	27 m	± 1/2 %	26,865 m - 27,135 m
B =	41 m	± 1/2 %	40,795 m - 41,205 m
C =	29,347 m	± 1/2 %	29,200 m - 29,494 m
D =	47,011 m	± 1/2 %	46,776 m - 47,246 m
E =	1,25 m	± 1 %	1,188 m - 1,313 m
F =	11,5 m	± 5 %	11,385 m - 11,615 m

axis = main running cable

(off line) axis - middle line buoys = 0,00 m ± 0,115 m

Note: The average of the six measured F dimensions cannot be less than 11,48 m

Diagram 8 / Scoring of buoys



Appendix 7. Trick diagrams

