

**ALPINE CANADA ALPIN**

**BC ALPINE SKI  
ASSOCIATION**



**LEVEL III  
ALPINE OFFICIALS  
PROGRAM  
COURSE MANUAL**

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## LEVEL III COURSE

This course is designed for those officials who have obtained Level II and since then have gained specific practical experience as covered in the Alpine Officials Certification Program. This is an interactive course in which the major emphasis will be discussion and exchange of ideas, opinions and experiences by the participants. An examination of the course outline will show the variety and depth of the material covered.

Throughout the course, you will be participating in many case studies taken from actual experiences. You will be asked to make decisions on these problems with reasons and generally within a time limit - just as it happens in a race. Juries will also be formed to make decisions.

The Manual that accompanies this course is *simply a collection* of reference material deemed to be useful to this course. As such, the pages are numbered and a listing provided so that individual items can be found. The material is arranged to follow the order of presentation of the course.

Prior to the course, participants are asked to complete 'homework', to have read the manual and Case Studies and to have obtained specific items needed at the course. Successful participation in the course depends upon the advance preparation of each participant, as most time will be spent on discussion and not on lecturing.

The exam for this course will be given at the end of this ski season. This gives each participant the opportunity to enjoy the course without being concerned about writing an exam at the end of two full days. It also allows the material presented in the course to be reviewed and put into practice over the ski season.

## **BEING AN EFFECTIVE OFFICIAL**

This section represents the nuts and bolts of getting a good job done - the do's and don'ts of how to avoid the seemingly inevitable frustrations that come with the tasks.

1. Ski competitions are for the skier; officials are present to guarantee that the rights of each competitor as stated in the rules and regulations will be upheld in the competition. You are there to serve the best interests of all competitors.
2. Officials and officiating should be as unobtrusive and inconspicuous as possible. You should assume your responsibilities in a manner that will earn you the respect and support of competitors, coaches and spectators.
3. Officials should respect the desire of each competitor to be considered as something above an "also ran" participant. As officials, your personal views should not be voiced, and each individual effort from a competitor should be taken seriously.
4. You make any officiating duty a personal commitment as well as a commitment to your peers. This is easily reflected by your willingness to consult with others and by your effort to keep up to date with current rules and procedures.
5. Remember that you and everyone else officiating at a ski competition are volunteers! Everyone has probably adjusted other priorities in their lives to be there. Respect and support their efforts through a spirit of co-operation. The overall success of the competition is dependent upon the performance of each individual.
6. Accept an assignment to officiate only if you plan to honor the commitment. There are enough unpredictable built into our sport by Mother Nature that we do not need the added frustrations of "no shows".
7. Be on time for your assignment - that means you are there before you are needed.
8. Inform the appropriate major official if you are unable to attend or if you will be late. This must be done as early as possible; and if you are conscientious, you should aid in finding your own qualified replacement.
9. As officials, you must not be a couch to competitors. Encouragement may be given provided it is done equally for all. For Young competitors, it may be necessary to offer more guidance.
10. Never accept an assignment you are not qualified to handle. Poor performance through ignorance can be harmful to the skier and will reflect poorly on you and on the organizing club you represent.
11. Officials should respect the fact that last minute changes will always be a possibility. Remaining flexible and adaptive in your thinking will enable the competition to continue on to its successful conclusion.

## **B. BC Alpine Officials Program**

The BC Alpine Officials program is a structured, integrated program involving four levels of Officials and four levels of Technical Delegates. It covers all Officials from the novice Level I to the highly qualified and experienced Level IV Officials and National Technical Delegates. The program stresses the integration of practical with theory at all levels. It seeks to provide the means by which Officials can build a broader and more knowledgeable base of experience and maintain that level of experience. It is vital that Officials are able to provide race organization and officiating skills that will match the competitors' performance levels and program goals. Competitors have the right to expect that Officials have this level of expertise so that results reflect the athletes' ability and skill without being compromised by the incompetence of race Officials or "luck".

### **Objectives**

The objectives of the Program are:

- a) To standardize the methods and techniques of organizing and officiating at ski races across BC
- b) To ensure that ski competitions are fair, safe and consistent with prescribed standards.
- c) To ensure uniformity with respect to rule interpretations
- d) To ensure that required numbers of qualified Officials are available at all races in BC.
- e) To offer opportunities to anyone, anywhere to become a ski Official
- f) To offer opportunities, through established programs, for Officials to progress from club Officials to International Officials.
- g) To establish criteria for Officials certification which reflects the current standards in racing
- h) To offer recognition to Officials for their achievements

*Level I:* Prepares new Officials for local or Zone races in various junior Race Official positions. Course is 3 hours with no exam.

*Level II:* Offers further education and training to Level I Officials with specified experience so that they may take on more demanding and responsible roles. Level II Officials are qualified for several Chief and Jury positions. Course is 7 hours with national exam. Minimum of 70% is required to pass.

*Level III:* Prepares Officials for all Chief positions and for minimum entry qualifications for the Technical Delegate (TD) program. Must be Level II Officials with specified experience. Course is two days with national exam. 70% pass.

*Level IV:* This Level is for those Officials who have gained further experience at National or International level races and who have demonstrated superior abilities as an Official. The BC Officials Chair must recommend them to the National Officials Committee.

*Level II or III Technical Delegate:* Must be Level III or IV Official, serve as TD Candidate at two races and be evaluated in both cases. Practical and written exam. Qualified to TD at BC Races and some National Level races.

*National TD:* Obtained through experience and demonstrated superior ability. The BC Officials Chair must recommend them to the National Officials Committee.

## ***Officials Code of Conduct***

Alpine Ski Officials must demonstrate high standards of judgment and competency as they represent BC Alpine at all times. The hallmarks of good Officials are promptness, firmness and justice, tempered by tact and consideration.

Officials must be impartial and must supervise and control an event in a manner that reflects the spirit and intent of the rules and regulations. They will provide a competition that will preserve the health and safety of all involved. They will do their utmost to guarantee that each competitor receives an equal and fair opportunity to win. They will promote sportsmanship and an atmosphere of enjoyment

Officials shall maintain high standards of moral and ethical conduct that includes self-control and responsible behavior, consideration for others' physical and emotional well-being and courtesy and good manners at competitions.

Officials shall abstain from the use of illegal drugs and from immoderate consumption of alcohol.

Officials shall refrain from the use of profane, insulting, harassing or otherwise offensive language in the conduct of his/her duties.

## **Disciplinary Action against Officials**

If an Official appears to have exhibited behavior or conduct that is either unprofessional or unethical, the following procedures shall be followed:

- a) A complaint against an Official shall be submitted to the Officials Chair.
- b) The complaint shall be investigated and action recommended. This action may include but will not be limited to, a warning, probation, and revocation of participation privileges and/or loss of credentials.
- c) The decision of the Officials Chair shall be communicated to the Official in question as well as to the BC Alpine's President.
- d) An Official against whom actions have been taken may appeal the action through the appeals procedure of BC Alpine.

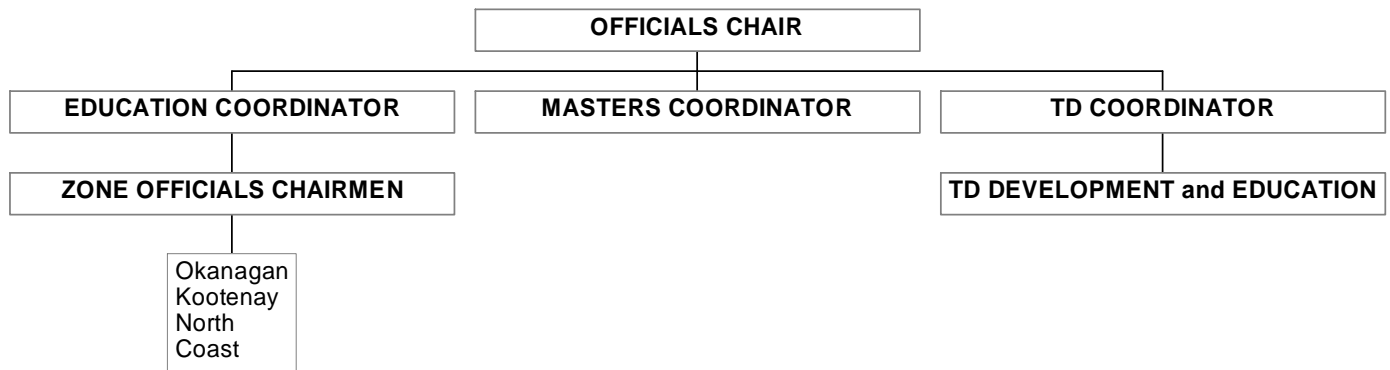
## ***Administration of the Officials Program***

The Officials Chair who shall be elected by the membership at the AGM each year shall administer the Officials Program. The Organization chart for Officials Committee is shown below.

The Officials Committee advises and assists the Officials Chair with the administration, content and criteria of the Officials Certification Programs in specified areas. Each member must be a minimum of a Level III Official and hold a current TD License.

The Committee, headed by the Officials Chair, will meet once each year at the time of the BC TD Update.

## BC Program Chairmen Organizational Chart



### Officials Chair

The Officials Chair coordinates and administers the Officials Program of BC Alpine and ensures that the objectives of the program are met. The position reports to the Board of Directors and involves:

- Ensuring that all aspects of the Officials certification program meets the requirements of the race programs in BC
- Establishing budget and maintaining financial statements
- Working with BC Alpine staff to establish and maintain a record gathering system for all Officials
- Overseeing the database for Officials which features search and retrieval functions for any of the data fields recorded for each Official
- Preparing statistical records of Officials from database
- Issuing Officials Lists as required
- Identifying Officials who are ready for advancement to next level
- Recommending new rules or rule changes as appropriate
- Updating of BC Rules annually
- Communicating rule updates and changes to clubs, Officials and coaches annually
- Contributing material to BC Alpine Update and Newsletters for information of all Officials
- Attending BC Alpine Board meetings
- Nominating Officials for volunteer of year award and/or Sport BC Official of Year
- Appointing members of Officials Committee: Zone Chairs, Masters Chair, TD Coordinator, Education Coordinator and TD Development/Education Coordinator
- Preparing required reports ie: for membership
- Establishing goals for the upcoming year

In addition, the Officials chair is a member of the National Officials Committee and has duties as specified under the terms of reference for that committee.

### TD Coordinator

Coordinates and administers the Technical Delegate program with direction from the Officials Chairman. Ensuring that the objectives are met this involves:

- Overseeing a special database for TD's for tracking and identification
- Assigning TD's to all BC races
- Approving expense accounts within an established budget
- Updating race forms
- Preparing and distributing race packages for all races then reviewing the completed packages and returning same to clubs following assessment and evaluations

- Assisting with arrangements for the TD Update annually
- Ensuring that the TD Candidate program is in place and that recruitment of Candidates is sufficient to meet the needs of each zone and BC
- Issuing the Club 604 Newsletter three times a year to all TDs
- Advising Officials Chair in the various aspects of the Officials Program on an ongoing basis
- Establishing of goals for the upcoming year
- Attending the Officials committee meeting each year

### **TD Development/Education Coordinator**

Identifies and develops the educational needs of the Technical Delegate Program with direction from the Officials Chair. In conjunction with the TD Coordinator ensures that the objectives are met this involves:

- Arranging the TD Update annually
- Identifying the educational needs of TD's and recommending action
- Initiating programs for educational requirements
- Reviewing Officials manuals and recommending changes
- Reviewing nomination procedures for TD Candidates and recommends changes to criteria and/or procedure
- Conducting such surveys, reviews as needed for the Officials Program
- Reviewing the Officials Certification program each year
- Advising the Officials Chair in the various aspects of the Officials Program on an ongoing basis
- Establishing goals for the up-coming year
- Attending the Officials Committee meeting each year

### **Educational Coordinator**

Identifies, develops and coordinates the educational needs of the Officials Program working under the direction of the Officials Chairman. This involves:

- Preparing and updating the course material for Level I, II, III manuals
- Updating the Officials forms relevant to Officials courses
- Coordinating with BC Alpine office manual production, printing and distribution
- Arranging, organizing, distributing course material to Officials Zone Chairs
- Liaisons with the Zone Officials Chairs to organize Level I, II, III Officials courses
- Recommends new rules and changes as appropriate
- Advising the Officials chair in the various the various aspects of the Officials Program on an on-going basis
- Establishing goals for the up-coming year
- Attending the Officials committee meeting each year

### **Zone Officials Chairs**

This position is selected by the Officials Chair from the four Zones. Working with the Educational Coordinator the responsibilities include:

- Consulting with the Educational Coordinator to organize Level I, II, and III Officials courses in their respective zones.
- Arranging for instructors, forwarding all necessary material to instructors, receiving all back in good order and forwarding to the Educational Coordinator all forms, fees and exams.
- Ensuring that, by means of Officials Courses, each club within their respective zone maintains a sufficient number of registered Officials to run races according to BC criteria.
- Analyzing course material on a regular basis and planning further developments and changes for Level I, II and Level III
- Reviewing the Officials Certification Program each year
- Advising the Officials Chair in the various aspects of the Officials Program on an ongoing basis.
- Attending the Officials Committee meeting each year.

### **Masters Coordinator**

- Administers the appointment of Technical Delegates for Masters races in BC
- Prepares report forms for these races, issues them to TDs, receives them back and forwards them to clubs.
- Reviews the Officials Certification Program each year.
- Advises the Officials Chair in the various aspects of the Officials Program on an ongoing basis.
- Attends the Officials Committee meeting each year

### ***Officials Development Model***

The table on the following page outlines the Officials Development Model

### BC ALPINE OFFICIALS DEVELOPMENT MODEL

| <u>TD Recruitment</u>         | <u>TD Level</u>       | <u>Race Level *</u>                      | <u>Officials Level</u> | <u>Course Requirement</u> | <u>Technical Requirement</u>                        | <u>Course Conductor</u> | <u>Officials Recruitment</u>                               |
|-------------------------------|-----------------------|--|------------------------|---------------------------|---|-------------------------|--|
| Nomination to FIS             | FIS                   | WC<br>Nor Am<br>Can Champs               | IV                     |                           | Official III<br>+ 2 years<br>specified exp.         |                         | Officials<br>Chair   |
| Nomination to FIS             | FIS                   | FIS                                      | III                    | Level III                 | Official II<br>+ 2 years<br>specified<br>experience | Technical<br>Delegate   | Officials<br>Committee,<br>recommendation<br>or invitation |
| Nomination to Officials Chair | Level III<br>Level II | K&J levels<br>JA/JB<br>Technical<br>only | III<br>III             |                           |   |                         |  |
| Masters Coordinator           | Masters               | Masters                                  | III                    |                           |   |                         |  |
| Nomination to Officials Chair | Level I or II         | K1, K2<br>Technical<br>only              | II                     | Level II                  | Official I<br>+ 2 years<br>specified<br>experience  | Level III, IV<br>or TD  | Club, Officials<br>Committee                               |
|                               | N/A                   | NGSL<br>E1, E2<br>Scamps                 | I                      | Level I                   | None  | Level II or<br>higher   | Club, Officials'<br>Committee                              |

\* Refers to major and/or Jury positions for Officials Level required

## **Levels, Pre-requisites and Criteria**

### **Level I**

This is the entry level. There are no pre-requisites as to practical experience although participants will gain the most benefit if they have some experience even if this is at the NGSL level. The course is 3-4 hours long with no exam. Attendance at this course automatically qualifies the participant as a Level I Official. Parents of racers in the Alcan NGSL and K1, K2 program find this course an excellent introduction to race officiating and in gaining an insight into the racing program as a whole.

### **Level II**

The pre-requisites for this level are Level I certification, and practical experience in at least the K level in at least three **different** positions taken from at least two different categories of Official which covers a minimum of 4 event assignments i.e. 8 race days. For example, 2 days as gate judge, 2 days as a recorder, 2 days as a starter and 2 days in any other or the same of these positions would cover the qualifications. However, 4 races as recorder and 4 races as gate judge would not, as only two different Officials positions have been filled.

For the purposes of certification, the various Officials positions have been divided into the following categories.

| <b><u>Administration</u></b>      | <b><u>Course</u></b> | <b><u>Timing</u></b>  | <b><u>Jury</u></b>          |
|-----------------------------------|----------------------|-----------------------|-----------------------------|
| Race Chairman                     | Chief of Race        | Chief of Timing/Calc. | TD                          |
| Race Secretary                    | Chief of Course      | Chief of Timing       | TD Candidate                |
| Secretariat *                     | Chief of Gate Judges | Starter               | Referee                     |
|                                   | Gate Judge *         | Assistant Starter *   | Asst. Referee               |
| <b><u>Event Quality</u></b>       | Course Crew          | Timer                 |                             |
| Chief of Event Quality            | Chief of Equipment   | Timer Recorder *      | <b><u>Jury Advisers</u></b> |
| Chief of Ski Area Relations       | Chief Steward        | Chief of Calculation  |                             |
| Chief of Awards & Media Relations | Steward *            | Calculator            | Start Referee               |
|                                   |                      | Finish Controller *   | Finish Referee              |

### **Level III**

Pre-requisites for this level are Level II certification and practical experience as follows:

- Any two of the following positions **since obtaining Level II**:
  - Chief of Race
  - Chief of Course
  - Chief of Timing and Calculation
  - Chief of Gate Judges
  - Race Secretary
- 2 assignments as a member of the Jury (other than Chief of Race)
- 1 different assignment from those listed above without an asterisk at a FIS level race.
- Attend the Level III course and pass the exam.

## Level IV

In order to become a Level IV Official, it is necessary to be recommended to the National Officials Committee by the BC Officials Chair. Level IV Officials are the most experienced Officials who have demonstrated a superior level of ability. Among the qualifications required of a Level IV Official are: Level III Official with the minimum practical experience in each of the following, **since obtaining Level III certification:**

- Satisfactory performance of the duties of Chief of Race at FIS level.
- Assignment as voting Jury member at a DH race at minimum Division level.
- Satisfactorily perform:
  - 1 event assignment as: Chief of Course or Chief of Gate Judges.
  - 2 event assignments out of: Race Secretary, Chief of Timing and Calculation, Race Chairman

This practical **must** be either J1 and/or FIS level.

### ***Coaches Entry Into the Officials Program***

Criteria by which Officials recognition may be obtained by coaches other than by taking Officials courses:

- All Level I coaches are automatically Level IC Officials.
- All Level II coaches remain a Level IC official until taking the required the Level II Officials course unless already qualified as a Level IIC Official.
- All Level III or IV C.S.C.F. coaches are automatically Level IIC Officials.
- Level I or II coaches should take the Level II Officials course directly.
- Level III or IV C.S.C.F. coaches may take the Level III Officials course directly.

**Note:** The letter **C** is used to distinguish those who have obtained a Level I or II Official's standing through coaching qualifications.

### ***Officials Recognition***

The following table shows the method by which the various levels of Officials are recognized:

| <u>Level</u> | <u>Recognition</u> | <u>Identification</u>        |
|--------------|--------------------|------------------------------|
| I            | Card               | National or Division Pin     |
| II           | Card               | National or Division Pin     |
| III          | Card               | National or Divisional Pin   |
| IV           | Card               | National Pin and Certificate |

### ***Requirements to Maintain Certification***

|                           |           |             |
|---------------------------|-----------|-------------|
| Initial certification is: | Level I   | three years |
|                           | Level II  | three years |
|                           | Level III | two years   |

Once obtaining a specific level of certification, there are practical and, in some cases, other requirements to maintain certification after the initial period of certification has expired i.e. if an Official does not the criteria, then the certification is not extended past the initial certification period. These are shown below.

|                |         |  |
|----------------|---------|--|
| Level I, IC:   | Minimum | Activity as an Official  |
| Level II, IIC: | Minimum | 2 event assignments (4 race days) in a 3-year period and Update* |
| Level III:     | Minimum | 2 event assignments (4 race days) a year and Update. *           |

Level IV: Minimum 2 event assignments (4 race days) per year, at the TD or Chief level or to the satisfaction of the Official Chair. Attend Officials update clinic every other year.

\* Level II and III Officials must also update every two years. The methodology of the update is at the discretion of the BC Officials Chair.

Officials who do not meet these criteria are removed from the Officials List.

### ***Official Data Base and Tracking System***

The BC Officials Chair keeps records of each Alpine Official in BC. These records show the activity as an Official, i.e. what races he/she works on and the position held, what courses he/she has attended and his/her background on becoming an Official. The record sheet also keeps track of maintenance requirements when an Official becomes eligible for advancing to the next level and when the present certification expires.

The main method of obtaining the required information is through the Race Officials/Volunteers Record which is completed for all levels of races in BC. The second source of information is the Officials Self Tracking Card which is issued to each Official and is his/her license to be an Official. This card is used to keep a record of experience and is returned to the Official's Chair on a regular basis. Using both these methods, a satisfactory record of experience for each Official is maintained.

All information from the records is transferred to the Officials Database that is updated annually. Prior to the updating, an archive copy of the Officials List is produced. During the updating, inactive Officials are removed and Officials eligible to advance to next level are identified.

The Officials Data Base is available on the BC Alpine web site. Information is available by Zone or Club.

## **OFFICIALS COURSES**

### ***Course Descriptions***

Advancement to another level of Official is by combination of practical experience and by taking the appropriate Officials courses as detailed previously. An outline of the course content of the courses follows:

#### **a) Level I**

Time Required: 3 hours  
Course Fee: \$10 per participant - includes course manual and Officials card and Pin  
Pre-requisites: None  
Exam: None

This course is the entry-level course and is an overall introduction to race organization and Officials with particular emphasis on timekeeping and gate judging methods.

#### **b) Level II**

Time Required: 6 hours plus 1 hour exam. One day or two evenings  
Course Fee: \$20 per participant - covers course manual, Officials pin and card.  
Pre-requisites: Level I certification with practical experience in at least three different Officials positions from two different categories which covers a minimum of eight race days experience. See Section 1 for full details on this.  
Exam: 1 hour, multiple choice, T/F and short answers. Open book.

This course has been designed as a detailed introduction to alpine ski racing and the roles and duties of the various Officials. It is a fairly intensive course that does not repeat the material covered in detail in Level I and thus does require some prior knowledge and experience in order that the material covered is absorbed to the best advantage.

### **c) Level III**

- Time required: 12 hours plus 2 hour exam. Generally given on a weekend but can be given over three evenings. Course involves classroom and on-hill instruction.
- Course Fee: \$30 per participant. Covers course manual and materials, case studies and Officials pin and card.
- Pre-requisites: As this course involves prior reading of material and completion of homework, it is open only to those who have the necessary pre-requisites as outlined in the National Officials Certification Program or who have been identified as being very close to having the necessary practical. Once the dates of the courses have been established, those so qualified will be notified and will be able to register for the course and receive the materials.
- Exam: 2 hour open book exam. This exam may be given immediately following the course or at the end of the season.

This course is an interactive one in which there is emphasis on discussion and exchange of ideas, opinions and experiences by the participants and the instructor. This course is designed for Officials with considerable practical experience. It covers rules for particular disciplines and the work and duties of the Jury and Technical Delegate in detail. It is the pre-requisite course for entering the Technical Delegate program. Also covered are the duties of senior Officials, course preparation, maintenance and setting and calculation of points and penalties. Throughout the course, participants take part in many case studies taken from actual experience and will be asked to make decisions on these as well as participating in Jury decisions.

### ***Scheduling Of Officials Courses***

An ideal schedule of courses per year would be:

- Level I - each club
- Level II - minimum of two courses each Zone
- Level III Coast Zone: each year  
Kootenay, North and Okanagan Zones: once every two years on a rotational basis.  
Eligible Officials receive assistance to attend Level III courses in other Zones as needed.

It is the goal and commitment of BC Alpine to provide courses as needed and based on the above schedule. Clubs wishing to arrange for Level I or II Officials courses should contact the Officials Committee member for their zone. The Officials committee member will arrange for the instructor and all course materials. If time is short, arrangements can be done by phone, but, remember that the minimum time required to arrange a Level I course is one week, Level II is 10 days to 2 weeks. The club will then be notified of the instructor and will be responsible for arranging for the course and notifying those interested in attending this course if this is a Level I or II course.

As indicated above, different arrangements are in place for a Level III course and are handled by the Officials Chair.

## **Course Conductor Qualifications**

The following are the minimum criteria for Course Conductors:

|                  |  |
|------------------|--|
| <b>Level I</b>   | Level III Official <i>or</i> Level II Official approved by Officials Chair |
| <b>Level II</b>  | Level II TD <i>or</i> a Level III Official approved by Officials Chair     |
| <b>Level III</b> | Minimum of Level II TD with two years experience.                          |

## **TECHNICAL DELEGATE PROGRAM**

The Technical Delegate (TD) is the person who has advisory control over pre-race and post-race operation and together with the other members of the Jury, has complete control over the competitive operation of the race. He/she has the final decision in all matters of racer protection and has the authority to cancel, postpone or annul the race if necessary. In all cases the TD is the representative of the governing body by whom he/she is appointed.

### **Levels and Criteria**

A TD must have a broad working knowledge and experience as an Official and have demonstrated an ability to handle a variety of on-hill situations in a calm and knowledgeable manner. The National Officials Program allows for a Level I TD certification but this certification is not in place in BC. The requirements for certification at the various levels are:

#### **a) Division TD Level II**

This certification qualifies a TD in technical events. The requirements are:

- Level III Official certification.
- Successfully carry out 2 assignments as TD candidate, one in a SL and one in a GS.
- Be recommended by the TD Examiner for TD certification
- Pass a written exam.

#### **b) Divisional TD Level III**

This certification qualifies a TD in both technical and DH and Super G events. In order to receive qualification as a Level III TD, a candidate will complete the TD Level II program above and must have a strong background in DH/Super G experience either as a racer or coach or will have an excellent experience level as an Official in those events. In order to receive this qualification, a candidate will have to serve as a candidate at a DH and/or Super G.

#### **c) National TD**

- Level IV Official Certification.
- Licensed Level II or III TD with demonstrated superior knowledge and ability.
- Nomination by the BC Official Chair to the National Officials Committee. A National TD will have demonstrated, over a period of at least three years, a sound understanding of the responsibilities of a TD and will be capable of being a TD at a variety of level of National races.

#### **d) F.I.S. Technical Delegate**

The first step to entering the FIS TD program is nomination by the BC Official Chair and the BC Alpine President to the FIS TD Commissioner for Canada. Following acceptance by the Commissioner, the candidate follows the program outlined in ICR 604.

## **Requirements To Maintain TD License**

Due to the nature of the responsibilities of a TD, it is important that a TD remain an active Official, fulfill a TD appointment at least once every two years and be current with the latest rules and calculations. The following thus represents the **minimum** requirements for maintaining a TD license.

### **a) Division Level II and III**

- Minimum of one TD assignment in a two-year period.
- Complete an update clinic or TD update every other year.
- Maintain Level III or Level IV Official certification as outlined in the Officials Certification program.

### **b) National**

- Minimum of one TD assignment in a 2-year period.
- Maintain Level IV Official certification.

### **c) F.I.S.**

As per ICR 604.

## **Appointment**

TDs are appointed as follows:

### **a) BC Division Races**

The BC Officials Chair or TD Coordinator appoints TDs for BC races. These TDs are Level II, III or National levels. In making these appointments, consideration is given to the level of race, its location and the qualifications of the TD.

### **b) International and FIS Scheduled Races**

TDs must hold a valid FIS TD license and for all FIS sanctioned events other than World Championships, Olympic Winter Games and World Cup events are appointed by the FIS TD Commissioner for Canada. In the case of Nor-Am races this is done in conjunction with the USA FIS TD Commissioner or his/her representative. The FIS TD Commissioner appoints a Western Canada representative who working in conjunction with the FIS TD Commissioner for Canada, appoints the TDs for BC and Alberta. TDs for non-FIS National races such as the Western Juveniles or Canadian Juveniles are appointed by the Western FIS TD representative.

## **TD Candidate Program**

### **a) Selection of Candidates**

- Initial qualifications are: Level III or IV Official with sufficient experience for this program
- Candidates must be nominated by a current BC or FIS TD using the TD Candidate Nomination form.
- This nomination must then be seconded by another TD.
- Either the nominator or the seconder may be from the proposed candidate's club, but not both.
- The nomination then must be accepted by the Officials Chair and also by the candidate.

### **b) Training and Evaluation of Candidates**

Candidates will be assigned to a training assignment, either a GS or Slalom, with an experienced TD. This is meant to be full training session with the TD and a short evaluation form is completed after this.

The next practical session is an evaluation session in which the candidate will be expected to become the TD for one full day of the race and must perform all the duties of the TD. The TD of record will only step in if a situation arises which the candidate is unable to handle or if the race itself is jeopardized or if a safety situation is not resolved.

Following this practical, a full evaluation is completed on the candidate. Assuming that this is satisfactory, then there is a short TD exam. The candidate then receives his/her license as a Divisional TD Level II.

### ***Administration and Record Keeping***

The administration of all Level II, III and National TDs in BC is the responsibility of the BC Officials Chair or TD Coordinator. A listing is maintained of all who hold a current license as a Divisional or national TD. Records are kept for all TDs as to activity as an Official and a TD and fulfilling of update requirements. This information is transferred to the TD database that is maintained by the Officials Chair.

The Officials Chair also has the responsibility of identifying those with the potential and interest to enter the TD program as mentioned above.

## **COMMENTS ON OFFICIATING AND THE RULES**

I. Rules are created to...

- A. Define the physical environment of a competition as to: the nature of the site, its dimensions, And acceptable conditions;
- B. Define/describe the essential procedures of a competition;
- C. Minimize unreasonable hazards;
- D. Control the participants and those officially associated with them;
- E. Prevent actions that give an advantage to one or more of the participants;
- F. Define the rights and duties of the officials.

II. Officials are present to: assist, assure control, arbitrate, and report on the competition

According to the oft-quoted view:

It is the purpose of the rules to penalize a player who --- by reason of an illegal act --- has placed an opponent at a disadvantage.

One might see the rules of a sport as serving to prevent a personal advantage!

Attributed to John Bunn, a sports official and writer:

It is not the intent that the rules shall be interpreted literally. Rather, they should be applied in relation to the effect which the action of players has upon their opponents.

If they are unfairly affected as a result of a violation of the rules, then the transgressor should be penalized. If there has been no appreciable effect upon the game, then the act should be ignored.

A rule can't work one way one time, and work another way another time; application of the rules must be consistent.

## **THE RULES OF SKI RACING**

What is the ultimate source of rules for Alpine ski racing?

All competitions are run according to the FIS International Competition Regulations - or also known as the ICR, or Blue Book. This is a book of rules that have been approved by FIS Congresses. The rules are based on recommendations from committees and national federations as well as from motions made by Congress delegates. If necessary, the rules are interpreted between Congresses, by the FIS Council.

In Canada, all Competitions are run under the rules as set forth in the current ICR. However, because the ICR is primarily written for FIS races where it must be implicitly followed, it is necessary that certain modifications be made to be appropriate to the specific levels of competition. The rules of the ICR may be modified by ACA or by Division rules to reflect this. For example, it is compulsory that helmets be worn for GS races in Canada but this is not mandatory for FIS races. Also the technical specifications required for FIS races are modified for National races according to the level of the race.

### **HOW RULES BECOME RULES**

Alpine ski racing is very different from many of our sports for several reasons:

1. The dimensions of the 'gymnasium' (race hill), type of equipment (skis, clothing, slalom armor, etc.), duration of the events and the number of 'players' on the team constantly change and evolve.
2. The sport itself is highly international and the rules reflect this in translations from various languages (primarily German and French).

The dimensions of a base ball field, football field and basketball court, etc., are all the same size regardless of where they are located - -whether they are in New York or California or Japan. This is not possible to do on a ski hill. No two are alike due to characteristics of the hill itself, the altitude, the weather, the snow coverage - manmade or natural - -etc. etc.

The development of the rules was, and remains today, a very evolutionary process - reacting to problems and situations. In other words, the rules were not created - nor are they created today - just for the purpose of designing the sport of ski racing.

The perceptive race official can often sense why a given rule exists. By taking a look at earlier editions of the rules, an understanding of some of the rules can be gained. In addition, inquiry into the incidents and conditions that evoked the creation of a rule often explain why some rules have been altered or deleted from the ICR over the years.

The rules have been and continue to be:

1. Written in response to real life situations rather than determining in advance what the rules should be;
2. Often influenced by serious commercial and political considerations (note the rules allowing for TV coverage);
3. Incomplete, with details for every circumstance constantly being refined and amended.

How is 'judgment' involved with these rules? Remember that the ICR was/is often designed for Olympic Winter Games and World Cups. Because of the elite athletes that participate at that level the rules may not

seem to fit or even be fair at other levels of racing. Therefore, a rule must be viewed with these thoughts in mind: ‘What does this rule mean? What is it meant to accomplish/control?’

Judgment plays a key role in ski racing. It is necessary to consider the ‘spirit of the rules’, the fairness of and appropriateness of specific rules. One of the primary goals as ski race volunteers is to attempt to give each and every racer, one - and only one - fair and equal opportunity on the race course.

This sounds like a very idealistic viewpoint. Does this work in actuality? At every competition there is a Competition Jury. It is a balanced decision - making body with responsibilities for the rules - in areas where rules do not exist - and for the success of the competition and sport beyond the rules keeping. Being a member of this Jury is an important role for coaches and team leaders on the Jury as referees and assistant referees (and as future TD’s). However, there will be more specifics on this subject later.

## **SOURCES FOR RULES**

There are several publications where the current rules pertaining to Alpine ski racing can be found. It is important that the Referee, Assistant Referee, Chief of Race and especially the Technical Delegate be very familiar with the current copies of these sources:

1. The International Ski Competition Rules (ICR).
2. The ‘Rules for the FIS Points which accompanies the Fall edition of the FIS Points List.
3. The “Precision’s” issued annually (cumulative) by the FIS.
4. The Memento for the Technical Delegate issued by the FIS
5. ACA and Divisional Rules

Rules were introduced to Alpine ski racing as it slowly evolved into a formal sport. These rules are necessary:

1. To prevent local or regional advantage;
2. To specify technical aspects in the definition of and execution of a race - often on matters that were once assumed to be ‘understood’ by knowledgeable officials;
3. To adapt to technical - developments in competitors equipment, clothing, competition equipment for example, the change from restraining straps to ski brakes and the changes from bamboo poles to flex poles).

It doesn’t take much reading of the ICR to see that some rules are quite specific while others lack in detail and then for some matters no rules exist, as yet. In many cases, there is simply that something is to be accomplished - not by who or how. This is one of the challenges of being a volunteer:

The skillful race official must know where to find the rules, understand (interpret) them and then apply the rules in a consistent manner.

## **RULES - THE MOST COMMON PROBLEMS**

As in any other sport, rule violations (unfortunately) are a common problem. From a disciplinary point of view it is necessary to consider the competitors and the coaches.

On the subject of course inspection, violations are common with the racers’ bibs and procedures for the inspection - whether or not they are followed and how closely.

As the race progresses, common problems that come to light include, but are not limited to, false start(s) on the part of the racer, failure (DH, SG or GS) to have a proper helmet or even the infamous problem of the lack of plumbs on the competitors’ competition suits. This particular problem became well known at the 1988 Olympics in Calgary.

In addition, there can be problems concerning personnel needed to staff the competition. These problems can be found in person(s) volunteering or selected/appointed to serve as an official who:

1. Does not know or understand the rules.
2. Fails to ANTICIPATE potential difficulties.
3. Is not available when needed or is tardy.
4. Is over bearing in demeanor.
5. Fails to follow instructions.
6. Exhibits evidence of personal or local favoritism in decisions that need to be made.
7. Is indecisive.

In the general and organizational areas common problems are:

1. Lack of adequate preparation in Secretariat, mistakes and distractions.
2. Seeding and Second Run Start Lists.
3. Inadequacies in preparation of the Course/Track, including the Start and Finish areas.
4. Inadequacies in maintenance of the Course/Track,
5. Gate judging and documentation.
6. Timing and calculations.
7. Communications.
8. Reporting the Race.
9. Facilities for holding meetings.
10. Lack of knowledge regarding duties and obligations, among coaches and competitors.
11. Delays caused by failure to anticipate possible problems.
12. Inconsistencies in any procedure.

## EXAMPLES AND COMMENTS

In the following section, some incidents are covered that require a decision by an official. Some incidents are such that there can be no argument. These are the “easy” problems. Others are such that interpretations or examples can be useful in guiding an official to a decision in similar situations. Where there are no rules, or the applicable rule(s) may not be readily obvious, or the incident has never been encountered by the reader, a relatively detailed response is given as experienced by at least one official who was faced with making a similar decision. As is often true in the posing of problems, the reader may feel that there is a lack of information. If that is so, then base your response on reasonable assumptions.

**EXAMPLE #1:** A question of “correct passage” at a gate - three variations will illustrate the relative ease (or difficulty) in making a decision:

1. A racer falls and slides through gate 14 with one foot in the air.  
(DSQ at gate 14?)

**Comment:** No DSQ. This is no different than a racer without a fall flying off a bump and passing the gate with both feet and skis off the snow.

2. A racer falls, missing gate 14; slides through gate 15; climbs back and skis through gate 14; then proceeds directly to gate 16 and skis through it. (DSQ? Which gate?)

**Comment:** NO DSQ. Except for Start and Finish the racer may ski the gates in any order and from either side.

3. A racer skis through gate 14 but the “turning “ pole of gate 15 has been knocked down by the previous racer and is out of sight. The racer continues, outside of the dye mark where the missing pole belonged and passed through gate 16.

(DSQ at gate 15? Is the response different for DH, SG, GS or SL?)

**Comment:** DSQ at gate 15, unless he promptly leaves the course and requests a rerun. This is true in all 4 events - DH, SG, GS and SL.

**EXAMPLE #2:** Start Area Situations:

1. The starter holds his hand on the competitor's shoulder and pushes lightly at the signal of "Go!"

**Comment:** An early rule recommended that the starter hold the competitor by his clothes until the start signal. This procedure is not legal now. This racer should stop and request another start and the starter should be notified of his fault.

2. The racer pushes himself out of the start gate using (at least one of) the start posts.

**Comment:** Illegal start - DSQ

3. A racer raises his poles over his head and "jams" them into the start ramp to propel himself forward in a dramatic lunge.

**Comment:** Race juries have come to accept this method of starting although the rule was originally intended to prevent the classic "Killy start".

4. A racer leaves the start gate (opening the wand) for his first run in a GS at the count of "Ten seconds!"

**Comment:** Start DSQ, of course - but ...earlier rules regarded this as a false start but then stated that the starter should call the racer Back! For a new start (and a penalty of one second added to his time).

**EXAMPLE #3:** Is it really generosity to 'bend a rule for a racer'?

1. A racer, making a "hard" turn on the second gate "pops" out of his binding. Quickly recovering his lost ski, the racer returned to the start and requested another start. Is this a valid request?

At which gate would you refuse a restart for the same accident? The 3rd gate? The 4th? Next to last gate?

**Comment:** No! Unless there is obvious evidence of serious negligence on the part of the Gate Judge or the course maintenance crew, the racer and his coach must accept the blame for faulty equipment or improper adjustment.

**Comment:** An official (at a "low-level" race) deciding otherwise in a mistaken gesture of generosity, is not helping the racer train properly for subsequent competitions.

At what level of competition would you begin to play the game by the rules? (For example: Go ahead - take 4 strikes! Or, only slightly offside!).

A tennis ball ruled as "out" at a Grand Prix match is also "out" in junior competition - "Close enough!" is not an acceptable judgment.

2. A racer knocks down a pole in the top gate of a (Slalom) flush. The pole falls into the flush obviously hindering the racer's passage through the remaining gates of the combination. He leaves the Course and requests a re-run. Is this a valid request?

**Comment:** No! Unless the Gate Judge can be shown to have made less than a reasonable effort to maintain his gates in a proper manner the racer must recognize that it was he who produced the difficulty by striking the pole with sufficient force to dislodge it.

**Comment:** If the racer had knocked the pole out of the line and thus encountered no difficulty, we assume that he would not request a re-run. Why then, should he expect a second opportunity if "chance" turns against him on an action that he initiated? (Again, a rule cannot work one-way one time and another way the next time.)

**EXAMPLE #4:** A matter related to Homologation.

The ICR states: All events ... may only take place on courses that have been approved by the FIS.

The TD, having made the required pre-season inspection of a Downhill Course and having dutifully corresponded with the Chief of Race as recently as a week ago, arrives at the site on the morning prior to the start of training - and finds that the lower 20% of the race trail on which the event was Scheduled to take place is unfit for competition. (Assume insufficient snow cover, etc.) The organizers, with limited facilities, propose that an alternate route, branching from just above the faulty section of the race trail, be used as a substitute. The alternate trail merges well with the race trail, is wider, has artificial snowmaking and has an interesting contour.

Consider the possible actions, including the situation in which an entirely different trail is recommended by the organizers. (Note: In the case above, the alternate section is not homologated and did not even exist when the race trail was homologated.)

**Comment:** DH and SG events MUST be held entirely on a homologated course, or on a part thereof, as long as the minimum vertical drop is met. This is an absolute rule, because of safety factors, legal liability and insurance coverage. In this case the TD MUST cancel, or postpone and pray for snow. The organizers should have had the alternate course homologated. In GS and SL the TD may, in such cases of “force majeure”, use non-homologated courses.

## CHECK LIST FOR RACE ORGANIZERS

The following is a simplified check list for race organizers.

### 1. Early Fall

- a) Contact ski area management and obtain approval for the event.
- b) Check rules to see that terrain selected conforms to the rules for the event.
- c) Obtain approval for the event at the Zone meeting for inclusion in the Divisional calendar.
- d) Appoint a Race Chairman and Race Secretary.
- e) Establish and maintain regular contact with the ski area.

### 2. Four Weeks Prior to the Race or Earlier

- a) Make arrangements with ski area re course preparation, lift operation, ticketing, course equipment, communications.
- b) Plan and acquire all needed equipment and spares and all supplies.
- c) Appoint and confirm all major officials, qualified for the level of race.
- d) Install and **test** all communications and timing wiring.
- e) Issue the race notice.
- f) Contact Technical Delegate appointed to your race re accommodation, arrival, plans etc.
- g) Check on course preparation and grooming.

### 3. Two Weeks Prior to the Race

- a) Check with all committee chairman and chiefs to ensure that they have enough personnel.
- b) Check with Chief of Equipment on progress of equipment.
- c) Order prizes.
- d) Inform TD of the progress of preparations and impending problems.
- e) Check safety provisions as applicable.
- f) Thoroughly test all timing and communications equipment on the hill.
- g) Check course preparations.

### 4. One Week Before Race

- a) Re-check all arrangements; inspect trail preparation personally.
- b) Bring equipment to ski area and race site if possible.
- c) Check with ski area.
- d) Contact all major officials for progress report.
- e) Contact TD with status report.
- f) Insist that the course be packed, rolled, graded etc. during the week before the race.
- g) Make arrangements for chemical course preparation if needed later.
- h) Prepare for seeding meeting and draw.
- i) Arrange for preparation and installation of start and finish areas.
- j) Arrange for dignitary to present awards.
- k) Prepare race rules.
- l) Firm up schedule of events and confirm with officials and ski area.

## 5. **The Day Prior to the Race**

- a) Confirm with Race Secretary that all is ready.
- b) Check communications and timing system again.
- c) Do final grooming and set first course(s).
- d) Do final preparation of start and finish areas.
- e) Do final preparations for coaches meeting and draw.
- f) Confirm lift operation with ski area according to schedule.

## 6. **Evening Before Race**

- a) Coaches meeting, followed by draw.
- b) Jury meeting.
- c) Major officials meeting.
- d) Make adjustments developing from these meetings.
- e) Publish race schedule, start lists, etc.

## 7. **Race Day**

- a) Arrive early!
- b) Final installation of timing and communications system two hours prior to race start.
- c) Jury inspection.
- d) Final course preparation as needed - dying, numbering, flagging.
- e) All officials in place and ready in plenty of time prior to the start.
- f) Fore-runners go prior to start and report to Jury.
- g) Start on time.
- h) Remember to keep all racers, coaches and officials informed of current events and any changes.
- i) Confirm quiet place for jury meeting.
- j) Make certain Chief of gate judges keeps gate judges informed for potential Jury meeting.
- k) Process results as quickly as possible.
- l) Distribute unofficial results as soon as they are available.
- m) Ensure quiet, secure area for results production.
- n) Ensure course clean-up is satisfactory.

## 8. **Key Elements on Race Day**

Course maintenance is particularly vital and should start before trouble spots develop and should continue until the last racer has finished.

Be certain to provide sufficient equipment on the course: Poles, flags, rakes, bars, shovels, tiger torches and drills.

Provide independent communications for Jury and Chief Officials.

Avoid interfering with timekeeping team and those working on results.

**Thank everyone** - All volunteers, officials and area management.

## RACE SECRETARY NOTES

### ONE MONTH BEFORE

Make up and send race notice

- BC Alpine, Alpine Canada Alpin, Officials Chair, TD

Check Quotas and host zone quotas in Green Book

Talk to TD(s) about need for accommodation, preview of race course

Check Supplies

- Waterproof paper for manual timing sheets
- Scoreboard sheets
- Gatekeeper cards
- Labels, markers, dye for marking gates
- White Xerox paper
- Ink cartridges for fax machine, photocopier, printer
- Clipboard
- Drawboard, draw cards, 2 sets of ping ping balls (15) ~ for manual draw
- File folders in appropriate colours
- Blank computers discs
- Manila envelopes

Order most recent Computer Ski Race program

### 2 WEEKS BEFORE

Meeting with ROC

Discuss preliminary agenda, schedule and race rules to present at coaches meeting. Follow FIS forms for agenda and schedule.

Discuss ticket order with mountain (preliminary discussions will have already taken place as ticket price is needed on race notice).

Get All Area Pass list from BC Alpine and Alberta Alpine (really helpful during registration).

Order or download FIS Points list from Alpine Canada Alpin.

Make sure Alpine Canada Alpin has sent all FIS forms on disc.

Test run Ski Race program. See if points upload options work.

Locate homologation reports.

Confirm codex #'s for all races (Individual #'s for M & F each day).

Organize bibs, banners, media coverage and awards. Find out who will be presenting awards.

Locate draw board, get 2 sets of ping pong balls each numbered 1-15 for the top seed random draw. Make draw cards.

Have a current FIS rule book on hand.

#### **A FEW DAYS BEFORE THE RACE**

Enter athletes into ski race program using FIS disc upload option (should just need to enter FIS card # then program will upload points and rest of athlete information automatically). Saves a lot of time and accuracy is ensured. If a FIS number is entered incorrectly, a wrong athlete may be entered. Need to do double checks of all #'s and names.

Check daily codex #'s for M & W.

Get TD #

Confirm current F Factors

#### **AFTER COACHES MEETING**

Edit entries (add or pull racers as necessary)

Double check that the actual number of racers is the same number in ski race program – good check after editing.

Title races – 8 character max

Make on-hill packages for start, finish, TD, Referee, Chief of Gates

Should contain:

- Start list with schedule, rules attached
- Referee report
- Protest forms

## AFTER RACE

Make EMF files and FIS version

Email EMF files daily to BC Alpine and Alpine Canada Alpin

Email FIS files along with TD report to Switzerland - consults FIS instructions for sending

Keep track of volunteers for Officials Chair on Officials/Volunteers form and e-mail.

Compile race results package as per the FIS Distribution list. Mail or E-mail ASAP

## **HAZARDS in the SECRETARIAT**

If the Race Secretary is aware of the following situations, then plans can be made to avoid or at least alleviate them:

- LOCATION**
- Public area where staff is easily distracted
  - Area is too small and not dedicated to Secretariat
  - Great distance from the race site without a good communication plan
  - Area which is not adequately lighted
  - Inadequate power supply for computing & duplicating requirements
- FAILURE**
- To read or to refer to guidelines provided by governing association or the assigned TD in regards to :
    - Seed Board procedures
    - Results headings (technical data)
    - Competitor information on race documents:
  - To use correct Points List and race results software
  - If a FIS race to use correct CODEX
  - If a FIS race, to ensure correct adder and correction value for penalty
  - Racer names must be spelled as on the Point list, not necessarily as on the entry;
  - To list competitors, LAST NAME FIRST AND CAPITALIZED, First Name in LOWER CASE with only first letter in caps.
  - Officials' names are shown, for example, J. Smith
  - To publish times in Minutes and Seconds
  - To indicate on the Start List racers selected for the Snow Seed
  - To take Minutes recording only necessary items
  - To record votes and signatures of Jury
  - To complete all documents
  - To fail to follow appropriate procedures for protection of computer hardware and procedures
  - To have available sufficient supplies, materials and adequate equipment;
  - To have computer input operators that are knowledgeable in preparing the proper race documentation;
  - To have staff who can remain until the proper documentation is complete.

## **RACE JURY**

### **1. Composition of Jury**

In control of an Alpine Ski Race and ruling on all questions on the interpretation or applicability of the rules is the Race Jury. The nature and function of the Race Jury are very different from those of the Race Committee and have developed in direct response to the needs of ski racing. The composition of the Jury is as follows:

#### **VOTING MEMBERS OF THE JURY AND APPOINTMENT**

|                    |   |
|--------------------|---|
| Technical Delegate | <ul style="list-style-type: none"><li>- Appointed by the sanctioning association</li><li>- Represents the sanctioning association</li><li>- From outside the host organization</li><li>- Chairman of the Jury with the deciding vote in case of a tie</li></ul> |
| Referee            | <ul style="list-style-type: none"><li>- Appointed at coaches meeting by Technical Delegate</li><li>- From outside the host organization</li></ul>   |
| Assistant Referee  | <ul style="list-style-type: none"><li>- DH/SG: Appointed at coaches meeting by Technical Delegate</li><li>- Technical Events: Optional – Appointed at coaches meeting by Technical Delegate</li><li>- From outside the host organization</li></ul>              |
| Chief of Race      | <ul style="list-style-type: none"><li>- Appointed by host organization</li></ul>  |

#### **JURY ADVISORS**

|                |  |
|----------------|--|
| Start Referee  | <ul style="list-style-type: none"><li>- Appointed by host organization</li></ul> |
| Finish Referee | <ul style="list-style-type: none"><li>- Appointed by host organization</li></ul> |

### **2. Qualifications for Jury Members in BC Division**

In BC, there is an established policy for qualifications of Jury members and is contained in the BC Rules and given below.

#### **2.1 Certification of Race Officials for Downhill and Super G Events**

|                    |  |
|--------------------|--|
| Technical Delegate | <ul style="list-style-type: none"><li>- Minimum of Divisional Technical Delegate with certification in DH.SG events</li></ul>  |
| Referee            | <ul style="list-style-type: none"><li>- Either: A Level II Coach with minimum of Level II Official certification or Divisional, National or FIS TD with speed qualifications</li></ul> |
| Assistant Referee  | <ul style="list-style-type: none"><li>- A coach with minim of Level II coach certification plus Level II or IIC Official Certification</li></ul>                                       |
| Chief of Race      | <ul style="list-style-type: none"><li>- Level II Official Certification</li></ul>  |
| Start Referee      | <ul style="list-style-type: none"><li>- Level II Official Certification</li></ul>  |
| Finish Referee     | <ul style="list-style-type: none"><li>- Level II Official Certification</li></ul>  |

## 2.2 Certification of Race Officials for Technical Events

|                     |   |
|---------------------|---|
| Technical Delegate  | - Minimum of Divisional Technical Delegate  |
| Referee             | - A coach with minimum of Level II coach certification plus Level II Official or IIC Official Certification |
| Assistant Referee** | - Level I or II coach   |
| Chief of Race       | - Level II Official Certification   |
| Start Referee       | - Level II Official Certification   |
| Finish Referee      | - Level II Official Certification   |

**\*\* Note:** For Technical Events in BC Alpine Ski Association, the position of Assistant Referee is optional but highly recommended.

## 2.3 FIS Races

|                           |                      |
|---------------------------|----------------------|
| Chief of Race             | - Level III Official |
| Start & Finish Referees,  | - Level II Official  |
| Referee, Chief of Course, | - Level II Official  |
| Chief of Gate Judges      | - Level II Official  |

## 2.4 Alcan NGSL

All races including weekly races must have three Level I Officials in charge

## 2.5 Master Series Racing

For all Masters Races, the minimum Jury consists of 4 positions consisting of the Technical Delegate and any 3 of: Referee, Assistant Referee, Chief of Race, Start Referee and Finish Referee. The Technical Delegate will be appointed by the BC Alpine Ski Association Officials Chairman and will be either a Divisional or Master TD. Technical Delegates for National Master's races are appointed by the FIS.

## 2.6 NCSA Races

|                        |  |
|------------------------|--|
| Technical Delegate     | - National or FIS Technical Delegate                           |
| Referee                | - A Level II coach plus Level II or IIC Official Certification |
| Assistant Referee      | - A Level II coach plus Level II or IIC Official Certification |
| All other Jury Members | - Minimum Level I Official                                     |

## 3. General Responsibilities of the Jury

The Jury as a whole watches that the rules are adhered to throughout the race and that the safety of the competitors, officials and spectators is never compromised.

They have the following general responsibilities:

1. Application and implement of the rules.
2. Conducting the draw
3. Course inspection – prior to start of training and race and during the race.
4. Supervision of start and finish.
5. Rights to: Cancel, interrupt or postpone a race; change the start intervals; shorten the course.
6. Rules on all provisional runs and protests.
7. See FIS rules and modifications are upheld.
8. Approve the methods of timing and calculation.

## 4. Duties and Responsibilities of Jury Members

Sections 603 and 604 in the ICR cover the duties of the Jury and its individual members and should be read in detail to supplement the brief descriptions given below.

#### **4.1 Referee and Assistant Referee**

The primary responsibilities of the Referee are:

1. To conduct the draw.
2. Inspect the course after it is set – alone or accompanied by other members of the Jury.
3. Change the course by taking out or adding gates.
4. Receive the reports of the Start and Finish Referees and Chief Gate Judge and post a list of competitors disqualified.

The Assistant Referee is expected to assist the Referee in all of the above duties. In addition, both the Referee and Assistant Referee are the representatives of the competitors on the Jury.

#### **4.2 Chief of Race**

The Chief of Race has very specific duties as part of the Race Committee. Within the Jury, his responsibilities are to represent the Race Committee and to co-ordinate and implement the Jury decisions as appropriate to the Race Committee.

#### **4.3 Start Referee – Jury Advisor**

The primary responsibilities of the Start Referee are:

1. Make sure the regulations for the start are properly observed.
2. Determine late and false starts.
3. Determine violations against the rules for equipment.
4. Report to the Referee the names of those competitors who have made late or false starts or other start infringements.

Experienced Start Referees should also be aware that they might have certain peripheral responsibilities such as:

Improper action of start wand(s)

Failure of Start switch(s)

Deficiencies in start platform or ramp –

Snow cover – too much or too little?

Support for placement of racer's poles

Tilt, particularly no down tilt, which may produce false starts.

May have to double as Starter

Control of traffic at the start –

Service personnel

Coaches

Competitors

Spectators, including VIPs and press

(Distractions by any of these)

Adequate shelter for waiting racers

Know procedure for a “hold” in the race, especially if a serious accident occurs on the course.

Consult with TD prior to race

Decisions regarding Late and False starts

Record order of start, valid? And time of start

Report to the Referee at end of run, and at end of race

Experienced Start Referees try to have “emergency supplies: handy such as: warm clothing, lunch, spare bibs, shovel, water, stapler, felt tip marker, extra paper or cardboard, rope adhesive tape, flagging or surveyor's tape and spare wand(s)!

#### **4.4 Finish Referee – Jury Advisor**

The primary responsibilities of the Finish Referee are:

1. Make sure that all rules for the organization of the finish and the in-run to the finish are observed.
2. Supervise the Finish Controller, the timing and crowd control in the finish area.
3. Be able to communicate with the start at all times.

There are also some peripheral activities the Finish Referee is expected to be aware of:

Improper alignment of the light beam and/or sensor for the timing equipment. If it is set on the snow, it will wink as melting occurs.

Possible problems in the Finish area:

Inadequate packing, particularly in the stopping region.

Inadequate fencing and padding at likely points of impact.

Inadequate protection of timing equipment.

May have to double as Finish Gate Judge and record order of finish, whether a valid finish and time of finish

Control traffic in finish area such as: previous racers, coaches

Decisions concerning re-runs

Report to the Referee at end of run and at end of race

#### **4.5 Technical Delegate**

The multitude of duties and responsibilities of the Technical Delegate are shown on next page.

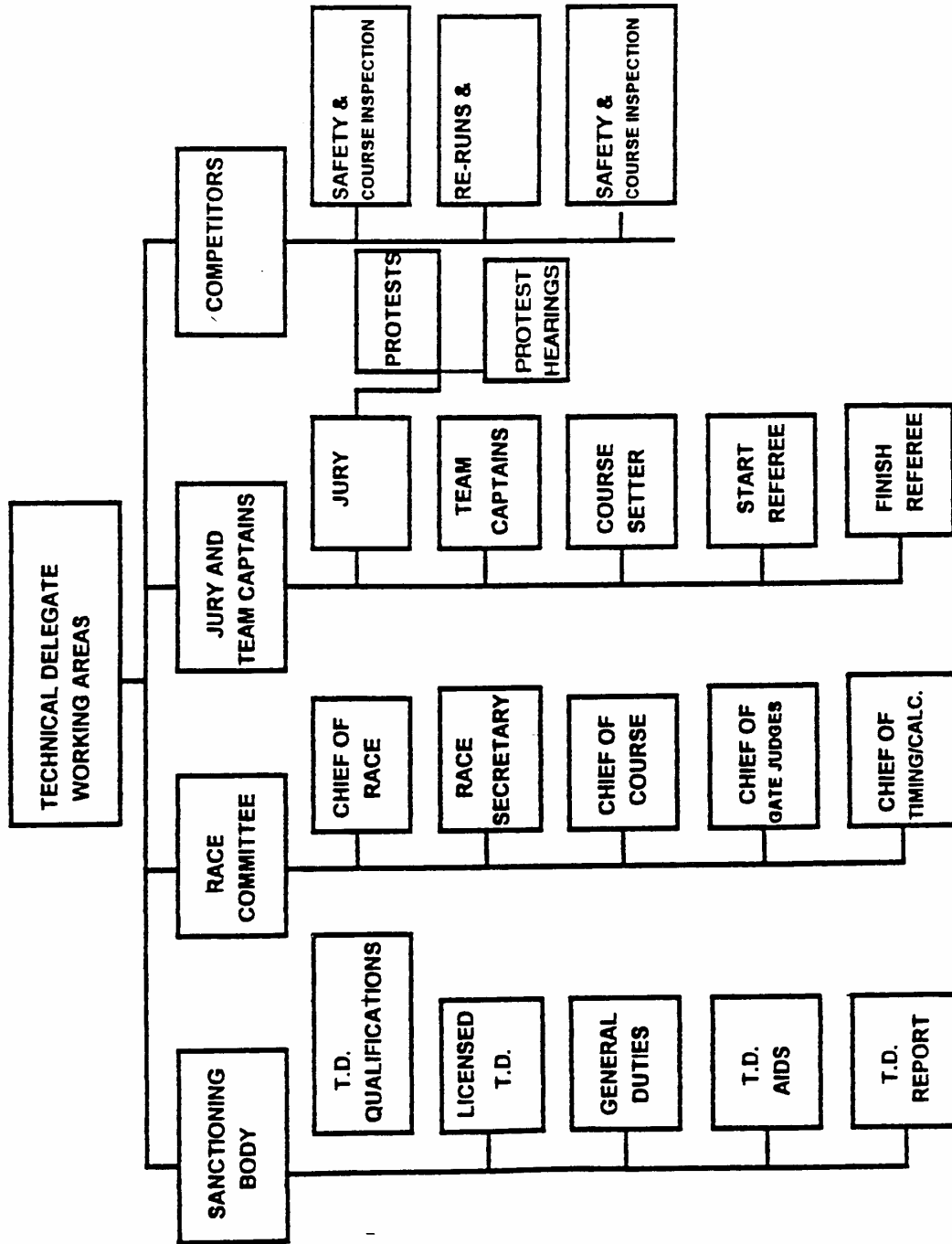
As Chairman of the Jury, the Technical Delegate has several primary duties, which include:

1. Making sure that all rules and directions of the FIS are adhered to before, during and after the event.
2. To see that the event runs as smoothly as possible.
3. To advise the organizers within the definition of his/her duties.
4. To be the official representative of ACA/Division.

The role of the Technical Delegate has changed from that originally of being the advisor to the Race Committee to the person who has complete control over the operation of a race during its competitive operation and advisory control over its pre-race and post-race operation. He/she has the final decision in all matters of safety and the authority to cancel, postpone or annul the race if necessary.

The role of the Technical Delegate is multi-faceted. He is a positive contributor to a race through his wide knowledge and experience; he is a counselor to the race organizers. He is charged with the ultimate supervision of an event, and he is expected to make decisions with regard to the technical installations and that nature of the rules and their application. In addition, the objective of the TD is to help the Organizers run the best possible competition even under the worst possible conditions. Success of this goal will call for foresight, preparation, organization and anticipation on the part of the TD.

# THE TECHNICAL DELEGATE



## **THE TD AND LOCAL OPTIONS**

Under his responsibility for upholding and interpreting the international competition rules, the Technical Delegate will be called upon to comment upon the proposed variations or local options and to rule on their compatibility with the appropriate regulations.

In considering a proposed option, the TD should weigh the option against the following guidelines:

1. Does it maintain the spirit and intent of the actual rules?
2. Is it fair to all?
3. Does it avoid giving any undue advantage?
4. Does it maintain the relative value of racing performance and FIS Points?
5. Is it consistent with modern skiing standards?
6. Can it be realistically carried out and or enforced?
7. Is it readily understandable to the concerned public so that good public relations can be maintained?
8. Is it advantageous or necessary (not merely convenient to the Organizers or a particular group)?
9. All things considered favorably, in summing up – are you willing to go on the record in your written report as having approved this decision from the rules?













**“THE ROLE AND RESPONSIBILITY OF THE  
TECHNICAL DELEGATE IN COURSE INSPECTION”**

**RESPONSIBILITY**

Primarily the TD is responsible for a fair and safe competition. All other responsibilities are in support of this charge

The “course has two components:

1. The area of competition start to finish “The Track”
2. Auxiliary areas

- Competitor staging
- Equipment preparation
- Start area
- Finish area
- Spectator areas
  - i. Coaches
  - ii. Public
- Possible section timing DH

Out of  
Spill Zones  
protected if  
required

**ORGANIZATION**

Pre Inspection

- Note topics from team captains meeting and draw that may relate to course
- Weather – snow conditions on track – blow down fences, etc..., chemical availability, visibility, course hazards – stumps – rocks etc.
- Confirm time and place for jury to meet
- Allow time for full jury including start and finish ref

**OBSERVATION**

If possible arrive early and observe the set. Don’t participate unless something is clearly a potential problem.

- Safety – course hazards
- Rule violation
  - ie: - line at start finish
  - number of gates

Allow time for personal observation/inspection prior to jury.

Pre jury inspection

## THE BIG PICTURE

A Number of non “track” specifics should be checked/observed to ensure efficient race organization.

- Timing gear – in place – operational – back up
- Safety gear – toboggan
  - ski patrol
- Communications – on course
  - jury
- Course access and control fencing etc.
  - Public visibility to avoid rec skiers on course
- Location of temporary shelters
  - Start hut/tent
  - Timing shelter
  - Score board/results posting
- Competitors gear, lunches, etc...

## COURSE SPECIFIC

Two Roles of TD

1. Informal
  - Observation/comment
2. Formal
  - Jury inspection

## SUPPORT & BACKUP

Ensure the equipment required for the course maintenance is adequate and properly positioned – it is much easier to move things downhill than up.

Mental check  
list and note  
locations

Relocate if  
necessary

- Gates/Poles – Drill
- Flags/Panels
- Shovels
- Rakes
- Tiger Torch
- Axe or saw
- Chemicals
- Boughs
- Bunting or Fencing
- Willy bags/fiberglass bales
- Tools, duct tape, dye, etc...
- Wedges/hammers
- Etc...

Personal pack – knife, tape, UNI driver, thermal blanket, work gloves, - lunch

Course Inspection

Start early allow adequate time and attempt to have a full jury.

ICR 603.7  
Referees duty to  
inspect & if reset  
inform setter.  
Collaborates with TD

Let the referee have a voice in meeting time etc. as he may be committed to his own team. Avoid cavalier attitude of let's rush and leave the referee on his own.  
Attempt to keep the jury together and competitors well behind.

## **COURSE INSPECTION**

Same two areas to focus on

1. Fair competition
2. Safety

## **FAIR COMPETITION**

As jury moves down course watch for:

- Course must comply with the technical requirements
- Number of gates – vertical drop
- Position and dimensional data of gates
- Start/finish sequence to set safe/fair line
- Use of terrain
- Visibility – extend panels – confusing backgrounds
- Markings – dye or ink
- Flat light – boughs
- Course markers – speed events
- Yellow Zones
- Conditions of the track
- Gate judges – in place and adequate number
- Judges access to poles etc...

## **SAFETY**

Soft Snow &  
Hazards

- Rapid Gate – flexibility
- Course Access Controlled
- Spill zones including finish clean and packed with hazardous protection where necessary
- Soft snow removal or packed
- Track firm and smooth
- Track hazardous s/b checked a twig can become branch in soft snow conditions
- Take the time to correct – remove or reset before the competition
- Protection at photocells, section timing
- Large clean finish area – no soft tents, soft snow, hazards, tight fences, or scoreboard.

## **PROTOCOL**

Role of TD – observe and be sensitive to:

- Rights of Referee: Can inspect alone and reset
- Role of Assistant Referee
- Role of Course Setter – Should always be consulted on reset, has sole responsibility for setting.
- Role of CH of Course – UDM is the TD who can always rule on the basis of safety.



## **FIS TD AND JURY LEADERSHIP VIA RADIO**

Prepared by Ted Savage (CAN) #473 for the FIS TD Update - November 1993

### **HOW TO BROADCAST YOUR INTENSIONS**

**ROGER, ROGER..... GIVE ME A VECTOR VICTOR...**

**WHAT'S THAT CLEARANCE CLARENCE...**

**TD: START REFEREE DO YOU READ...**

**START REFEREE: SURE, I MADE IT THROUGH HIGH SCHOOL**

In ski racing, the radio is your most important, and most fragile, human resource tool. We depend on the radio to communicate our thoughts and important safety related commands, and when something goes wrong with the radio network, your jury becomes temporarily powerless until the problem is fixed. You will in fact spend more time exercising leadership and management skills over the Jury radio than in person. The way you use a radio your own radio personality and your understanding of the limitations that typical radio technology represents, will define how clearly and convincingly you are understood.

Modern portable two-way radios offer the ski race jury the ultimate in flexibility. There are other low cost alternatives to radio, but they have severe limitations. Examples of this include: Drums (tough to hear in windy conditions, difficult to carry), Flashing lights, Mirrors, and strategically placed Fires (affected by topography, require a special code), Flag waving (requires line of sight and a knowledge of the different flag waving techniques), two Cans and a long piece of String (tough to use while skiing and deadly on chairlifts), Mail (still limited services at most ski areas above the second intermediate). Although I am sure you have come across organizing committees who still use some of these alternatives to radios, when they work, radios are a vast improvement and hard to live without once you try them.

Radios come in a variety of types, (UHF, VHF, FM, AM, Digital Private line...) the list is endless. In my experience, like cars, there really are only two types: Those that work and those that don't. The details of how and why they work or they don't work I'll leave to those who seem to enjoy programming VCR's. My comments and suggestions are based on the simple premise that, like me turning it on and being able to communicate with specific individuals more than 20' away is all you really care about.

**“Can you hear me? I can hear you...”**

Having something worthwhile to say is also salient to the overall concept of having radios in the first place, content makes a difference. Once you have decided that the outside world can't live without your most recent thought, here are some simple things you can do to improve your chances that your radio will work and that you will be understood.

### **LEARN THE CONTROLS**

Like TD's, all radios are not the same, and your ability to hear and be heard depend on your knowledge of the controls. Most important are the following:

**On/Off – Volume knob:** Obvious, but the volume knob only affects incoming sound and turning it up will not boost your out going transmission. There are a lot of radios that get classified as the “don't work” type because they never get turned on. Sad but true.

**Squelch button:**

Either a knob or a switch. The squelch control filters out the background “static” noise that would otherwise be heard when the channel is not being used. Most modern radios have an automatic squelch which can be bypassed by pressing a button to momentarily release the filtering action of the squelch setting when trying to listen to weak signals that keep cutting in and out. If the radio has a knob for squelch adjustment the setting should be just past the point where the radio becomes silent. Coaches in jury meetings are not available with this feature.

**Push to Talk Button (PTT):** Find it, and only use it when you want to transmit. Always remember that you must wait a split second before you begin to speak after “keying” the PTT transmit button. On certain radios that are linked to a repeater network, this kick-in delay may be a long full second, and you must wait before you speak or risk having the beginning of your transmission cut off. Be Brief. When you are on air, you are tying up the channel and using battery reserves.

**Channel:** Make sure you know what channel is being used and set the radio correctly. The local towing company is not interested in who is on course.

**Speaker Mick:** The most important factor in your outgoing transmission quality is the relative position of your mouth to the radio’s built in microphone. Know where it is (not always the obvious choice) and speak directly into it at a distance of about 1 inch. Speak at a moderate pace, neither too slow nor too fast, avoid slurring your words and never shout – increasing your level will only cause distortion of your voice by the microphone. Note that higher, constant pitched voices transmit best. In very cold conditions speaking directly into the Speaker/Microphone at close range might cause the radio to ice up. In this case try to speak across the unit.

**Antenna:** Regardless of type or size, it will give you the best performance if placed in a vertical position. Never bend it and tape it so that it can poke you in the nose if you are wearing a chest pack. Doing this will drastically reduce radio performance, and is the reason why cars have their antennas on the roof rather than the doors.

**Battery:** Solar powered radios are not common and have problems operating in the dark. Most radios have a battery that is attached to either the lower half or the back of the unit. The method of attachment varies but you can be assured that it was designed by the same person who designed those “easy open” airline peanut bags. A hatchet or small chain saw might help should you decide taking the battery off would be a good idea. This of course would be useful if the battery is dead and you want to replace it with an already re-charged unit. The key word here is re-charged. Radio batteries are general Nickel Cadmium in nature, meaning that they can be recharged thousands of times, thereby avoiding the expense of purchasing new batteries. The down side is that they fail rather abruptly when they reach the end of their charge. The discharge curve is very flat until it suddenly fails. This is why your radio might work well one instant, and not the next. A weak or dead battery is the typical reason why you end up talking into an overpriced electronic paperweight rather than a functioning radio. Precautions to avoid rapid discharge include keeping the volume knob turned down, limiting the duration of your transmissions, and keeping the battery as warm as possible. Cold kills batteries. In extreme conditions keep the radio inside your jacket, or use “Hot Shots” wrapped around or taped to the battery area of the radio. Battery contacts can be cleaned by using a pencil eraser to remove oils and residue from the connectors, a simple reason why some radios function intermittently.

## INITIAL CONTACT PROCEDURES and TYPICAL MESSAGES

Proper radio technique simply translates into being understood. You will also spend less time “on the air” and subsequently leave the channel open for potentially more important messages. A typical routine contact might go like this:

**TD:** Finish Referee from TD, over

**FR:** TD, this is Finish Referee, go ahead

**TD:** Tom, I’m about six gates from the finish and see what looks to be course workers spreading spruce needles just above you, confirm please.

**FR:** Roger that is correct.

**TD:** Please tell them to stop. Advise them to wait for a jury decision on that. The sun is going to help us out on this one.

**FR:** Roger that, I’ll tell them to stop. Please say time and location of the jury meeting.

**TD:** Stand by, Tom.....Jury will meet at 08:45 your location, over.

**FR:** Roger, thank you, Finish Ref out.

**TD:** Thanks, Tom, and stop calling me Roger. TD out.

Strict radio procedure is only a necessity when transmission conditions are difficult. In most cases when contact is established and you have developed a rapport with your Jury member, you can dispense with the “over’s” and “do you read’s”. It is however prudent to end all contacts with “out” so that others on the channel know you are finished, and to use specific, pre-determined terminology to avoid misunderstanding.

## SUGGESTED RADIO TERMINOLOGY

There is a big difference in the meaning of “GO” and “NO” but not much of a phonetic difference. Your choice of words could be confusing and cause a problem. Here are a few suggestions in terminology that will help avoid misunderstanding.

| WORD OR PHRASE  | INSTEAD OF         | MEANING                               |
|-----------------|--------------------|---------------------------------------|
| NEGATIVE        | nope               | NO                                    |
| THAT IS CORRECT | yup                | Yes, confirm                          |
| AFFIRMATIVE     | As above           | As above                              |
| ROGER           | AS above           | As above                              |
| ACKNOWLEDGE     | Eh? (CAN)          | Confirm you understand                |
| SAY AGAIN       | Hunh? (USA)        | Repeat last message                   |
| GO AHEAD        | Yeah what          | Listening, proceed with message       |
| CORRECTION      | Oops....           | I made a mistake-correct version      |
| DO YOU READ     | Are ya there?      | Called you once or more, please reply |
| STAND-BY        | Wait a sec will ya | Busy, please pause for a moment       |
| HOLD            | Oh God..stop...    | Hold further racers at the Start      |
| CLEAR TO SEND   | Let ‘em rip        | Start or Restart the race             |
| WILCO           | Okey Dokey         | Message understood, please comply     |
| OUT             |                    | Message ended, no reply expected      |
| OVER            | Huh, Eh            | Message completed, reply expected     |
| CHECK           | Got it             | Understood                            |
| CONTACT         | I see ‘em          | Visual contact at this position       |
| CONFIRM         | Is that right eh?  | My version is...Is that correct?      |
| VERIFY          | Who says?          | Check info with the source            |
| READ BACK       | Get it?            | Repeat this message back to me        |
| WORKS TWICE     | .....              | Send every phrase twice               |
|                 | Ah, Ummmmm         | I have nothing of value to say        |

## **EMERGENCY PROCEDURE – KEY WORDS**

Getting a message wrong about what time the box lunches are expected to arrive at the start is one thing, being able to quickly and effectively stop a racer at the start or at a yellow zone is quite another.

As leader of the Jury, you should make it crystal clear what the exact phrases, words and procedures all Jury members should use will be if essential actions are required. The Jury as a whole should discuss what these key phrases are, and this will reflect personal and regional preferences.

In all cases, use what your Jury is comfortable with and practice the procedure before the training run or race are underway. Avoid “go”, “no”, “what”, etc and demand clarity of meaning and speech from your Jury. Above all else, make sure the Start Referee can handle a radio in a professional manner and if necessary instruct him/her in what you expect. Test your Start Referee early in the event, and make certain all members of the Jury can effectively communicate with the Start Referee.

Split second reactions to messages sent to the start are incredibly important. The Start Referee by virtue of his/her topographical position relative to other Jury members at the race is also the natural relay person and might play an important role in marginal radio conditions on a long DH course.

### **YOU ARE NOT ALONE.....**

Jury deliberations over the radio can be picked up by anyone with a radio on the same channel, and more commonly by a unit such as a frequency scanner. At a major event you can bet your bindings that your conversations are being monitored by others involved with the race. You might want to govern your on-air comments accordingly and realize that potentially controversial subjects should be discussed off the air whenever possible.

### **A RADIO IS NOT A TELEPHONE...**

It doesn't even look like one, but some Jury members just don't understand the difference. Most of us know this and thus I will not insult you with a discussion of this basic observation. In essence, only one person can speak at a time, thus the idea of being brief and only talking when absolutely necessary.

## **DO'S AND DON'TS**

### **DO**

Be brief and to the point. When the race is on stay off the radio unless absolutely necessary. Listen before you begin your transmission and always wait a split-second before you speak after keying the push to talk button.

Engage brain before mouth. Think about how best to make yourself understood.

Turn down your radio before entering the start area.

Turn OFF your radio when entering the timing or results building/shack/tent/igloo/ditch.

Speak directly and clearly with an even tone into the Mic at a distance of 1 inch.

Acknowledge the receipt of all messages directed to you regardless of how trivial.

Keep the battery as warm as possible to improve performance.

### **DON'TS**

Talk too much. Only speak when absolutely necessary. Safety information must take priority.

Use “OVER and OUT”. You can either expect a reply (“Over”) or finished and clear the channel (“Out”), not both simultaneously. A dead give-away you're an amateur.

Swear. Good advise in general, but common sense on an open radio channel.

Loose the radio. If you do, get two other radios on the same channel, place them face to face and key one of the Push to Talk Buttons. This will produce a howling feedback on the open channel and might allow you to find that radio somewhere in the snow, or in the lodge.

Shout into the radio. Useless. Only distorts the resulting transmission.

Turn Up the volume max. Drains the battery and cause distortion. Has no effect on outgoing transmission quality.

Abuse the antenna. Break it and you have an effective range of 10 feet.

Happy communicating.....Ted, Out.



# RACE NOTICE

Send via BC ALPINE web site [www.bcalpine.com](http://www.bcalpine.com) or fax to BCA office (604) 738-7191.  
Please send a copy to Technical Delegate assigned to your race event.

| <b>Event Name</b> | <b>Location</b> | <b>Date of Event</b> | <b>Organizing Club</b> |
|-------------------|-----------------|----------------------|------------------------|
|                   |                 |                      |                        |

**Sanction:**

| <b>Schedule of Events - Date</b> | <b>Men Discipline</b> | <b>Women Discipline</b> |
|----------------------------------|-----------------------|-------------------------|
|                                  |                       |                         |
|                                  |                       |                         |
|                                  |                       |                         |

**Eligibility:**

| <b>RACE ENTRY - Attention:</b> |                  |            |              |                 |            |
|--------------------------------|------------------|------------|--------------|-----------------|------------|
| <b>Address</b>                 | <b>Telephone</b> | <b>Fax</b> | <b>Email</b> | <b>Deadline</b> | <b>Fee</b> |
|                                |                  |            |              |                 |            |

**Bib & Teardown Deposit:**

| <b>DRAW &amp; TEAM CAPTAINS MEETING</b> |             |                 |
|---|-------------|-----------------|
| <b>Date</b>                             | <b>Time</b> | <b>Location</b> |
|   |             |                 |

**Rules & Regulations:**

**Lift Tickets:**

**On Hill Race Office:**

| <b>RACE COMMITTEE</b> |             |                  |            |              |
|-----------------------|-------------|------------------|------------|--------------|
| <b>Title</b>          | <b>Name</b> | <b>Telephone</b> | <b>Fax</b> | <b>Email</b> |
| <b>RACE CHAIR</b>     |             |                  |            |              |
| <b>Race Secretary</b> |             |                  |            |              |

**Awards:**

| <b>RECOMMENDED ACCOMMODATIONS</b> |                  |            |
|-----------------------------------|------------------|------------|
| <b>Name</b>                       | <b>Telephone</b> | <b>Fax</b> |
|                                   |                  |            |
|                                   |                  |            |
|                                   |                  |            |

**COACHES MEETING**

DATE: \_\_\_\_\_ TIME: \_\_\_\_\_

**All competitor entries and race fees must be finalized prior to start of meeting.**

WELCOME / INTRODUCTIONS

1. ATTENDANCE LIST – for Race Secretary (EVERYONE PLEASE SIGN)

2. EVENT: M\_\_\_ SL\_\_\_ GS\_\_\_ SG\_\_\_ DH\_\_\_  
W\_\_\_ SL\_\_\_ GS\_\_\_ SG\_\_\_ DH\_\_\_

3. ROLL CALL BY TEAMS

4. JURY - APPOINTMENT

TECHNICAL DELEGATE \_\_\_\_\_

CHIEF OF RACE \_\_\_\_\_

REFEREE (Day 1) \_\_\_\_\_ (Day 2) \_\_\_\_\_

ASST. REFEREE (Day 1) \_\_\_\_\_ (Day 2) \_\_\_\_\_

START REFEREE (Day 1) \_\_\_\_\_ (Day 2) \_\_\_\_\_

FINISH REFEREE (Day 1) \_\_\_\_\_ (Day 2) \_\_\_\_\_

5. COURSE SETTERS – APPOINTMENT **Please Note:** COURSE VERTICAL \_\_\_\_\_

1ST RUN MEN (Day 1) \_\_\_\_\_ (Day 2) \_\_\_\_\_

2ND RUN MEN (Day 1) \_\_\_\_\_ (Day 2) \_\_\_\_\_

1ST RUN WOMEN (Day 1) \_\_\_\_\_ (Day 2) \_\_\_\_\_

2ND RUN WOMEN (Day 1) \_\_\_\_\_ (Day 2) \_\_\_\_\_

6. COURSE SETTER NOMINATOR/ ASSISTANT **Please Note:** MIN/MAXI # of gates - \_\_\_\_\_

1ST RUN MEN (Day 1) \_\_\_\_\_ (Day 2) \_\_\_\_\_

2ND RUN MEN (Day 1) \_\_\_\_\_ (Day 2) \_\_\_\_\_

1ST RUN WOMEN (Day 1) \_\_\_\_\_ (Day 2) \_\_\_\_\_

2ND RUN WOMEN (Day 1) \_\_\_\_\_ (Day 2) \_\_\_\_\_

7. FORERUNNERS: NUMBER \_\_\_\_\_ Level of Race ability \_\_\_\_\_

8. UPDATE OF ENTRIES / REVIEW OF COMPETITORS / USE OF SNOW SEED?

9. DRAW – COMPUTER

10. REPORT BY THE ORGANIZING COMMITTEE

11. COMMENTS BY THE TECHNICAL DELEGATE – Include request for information from Coaches on competitors with medical concerns that could affect their care if injured (eg: diabetic)

12. REPORT BY JURY MEMBERS
13. WEATHER FORECAST \_\_\_\_\_
14. AWARDS LOCATION: \_\_\_\_\_ TIME: \_\_\_\_\_
15. PROTESTS IN WRITING \$ \_\_\_\_\_ WITHIN 15 MINUTES OF POSTING OF THE REPORT
16. OFFICIAL NOTICE BOARD LOCATION \_\_\_\_\_
- |                              |              |                |
|------------------------------|--------------|----------------|
| 17. SCHEDULE                 | MEN SCHEDULE | WOMEN SCHEDULE |
| RACE HEADQUARTERS OPENS      | _____        | _____          |
| LIFTS OPEN                   | _____        | _____          |
| TRAINING COURSES             | _____        | _____          |
| RACE COURSE NAME             | _____        | _____          |
| COURSE SETTING               | _____        | _____          |
| JURY MEETS FOR RADIOS        | _____        | _____          |
| JURY BOARDS LIFT             | _____        | _____          |
| JURY INSPECTION -            | _____        | _____          |
| COURSE OPEN FOR INSPECTION   | _____        | _____          |
| COURSE CLOSED                | _____        | _____          |
| SNOW SEED (YES OR NO)        | _____        | _____          |
| FORERUNNERS                  | _____        | _____          |
| 1ST RUN / TRAINING RUN START | _____        | _____          |
| START INTERVAL               | _____        | _____          |
| COURSE SETTING - 2ND RUN     | _____        | _____          |
| JURY INSPECTION - 2ND RUN    | _____        | _____          |
| COURSE OPEN FOR INSPECTION   | _____        | _____          |
| 2ND RUN FORERUNNERS          | _____        | _____          |
| 2ND RUN START                | _____        | _____          |
| START INTERVAL               | _____        | _____          |
18. LIFT TICKETS/BIB: LOCATION-\_\_\_\_\_ TIME: \_\_\_\_\_
19. TRAINING AREAS: LOCATION-\_\_\_\_\_ TIMES: \_\_\_\_\_
20. TEAR DOWN OF COURSE- \_\_\_\_\_
21. EQUIPMENT STORAGE/LIFT LINES / FAST SKIING/ RACER ETIQUETTE-SAFETY
22. COMMENTS/QUESTIONS FROM COACHES
23. NEXT COACHES MEETING \_\_\_\_\_

## *Starting Order, 1<sup>st</sup> and 2<sup>nd</sup> Run and “Snow Seed”*

### **1<sup>st</sup> Run Starting Order**

The starting order for the first run is quite simple. The competitors are placed in order of their National Points for a Divisional race, low to high and FIS points for a FIS race, low to high. A group of 15 forms the first group and these must be drawn for position. The remaining competitors start in order of their points. Competitors who have no points are drawn in a group at the end. Some points to note:

- a. If there is a tie in points for the 15<sup>th</sup> position in the first group, then the first group can be increased accordingly.
- b. If in the first 15 competitors, the point difference between one and the following is too great, the Jury has to decide the number of competitors in the first group.

### **“Snow Seed”**

There is a rule for starting order in extraordinary conditions often called the “snow seed”. This takes place in a downhill, giant slalom or Super G (Not in Slalom) in the event of actual or anticipated heavy snowfall. Should the conditions not warrant it on the day of the race as decided by the Jury, then it is not used. It should always be drawn, however, as a precaution.

The “snow seed” is a group consisting of at least 6 competitors chosen by lot from among the last 20% of the start list. They start after the forerunners and before #1 competitor and in reverse order of their start numbers. For example, in a field of 90 competitors, 20% is 18 and thus six will be drawn from among bib numbers 73-90. If #75, 90, 77, 81, 84 and 73 are drawn, then the starting order will be: 90, 84, 81, 77, 75 and 73. These racers are shown on the regular start list with a \* beside their name.

### Starting Order – Divisional 2<sup>nd</sup> One Run Event of the Day

Reverse the top 15 start order of the 1<sup>st</sup> event of that day; so

- #15 – runs 1
- #14 – runs 2
- etc...
- #1 – runs 15

(Bib #'s are not changed) The rest of the competitors runs as per the 1<sup>st</sup> run Start List.

### Starting Order for 2<sup>nd</sup> Run – Divisional & FIS

In a competition with two runs, the starting order for the second run is determined by the results list of the first run except for the first 15 places. The starting order is as follows:

- the 15th in the result list starts 1<sup>st</sup>
- the 14th in the result list starts 2<sup>nd</sup>
- the 13th in the result list starts 3<sup>rd</sup>
- the 1st in the result list starts 15th 1<sup>st</sup>

The remainder of the field from 15th on then runs according to the order of the result list of the first run. This is shown below.

#### 1ST RUN RESULTS

| Place | Bib No. | 1st Run Time | 2nd Run Start Number |
|-------|---------|--------------|----------------------|
| 1     | 6       | 55.32        | 15                   |
| 2     | 10      | 55.56        | 14                   |
| 3     | 4       | 55.94        | 13                   |
| 4     | 1       | 56.29        | 12                   |
| 5     | 8       | 56.33        | 11                   |
| 6     | 3       | 56.48        | 10                   |
| 7     | 2       | 56.49        | 9                    |
| 8     | 12      | 56.51        | 8                    |
| 9     | 18      | 56.67        | 7                    |
| 10    | 7       | 56.73        | 6                    |
| 11    | 16      | 56.75        | 5                    |
| 12    | 5       | 56.80        | 4                    |
| 13    | 13      | 56.85        | 3                    |
| 14    | 14      | 56.89        | 2                    |
| 15    | 9       | 57.08        | 1                    |
| 16    | 11      | 57.23        | 16                   |
| 17    | 15      | 57.18        | 17                   |
| 18    | 17      | 57.34        | 18                   |

**However**, if the first group in the first run was composed of less than 15 competitors, the same number will be reversed for the second run, i.e. if the first group was 10, then 10th in the result list will start 1st with 10th in the result list starting 1st.

If there is a tie for 15th place in the results list, then the competitor with the lowest number will start first with the group to be reversed being increased according to the number tied.

What does this mean? Let's look at an example on next page

Put the finishers in order of first run results

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15T - highest bib #
- 15T - lowest bib #
- 17
- 18 etc.

The second run start list then looks like this

- 15T - lowest bib #
- 15T - highest bib #
- 14
- 13
- 12
- 11
- 10
- 9
- 8
- 7
- 6
- 5
- 4
- 3
- 2
- 1
- 17
- 18 etc.

An actual example is given below.

| <u>Place</u> | <u>Bib No.</u> | <u>1st Run Time</u> | <u>2nd Run Time</u> |
|--------------|----------------|---------------------|---------------------|
| 1            | 6              | 55.32               | 16                  |
| 2            | 10             | 55.56               | 15                  |
| 3            | 4              | 55.94               | 14                  |
| 4            | 1              | 56.29               | 13                  |
| 5            | 8              | 56.33               | 12                  |
| 6            | 3              | 56.48               | 11                  |
| 7            | 2              | 56.49               | 10                  |
| 8            | 12             | 56.51               | 9                   |
| 9            | 18             | 56.67               | 8                   |
| 10           | 7              | 56.73               | 7                   |
| 11           | 16             | 56.75               | 6                   |
| 12           | 5              | 56.80               | 5                   |
| 13           | 13             | 56.85               | 4                   |
| 14           | 14             | 56.89               | 3                   |
| 15           | 11             | 57.08               | 2                   |
| 16           | 9              | 57.08               | 1                   |
| 17           | 15             | 57.18               | 17                  |
| 18           | 17             | 57.34               | 18                  |

Remember the keys are - put them in order of the first run results following the normal rules for breaking of ties i.e. high bib # is listed before low bib #, then reverse the appropriate number.

## POINTS SYSTEM

### *Definitions*

#### **Points:**

Points are calculated using results or racer points (see below). Usually the advantage of the best two results in each discipline is used to calculate the points. Also called Seed Points or List Points.

#### **Points List:**

A listing of competitors giving their points in each discipline. FIS list is valid for specific dates and only the current list may be used for the race entries.

#### **Race Penalty – National and FIS :**

This is a calculated number used to equalize races held on different hills. It also allows for weighing the race results according to the caliber of the competitors finishing among the top ten finishers in that race and their performance relative to their seed points.

#### **Race Points – National and FIS :**

These points are determined by the specific formula in which the Racer's time is compared to the winning time. The winner of a race always gets 0.00 points. Race points are used in the calculation if race penalty.

#### **Racer's Points or Result – National and FIS only:**

A racer always gets a result from a race, which are his race points added to the race penalty.

### *National and FIS Race Points*

Race points are a handicap system, which compares a racer's time with the winner's time, based on a linear function. Because races are run within a well-defined set of limits and rules, the winner's time and other times in a specific race can be related to other similar events.

Race points are calculated on the basis that the winner receives "zero": points and all others some greater value on proportion as to how much longer they took to complete the course compared to the winner. The following formula is used.

$$P = [(T_x/T_o) - 1] \times F$$

|                |   |                          |
|----------------|---|--------------------------|
| P              | = | race points              |
| T <sub>x</sub> | = | racer's time in seconds  |
| T <sub>o</sub> | = | winner's time in seconds |
| F              | = | 60/(CM - 1)              |

The CM value is arrived by statistical analysis of worldwide results. For the various disciplines the value of F are shown below:

|              |   |   |      |
|--------------|---|---|------|
| 2002-2003    |   |   |      |
| Downhill     | F | = | 1350 |
| Slalom       | F | = | 570  |
| Giant Slalom | F | = | 860  |
| Super G      | F | = | 980  |

Note that every two years, new F factors are calculated on the previous two years statistics worldwide. For us on pocket calculator the formula restated as:

$$P = \frac{f_x T_x - F}{T_o}$$

All calculations must be done to at least 4 decimal places.

**Some Important Points to Note in This Calculation:**

1. All steps of the calculation must be done to at least 4 decimal places with no rounding off occurring until the calculation is complete.
2. Rounding off to two decimal places is done as follows:

**Ignore the 4<sup>th</sup> decimal place and use the value of the 3<sup>rd</sup> decimal to round the 2<sup>nd</sup> decimal place.**

0-4 goes down i.e. stays the same: 5-9 goes up.

e.g. 105.5689 → 105.57

105.5649 → 105.56

3. As there is no set of tables for manual back-up calculations, checking of the program and your calculations must be done on a regular basis. Note that a 'To' time of 100 seconds in slalom and a Tx time of 108 seconds will give a points value of 46.40. The same times will give values of 64.80 in GS, 74.40 in SG and 103.20 in DH. This will allow you to check your program. You should always check that the winner's time gives a value of zero points.

On the next page are sets of sample values for the four disciplines to allow you to practice the calculation of points.

|    | <b><u>Racer</u></b> | <b><u>Time</u></b> | <b><u>Time<br/>Seconds</u></b> | <b><u>P<br/>DH</u></b> | <b><u>P<br/>SL</u></b> | <b><u>P<br/>GS</u></b> | <b><u>P<br/>SG</u></b> |
|----|---------------------|--------------------|--------------------------------|------------------------|------------------------|------------------------|------------------------|
| 1. | AAAAA               | 1:58.99            | 118.99                         | 0.00                   | 0.00                   | 0.00                   | 0.00                   |
| 2. | BBBBB               | 1:59.74            | 119.74                         | 7.88                   | 3.53                   | 4.92                   | 5.92                   |
| 3. | CCCCC               | 2:03.52            | 123.52                         | 47.59                  | 21.32                  | 29.69                  | 35.79                  |
| 4. | DDDDD               | 2:04.01            | 124.01                         | 52.74                  | 23.63                  | 32.91                  | 39.66                  |
| 5. | EEEEE               | 2:04.29            | 124.29                         | 55.68                  | 24.94                  | 34.74                  | 41.87                  |

#### Calculation of Race Penalty

Not all races are of equal quality and to simply give all winners the same point value would not differentiate between the various levels of races. Therefore, each race has a penalty calculated for it which is a direct measure of the caliber of the race – the lower the penalty, the better the caliber of race.

The procedure for calculating a penalty is as follows, using the Penalty Calculation Form.

1. List top 10 finishers
2. Add up list points for the best 5 list point finishers from the top 10
3. Add up the list points for the best 5 list points who started the race irrespective of where they finished or if they finished
4. Add the results of the best 5 who finished and the best 5 who started
5. Deduct the race points of the best 5 list points holders
6. Divide the result by 10
7. Use correction value and category adder as allocated by FIS for specific level of race (WC, COC or FIS)

# PROGRAM FOR NON-PROGRAMMABLE CALCULATORS

- 1. ON
  - 2. F
  - 3. ÷
  - 4. To \_\_\_ Winning Time
  - 4a. \_\_\_\_\_ Note
  - 5. M+
- } Stores F/To in memory

- I. MR
  - II. x
  - III. Tx
  - IV. -
  - V. F
  - VI. = Round!
- } Points for xth competitor

- I. MR
  - II. x
  - III. Tx
  - IV. -
  - V. F
  - VI. = Round!
- } Points for xth competitor

etc.

Note ( = ) Required on some models

### **Calculation of Result Points**

To arrive at a final value for the race, we add Race Points + Penalty Points for each racer to determine Result Points for the race.

Let us look at an example to see how this works.

|              | Time in Sec. | Race Points | Penalty | Total Points |
|--------------|--------------|-------------|---------|--------------|
| Winner       | 111.72       | 0.00        | 125.18  | 125.18       |
| Competitor A | 116.26       | 23.16       | 125.18  | 148.34       |
| Competitor B | 116.72       | 25.51       | 125.18  | 150.69       |

The value that appears for each competitor on the National Points List is calculated by averaging the points results of the two best races in one season for each discipline.

Thus if Competitor A's two best results in one discipline were the above result of 148.34 and another result of 156.24, then the value for A in the points list would be

$$(148.34 + 156.24) / 2 = 152.26$$

# PENALTY CALCULATION

## CALCUL DE LA PENALITE

### PUNKTEZUSCHLAGSBERECHNUNG

|   |   |   |
|---|---|---|
| <b>Name of event</b><br><i>Nom de l'événement</i><br>Name der Veranstaltung |   |   |
| <b>Date</b><br><i>Date</i><br>Datum   | <b>Discipline</b><br><i>Discipline</i><br>Disziplin | <b>Name of the TD</b><br><i>Nom du DT</i><br>Name des TDs |

**The best 10 at finish / 10 meilleurs à l'arrivée / Die besten 10 im Ziel**

| Result<br><i>Résultat</i><br>Resultat | Number<br><i>Dossard</i><br>Nummer | Name<br><i>Nom</i><br>Name | Nat<br><i>Nat</i><br>Nat | FIS-Points<br><i>Points FIS</i><br>FIS-Punkte | Best 5<br><i>5 meilleurs</i><br>5 besten | Race points<br><i>Pts de course</i><br>Rennpunkte |
|---------------------------------------|------------------------------------|----------------------------|--------------------------|---|--|---|
| 1.                                    |                                    |                            |                          |   |  |   |
| 2.                                    |                                    |                            |                          |   |  |   |
| 3.                                    |                                    |                            |                          |   |  |   |
| 4.                                    |                                    |                            |                          |   |  |   |
| 5.                                    |                                    |                            |                          |   |  |   |
| 6.                                    |                                    |                            |                          |   |  |   |
| 7.                                    |                                    |                            |                          |   |  |   |
| 8.                                    |                                    |                            |                          |   |  |   |
| 9.                                    |                                    |                            |                          |   |  |   |
| 10.                                   |                                    |                            |                          |   |  |   |

**The best 5 at start / 5 meilleurs points FIS au départ / Die 5 besten FIS-Punkte am Start**

| Result | Number | Name | Nat | FIS-Points | Best 5 | Race points |
|--------|--------|------|-----|------------|--------|-------------|
|        |        |      |     |            |        |             |
|        |        |      |     |            |        |             |
|        |        |      |     |            |        |             |
|        |        |      |     |            |        |             |
|        |        |      |     |            |        |             |

**TOTALS / TOTALS / SUMMEN**

- (B) **FIS Points of best 5 at start**  
*Points FIS des 5 meilleurs au départ*  
Die 5 besten FIS-Punkte am Start
- (A) **FIS Points of best 5 to finish in top 10**  
*Points FIS des 5 meilleurs dans les premiers 10*  
Die 5 besten FIS-Punkte aus den ersten 10
- (C) **Race Points of corresponding competitors**  
*Points compétition de ces concurrents*  
Rennpunkte der entsprechenden Wettkämpfer

A  + B  - C  =  : 10 =

**Category Adder/Additif De Catégorie/Kategorie-Adder**

**Correction Value/Valeur De Correction/Korrekturwert**

**Penalty Applied / Pénalité Appliquée / Angewandter Punktezuschlag**

|  |                 |
|--|-----------------|
| <b>Signature TD / Signature du DT / Unterschrift des TDs</b> | <b>Nr/No/Nr</b> |
|--|-----------------|



## FIS RESULT PACKET

The result package items should be in this order for each packet as it makes checking easier for the FIS Office.

[FIS ENTRY FORMS NO LONGER REQUIRED: RETAIN IN OC FILE]

1. Original Report of the Technical Delegate – signed by TD – should be typed or at the very least – LEGIBLE.
2. Additional Report of the Technical Delegate – signed by TD, only if used to request re-homologation.
3. Official Results – original signed by TD – times MUST BE in Minutes and Seconds.
4. FIS Penalty Point Calculation – verified and signed by TD. If the computer generated penalty calculation is checked, verified and signed by the TD, print it on the discipline colour paper. If wrong, hand calculated penalty signed by TD and printed on pink paper.
5. Start List – Run 1 – not all Start Lists.
6. Team Captains' Meeting Minutes completed and signed by the Race Administrator. If more than one set, place in chronological order. (Completed = gate counts and, for DH & SG, measured length of course.)
7. If needed, in chronological order, Protests attached to applicable Report of the Referee and Minutes of Jury Decisions – Protest, with record of vote and required signatures.
8. In chronological order, minutes of Jury Decisions Without Protests – with record of vote and all necessary signatures. Note only for major decisions.
9. If needed, FIS Accident Report Form(s) only for accidents requiring hospitalization or injury to non-participants. (TD will decide where these are inserted in the packet.)

**AN IDENTICAL PACKAGE IS TO BE SENT TO THE NATIONAL ALPINE OFFICE OF ORGANIZATION**

**NOTE:** FIS forms are available on disk. Contact your ACA National Office.

## PROOFREADING CHECKLIST FOR CRITICAL ERRORS

Thorough proofreading of Official Results and other required reports is a basic responsibility of the Technical Delegate, Although reference to the following checklist will not cover all of a TD's tasks in this regard, it should help to catch or to avoid errors.

### Technical Data:

All technical data on all results headers and reports must be complete, accurate, consistent, and must meet the requirements.

#### Check:

- Name/Date/Site/Discipline/Sex/Category of events
- Confirmation of Technical Data form, completed and signed by TD and Referee
- 1st Run Results and Start Orders(s) headings
- Official Results headings
- Technical Delegate Report
- Legal numbers of gates for the vertical drop
- Measured "running" length of downhill and Super Gs noted on the Official Results, etc

### Official Results:

Proofreading of Official Results can be simplified somewhat by first doing various "spot checks". If these turn up deficiencies, then more thorough proofreading, line-by-line, must be done. Discontinuities In data are easy to spot and can be keys to big problems needing attention and correction.

#### Check:

- Correct totaling of times and correct calculation of FIS points for first ten finishers, plus random samples of later finishing racers
- Proper handling of equal placements (ties)
- Card numbers appear for all registered racers
- Number appearing on Start List = Number on official Results including all DNSs, DSQs and DNFs

### Penalty Calculations:

There are a number of errors that can appear in, or be discovered by proofreading, the penalty calculations. Transcription and typographical errors are easily made; refer to original data. Computer programs may not necessarily produce correct penalty calculations and are prone to rounding "errors" based on the assumptions, order of calculations and precision in the program.

#### Check:

- Correct mathematics (addition, subtraction, division) and correct rounding (1-4 down, 5-9 up)

- Correct seeding and FIS points
- Minimum penalties (by category) noted & respected
- Penalty & applicable minimum appear on TD Report
- Manually check and “sign-off” on all computer calculated & printed penalty calculations

**Signatures:**

Authentic signatures are required on several items. Most documents should bear at least the initials of the responsible or supervising official. Official Results and TD Report should be signed only after satisfactory proofreading. The TD is responsible.

Check:

- Official Results and TD Report
- Confirmation of Technical Data form (TD & Referee)
- Various minutes and other reports (i.e. Referee’s Reports, Protest, Jury Minutes)

## PISTE PREPARATION

A list of key points for the most important tasks, prepared by Kurt Hoch, Race Director Women's World Cup

### 1. Machine preparation

- Basic principle: Higher roller pressure - faster blade speed; slower machine run, reversing for further compression (local preparation)
- Daily machine preparation (Exception: stable crust, poor base, minimal air humidity, warm:
- Natural snow mixed with artificial snow
- Timing of machine preparation (optimal temperature, air humidity)
- For basic preparation, piste should be left open for tourists and prepared with machines on a daily basis
- Steep sections with cable winch (turning around behind the edge of the section, so the pressure of the machine will be greater)

### 2. Water

- In specific areas or the whole piste
- Safe method: boot pack, then water, finally packing with *skis on, no* sliding.
- Or: break up with machine, then water, pack with machine (effective at certain temperatures and air humidity i.e. does not work when base is very dry)

### 3. Dealing with new snow

- In specific areas or the whole piste
- Artificial snow in addition: mix it up, prepare several times with machine.
- Remove new snow with machines or by hand (shovel I) if the base is good

### 4. Preparation of special areas

- Start - Freeze/ice ramp when necessary, starting platform partially free of snow for ski pole placement
- Finish - Daily machine preparation get rid of large uneven areas, make sure there is snow on the outside of the finish area
- Individual gates during the competition  
Side slip (individually or in groups), with rakes (depending on the circumstances with the rough or smooth side) Pulling along the length of the rut, basic principle to begin working on the piste immediately and check it after each competitor
- Fall zones  
Prepare with machines if there is enough space to maneuver, other wise make the area compact with snow and shovels so it will not break using  
Area in piste breaking through during the race  
Prevent waves/uneven terrain before and after the hole through working with rakes or shovels  
If the piste breaks through badly  
Depending on the temperature, use water and snow, have a short break or  
Water - snow chemicals + snow - combination, short break when necessary

## **5. Use of chemicals**

- Snow hardener with different methods- Natriumchloride, Natriumkarbonate, Natriumnitrate
- Big difference in actual effect. test beforehand on small area

## **6. Jumps**

- Take off. incline(15-20), take off area flat as possible
- Landing: Firm preparation, long enough run out area before the next change of gradient

## **7. Pine needles**

- If necessary (flat light, shade, changing light) on the outside of the turn", n flat sections outside the line (i.e. left or right by exit) Jumps and landing area: fine, widely spread material In uneven terrain and hollows: spread across the line Use well chopped, fir material: the best is spruce or fir, no finger-thick branches

## **8. Preparation of icy sections**

- If "glass" or too icy
  - Break up with rakes, if it is too hard to stand with crampons then salt can be used in certain temperatures
  - Check base before considering use of machines for very thick ice. Ice machines can also removes thin ice areas.

## **9. Slipping**

- DH/SG: Groups of 3-4 persons sliding in relay, no slipping flat sections
- SL/GS: 1-2 persons after every competitor

## Preparation of the Piste

### Utilization of Chemical Products

#### Introduction

1. With cold temperatures and dry snow, it is recommended that water be used to harden the piste.

The method with blow torches can also be used.

2. One distinguishes between 3 different types of snow for which chemical products are used:

- rotten snow
- wet rain soaked snow
- melting snow from warm winds

These 3 kinds of snow can be hardened by a chemical reaction with which cold is generated causing the moisture to freeze.

The most used chemical products are:

- calcium chloride (salt)
- snow cement with an ammonium base (most frequent), having no effect on the grass growth, with no danger to animals and harmless to handle.

There is also snow cement with a nitrate base, which has the inconvenience of being toxic and inflammable, but the advantage of a fertilizer effect in the spring.

#### Use:

**Salt:** Duration 1 day. Minimum snow depth 20 – 30 cm.

Boot pack, scatter salt into the holes and finally smooth off with skis or with slope machines equipped with compression plates.

Advantage: economical solution

Disadvantage: after one day causing further melting of snow

Salt is primarily recommended for thawing and softening up of courses that are too hard frozen

**Snow Cement:** Depending on the method of product on, this comes in various grades:

- Rapid-acting ..... Duration of effect 2-4 hours.
- Medium-speed-acting Duration of effect 6-8 hours.
- Slow-acting ..... Duration of effect 4 days or more.

Rapid acting snow cement is used for race days. One hour after it is spread it creates a frozen layer from 5 to 10 mm thick. Hardening begins immediately, but only lasts 2-4 hours.

These chemical products are used mainly for the slalom. For Downhills they are not recommended, because they can lead to dangerous conditions.

Snow cement with slower action or medium action is used either for solidification of the piste with snow brought in from elsewhere or for hardening of the piste in warm weather.

If the snow cover is thick, the product must be dug in deeply enough. One can thus obtain a hardened layer of 20-30 cm thickness and the piste will remain hard for a long time.

If the snow cover is thin, it can be maintained in condition for several days.

One must spread the chemical on the eve of the training or race.

This systems hardens, but does not freeze.

### **Recommendations:**

#### ***For the Slalom***

Chemical products are often used.

#### ***For the Giant Slalom***

One must watch out that the product is evenly distributed over the entire piste from Start to Finish.

#### ***For the Downhill***

Usually only H<sub>2</sub>O(Water) is used

The use of snow cement is not forbidden, but for safety reasons must be used with great caution

(braking effect or accelerating effect).

The Jury as well as the Chief-of-Course must have wide experience.

## CHIEF OF COURSE

### OUTLINE OF WORK PRIOR AND DURING COAST ZONE RACES FOR SLALOM, GIANT SLALOM AND SUPER GIANT SLALOM

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#### **One Month prior to race:**

1. Determine which run will be used for the race. Consult the Homologation report located in the Club cabin. Determine where safety systems will be located and plan crowd control.
2. Recruit course crew. Let them know that work will be needed prior to the race date. Definitely the weekend before the event.
3. Do equipment inventory.
4. Arrange for radios usually 12 with capability of two channels, one for jury and the other for course. Make arrangements for drills and gate keys.
5. Recruit course crew
6. Make arrangements for lift tickets for course workers who do not have them. Don't forget race day and all work weekends.
7. Arrange with the Mountain, through the Program Director for the use of the run. Learn how to submit dispatch requests and introduce yourself to the events staff (Cate and YP). Ask about lift access, equipment on lifts and procedures for early morning access. You might coordinate with the Chief of Race on this.
8. Recruit even more course crew.

#### **Weekend Prior to Race**

9. Setup safety systems and crowd control. Leave crowd control open so that the public may access the runs. Since it may snow before race day, stand all crowd control nets up and leave safety systems 1 foot above snow line.
10. Arrange with the Mountain, through the Program Director for the packing and grooming of the run and development of a start ramp
11. Arrange for Ski Patrol to be in attendance during the race and in place 20 minutes prior to start.

## **DAY/EVENING BEFORE THE RACE**

12. Develop course take down schedule.
13. Attend Team Captains Meeting. Be prepared to give a weather forecast.
14. Re-confirm grooming requirements and make arrangements to have transporter (BFT) at bottom of course for takedown.
15. Make sure drills and radios are charged.

## **SOME KEY ELEMENTS ON RACE DAY**

16. Course maintenance is particularly vital. Plan slip schedule with Jury. Should start early in the race before trouble spots develop and should continue until the last racer has finished.
17. Be certain to provide sufficient equipment on the course: poles, panels and tools: drills, rakes, shovels, gate keys.
18. After race put take down plan into action. On Saturday sideline gates and open crowd control so groomers can get access. On Sunday load transporter.
19. Be sure to thank **everyone**. Execute refreshment plan.
20. After Race Day contact mountain and make sure equipment is correctly returned.

## CHIEF OF RACE

### OUTLINE OF WORK PRIOR AND DURING COAST ZONE RACES FOR SLALOM, GIANT SLALOM AND SUPER GIANT SLALOM

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1. Send out Race Notice to all Coast Zone Ski Clubs including B.C. Alpine and Technical Delegate. This is generally done by the Race Secretary 6 to 8 weeks prior to the race.
2. The key personnel you require are Race Secretary, Chief of Course, Chief of Gates, Chief of Electronic Timing, Chief of Hand Timing (minimum 4 people), Scoreboard, Start Referee, Starter, Assistant Start Referee, Finish Referee, Lunch/Refreshment Coordinator, SAM Coordinator, Bib Collector, Timing Tape Runner, and Course Control (minimum 2 people). You may need to call a meeting if necessary.
3. Determine which run will be used for the race. Consult the Homologation report located in the Club cabin.
4. Arrange with the Mountain, through the Program Director for the use of the run. Learn how to submit dispatch requests and introduce yourself to the events staff (Cate and YP)
5. Arrange with mountain for early morning lift access. Which lifts? Do you go up as a group?
6. Arrange with the Mountain, through the Program Director for the packing and grooming of the run and development of a start ramp. Program Director will also arrange training areas for all teams.
7. Contact Technical Delegate one month prior to event. Usually at this time you make the appropriate accommodations and lift ticket etc. arrangements. With speed events it is a good idea to meet the T.D. the day or afternoon prior to the race to ensure a good understanding of safety expectations and lead time in the event of major changes.
8. Contact B.C. Alpine for sponsor bibs and panels.
9. Locate awards (medals) and have engraved or labeled.
10. Determine where awards ceremony will be held. Make arrangements to move podium to awards site.
11. Contact major sponsor for awards ceremony.

12. Contact SAM Coordinator to ensure sponsors are attending and have a press release sent to radio station and local newspapers.
13. When you are with the T.D. on the day before the race, suggest the course setter be one of the club coaches and have them pre-set or set the course that day to ensure safety is in the correct place. Then at the coaches meeting announce course setter instead of asking.
14. Check with Chief of Course on his/her intentions of safety systems, crowd control, traffic flow, security, trail closure and course preparation.
15. Arrange for radio's usually 12 with capability of two channels, one for jury and the other for course.
16. Arrange for Ski Patrol to be in attendance during the race and in place 20 minutes prior to start.

#### **DAY/EVENING BEFORE THE RACE**

17. Develop Race Schedule and Local Rules. You will need some lead-time for Race Secretary to type and copy for Team Captains Meeting.
18. Chair the Team Captains Meeting, followed by the Draw.
19. Adjust the schedule and program as necessary from these meetings.

#### **SOME KEY ELEMENTS ON RACE DAY**

20. Arrange slip schedule with Chief of Course.
21. Provide for a clearly defined chain of command so that your officials do not contradict each other and can be mobilized quickly to respond to any problem that may develop.
22. Thank every-one for their involvement.

#### **AFTER RACE DAY**

23. Contact Mountain and thank them for their support and make sure everything is looked after.

The key to being the Chief of Race is to have good people coordinating at the key positions. If this is achieved you will not have much to do during the race therefore, it is

very important that you let them run their own show and not interfere only assist when needed.

As you can see by the list your job is prior to the event and if it is done well sit back and congratulate yourself. GOOD LUCK!!!

## **Start Referee**

There is much excitement in the start area of a race, where racers, coaches, spectators, media, gate judges, timing crew and course workers all gather before heading down the hill. Volunteers working in the start area (starter, assistant starter, manual timers & start ref) must all enjoy being around the racers, remaining calm, fair, warm and welcoming through a long day which may involve some confusion, tension and delays.

A good Start Referee is alert to all that is happening, quick to respond when necessary yet mostly unnoticed while things go well. It's important to have good radio etiquette, a good knowledge of the rules, the confidence to remain quiet or speak up when necessary, and a willingness to adapt quickly to change. A good Start Referee will oversee others working or observing in the start area and promote a positive, supportive atmosphere among volunteers, racers and spectators. Above all, the Start Ref has the responsibility to ensure that each racer arriving at the start gate gets an equal opportunity to perform and excel, no matter what their bib number.

The Start Referee is responsible for looking after the start area, making sure everything is set up properly, controlling who passes through while the course is closed, and assuring racers pass through correctly and safely when the course is open. The Start Referee follows the directions of the chief of race, communicates with others on the Jury channel, and initiates course clearance at the request of the TD or Chief of Race. The Start Ref remains at start area from well before the race begins until after the last racer is across the finish line and the course is officially closed. The Start Referee is a non-voting member of the Jury but must be prepared in case the Jury requires details about any infractions in the start area.

**When does this job begin?** Early! Ideally the start referee will join the early-loading group along with other members of the Jury and arrive at the start in plenty of time to confirm the start area is ready, to control pre-race inspections, and to test timing and radio contacts in plenty of time so as to avoid delay in starting the race. Plan to arrive at the start at least 15 minutes before the course opens for inspection, which may be at least an hour before the race starts.

**When does the job end?** As soon as the start referee communicates "course is closed" to all those waiting at the top of the course the start referee is free to leave the start area. Any offers to help with teardown or to carry equipment down the mountain are always appreciated. Remember to return your clipboard, radio and un-used bibs to the race office, and to keep notes of irregularities at the start in case the Jury asks for them later.

**What does the start referee do?** To follow are some notes on what I have learned over time, tips a Chief of Race may not have time to discuss, but details you might find helpful.

### **Before the race:**

›If possible contact the Chief of Race before race day to go over expectations and routines for this particular race, and with this particular team. Attend the coaches meeting the afternoon or evening before the race to find out about any local rules, the schedule, possible snow seed, weather concerns and to meet the TD. On race day make early contact with the finish referee, the referee, the assistant referee, timers and the starter, because you will be working closely with them during the race and it will be easier to keep your radio chat clear and brief if you have already been in contact on the radio, or face to face.

›Pack your daypack with extras: an additional layer of warm clothing because you will likely get cold standing at the start all day, an extra jacket or small blanket to throw over a racer if the start is stopped, hand warmers, tissues, a knife, two pencils, a felt marker, a few pieces of blank paper in a plastic page cover, duct tape, electrical tape, band-aids, sun glasses, sun screen, lunch, liquids, and a spare pair of gloves that allow you to hold a pencil.

› Go to the race office to pick up your Start Referee package (race schedule for the day, list of local rules if available, several copies of start lists for both men and women, clip board and pencil) plus 6 forerunner bibs, and 6 spare (high number) bibs for any racers who may arrive at the start without their bib.

› Pick up a radio, and a spare battery if possible. Keep your radio and spare battery warm inside your jacket so they will last longer. The start referee cannot risk being out of touch by radio once the race is underway, particularly during speed events where a Stop Start must be carried out immediately to avoid possible collision and injury.

Note: It can be a good idea to use an earphone with your radio so racers will not hear Jury communications while in the start gate, particularly in speed events where reasons for a Stop Start could be upsetting to the racer who is about to depart. Turn your radio on right away, get familiar with the controls, do a test before you leave with the radio. \*\*Be ready to do a radio check with the Chief of Race and other members of the Jury as soon as convenient, and ask the Chief of Race to review radio protocol on the Jury channel so you can practice communicating in a clear and brief manner before the race begins. Practice Racer Down protocol several times – never underestimate how imperative quick and clear communications will be in case of an accident.

›Arrive at the start before the course is scheduled to open for inspection and leave your pack at the start gate because once the race begins you will not be free to roam from this spot.

› Meet the Chief of Course and find out where racers will enter for inspection, then post a notice at this entrance which clearly states:

COURSE OPEN FOR MEN AT \_\_\_\_(time), CLOSED FOR MEN AT\_\_(time)

COURSE OPEN FOR WOMEN AT \_\_\_\_(time), CLOSED FOR WOMEN AT\_\_(time)

Note: Sometimes racers begin inspections through the start gate, but sometimes they are asked to avoid the start gate if conditions are marginal or set-up is incomplete.

›Check that fencing is in place around the start gate, and across the top of the course. Is there a shelter that needs to be erected? Are there any sponsor banners to set up? This has probably been done already, but some of the start area may require work due to overnight grooming.

› Post a copy of each start list (men and women) and the schedule on the fence outside the start area, and another copy on the fence nearest the start gate so that racers, coaches and spectators can easily read them. Hang on to several copies, even when coaches and racers beg for them!

› Take time now to check the start gate area, making sure the platform is has at least one ski length of flat snow so that racers can stand relaxed at the gate.

›Meet the starter, who is likely testing systems with the timing crew. Check that the start wand has been placed the correct height off the snow. Confirm where each of you will stand during the race, and that your radio will not cause static in the starter's headset. You may need to shovel out a platform. A small rug will help keep your feet warm. Make sure you will be able to communicate with the Chief of Race and keep tabs on medical or ski patrol.

›Clean up the start area if necessary, making sure the snow is free of needles or chemicals that could concern racers and coaches who have spent a long time waxing skis for this race. Check there are bamboo poles or small fences placed about two ski lengths back from the start gate to keep other racers from crowding the racer in the start, and that a more complete set of poles or fences have been set up further back to create a start corral to keep all but the next few racers well clear of the start area. Check that there is a protected area for racers and coaches to spread out equipment before and during the race.

All this will likely be prepared in advance but now is the time to make adjustments and confirm the layout will work.

### **During Inspection:**

- › The Chief of Race should confirm over the Jury radio that “inspection will open in five minutes” and this is your cue to make this announcement in a loud voice to racers hovering at the start area. Take your clipboard, forerunner bibs and spare bibs with you and move closer to the inspection entrance. If you have not already done so, identify forerunners and hand them bibs, taking note of their names and home club so you can follow-up later if the bibs don’t come back to you.
- › At the designated time call out “inspection open for men” (or women, if they are first) then watch to see that all racers have their bibs with them for inspection. Most will likely hang their bibs around their necks rather than wear them as during the race, particularly the older racers. If a racer arrives at the top without his/her bib you may hand out one of your spare bibs but be sure to note the name and bib number of the racer, his/her coach and ski club/country as there is usually a fee charged for any missing bibs.
- › Manual timers will likely arrive during inspection so this is a good time to guide them through a practice session with the watches. If they are new to this job help them understand how important it is to be consistent. Help them find a comfortable perch so they can clearly see the racer depart.
- › Meet with the assistant starter, making sure that she/he has a start list and pencil, and review how this person can be of assistance. You will want your assistant starter to check bib numbers (sometimes racers don’t have their correct bib), help racers line up in order and in time, check plumbs for FIS or stickers for BC K1 races, and report any missing racers (DNS or late arrivals) to Start Ref. Inform the assistant starter what is planned for start intervals so she/he can be sure to have racers in line in time. Explain snow seed routines.

### **Just before the race:**

- › Listen for another radio check on the Jury channel or call the Chief of Race for one.
- › Confirm timing is ready.
- › Confirm forerunners are ready, and that the first few racers are in the start area.
- › Confirm with the Chief of Course that course work is complete.
- › Re-confirm start time with the Chief of Race.
- › Complete clearance from the bottom up:
  - › Announce: start clear
  - › Chief of race confirms: you may start your first forerunner
  - › Announce: sending first forerunner on the next interval, or in xx minutes/seconds

### **During the Race:**

- › Announce on Jury radio: First forerunner in the gate, starting in XX seconds
- › Announce: First forerunner on course.  
*Do not announce any other racers unless you are requested to stop the race*
- › Announce: Fourth forerunner in the gate
- › Announce: Fourth forerunner on course, this is our last forerunner

You may be asked to delay two intervals or longer before you start the first racer. There may be course work to be done, or a timing delay. After the hold you will be asked to conduct another course clearance before you send the first racer. Do not send a racer after a hold or stop start until the Chief of Race has requested and you have completed a course clearance. Each time you restart the race announce the racer (bib number) in the start gate, and again as soon as that racer is on course.

- › Announce: Racer One in the gate.

› Announce: Racer One on course

*Do not announce any other racers unless you are requested to stop the race, and only stop the race when requested to do so by an official on the Jury radio, or the starter.*

If you hear “stop start” immediately stop the racer in the gate by putting your arm out, or by stepping in front of the gate.

Immediately reply: Racer 18 in the gate, Racer 17 on course (or appropriate bib numbers).

Refrain from further comment while the rest of the Jury deals with the problem. Remain calm and relaxed. If you hear that the stop will last for awhile you may let the coach know so he/she can put a jacket over the racer in the gate, step out of skis or unbuckle boots. Do not let anyone know the cause of the stop start. Do not engage in conversation with the racer being held. Coaches do this.

Once the hold is over you will likely hear: send your next racer when he/she is ready. Offer the racer the choice of an interval or two to gain composure again.

Announce: Racer 18 in the gate, departing in xx seconds.... Then: Racer 18 on course.

In slalom races the starter will manage various start intervals and may even delay the start of a racer if a racer is down on the course, but this is not cause for an official ‘stop start’ and the Start Referee need not intervene or announce racer starts.

Be prepared to look for plumbs or stickers and note on your start list if these are missing. Watch that each racer stops completely in the start gate before departing, plants poles correctly, and starts within the correct time frame. Watch that each racer arrives in sequence, wearing the correct bib in the correct manner. (An experienced assistant starter will have done all this for you but it’s important to double check). Notice that the starter closes the wand after each racer, and sends racers on the correct interval. If volunteers are limited you may also be asked to be a gate judge for the first gate.

Also keep an eye on the start area around you, making sure other racers and spectators keep out of the immediate start area and remain behind fencing. Make sure the racer in the gate can concentrate, that other racers, coaches, officials and spectators are kept at a distance. Only one racer and one coach are allowed at the start gate, and only racers and coaches are allowed within the start area.

›Announce: Racer 65 (or whatever) in the gate, this is our last racer

›Announce: Racer 65 on course

› Listen for the last racer to cross the finish and for the chief of race to announce on the Jury channel that the course is closed.

› Announce out loud to all those at the start area: course is closed, you may go.

### **After the race**

›Thank the volunteers around you! Help clean up the start area and participate in tear down.

› Return radio, spare bibs and start ref package (clip board etc) to the race office, along with any notes that might be used in sorting out a protest.







# Timing an Alpine Skiing Race Event

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## Preface - August 2000

This document is intended to both introduce the reader to and to serve as a reference guide for the timing of alpine ski events. As such, it covers a wide range of topics, some of which the reader may choose to skip over due to prior familiarity, and some may be (hopefully) valuable new information.

The intent is to provide a reference manual first for the overall concept of timing an alpine race event.

It is the author's wish that the reader point out errors, areas requiring more or less detail, and in general to provide comment as to the suitability of the manual for the purpose for which it was created.

Timing can be an intellectual challenge, strenuous activity and a lot of fun.

David A. Oakes

## **THE BASICS**

You see the races on TV, and you help run races for your own ski club. However, you do not understand some of the things going on, particularly in the area of timing and other technical portions of the events.

Essentially, the racer leaves the start under some control and arrives at the finish. In between, there are exciting moments, spills, and the like. There is equipment about, including a wand at the start and some light beams at the finish. There are people standing around holding stop watches (or similar) and writing things down. What is going on ?

### **The Overall Concept**

There is a set of wire circuits between the start area and the finish area. The racer breaks this circuit when the start wand is moved by the leg of the racer. This provides the computer at the finish with the information that the racer has departed. When the racer passes through the light beam at the finish, the circuit is again broken, and the computer knows that the racer has arrived. By keeping track of when the racer departed the start and arrived at the finish, the computer calculates the elapsed time of the racer.

One might wonder if the open circuit at the top would interfere with that of the bottom. There are in fact two circuits - one from the top to the computer, and one at the bottom from the light beam assembly for the finish. In addition, the top circuit is only open momentarily, so when the start wand is reset then the next racer may depart and the computer will receive a new start indication. Keeping track of the start / finish pairs is one of the major jobs of the person running the timing computer and of the computer itself, during a race.

When the race is completed (or at least the run) then the computer will provide the results of the run, indicating in various sequences the racers times, - ranked first to last, unranked (in time of finishing sequence) and so forth. When these are put together with other information as to racers disqualified, who did not finish, and who did not start, then the overall race results may be produced.

For a race with more than one run, the computer will accumulate the times for the event and then provide the results based upon best to worst total times.

Sounds simple.

### **Circuits, Boxes, Wires**

Most race hills are permanently wired to accommodate racing events of different types. For this reason, there may be several circuits from the start area to the finish, several intermediate points where a finish can be established or where someone may act as a spotter - to advise the finish timing person which racer has passed which point on the course - and so forth.

To properly run a race there should be at least two complete circuits from the top of the course to the finish area. If this is a F.I.S. race then three are the minimum.

Circuit #1 is used for communications between the starter and the finish line. Additional persons may be on this line, as spotters, or a separate line could be used. If there is a separate line then there must be two operators at the finish area, as one person can only be attached to one communication line with a headset.

Circuit #2 is used to carry the start signal to the timing computer.

Circuit #3 is used in F.I.S. races to carry the second start signal required. More on this in a minute.

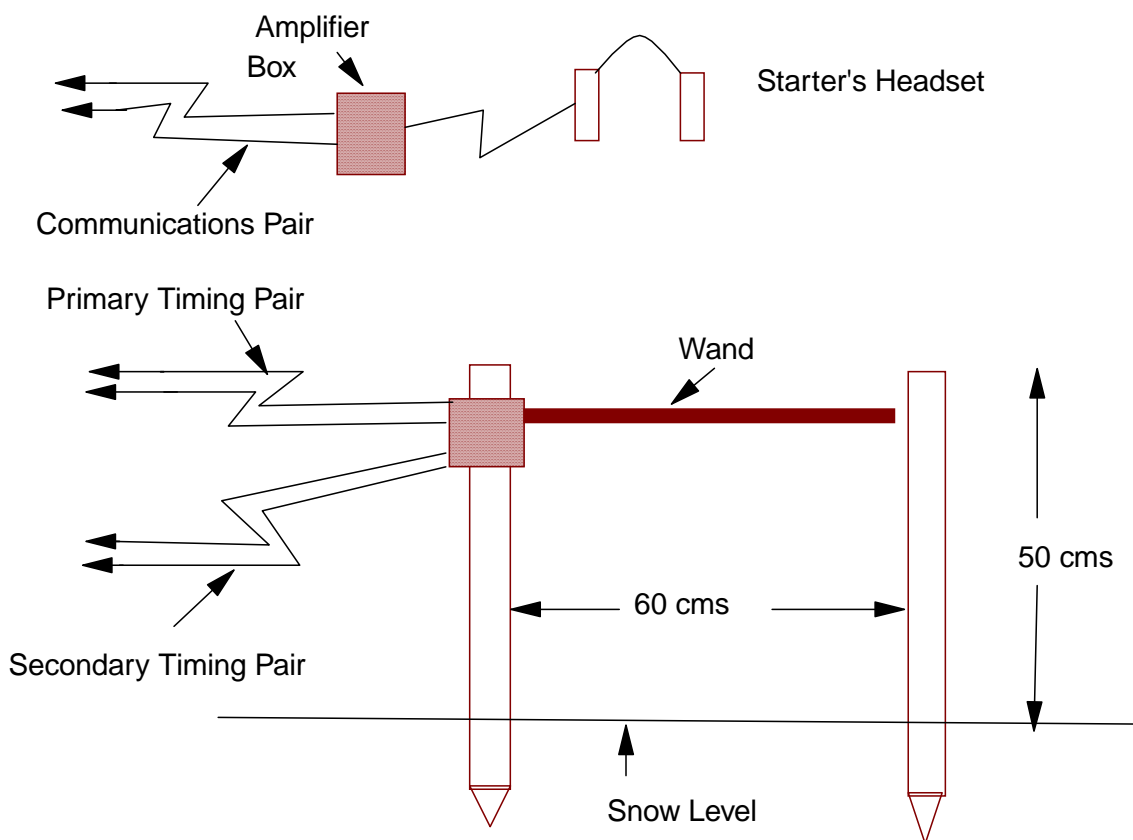
Circuits above 3 can then be used to carry interval time signals if they are desired. This is common in Downhill and Super G races, and sometimes in Giant Slalom. The equipment to provide these signals will vary according to the availability of devices and the accuracy desired. As these interval times are for audience and coaches use and are not part of the official results of the race, their accuracy is not of concern usually. However, the finish area must know if a racer does not proceed through a timing interval, so the computer can be advised that the next signal is from a different racer.

## The Start Area

The layout of the start area is a responsibility of the race Jury plus the Chief of Timing.

The start wand is mounted on a set of posts approximately 60 cms apart, that do not extend above 50 cms from the snow. The wand itself should be placed at approximately the mid calf height of the average racer. The wand may be able to provide two independent signals for a F.I.S. race, or a single one for club and other non-FIS races. In any case, wiring inserted into the wand is then fed into the circuit being used for timing, usually found as a set of plugs on a box on a nearby tree. If you are in an established start hut, then the plugs would be on a panel on a wall near the start posts, probably outside the building so the wire does not have to pass through an open window (it gets cold out there sometimes).

In addition to the start signal circuit, the starter's headset must be connected to the communication circuit, so the starter and the person timing the race with the computer at the finish may converse about the state of the race.



## One or Two Timers ?

The Federation Internationale du Ski (F.I.S.) rules state that a FIS sponsored race must be timed with two independent electronic timing facilities, plus a backup hand timing facility. A single start wand is used that is

capable of providing two signals. Two computers are required at the finish (with two operators). They must be synchronized before the event begins, so they provide exact backup to each other.

Ideally, two independent wires are provided from the start to the finish, following two separate conductors. The emphasis here is on the word *ideally*. Most hills do not have two independent wires, just additional circuits in one wire conductor. Since this is not a safety issue, this requirement is usually noted but ignored.

### **Backup Hand Timing**

Every event has the opportunity for the electronic equipment to malfunction at some time or another, probably instantaneously. Thus the electronics may miss the time for one or more racers. To compensate for this, and to avoid having racers re-run the course, backup manual timing is provided. Two stop watches are provided at the start and at the finish. They are synchronized with each other before the event begins.

When a racer starts, the watches at the start are read for the time of departure and this is noted on a start list. At the finish, the finish time is again noted from the stop watches there, and recorded.

The watches used are running continuously. When the plunger is depressed, the current time freezes on the display, while the watches continue to run. This is the time recorded. The operator of the watch makes every attempt to be consistent as to the point when the plunger is depressed for each racer. Should one watch become non functional, then the time is recorded from the remaining watch. The four watches may be resynchronized before the second run, in this case.

### **Interval Timing, Spotting**

For most 'speed' events, it is of interest to the coaches, the racers and the audience as to the leaders, average speeds through a portion of the course, and so forth in addition to the overall results. Thus intervals may be timed for such events.

For non FIS races, the accuracy of these interval times is not as critical as for a race which is appearing on national or international TV. In this case, intervals may be timed 'subjectively' by having a person depress a button that provides a signal to the finish computer, at some consistent point as each racer passes.

If the interval time should be as accurate as possible for TV coverage (etc) then electronic means are used. Specifically, electronic beams are placed across the track of the course in a manner that when a racer crosses the beam, a signal is provided to the finish computer. In this case, there is usually a manual button to press as the racer approaches, to enable the timing unit. This stops spurious signals caused by course workers, as well as by the skiing public crossing the course between racers to interfere with the running of the race and the accurate timing of the race.

See the next section for details on setting up a light beam arrangement, and the section on Safety Considerations for protecting the equipment and the racers from each other.

### **The Finish Area**

The Finish Referee is responsible for the overall finish area. However, the Chief of Timing must participate in the set up of the area.

The finish line is demarked by the two timing units - the transmitter (of the light beam) and the receiver. The receiver is usually at the end of the line closest to the timing computer, whether in a finish hut, tent or in the open. The beam should be approximately half the height from the snow of an average skier's shin - i.e. half way from the snow to the knee. Setting these two units up takes practice. However, there are no magic tricks to perform.

One sets up the receiver and turns it on. Sighting over it, align it to be pointing at the approximate location of the transmitter. It is usually mounted on some form of post (say a 2" X 2") pounded into the snow. The transmitter will be on a similar post the required distance from the receiver. These distances vary according to the discipline of the race.

| <u>Discipline</u>   | <u>Minimum Finish Line Width</u> |
|---------------------|----------------------------------|
| <b>Downhill</b>     | 15m                              |
| <b>Slalom</b>       | 10m                              |
| <b>Giant Slalom</b> | 10m                              |
| <b>Super G</b>      | 15m                              |

Mount the transmitter on its post and repeat the visual lineup as per the receiver. Turn it on, and begin to move it about on both axis until the receiver's light comes on, indicating it is now receiving. Fasten everything, and connect the wiring from the receiver to the computer.

Inside the finish 'hut', there are several wires to connect. With some luck these will be connected to a panel outside of the finish hut rather than being fed through a partially open window (see The Start Area).

Circuit #1 will hook to the operator's headset. This may be through the computer, depending on the model.

Circuit #2 hooks into the start signal plug on the computer.

Circuit #3 hooks into the start signal plug on the second computer (for a FIS race).

The wire from the receiver outside hooks into the finish plug on the computer. If you have two finish eyes then there is a second wire to connect to the second computer, else you hook it to both using some form of splitter. Two eyes are preferred.

If you have interval timing, then each interval will show on its own circuit and must be wired into the computer's interval timing plug. In some cases, you may plug interval #1 into the first computer and interval #2 into the second one. This implies the computer can only deal with one interval time. This is computer type dependent.

### **One or Two Eyes ?**

If you are timing a FIS event then there is the need for two sets of electronic eyes (beams). They would be mounted on the same set of posts, with the beams crossing each other approximately in the middle of the finish line. Thus one would come from the uphill side of its post to the downhill side of the other post, and so forth. The beams are lined up one at a time then both are checked for interference with each other.

### **Timing the Race**

The overall race timing takes place from the finish area, assuming all of the above setups have taken place and have checked out satisfactorily.

### **The Timing Computers**

The type of computer used for race timing varies from club to club. However, the principles are the same for all types in common use. They are programmed to take in a list of participants (usually the list of valid bibs for the particular run), the electronic signals from the start, intervals and the finish, and provide facilities to adjust things as the race is run.

What do you adjust ?

When a racer starts, the computer assumes the racer has the next bib in sequence. If the racer does not show up to start then the computer must have this number advanced to the next valid one. The same for racers that fall during the run and will not continue through the interval(s) or the finish.

One of the main problems with timing is the unexpected arrival of someone through the finish line, such as a side slipper or a spectator that gets through the security fencing. In this case the computer gets a finish signal but the racer has not arrived. Most computers provide the ability to freeze the last signal so you can examine the situation then erase the extraneous finish before the actual racer appears. Should the racer appear too soon for your manual dexterity, then there will be a finish signal without a start signal. Worse, there could be another racer on the course and now the computer thinks this racer has finished. Facilities are available to edit the results, remove the extra finish, and to put the right times with the right racers. While this sounds complicated, it is a straight forward process to be done during the next lull in the run or at the end of the run.

Some of the other reasons for timing failures are the weather and racers falling through the finish line, taking out part of the equipment as they go. In this case, the hand timing facilities are critical.

Weather conditions that affect timing include heavy snow blocking the electronic beam, and fog that is thick enough that the receiver cannot 'see' the transmitter. In this case, the race should probably be suspended. In the case of the heavy snow, turning off the beam from inside the computer area until the racer is about to cross the line sometimes suffices.

### **Communications**

During the race, the starter and the computer operator will be in constant conversation. The finish area needs to know the bib of the next racer starting, and the starter needs to know that the finish area is requesting a hold on starts until some glitch or other is resolved.

The interval reporters must also advise the finish area of the bib number of the racer passing their station or the fact that the racer is down and will not continue. If the racer is injured then either the starter or the finish person can contact the Start Referee or the Finish Referee who have radios and have them call the Ski Patrol for assistance.

The other person that needs to be able to listen to all of this is the person on the score board, assuming there isn't an electronic display that the audience can see. This person is wired on the main communications channel (pair #1 in our scenario) with a headset. The computer operator would then announce the time for a specific racer for this run clearly so the scoreboard person can write it on the board.

### **Recording, Checking, Results**

The computer operator, in addition to all of the other duties described above would record the times on a start list for each racer. When all times are checked at the end of the run, this paper can be used to get the times somehow to the Race Secretary for input to the results computer. This can be done by physically transporting it, by radioing it or by telephone (cellular usually).

In the case of a race with two runs, a second run start list is required to be produced reflecting the results of the first run. The timing computer can also create this list but first all racers that did not finish or were disqualified for whatever reason must be removed from consideration.

One way to create this list is to have the timing computer produce a list ranking the racers fastest to slowest. The operator then produces a hand list for the second run in the proscribed manner. That is, depending upon decisions about the draw for the first seed at the Coaches meeting prior to the race, up to 15 racers will be 'flipped' - that is, the 15th place finisher will start first for the second run, 14th 2nd, and so forth. For ties, the

racer with the lower bib number (in the top 15 finishers only) will start first. After the top 15, the higher bib number goes first. If there is a tie for 15th position then all are involved in the flip (i.e. 16).

Computer programs that do race results do this for you automatically.

## PROTECTION CONSIDERATIONS

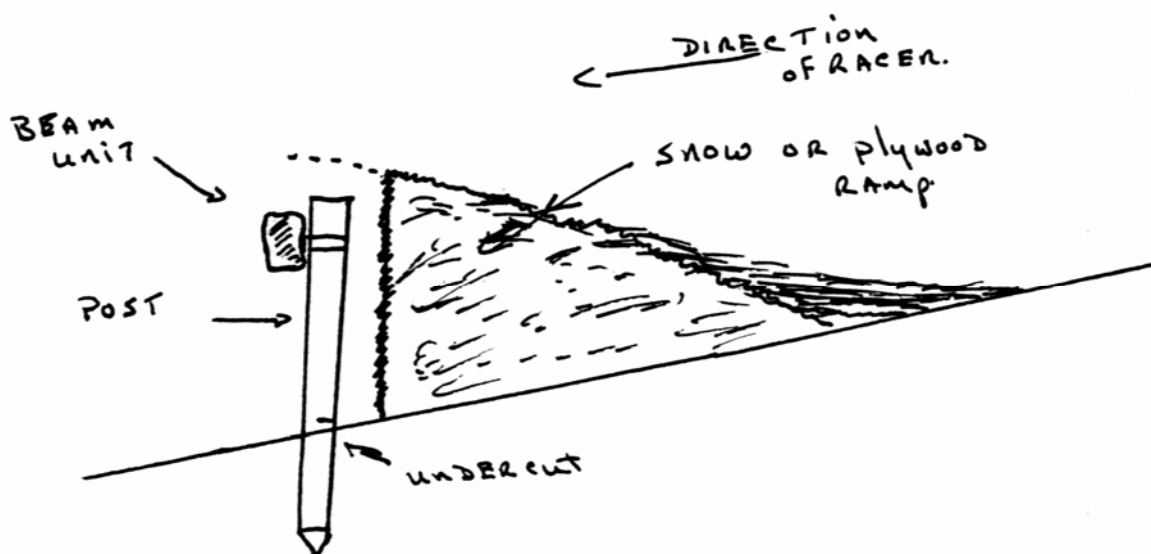
In all of the preceding I have not discussed one of the most important topic of ski racing - protection for the racer..

From a timing viewpoint, safety comes into play at any timing equipment installation (except the start where there generally are no hazards from a timing perspective). At intervals using beams, and at the finish, the beams must be set so that the skier cannot be injured in a fall by the equipment.

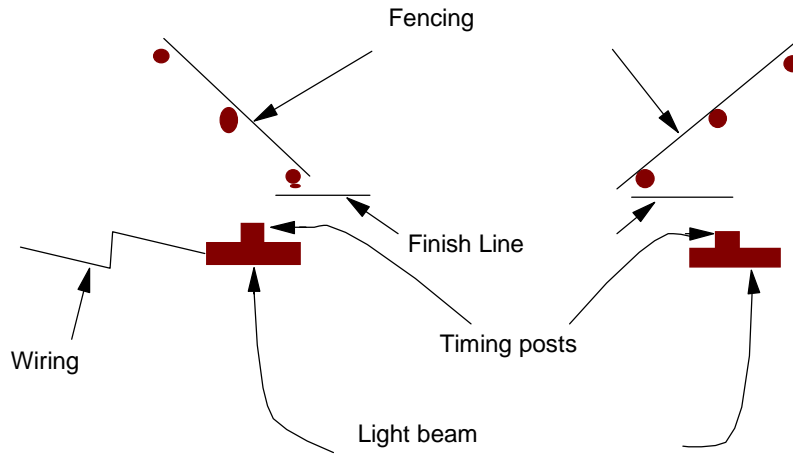
The normal principle is to place the equipment sufficiently away from the line of the racer so the chance of impact is greatly reduced. In World Cup racing, the equipment is usually placed outside of all rechnical isntallations and crowd control fencing, then a small hole in the fence is made so the beam may pass through unobstructed.

In addition to the above, the posts the beams are mounted on are

1. cut to be no higher than necessary or pounded in to such a level
2. cut at the snow level almost all the way through on the uphill side so if the skier does impact them the post will shatter.
3. Berms are built in front of the posts from snow, so the skier will hit the snow rather than the posts. These berms are sloped / tapered to provide a gentle bump that skiers can slide over them easily and if the skier is down and sliding the skier can also slide over them with minimal impact.



At the finish line, the posts must be bermed as above, plus protected by fencing set at an angle to deflect a falling skier, plus by 'willy bags'. This is in addition to placing them as far apart as possible as the terrain will allow. Most beams can transmit at least 25 meters.



All timing equipment should be set up or protected in such a way that danger to the competitors is avoided where possible.

## ***COURSE PREPARATION***

### **Overview**

An integral and obvious part of a race is course preparation! Perhaps not emphasized strongly enough is the real need for the use of the “Plan Ahead” principle. Although this is a necessary part of all aspects of the event(s) - from the conception of the plan to the storing of the equipment after the race - it is of monumental importance when it comes to the course preparation.

Although it is impossible to cover all aspects of all problems at all areas in all regions, an attempt has been made to cover the major aspects of course and snow preparation.

In the last ten years, monumental progress has been made in race course preparation. This progression has in turn resulted in snow surfaces which contribute to higher racer speeds. Also, better equipment available to the racer as well as the actual materials used in the competition suits has contributed to the higher speeds now seen in competitions.

## TIMING

Timing was covered in detail in Level I. Here specific items will be covered.

### 1 *Rules for Timing*

The ICR does contain specific rules relating to timing. The most direct items include:

- There must be multiple communication between start and finish.
- Electric timing provided with a printer and with communication between start and finish must be used which will allow measurement of the times to 1/100th of a second.
- Hand timing must be in place and must be separate and independent of the electric timing. It must record times to 1/100th of a second.
- When the electric timing fails **temporarily**, the times recorded by hand shall be accepted after a correction has been calculated. This is known as the equivalent electric time (EET) and is covered in the next section.
- When the electric time fails **completely** during a race, then the times taken by hand shall be valid for all competitors, i.e. only hand times would be used for all competitors whether an electric time was available or not.

### 2 *Equivalent Electric Time - EET*

When a time is missed by the electric timing, the hand time is used for that competitor after a correction has been applied. This correction is calculated by calculating the difference between electric and hand times of the 5 competitors starting before the missed time and the 5 competitors starting after the missed time or if necessary the 10 nearest competitors. The sum of the remaining 10 time differences is divided by ten to give the correction, which must be applied to the hand time of the competitor whose electric time was missed.

Luckily a form has been developed which makes this calculation quite simple. This form is shown on page 79 and worked out example on page 80.

From this you will see that the correction to be applied is +0.01 seconds. At first this seems insignificant, but look at a set of actual race results below and see how many race points a difference 0.01 seconds translates into. Now that is not insignificant to a racer with low points!

| <u>Racer</u> | <u>Time</u> | <u>Points</u> |
|--------------|-------------|---------------|
| 1            | 1:56.68     | 0.00          |
| 2            | 1:56.84     | 1.66          |
| 3.           | 1:57.04     | 3.73          |
| 4            | 1:57.06     | 3.94          |
| 5            | 1:57.07     | 4.04          |



DATE: TODAY'S DATE DISCIPLINE: SL MEN X WOMEN 1 RUN 1 CHIEF CALCULATIONS: C

HAND TIME/TIME OF DAY (TOD) E.E.T. WORKSHEET

COLUMN A

HAND TIME/TIME OF DAY - TOD

| BIB # | FIN      | -ST      | =     | HT    | RACER BIB # | ELAPSED HAND TIME | ELECTRIC TIME | HAND TIME SHORTER (+) |
|-------|----------|----------|-------|-------|-------------|-------------------|---------------|-----------------------|
| 4     | 53:24.51 | 58:23.56 | 50.13 | 48.59 | 4           | : 50.13           | : 50.03       |                       |
| 5     | 54:01.58 | 59:09.28 | 52.30 | 49.67 | 5           | : 52.30           | : 52.35       | .05                   |
| 7     | 55:13.59 | 54:20.58 | 53.01 | 46.66 | 7           | : 53.01           | : 52.98       |                       |
| 8     | 55:48.04 | 54:56.21 | 51.83 | 48.43 | 8           | : 51.83           | : 51.82       |                       |
| 9     | 53:09.28 | 59:29.94 | 49.67 | 46.66 | 9           | : 52.64           | : 52.62       |                       |
| 12    | 53:09.28 | 59:29.94 | 49.67 | 46.66 | 12          | : 48.59           | : 48.62       | .03                   |
| 13    | 55:13.59 | 54:20.58 | 53.01 | 46.66 | 13          | : 49.67           | : 49.65       | .02                   |
| 14    | 55:13.59 | 54:20.58 | 53.01 | 46.66 | 14          | : 46.66           | : 46.61       | .05                   |
| 16    | 55:48.04 | 54:56.21 | 51.83 | 48.43 | 16          | : 48.43           | : 48.45       | .02                   |
| 17    | 55:48.04 | 54:56.21 | 51.83 | 48.43 | 17          | : 47.48           | : 47.49       | .01                   |

COLUMN A TOTAL + .11

COLUMN B TOTAL - .23

= (+) or (-) - .12

10 = (+) or (-) - .01 = CORRECTION

| BIB # | FIN      | -ST      | =     | HT | ELAPSED HAND TIME | CORRECTION (+) or (-) | RACER'S E.E.T |
|-------|----------|----------|-------|----|-------------------|-----------------------|---------------|
| 11    | 57:55.79 | 57:02.84 | 52.95 |    | 1:20.03           | -.01                  | 1:20.02       |
|       |          |          |       |    | 52.95             | -.01                  | 52.94         |

## **COMMON PROBLEMS WITH GATE JUDGING**

1. Gate Judges not in position, in position too late to properly observe or in poor choice of location to properly observe the passage of competitors. The Gate Judges, or a least a sufficient number for adequate control, must be at their stations well before the start of the race.
2. Indecision! Usually the result of failing to anticipate the possible decisions a Gate Judge may need to make. Plan ahead! At difficult 'combinations' of gates, the Chief Gate Judge should take the time to point out the types of situations that might be encountered at this position.
3. Before the race starts, draw a diagram of your gates in each box provided on the card. If diagrams are missing or unclear, then your card may be useless to the Jury. One of your most important duties is a drawing of the fault committed - absolutely required. If you draw the diagram in advance, then all you have to complete is the actual track of the racers and the bib number.
4. When there is a delay in the collection of the scorecards a delay is usually then passed on to the Jury proceedings and the preparation of the 2nd run start list or the results. The Chief Gate Judge is responsible for the rapid and efficient retrieval of the gate judge cards.
5. Missing gate judge cards - in the event that a gate judge was overlooked by the person picking up cards after a run, the gate judge should make every attempt to deliver his card to the Jury as soon as possible, preferably the Referee but at least to the Race Office.
6. Missing Gate Judge with Faults marked on his/her card: A Gate Judge is responsible for reporting to the finish to provide-needed information in regards to a recorded fault. The Chief Gate Judge should be present to present the Gate Judge to the Jury and to present the Gate Judge's qualifications to the Jury, if needed.

A Gate Judge's job is not finished when the last racer has crossed the finish line. The Gate Judge must be willing to serve as a witness, if needed, when a Protest is under consideration by the Jury.

If, at the end of the Protest period (usually 15 minutes after posting the list of disqualification's), there is no protest to the Disqualification, the Gate Judge will be dismissed from duty by the TD.

7. Inadequately trained Gate Judges - 'last minute' recreating of anyone available. Difficult to work around the video can be of some help in this last minute training.
8. Inadequate clothing for extreme weather conditions this is another plan-ahead item. Gate Judges must be prepared for all kinds of weather.

When possible, reserve Gate Judges can be used to relieve persons needing to get warm or otherwise, more comfortable. However, a shortage of Gate Judges seems to be the most common problems.

An evaluation of the above will point out a common factor - lack of planning and training. All of these can be avoided or minimized by good planning and understanding of duties by the Chief of Gate Judges. The effort is well worthwhile due to the important functions of the gate judges.

## 5. RE-RUNS, SANCTIONS, DISQUALIFICATIONS AND PROTESTS

The following are the sections taken from the ICR which cover the above.

### 5.1 *Re-runs*

#### 623 **Re-runs**

##### 623.1 Prerequisites

623.1.1 A competitor who is obstructed while racing must stop immediately after the incident took place and apply to any member of the Jury for a re-run. This claim can also be made by the team captain of the obstructed competitor. The competitor should make his way to the finish along the side of the piste.

623.1.2 In special situations (e.g. in case of missing gates or other technical failures) the Jury may order a re-run.

##### 623.2 **Grounds for Interference**

623.2.1 Blocking of the course by an official, a spectator, an animal, or other obstructions.

623.2.2 Blocking of the course by a fallen competitor, who did not clear the course soon enough.

623.2.3 Objects in the course such as a lost ski pole or the ski of previous competitor.

623.2.4 Activities of the first aid service which obstruct the racer.

623.2.5 Absence of a gate knocked down by a previous competitor, and not promptly replaced.

623.2.6 Other similar incidents beyond the will and control of the competitor, which cause significant loss of speed or a lengthening of the racing line and thereby consequently affect the competitor's time.

623.2.7 Malfunction of the timekeeping system.

623.2.8 Interruption of a downhill run by an official in a "yellow zone".

##### 623.3 **Validity of a Re-Run.**

623.3.1 In case the Referee or another Jury member is unable to question the appropriate officials immediately or to judge the justification for the re-run he may, to avoid delay for the competitor, grant a provisional re-run. This re-run will be valid only if it is confirmed by the Jury.

623.3.2 If the competitor was already disqualified before the incident entitling him to a re-run, the re-run is invalid

623.3.3 The provisionally or definitively approved run remains valid even if it proves slower than the obstructed one.

##### 623.4 **Start Time of the Re-run**

- 623.4.1 In the case of fixed start intervals, the competitor may start at the fixed interval, after he has reported to the start referee, in accordance with the decision of the start referee.
- 623.4.2 With non-fixed start intervals, the procedure is in accordance with the provisions of art.805.3

The ICR has had a change of philosophy with regards to disqualifications. The new rules address the seriousness of the infraction and encompass all individuals associated with the race event, whether it be the racer, coaches, officials or anyone at the race venue. New rules address reprimands, impaired starts, disqualifications, fines and suspensions.

## **5.2 Not Permitted to Start**

### **627 Not permitted to start**

- 627.1 Wears obscene names and/or symbols on clothing and equipment (Art 206.7) or behaves in an unsportsmanlike manner in the start area (205.5).
- 627.2 Violates the FIS rules in regard to equipment (Art. 222) and commercial markings (207).
- 627.3 Refuses to undertake a FIS required medical examination. (Art. 221.2)
- 627.4 Trains on a course closed for competitors (614.1.4).
- 627.5 In training Downhill has not participated in at least one timed training run (704.8.3).
- 627.6 Does not wear a crash helmet that conforms to the Competition Equipment Specifications (Art. 707, 1007), or does not have brakes on their skis (608.3).
- 627.7 Was eliminated from first run (607.4).
- 627.8 Violation of rules 627.1-627.7  
If a competitor has actually started in a competition and is later determined by the Jury to have been in violation of these rules the Jury must sanction the competitor.

## **5.3 Penalties**

### **628 Penalties**

- 628.1 Violates the rules governing advertising on equipment (Art. 207.1).
- 628.2 Alters the start number in a way which is not allowed (Art. 608.1).
- 628.3 Does not wear or carry the official start number according to the rules (704.5, 804.1, 904, 1004.1).
- 628.4 Skis through a gate or practices turns parallel to those required by gates on the course (904).
- 628.5 Is not ready to start on time or makes a false start (613.6, 613.7, 805.3.1, 805.4, 1106.3).
- 628.6 Violates rules of the start or starts in another manner than is permitted according to the rules (Art. 613.3).
- 628.7 Requests a re-run which proves not to be valid (Art. 623.3.2).

- 628.8 Continues to race after committing a gate fault (Art. 614.2.2).
- 628.9 Fails to pass the finish in accordance with Article 615.3
- 628.10 Removes skis before crossing the red line (206.5).
- 628.11 Does not leave the finish area through the official exit with all the competition equipment used in the race (615.1.7).
- 628.12 Takes skis to the official ceremonies (210.6)

#### **5.4 Disqualifications**

- 629 Disqualifications
- 629.1 Participates in a race under false pretenses.
- 629.2 Either jeopardizes the security of persons or property or actually causes injury or damage.
- 629.3 Does not pass through a gate correctly (661.4).

#### **5.5 Sanctions & Penalties**

##### **223 Sanctions**

##### **223.1 General Conditions**

- 223.1.1 An offence for which a sanction may apply and a penalty be imposed is defined as conduct that:
  - Is in violation or non-observance of competition rules, or
  - Constitutes non-compliance with directives of the jury or individual members of the jury in accordance with 224.2 or).
  - Constitutes unsportsmanlike behavior
- 223.1.2 The following conduct shall also be considered an offence:
  - Attempting to commit an offence
  - Causing or facilitating others to commit an offence
  - Counselling others to commit an offence
- 223.1.3 In determining whether conduct constitutes an offence consideration should be given to:
  - Whether the conduct was intentional or unintentional
  - Whether the conduct arose from circumstances of an emergency
- 223.1.4 All FIS affiliated association, including their members registered for accreditation, shall accept and acknowledge these rules and sanctions imposed, subject only to the right to appeal pursuant to FIS Statutes and ICR

##### **223.3 Penalties**

- 223.3.1 The commission of an offence may subject a person to the following penalties:
  - Reprimand – written or verbal
  - Withdrawal of accreditation
  - Denial of accreditation
  - Monetary fine not more than CHF 100,000

- 233.3.1.1 FIS affiliated associations are liable to the FIS for the payment of any fines and incurred administrative expenses imposed on persons whose registration for accreditation they arranged
- 233.3.1.2 Persons not subject 223.3.1.1 also are liable to the FIS for fines and incurred administrative expenses. If such a person do not pay these fines , they shall be subject to a withdrawal of any permission to apply for accreditation to FIS events for a period of one year.
- 223.3.2 All competing athletes may be subject to the following additional penalties:
- Disqualifications
  - Impairment of starting position
  - Forfeiture of prizes and benefits in favour of the organizer
  - Suspension from FIS events
- 223.3.3 A competitor shall not be disqualified unless the offence gives the competitor an advantage in the final result of the competition.
- 223.5 The following Penalty decisions may be given verbally:
- Reprimands
  - Withdrawal of accreditation
  - Denial of accreditation
- 223.6 The following Penalty decisions shall be in writing:
- Monetary fine
  - Disqualifications
  - Impaired starting position
  - Competition suspensions
  - Withdrawal of accreditation

## **5.6 Protests**

### **640 Protests**

#### **641 Types of Protests**

- 641.1 Against admittance of competitors or their competition equipment,
- 641.2 Against the course or its condition,
- 641.3 Against another competitor or against an official during the race,
- 641.4 Against disqualifications.
- 641.5 Against timekeeping,
- 641.6 Against the decision of the Technical Delegate to terminate the race,
- 641.7 Against the other decisions of the Technical Delegate,

## **5.7 PLACE OF SUBMITTAL**

### **642 Place of Submittal**

642.1 Protests according to the art. 641.1 - 641.5 and 641.7 at the location designated on the official notice board or at a place announced at a team captains' meeting.

642.2 Protest according to the art. 641.6 and 624 with the Division office.

## **5.8 Deadlines for Submittal**

### **643 Deadlines for Submittal**

643.1 Against the admittance of a competitor:

- Before the draw.

643.2 Against the course or its condition:

- No later than 60 minutes before the beginning of the race.

643.3 Against another competitor or competitor's equipment or against an official because of irregular behaviour during the competition:

- Within 15 minutes after the last competitor has passed the finish.

643.4 Against disqualification because of an irregular execution of the race:

- Within 15 minutes after the posting of the disqualification.

643.5 Against the timekeeping:

- Within 15 minutes after the posting of the unofficial result list.

643.6 Against the decision of the Technical Delegate to terminate the race:

- Within 24 hours after the publication of the decision.

643.7 Against all other decisions of the Technical Delegate:

- Immediately and no later than the deadlines for submittal of protest according to the art. 643.4.



# ALPINE CANADA ALPIN

## PROTESTS FORM

|   |                               |   |
|---|-------------------------------|---|
| <b>Competition</b>                        |                               | L <input type="checkbox"/> M <input type="checkbox"/> |
| <b>Discipline</b>                         | <b>Date</b>                   |   |
| <b>REASONS FOR PROTEST</b>                | <b>ICR REFERENCES</b>         |   |
|   |                               |   |
|   |                               |   |
|   |                               |   |
|   |                               |   |
|   |                               |   |
|   |                               |   |
|   |                               |   |
|   |                               |   |
|   |                               |   |
|   |                               |   |
|   |                               |   |
|   |                               |   |
|   |                               |   |
| <b>NAME OF PROTESTER</b>                  | <b>Club</b>                   |   |
| <b><i>Date and time of submission</i></b> | <b>Payment of deposit</b>     |   |
|   |                               |   |
| <b>Protest and deposit received by</b>    |                               |   |
|   |                               |   |
| <b>Date</b>                               | <b>Signature of protester</b> |   |
|   |                               |   |

# MINUTES OF JURY DECISIONS and/or PROTESTS

|  |             |  |                |                     |   |
|--|-------------|--|----------------|---------------------|---|
| <b>Competition</b>   |             |  |                |                     | F <input type="checkbox"/> M <input type="checkbox"/> |
| <b>Discipline</b>  |             |  |                | <b>Date</b>         |   |
| <b>Jury members present</b>  | <b>Club</b> |  | <b>Vote *</b>  | <b>Signatures *</b> |   |
| Technical Delegate   |             | With voting right                            |                |                     |   |
| Referee  |             | With voting right                            |                |                     |   |
| Assistant Referee  |             | With voting right<br><i>DH /Super G only</i> |                |                     |   |
| Chief of Race  |             | With voting right                            |                |                     |   |
| <b>Others present at the meeting</b>   |             |  |                |                     |   |
| <b>Name</b>  |             |  |                | <b>Club</b>         | <b>Position</b>                                       |
|  |             |  |                |                     |   |
|  |             |  |                |                     |   |
|  |             |  |                |                     |   |
|  |             |  |                |                     |   |
| <b>Reason for Meeting : Protest - 0      Jury Decision other than Protests - 0</b> |             |  |                |                     |   |
| <b>Summary of reasons regarding protest or Summary of decisions taken</b>          |             |  |                |                     | <b>ICR References</b>                                 |
|  |             |  |                |                     |   |
|  |             |  |                |                     |   |
|  |             |  |                |                     |   |
|  |             |  |                |                     |   |
|  |             |  |                |                     |   |
| <b>Decision on Protest</b>   |             |  |                |                     |   |
| <b>Time published</b>  | <b>Date</b> |  | <b>The TD:</b> |                     |   |
|  |             |  |                |                     |   |

**\* Minutes of Jury Decisions require Jury signatures of Jury Members and a record of their individual votes.**

## BC ALPINE SKI ASSOCIATION

### TECHNICAL SPECIFICATIONS FOR 2002/03

| COMPETITION LEVEL | FIS | BC Division |
|-------------------|-----|-------------|
|-------------------|-----|-------------|

#### TECHNICAL REQUIREMENTS:

|                        |                             |                            |
|------------------------|-----------------------------|----------------------------|
| <b><u>DOWNHILL</u></b> | 500m – 1100m<br>450m/ 2 run | 450m/ 1 run<br>350m/ 2 run |
|------------------------|-----------------------------|----------------------------|

#### **SUPER G**

|                     |                        |                               |
|---------------------|------------------------|-------------------------------|
| Men                 | 500 – 650m             | <b>K1</b> – min 225 -max 350  |
| Women               | 350 – 600m             | <b>K2</b> – min 250 -max 450m |
| Minimum # of Gates* | Women – 30<br>Men - 35 | 10% of vertical               |
| Maximum # of Gates* | 10% of vertical        | 12% of vertical               |

**Note : Downhill and Super G courses must be measured**

\* **NOTE:** Only those gates requiring a change of direction are to be counted.

#### **GIANT SLALOM**

|                     |                     |                      |
|---------------------|---------------------|----------------------|
| Men                 | 250 - 450m          | <b>K1</b> – max 250m |
| Women               | 250 – 400m          | <b>K2</b> – max 300m |
| Min/Max # of Gates* | 11- 15% of vertical | 10 - 12% of vertical |

\***NOTE:** **BC Division - Count all gates**

**FIS only - Only those gates requiring a change of direction are to be counted**

#### **SLALOM**

|            |              |                       |
|------------|--------------|-----------------------|
| Men        | 140m – 220m  | <b>K1</b> - max 120m  |
| # of gates | 55 - 75 +/-3 | 32 - 40               |
| Women      | 120 - 200m   | <b>K 2</b> - max 160m |
| # of gates | 45 - 65 +/-3 | 38 - 50               |

**For BC Alpine races** - slalom courses must contain 1-3 flushes and at least 2 hairpins.

**FIS** – (exception) Men's SL - 120m or less vertical drop = 45 – 75 +/-3 gates

\*\*\* BC Division – Technical Specifications follow the FIS Kinder rules. Rules are available in the 2002 ICR – page 101.

**2001 Cafe de Colombia**

**World Cup Downhills and Super G**

**Lake Louise, Alberta**

**Racer Down Protocol**

At recent speed events there have been instances where well meaning, but untrained individuals have attempted to assist athletes following an on course incident. This type of situation is to be avoided in all but life threatening situations (a broken leg is not a life-threatening situation) and the following protocol is to be **strictly** adhered to. Person(s) not complying with this protocol may be subject to sanction by the jury.

1. The Jury member closest to the accident site will call a “Stop Start”, “Yellow Flag” (as necessary).
2. The Start Referee will confirm immediately on Jury channel “Start Stopped, holding racer number (#) in start, racer(s) number on course”.
3. The person calling the “Stop Start” will then call, on Jury channel, “Racer down at .....(position)”. It is important that the position be clearly stated to avoid having a racer that is already **below** the accident, incorrectly flagged.
4. The Flag Person will confirm **as soon as possible** on Jury channel “Racer Flagged and Stopped at .....(position)”.
5. **No** person is to move onto the course or approach the racer down, until ordered to do so by either, a member of the Jury **or** the Chief of Medical who will have heard the confirmation that the start is stopped and the on course racer(s) has been flagged and is stopped.
6. **Any** person, other than the Ski Patrol attending at the accident site, may **only** remove “debris” from the race course and may **only** assist the athlete under the **specific** direction of the Ski Patrol person in charge of the accident site. Under no circumstances, other than life threatening (remember, a broken limb is not a life threatening situation), is **any** person other than the Ski Patrol person in charge of the accident site, to attempt to remove athlete’s equipment, remove the athlete from nets or attempt to move the athlete in any way.
7. The ski patrol member will communicate **only** as per established Ski Patrol radio protocol and **any** other person attending the accident site will **only** communicate with the Chief of Race or the Jury member closest to the accident site on the Course channel.
8. During the time immediately following the “Stop Start” call, **all** persons will clear **all** radio channels until advised by dispatch that normal radio communications may resume. It may be **vital** to the rescue effort that this simple rule is complied with. During this time, the only expected radio traffic on the race communications system will be, to and from the Chief of Medical, to and from the Chief of Race or, to and from the Jury Member closest to the accident site. **No Exceptions.**
9. The Jury members will identify themselves to the Ski Patrol members at their assigned stations, each day, before the commencement of training or racing. Jury members should be aware that, throughout the event, Ski Patrol members may rotate out of their position. There is therefore, a need to be sure that the Ski Patrol on station knows, at all times, just exactly who the Jury person is, who may be directing them onto the race track.

10. The Jury member closest to the accident site will be responsible for the orderly conduct of the rescue. Care should be taken to control the number and status of those persons attending at the accident site. Strictly apply a “need to be there” rule.
11. During the conduct of the rescue, the Chief of Medical will reposition, as necessary, Ski Patrol personnel to ensure adequate coverage upon re-commencement of the event.
12. Immediately upon the accident site being clear and safe for the event to recommence, the Jury member closest to the accident site will advise the Race Director/Chief of Race.
13. The Race Director will commence a “Course Clearance” from the bottom up and then, as soon as it is safe to do so, will direct the Start Referee to re-start the event.
14. At this time the Chief of Race will advise Dispatch that normal radio communications may resume.
15. Chief of Medical will advise Chief of Race on private channel, destination and status of injured athlete and disposition of ski patrol members involved in the rescue as soon as these items are known.

Bruce Hamstead  
Chief of Race  
2000 Cafe de Colombia  
Women’s World Cup Downhills and Super G

REV. 5 Oct. 29, 2001

## Course Clearance

The following is a suggested way to do course clearance. Hand this out to the jury at the coaches meeting or the day of the race. It is also advisable that the Jury meets to practice this a number of times before the race. It is also a good way to have a radio check. If we have everyone in the province doing the same thing and using the same words then there will be less confusion and our races will be safer.

The Chief of Race should control all course clearances. At the start of the race the Chief of Race would say: **“This is the Chief of Race, we would like to start the 1<sup>st</sup> forerunner, could I have clearance from the bottom up.”**

The Finish Referee would say: **“Clear at the finish”**

The same would be repeated by the different Jury members who are doing the clearance in the order that they are on the racecourse, and they would always identify their position in the same manner from then on.

The Start Referee: **“Clear at the start, 1<sup>st</sup> forerunner in the gate”**

The Chief of Race: **“Start the 1<sup>st</sup> forerunner in 1 minute (or whatever)”**

When the 1st forerunner is on course the Start Referee: **“1<sup>st</sup> forerunner on course”** The Start Referee should state when each forerunner starts and the Finish Referee should state when they finish and give a report on the Jury radio re the condition of the course etc.

The same procedure, as above, should be used re course clearance to start the 1<sup>st</sup> racer.

If there is a hold on the course at any point the person calling for the hold would say: **“Stop Start”**  
(Yellow Flag protocol if necessary)

The Start Referee would immediately hold whoever is in the start and say: **“Holding # 17 in start, racer(s) # 16 on course.**

At that point the person who called the hold should identify what the problem is and where it is. If a racer is down, the Chief of Race will ask if Medical Assistance will be necessary.

Once the problem is solved the person who called for the hold will communicate to the Jury that the situation is clear. At that point the Chief of Race will ask for Course Clearance from the bottom up and the whole procedure will occur again.

It is key that one hears the clearance below them before they clear their area and the Chief of Race must hear all clearances before he says: **“Start Racer # 17.”**

The Start Referee will radio that **“Racer #17 is in the gate and starting in (30 seconds)”** and then **“Racer # 17 is on course”** but there is no need to mention when # 18 starts, since this will be extra radio communication that is not necessary. (Sometimes Juries want each number mentioned as the racer leaves the start gate, and that is also OK.)

Last Racer

The start referee should state that: **“Racer #68 is the last racer and is in the start gate.”** **“Racer # 68 is on course.”**

The Finish Referee will come on the radio to state that: **“Racer # 68 has come through the finish, will there be any reruns.”**

If the answer is negative then the CofR will state: **“The race course is closed”**