



# Officials Program

## Level I Manual

**Version 5/6**

Revision 1.1

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## INTRODUCTION

This course is the first step to the fascinating and rewarding role of Alpine Official. Without your active participation in the racing program in the role as an Official, the alpine ski competition, as we know it today, would be impossible and many young athletes would not have the opportunity to participate in this sport.

The National Alpine Officials' program is a structured and integrated program involving four levels of Officials. It is administered by the Alpine Canada Alpin (ACA) National Officials Committee which includes Officials Chairpersons from the Provincial Sports Organization (PSO) level.

Level I is a basic course prepared for race volunteers with little or no experience as alpine race officials. The goal is simple: To inform you about alpine ski racing.

After presenting you the overall program of alpine competitions in Canada, as administered by Alpine Canada Alpin, a member organization of the Canadian Ski Association, and the PSO's, your course conductor will inform you about the National Officials' program.

The different types of race events will be explained, how they are organized, the required personnel to run a race and the roles and duties those involved.

You will receive information on timing and learn the responsibilities of the Gate Judge. You will see examples illustrating diverse situations. The main objective is to allow all level 1 Officials to better understand these two fundamental aspects of alpine ski racing.

All sports are regulated by a set of rules and alpine skiing is no exception. However, during this course, only the necessary rules of this level will be presented, and in an informal manner.

# **CHAPTER 1**

## **STRUCTURE AND ADMINISTRATION OF ALPINE RACES IN CANADA**

### **1.1 INTERNATIONAL SKI FEDERATION**

The Federation International de Ski (FIS) is the international governing body for skiing. Its headquarters are in Switzerland. It is the parent body of ski racing world wide of which Canada and the Canadian Ski Association is one of its members. The International Ski Federation publishes rules book (ICR) under which all sanctioned races are run and administers the international ski racing program including World Cup, World Championships and Olympic events.

### **1.2 THE CANADIAN SKI ASSOCIATION & ALPINE CANADA ALPIN**

The Canadian Ski Association (CSA) governs and administers the amateur sport of the various skiing disciplines in Canada (alpine, freestyle, speed skiing).

Alpine Canada Alpin (ACA) a member of the CSA is responsible for all aspects of alpine ski racing in Canada. ACA's mandate of the alpine discipline is to:

- a) To promote competitive and non-competitive alpine skiing in Canada including all disciplines of alpine ski races;
- b) To govern the conduct of National alpine ski competitions and ensure that races are conducted in accordance with the established standards.
- c) To select and train members of the Canadian Alpine Ski Team;
- d) To provide guidance, information and assistance to the Provincial Sports Organizations (PSO) thus to further the development of competitive alpine skiing.
- e) Encourage support of its programs by the general public.

To implement this mandate, the Alpine discipline (ACA) is governed by a volunteer executive and managed by a professional staff headed by a President/CEO. The executive is responsible for establishing policy; the professional staff is responsible for implementing it.

### **1.3 PROVINCIAL SPORT ORGANIZATIONS (PSO)**

Alpine Canada Alpin as a whole has a membership through regionalized area representations called Provincial Sports Organizations (PSO). At the present time there are twelve recognized PSO's throughout Canada.

British Columbia  
Alberta  
Saskatchewan  
Manitoba  
Ontario  
Québec  
New Brunswick  
Nova Scotia  
Prince-Edward Island  
Newfoundland/ Labrador  
Yukon  
North West Territories

These Provincial Sport Organizations represent provincial governing bodies for the sport of alpine skiing. Their internal structure varies from one to another. Some PSO's, the larger PSO's such as Ontario and Quebec divide their region into Divisions.

Each PSO has the responsibility to manage national programs at the provincial level. It also is responsible to develop alpine skiing programs to meet the needs of its provincial racers.

## 1.4 RACING PROGRAMS

There are many competition levels in Canada, each PSO having developed the most suitable programs to satisfy their needs. However, they are generally divided in two:

<p>Carded Programs or Non-Carded Programs</p> <p><b>Or</b></p> <p>Points Races or Non-Points Races</p>
--

The various competition levels are as followed:

### **Non Points Races (Non-Carded Races)**

<b>Category</b>	<b>Age Group</b>
Introduction and/or Nancy Greene Ski League	12 years old and younger
Skill Award or Snow Star program	14 years old and younger
Master Series	19 years old and older
College tour	N/A

## **Points Races (Carded Races)**

### **National Point Races**

Category	Age Group
<b>PSO and National races</b>	
K1 (Kinder 1)	11-12 years old
K2 (Kinder 2)	13-14 years old
J1 (Junior 1)	15-16 years old
J2 (Junior 2)	17-18 years old
Senior	19 years old and older
University tour	N/A
Canadian Juvenile Championships	13 - 14 years old
Canada Winter Games (Every 4 years)	According to the Winter Games regulations

### **FIS Points Races**

Category	Age Requirement
Regional FIS	<u>Minimum Age 15 by DEC 31</u>
National FIS	
Canadian Alpine Series	
Canadian Championships Junior and Senior	
NorAm Series	
World Cup	

### 1.4.1 Non-Carded Programs

The major Non Point/Non-Carded racing program is the **Nancy-Greene Ski League** or **Introduction series** of which the regulations and criteria are uniform across Canada with their own set of rules and criteria. The league/series is training and racing program designated to encourage children to ski race without subjecting them to intense competitive pressures. In order to emphasize participation and fun, the results are calculated on a team basis.

Running in conjunction with the Nancy Greene Ski League/Introduction series is the **Snow Stars Program** that develops skiing skills through games, exercises, drills and purposeful free skiing. Eight levels of skills are recognized and each youngster progresses through each skill at his/her own rate.

The **Canadian Master Alpine Series** is a program that provides an opportunity for adults of all ages to participate in a structured racing program. Races are held in each of the provinces with a National Final each year.

#### College Programs

Colleges have their own tour with their own rules. There are regional and international events.

### 1.4.2 Carded Programs

The following age groups are recognized across Canada and are based on the age as of December 31:

Category	Age Group
SR (Senior)	20 years old and older
JR (Junior) Subgroup: J1 J2	From 15 to 19 years old 15-16 years old 17-18 -19 years old
K2 (Kinder 2)	13 and 14 years old
K1 (Kinder 1)	11 and 12 years old



A carded race is one in which each competitor must possess a current ACA competitor number. The races are entered into the National Points system.

The card system has been designed to accomplish several objectives:

- a) To provide a national registration system for competitors;
- b) To provide a graduated points scoring system, the National Points list in each of the alpine disciplines.
- c) To provide a means to measure the performance of a competitor upward through national levels.
- d) To provide a record of all participants for insurance purposes.

Competitors may not race in ACA sanctioned events that are submitted for input to the national points list without a valid competitor card. ACA sanctioned events include all the races that appear on National and provincial race calendars.

Races for carded racers exist at levels from provincial through to National and the F.I.S races. Competitor's starts at the "Zone" level, progress to the divisional level, followed by the provincial level then from there go through a series of higher quality races until eventually reaching membership status on the Canadian Alpine Ski Team.

### **1.4.3 PROGRAMS WITH FIS POINTS**

The FIS points system targets similar objectives of the National Points System but targets the international level of racer.

## CHAPTER 2

### OFFICIALS PROGRAM

#### 2.1 ALPINE OFFICIALS PROGRAM

The National alpine officials program is a structured and integrated program consisting of four levels of alpine Officials and four levels of Technical Delegates. The program stresses the integration of theory with practice 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 to maintain a level of expertise.

It is essential that Officials be able to provide race organization and exhibit officiating skills that will match the competitors' performance levels and program goals. Competitors have the right to expect that Officials have a high level of expertise so that results reflect the athletes' ability and skills without being compromised by the incompetence of race Officials or "luck".

The following are the basic criteria for certification of the various levels of alpine Officials across Canada as part of the National Alpine Officials program.

##### 2.1.1 Levels of Officials and Course Descriptions

The following list represents the minimum requirements. The PSO Officials Chairpersons can establish higher requirements if desired.

###### Level 1:

This is the entry-level course. It is an overall introduction to race organization and the various Officials positions with particular emphasis on timekeeping and gate judging. There are no course pre-requisites or required experience. Participants will benefit more if they have practical experience.

Course attendance automatically qualifies the participant as Level 1 Alpine Official. Parents of entry level and K1 level racers find this course an excellent introduction to race officiating and in gaining an insight into the racing program as a whole.

###### **Course Description:**

Time required: 3 hours  
Course fee: set by Divisional Officials Chair – includes manual, Officials pin & card  
Pre-requisites: None  
Exam: None

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

Administration	Course	Timing	Jury
Race Chairman	Chief of Race	Chief of Timing and Calculations	Technical delegate
Chief of Administration (Race Secretary)	Chef of Course	Chief of Timing	TD Candidate
Race Office *	Chief of Gate Judges	Starter	Referee
	Gate Judge *	Assistant Starter *	Assistant Referee
	Course Crew	Timer	Start Referee Finish Referee
<b>Event Quality</b>	Chief of Equipment	Timer recorder *	
Chief of Event Quality*	Chief Steward	Chief of Calculation	
Chief of Ski Area Relations *	Steward *	Calculator *	
Chief of Media and Awards *		Finish Controller *	

\* These positions do not qualify for Level III experience.

, Pre-requisites for Level 2 certification:

- Level 1 certification
- Practical experience in carded race **since obtaining Level 1** as follows:  
At least three **different** positions taken from any two different categories:  
*Administration, Event Quality, Course, Timing or Jury* covering at least 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 any of the same positions would cover the qualifications for a Level 2 certification.

### Level 2:

This course is designed as a detailed introduction to alpine ski racing and the roles and duties of various Officials positions. It is a fairly intensive course that does not repeat the material covered in Level 1 and does require some prior knowledge and experience in order that the material covered is absorbed to the best advantage.

### **Course Description:**

**Time Required:** 8 hours including a 1 hour exam. May be done in one day or two evenings.

**Course Fee:** set by the PSO Official Chair – includes course manual, Officials pin and card

**Pre-requisites:** Level I certification and practical experience in at least 3 different Official's positions from 2 different categories that covers a minimum of 8 days race experience.

**Exam:** 1 hour – multiple choice, T/F, and short answers. Open book.

### Level 3:

Pre-requisites for this course are Level II certification and practical experience **since obtaining Level 2** as follows:

- a) Chief of Race and one of the following positions:
  - Chief of Course
  - Chief of Timing and Calculation
  - Chief of Gate Judges
  - Chief of Administration (Race Secretary)
- b) Two assignments as voting/non-voting jury member (other than Chief of Race);
- c) An assignment different from the above at the FIS level excluding the positions with an asterisk on previous page.

The candidates have to attend a Level 3 course and pass the exam.

### **Course Description:**

Time required: 12 hours. Generally given on a weekend but can be given over 4 evenings.

Course fee: set by PSO Officials Chair. Includes manual and course material, Officials pin and card.

Pre-requisites: It is only open to those who have the necessary pre-requisites as detailed above or are identified as being very close to having the necessary practical. Must be recommended by the PSO Officials Chair.

Exam: 2 hour open book exam.

The Level III 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(s). The course is designed for Officials with considerable practical experience. It covers rules to particular disciplines as well as the work and duties of the Jury and Technical Delegate in detail. Also covered are the duties of senior Officials, course preparation, maintenance and setting, as well as calculations of points and penalties. Through out the course, participants take part in many case studies taken from actual experiences and will be asked to make decisions on these as well as participating in Jury decisions.

### Level 4:

In order to become a Level 4 Official, it is necessary to be recommended to the National Officials Committee by the PSO Officials Chair. Level 4 Officials are the most experienced Officials, having showed a superior level of ability. Among the qualifications required of a Level 4 Official are: Level 3 Official with the minimum practical experience in each of the following **since obtaining Level 3 certification:**

- a) Satisfactory performance of the Chief of Race's duties at the FIS level.
- b) Assignment as voting or non-voting Jury member at a race minimum National or provincial level, or at a regional speed event.

- c) Satisfactory performs at a J1 and/or FIS level:  
 1 event assignment as: Chief of Course or Chief of Gates  
 2 event assignments out of: Chief of Administration, Chief of Timing and Calculations or Race Chairman.

**2.1.2 Coaches Admission in the Officials Program**

All Canadian Ski Coaches (CSCF) Level 1 and higher can attend the Level 2 Official course without any other criteria of eligibility.

**Pre-requisite for Referee – Level 2 CSCF and Level 2 Official.**

All Level 3 and/or 4 CSCF coaches can attend a Level 3 Officials course without criteria of eligibility.

**2.1.3 Officials Recognition and Identification**

All officials will receive a National pin and ACA card in recognition of their achieved level.

**2.1.4 Officials Requirements to Maintain Certification**

Upon qualification, the initial period of certification and practical requirements to maintain certification for each Officials level is as follows:

Level 1	Three years	Activity as an Official
Level 2	Three years	Work minimum 4 race days in a 3 year period and an Officials Update every 2 years.
Level 3	Two years	Work minimum 4 race days a year and an Officials Update every 2 years.
Level 4	Two years	Work 4 days a year as a TD or Chief level or to the satisfaction of the Officials Chair. Attend an Officials Update every 2 years.

**2.1.5 Administration of National Officials Program**

The Officials program is managed and maintained by the National Officials Committee. The Committee includes: the National Officials Chair, two Directors-at-Large and PSO Officials Chairs from Alberta, British Columbia, Canada District, Ontario and Quebec. Canada District represents Saskatchewan, Manitoba, Yukon, New Brunswick, Nova Scotia, Newfoundland/Labrador, Prince Edward Island and the North West Territories.

Each PSO Officials Chair maintains records of all Alpine Officials in their region. The Officials record shows the activity of an Official, i.e. what races he/she works at and the positions 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.

### **2.1.6 Required Qualifications To Become A Course Conductor**

The following criteria are required for each level of training:

- Level 1:** Level 3 Official or Level 2 Official with 3 years experience approved by the PSO Officials Chair.
  
- Level 2:** Level 3 Official with 3 years experience approved by the PSO Officials Chair.
  
- Level 3:** FIS, National or PSO Technical Delegate with 2 years experience approved by the PSO Officials Chair.

### **2.1.7 Technical Delegates**

The Technical Delegate (TD) is the person who has advisory control over pre-race and race operation and together with 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.

### **2.1.8 TD 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 requirements for certification at the various levels are:

- a) Regional Technical Delegate
  - Level 2 Officials Certification.
  - Recommended by the Divisional and PSO Officials Chair
  
- b) PSO Technical Delegate – Technical (T)
  - Level 3 Officials Certification.
  - Recommended by the PSO Officials Chair for TD certification.
  
- c) PSO Technical Delegate – Technical/Speed (T/S) -
  - Level 3 Officials Certification.
  - Certified in both Technical and DH and SG events.

- d) National Technical Delegate
  - Level 4 Officials Certification
  - Licensed Divisional TD (T) &/or (T/S)
  - Recommended by the PSO Officials Chair to the National Officials Committee.

The minimum criteria to be assigned as a Divisional/PSO/National Technical Delegate are the following:

- Regional technical race: Level 2
  - PSO technical race and speed event: Level 3
  - National race events: Level 4.
- 
- e) FIS Technical Delegate
    - The first step in entering the FIS TD program is nomination by the PSO Officials Chair and the PSO President then a recommendation by the National Officials Committee to the FIS Commissioner of Canada. If accepted the candidate follows the program outlined in ICR 602.

## CHAPTER 3

### WHAT IS AN ALPINE SKI RACE?

Any ski race is a competition in which racers ski through a set course and the time they take is recorded. The winner is the racer who has the shortest time to correctly pass through the course.

This statement belies the organization and experience needed to stage most races but the principle is the same for all – the fastest racer with the correct passage wins.

For all races, there are three principle groups of Officials on the course necessary to conduct a race

- At the start:** Officials must be able to accurately time when a competitor leaves the start and ensure that it is done according to the rules.
- Along the course:** Officials must ensure each competitor correctly passes through the gates and the course is properly set up and maintained.
- At the finish:** Officials must accurately record the time of the finish for each competitor and ensure it is done according to the rules.

Other essentials, common to all races include:

- That the course is prepared and the track is laid out in advance of the competition.
- There must be competent personnel to do all the documentation prior to the race and produce the results.

### 3.1 TYPES OF RACES

Alpine racing has four main types of events:

- Slalom
- Giant Slalom
- Downhill
- Super G.

In addition, there are variations of Slalom events such as parallel events.

Relative course layouts and technical criteria of are outlined on the following pages:

#### **Slalom (SL)**

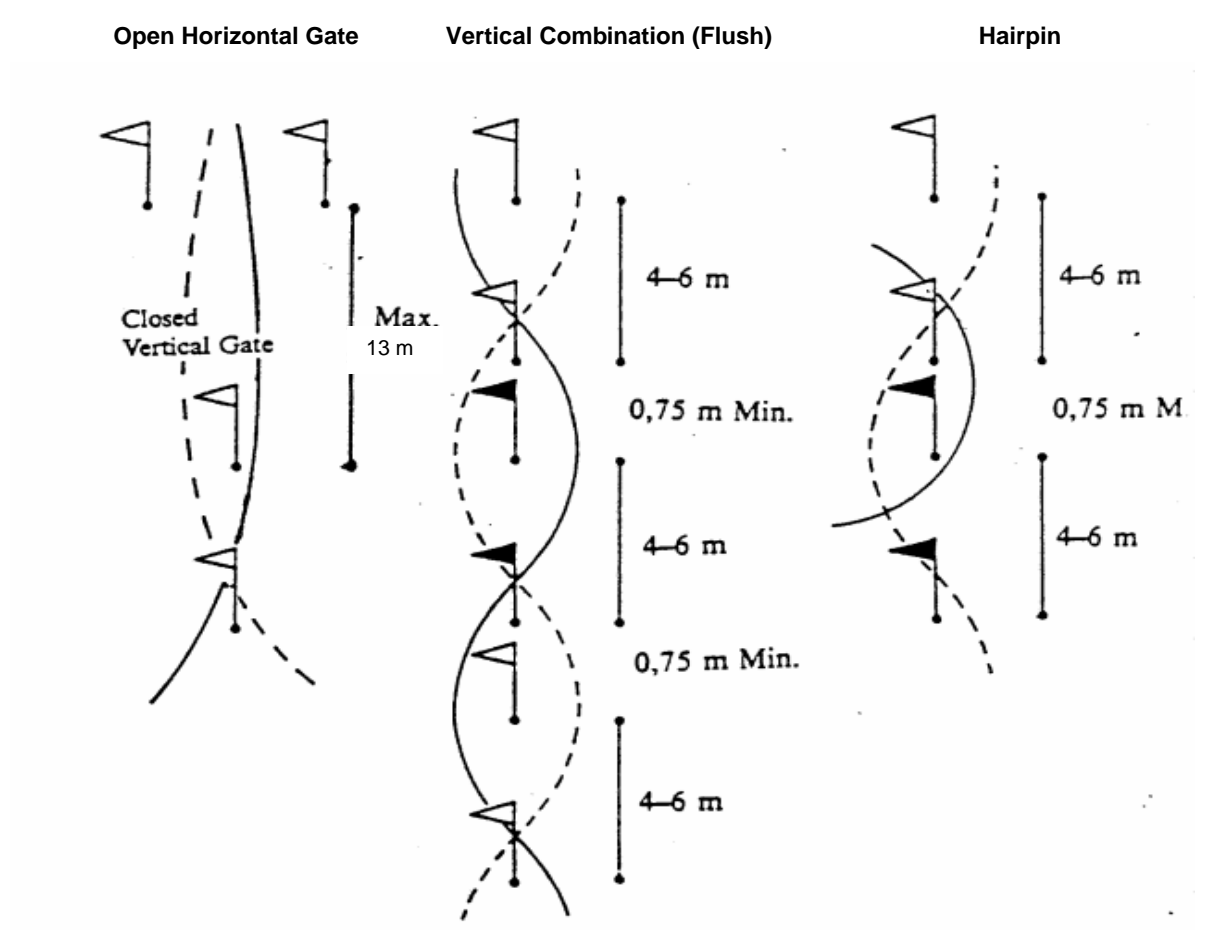
In Slalom, the competitor must follow a tight course defined by pairs of single flagged poles called “gates”. A slalom race is normally held on a fairly short but steep hill.

Racing is mostly down the fall line with a combination of open (horizontal), closed (vertical) or sidelong (diagonal) gates. The gates are narrow (4 to 6 meters in width) and close together (0.75 to 13 meters apart). Considerable turning skills are required by the competitor to safely negotiate the course.

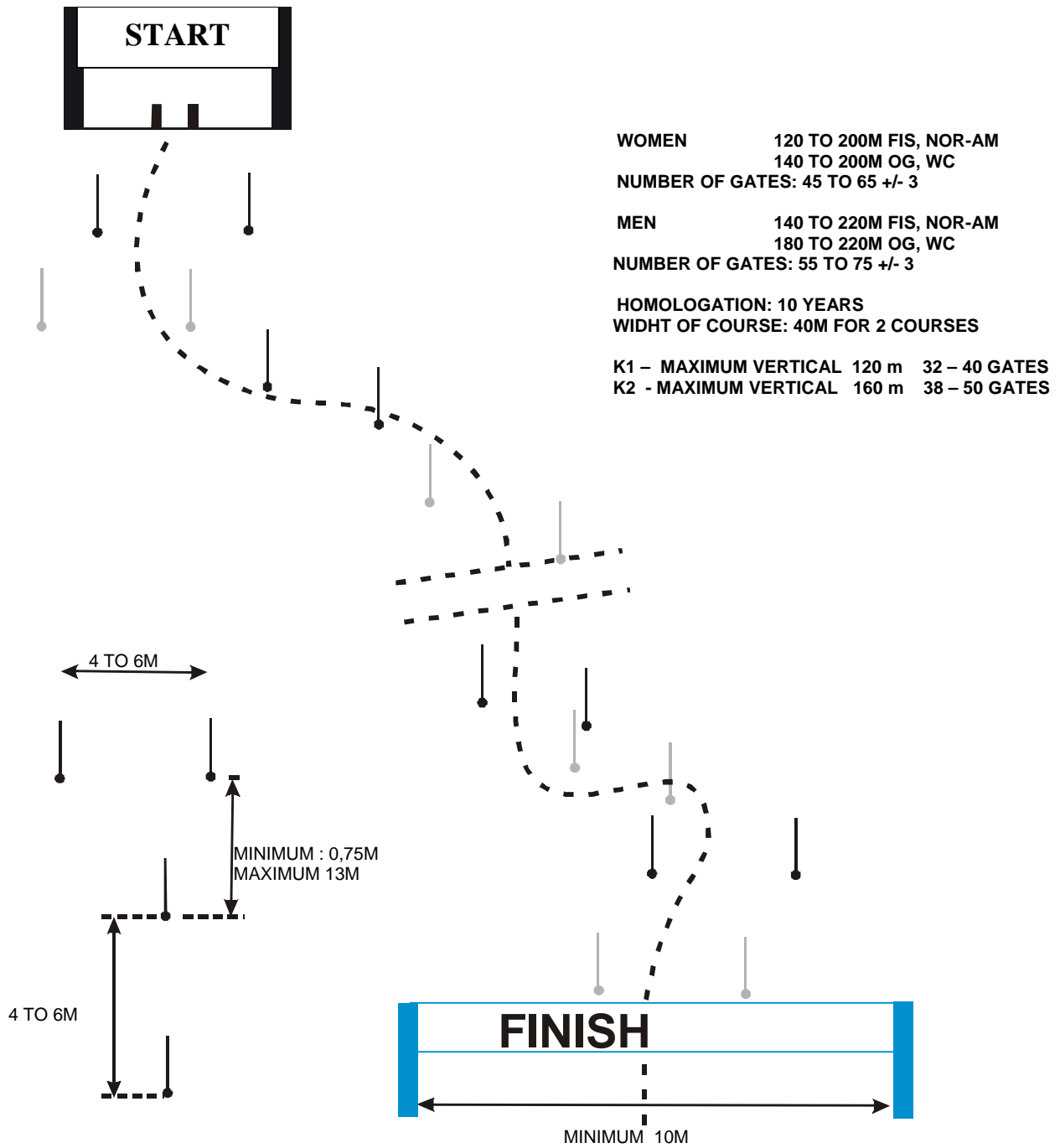


A slalom course must contain two sets of a combination of gates. These are known as: a) vertical combination or flush and b) hairpin combination. A good slalom course allows a racer to combine speed and a wide variety of technical skills and ski technique.

The typical slalom gate combinations are illustrated below.



**FIGURE 3.2 - THE SLALOM**



## **Downhill (DH)**

In this competition, the racer must demonstrate excellent skiing technique, agility, concentration, marked endurance and physical fitness as well as courage at high speed. The downhill course is the longest in alpine skiing competitions. The vertical drop varies from 500m to 1100 m., the terrain is varied and the gates are set to control and to direct the racer instead of demanding turning techniques. There are no gate combinations and the gates are wide and open to the racing line. Thus, speed is significant and safety measures must be taken to ensure the racer is protected in case of a fall. Training runs are obligatory before the competition.

Figure 3.3 illustrates a typical downhill course

## **Giant Slalom (GS)**

This is a race event combining both slalom and downhill characteristics. The course is moderately long and preferably undulating and hilly with a vertical drop between 250 to 400 m. Turns are a variety of long, medium and short turns set considerably faster than Slalom but still not approaching the speed of Downhill. The gates are set further apart than in Slalom but are needed to control the speed as well as to demonstrate the turning skills of the racer. The gates in Giant Slalom are double-pole gates, as in the Downhill, however with smaller flags and alternating colors between blue and red.

Figure 3.4 illustrates a Giant Slalom course.

## **Super G (SG)**

Super G derives its name from Super Giant Slalom implying that the course is both longer and faster than the regular giant slalom. Speed in some straighter stretches of the course may equal those of Downhill speed. The gates are set so they require more turning technical skills than in the Downhill but less than in the Giant Slalom. The Super G is a hybrid between Downhill and Giant Slalom. Because the speeds reached are high, the course is often traced on a course used for Downhill; however with a lower start position because the necessary installations to ensure the racers safety are the same. Flags alternate red and blue in color

Figure 3.5 illustrates a Super G course.

FIGURE 3.3 - D

MEDICAL CONTROL

CONTRÔLE MÉDICAL



START



WOMEN  
MEN

500 TO 800M  
500 TO 1100M FIS  
650 TO 1100M NOR-AM  
800 TO 1100M OG, WC

ONE TRAINING RUN OBBLIGATORY

HOMOLOGATION: 5 YEARS

SAFETY FIRST  
No limit for the maximum



1M

HELICOPTER



HÉLICOPTÈRE  
MEDICAL

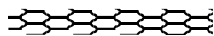


SORTIE DE PARCOURS POUR LE MEDICAL

WILLY BAGS  
FENCING



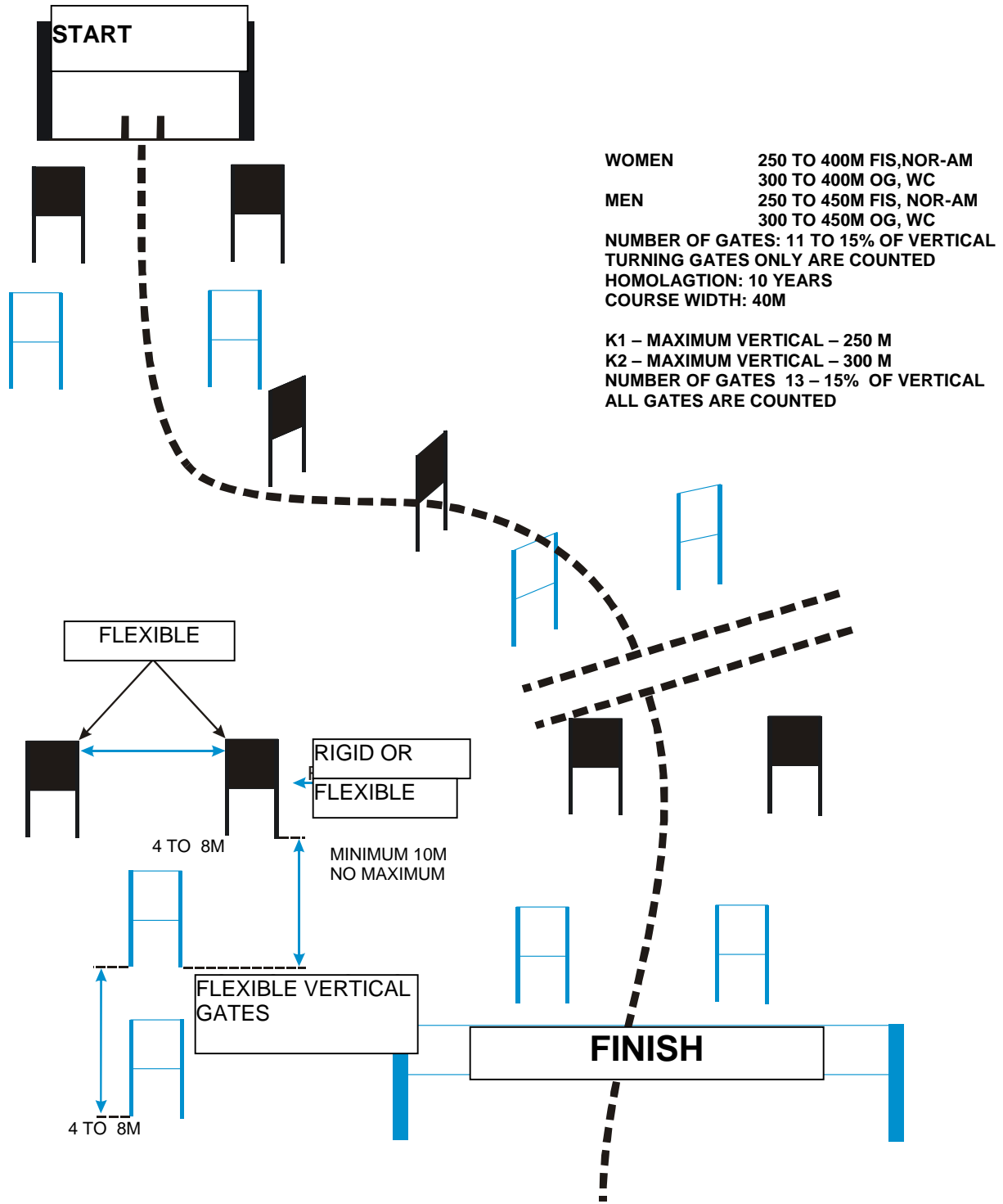
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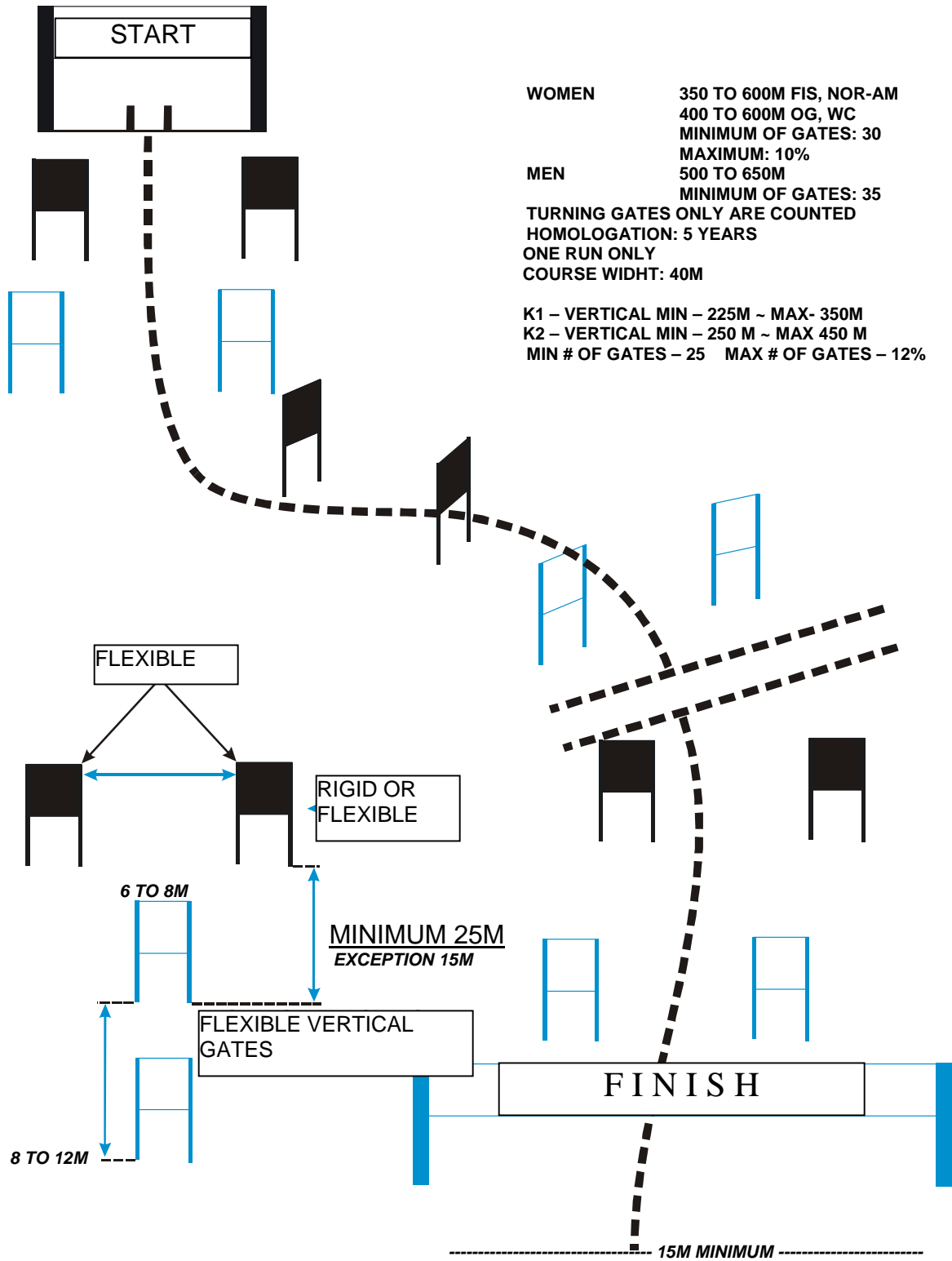
COMMUNICATION

FINISH  
15M MINIMUM  
ARRIVÉE

**FIGURE 3.4 – GIANT SLALOM**



**FIGURE 3.5 – SUPER G**



## 3.2 THE RACE COURSE COMPONENTS

There are three main areas of the race course: **Start, Course and Finish.**

### 3.2.1 The Start

Figure 3.6 illustrates a start area including the warm up area, the start ramp and the start gate.

**The Warm up area** is an area delimited by rope or fencing provided for the convenience of the racers and their coaches so they can prepare for the race without interruption.

**The Start Area** must be large enough to allow the racer to stand relaxed at the starting line. It must also be large enough to contain the racer, any required Officials and the competitor's coach.

**The Start Ramp** must have an angle of approximately but not greater than 45 degrees, steep enough to give the racer rapid acceleration. If needed, the ramp can be iced using salt and/or water. A shovel is an essential tool for the constant maintenance of the start ramp.

**The Start Gate** consists of two posts (4"x4"), which mark the start line. They should be solidly anchored and iced in place. Also, a solid base should be provided for the racer to stick his ski poles in front of the start gate. The racer's feet must stay behind the starting line until the start signal is given.

The start wand is mounted on the posts set approximately 60 cm apart and not greater than 50 cm above the snow line. The wand itself should be placed approximately at mid calf height of the average racer.

The following Officials must be present at the start:

**The Starter:** is the person responsible for giving the correct start signal to each racer. In collaboration with the Chief of Timing, the starter must make sure of the accuracy of the start interval between signals.

The start intervals are as followed:

**GS, DH, SG**

**SL**

10 seconds

Racer ready

(9)

GO

(8)

(7)

(6)

5

4

3

2

1

GO

Can go 5 seconds before and up to 5 seconds after “ Go ”

Must go within the 10 sec. following “ Go ”

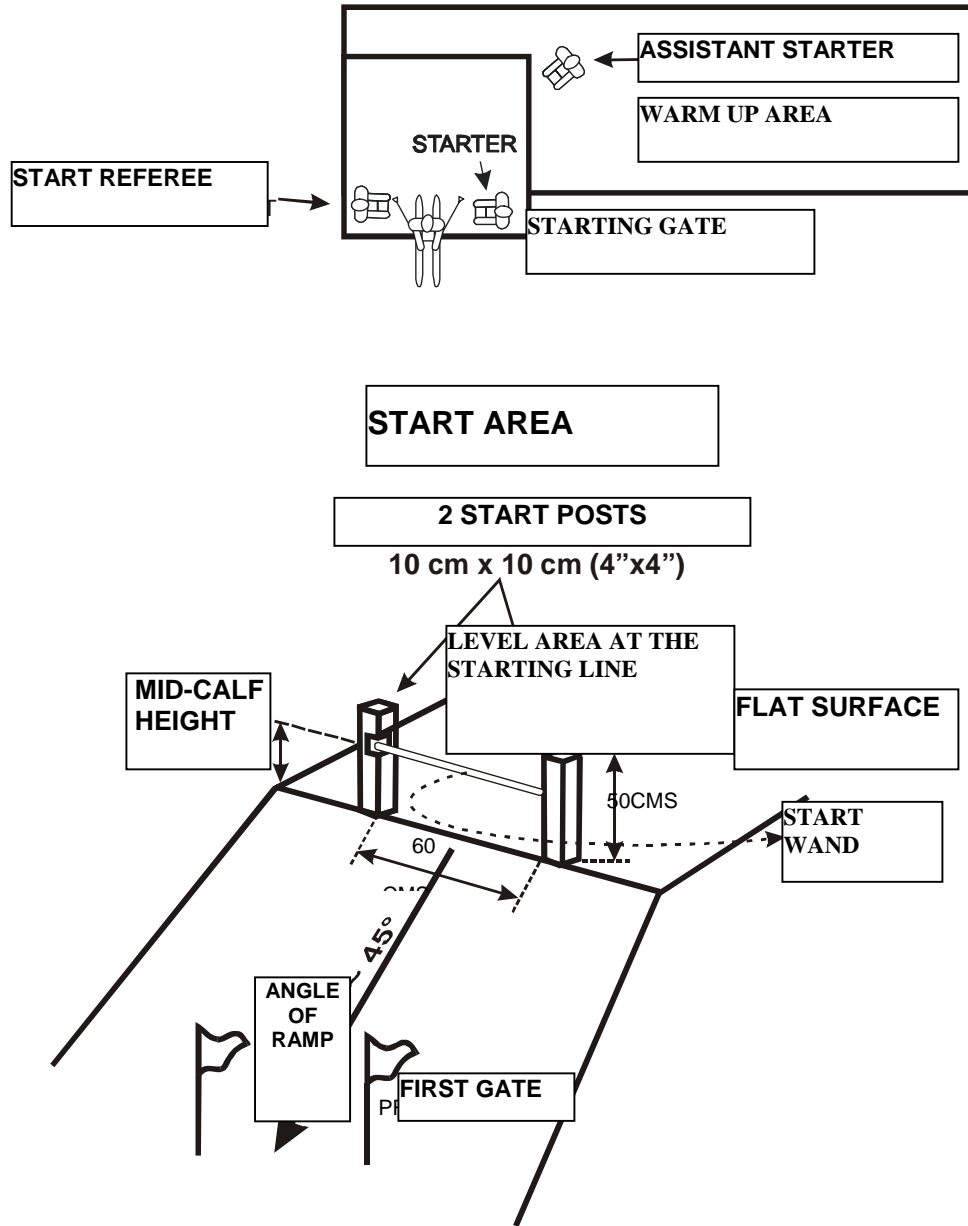
**The Assistant Starter:** is responsible for calling the racers to the start area in the correct starting order.

**Start Referee:** makes sure all racers start according to the established rules, have the required equipment and the physical and psychological capacities to race.

**The Manual Timer:** times and records the precise starting time using time of day timing (hand timers). The way to do it is described in detail in the section 4.4.5



**FIGURE 3.6 – START AREA**



### 3.2.2 The Course

A well-prepared course is essential for a good race. The more firmly and uniformly packed the snow is, the better the course will be. An area used by recreational skiers usually provides a good base to work with and the moguls can be easily be removed prior to the event. The amount of time and effort assigned to course preparation will depend on the manpower available as well as the cooperation and assistance from the ski area operators.

Before race day, the snow on the course must be made as firm and smooth as possible. Under most conditions, it will take at least 12 hours for re-worked snow to set properly.

Planning and cooperation with the area personnel are essential for getting a well-prepared course. In order to ensure fair conditions for all racers, sufficient and proper course maintenance is required throughout the race. The better the pre-race preparation has been, the easier the course maintenance will be during the race.

As with all other race operations, course maintenance is easier, more enjoyable and more effective if it is properly organized and there is good leadership and coordination. Course crew rotation on the course is generally the most successful.

A knowledgeable course leader should lead the crew. Essential equipment for course maintenance to correctly upkeep the course include rakes, shovels, drills, poles, gate keys and a tiger torch, to name a few.

For all races, a course must be set. This is done by a **Course Setter** who is experienced in ski racing and both trained and competent to set a course. In Slalom, the course should require precise skiing but at a level where the majority of racers can complete it successfully. In Giant Slalom, the course must be flowing, with a good rhythm and down a not too steep hill in order to get the racers down with controlled speed. Setting for Downhill and Super G requires an excellent understanding of the terrain involved, of the potential for safety equipment and the safe control of speed.

The Course Setter is a very important person. Good course setting can make the race enjoyable for all participants, with a high completion rate. No one appreciates a race, which is technically too difficult for the competitor.

Ideally, the course should be set the day before the race to allow enough time to complete preparation, including flagging, numbering and the dyeing of the gates on race day.

As mentioned earlier, the racer must correctly pass through the gates down the course. Individuals who decide if a racer has correctly crossed the gate line are the **Gate Judges** who are positioned along the course, in strategic positions that allow them to evaluate whether racers properly passed through each gate. It is a very important role whose duties are described in Section 4.4.7.

### 3.2.3 The Finish

A typical finish area is illustrated in Figure 3.7.

Set up of finish area is illustrated in Figure 3.8

Finish timing equipment is illustrated in Figure 3.9

The preparation of the finish area is also very important. The run out area must be large and its surface must be firmly and smoothly packed as the racer is coming through the finish line at a high speed.

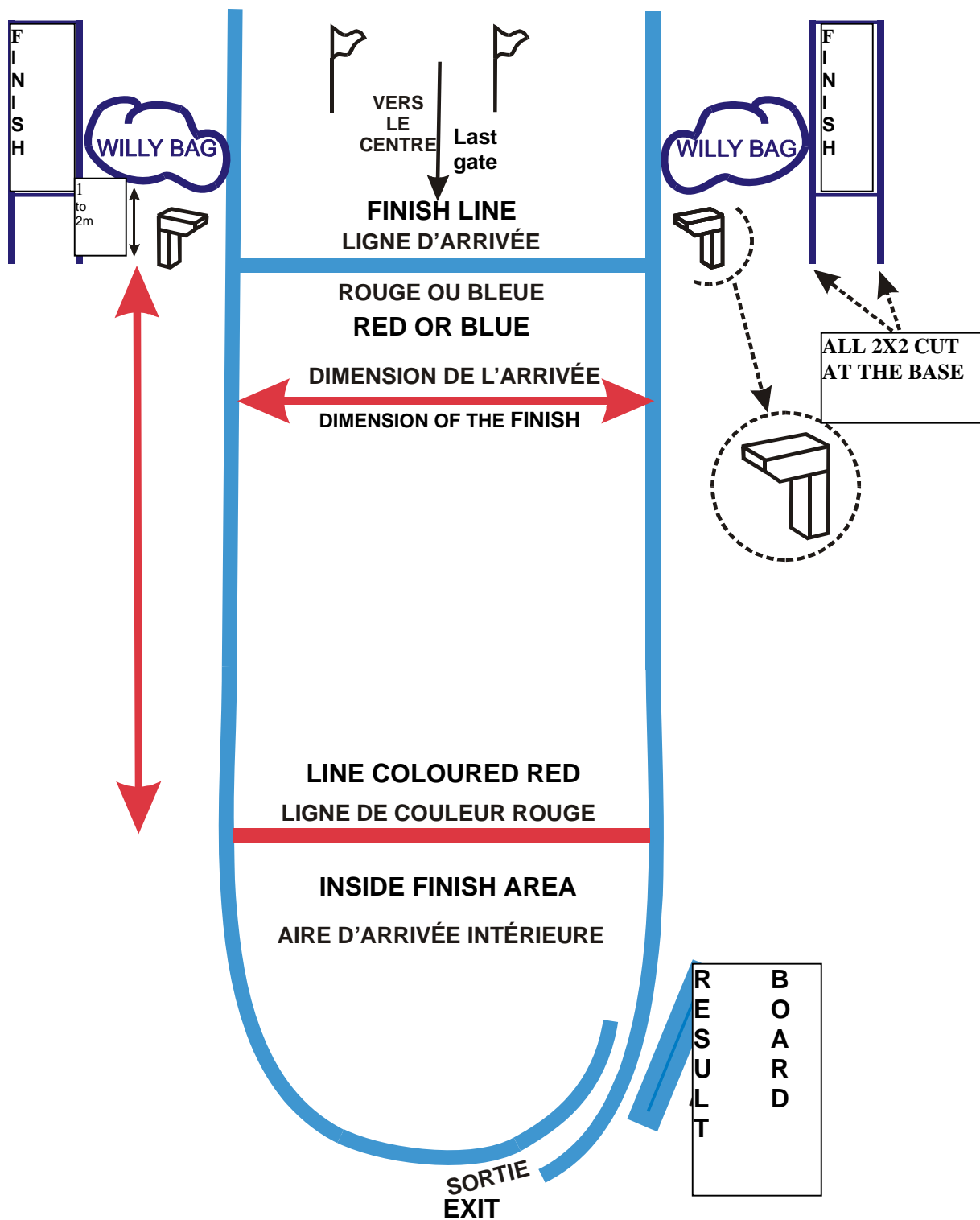
The finish posts (maximum 2"x2" cut at 50 %) on which timing beams and finish banners are fixed and must be well padded. Willie bags, insulation bales or hay loosely packed may be used for protection. **Hay bales are forbidden.**

The Finish Area must be fenced to protect the racer against the intrusion of the spectators, skiers, animals, etc. The scoreboard must be located out of the way of the finishing racers. Note that the last gates are set up in a way to direct the racer towards the center of the finishing line.

The Officials at the finishing line are:

<b>Electronic Timer:</b>	Is responsible for the electronic timing and recording all the racers' times.
<b>Manual Timer:</b>	Times and/or records the exact finishing time using time of day timing.
<b>Recorder:</b>	The procedure is described in details in the Section 4.4.5.
<b>Bib Collector:</b>	Collects bibs from the participants at the end of the race.
<b>Finish Referee:</b>	Stands in the Finish Area, downhill from the finishing line; makes sure that all racers cross the finishing line in accordance to the rules; on 2 skis, 1 ski or no ski; notes on his/her start list racers who have crossed the finishing line; clearly notes, racers who have not crossed the finishing line (DNF); clearly notes, the disqualified racers for their irregularity in the crossing of the finish line (DSQ); can disqualify a participant who has committed an irregularity in the last gates before the finish; receives requests for reruns, makes sure that the participants have a sportsmanlike conduct in the Finish Area.
<b>Scoreboard Operator:</b>	Posts the unofficial times of each racer on the scoreboard as soon as they are known.

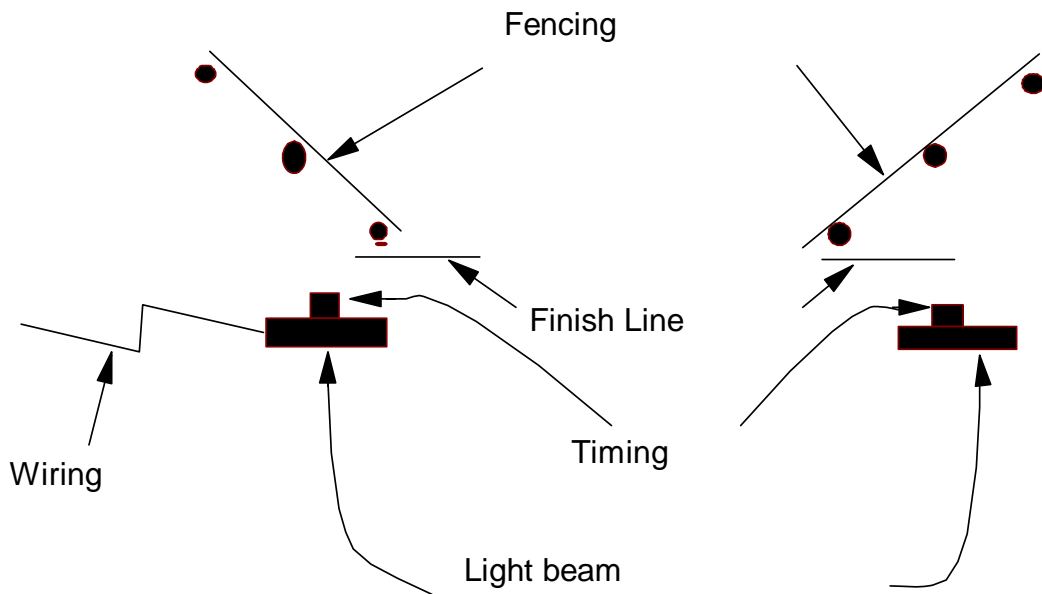
**FIGURE 3.7 - FINISH AREA**



The finish posts holding the finish banner should be at least the minimum distances for each respective discipline:

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

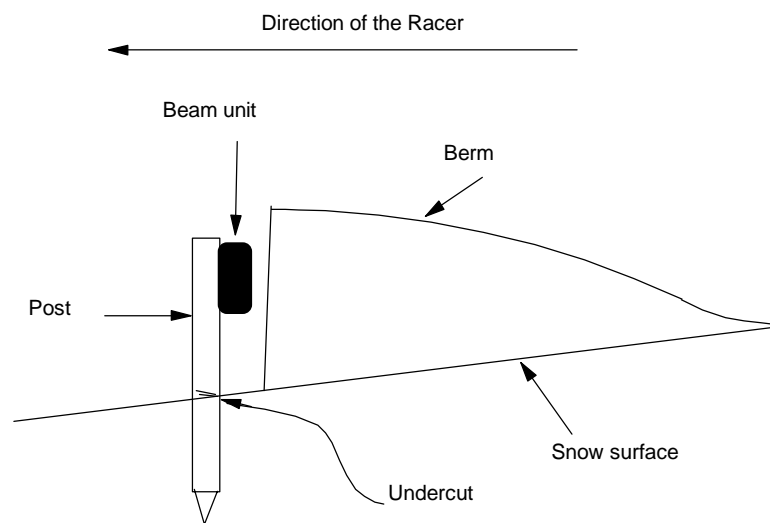
FIGURE 3.8 FINISH AREA SET-UP



The finish timing equipment is mounted on posts at the finish line and some points must be observed:

1. The posts should be cut or pounded into the snow so they are no higher than necessary.
2. The post should be at snow level almost all the way through on the uphill side so if the skier does impact them, the post will break. See Figure 3.9.
3. Berms can be built in front of the posts with snow, so the skier will hit the snow rather than the posts. The berms are sloped/tapered to provide a gentle bump that skiers can slide over.

FIGURE 3.9 FINISH TIMING POSTS



# **CHAPTER 4**

## **RACE ORGANIZATION**

### **4.1 PLANNING FOR A RACE**

Holding an alpine ski race requires work - the exact amount depends of course on the level of the race. But, the satisfaction gained from being part of a successful ski race will make the effort very worth while.

What factors must be considered in making the decision to hold a race?

- Do you have a race track available for the caliber of race you wish to organize?
- Will the weather and snow pack be suited for the race (as far as can be ascertained)?
- Do you have permission and cooperation from the ski resort management to hold the event?
- Do you have sufficient qualified personnel to organize, prepare and operate the race?
- Do you have sufficient equipment (poles, flags, timers, bibs, etc.)?

If all answers are affirmative, the next step is to appoint a Race Chairman of the Organizing Committee and start organizing the race.

### **4.2 ORGANIZING COMMITTEE**

The number of people required to organize and run a race will depend on the level of the race event to be held. A major event such as a World Cup will require hundreds of volunteers, but a PSO race may be done with 40 to 50 volunteers.

**Key officials' duties** are summarized below. They will be covered in detail as the different aspects of a race organization are presented.

<b>Race Chairman of the Organizing Committee:</b>	Manages all non-technical committees or work groups of the organization until the end of the race.
<b>Chief of Race:</b>	Responsible for all safety and technical aspects of the race.
<b>Chief of Administration: (Race Secretary)</b>	Responsible for all records, the draw, registration of racers, bibs, paperwork and results production.
<b>Chief of Course:</b>	Supervises the on-hill arrangements such as the preparation and maintenance of the course, course setting, course marking, flagging, gates numbering, dismantling the course and course cleanup, etc. Works with the Course Setter.
<b>Chief of Timing and Calculation:</b>	Supervises all timing systems (electronic, manual), communications and calculations, plans and sets up all timing and communication systems, oversees timers, recorders, starters, calculators and spotters.
<b>Chief of Gate Judges:</b>	Organizes and supervises the Gate Judges.
<b>Chief of Equipment:</b>	Responsible to provide all the necessary equipment to prepare and operate a race.
<b>Chief of Stewards:</b>	Responsible for the control of spectators, recreational skiers and first-aid coverage.
<b>Chief of Event Quality:</b>	Responsible for coordinating the race with the Ski Area, arranging the awards and media promotion & relations.



## 4.3 PRE-RACE ORGANIZATION

### 4.3.1 Race Notice

For all race levels, a race notice is necessary if competitors from outside the host club participate. This notice can be simple or very formal and detailed for a higher level race. Preparation of the Race Notice is the responsibility of the Chief of Administration (Race Secretary). It should be distributed at least 3 weeks in advance of the race event.

There is certain basic information to include in a Race Notice:

- a) Name, date and location of the event.
- b) Location and registration time.
- c) Number of competitors, specifying qualifications or restrictions on competitors' eligibility
- d) Pertinent race information related to:
  - i) Schedule of events
  - ii) Starting time
  - iii) Special regulations
- e) Race entry cost
- f) Cost of lift tickets & complimentary or purchase tickets for Coaches
- g) Location and time of Team Captains meeting and the draw
- h) Registration procedure and deadline
- i) Location of the race headquarters
- j) Names and telephone numbers of the key contact individuals

### **4.3.2 The Coaches Meeting and the Draw**

The coaches meeting ~ also known as the **Team Captains meeting** gives the visiting coaches an impression of the organizer's attitude toward the race, the planning and race organization. No matter how small or informal, the Coaches' meeting is a valuable tool in a well organized race. The time and location is announced on the race notice. The agenda should be prepared in advance by the Chief of Race and confirmed by the Technical Delegate. Items covered at the meeting include: payment of race entry fees, issuing of lift tickets for the competitor's and coaches, details concerning the race, review of the rules, finalization of the Jury, selection of the course setters and the draw.

Grouping and the draw are procedures used to establish the competitor's starting order. The goal is to enable skiers of almost equal abilities to compete as near as possible under equal or similar weather and course conditions so a fair test of skills will occur.

The type of race will determine the method for grouping and drawing, however the basic principles remain the same. Competitors are grouped and then drawn within the group. For the race, competitors are arranged in order of current "seeding points" i.e. the competitor's National points or FIS points that are valid for that particular race. The first 15 are drawn, the remainder run in order of points. Those without points form another group that is drawn at the end.

There are different methods of completing the draw. The drawing methods vary at World Cup, FIS and PSO races, the simplest being by random computer draw.

### **4.3.3 Bib Distribution**

Bib distribution can take place following the draw. Bibs are organized into clubs or teams and given to the coaches upon payment of a bib deposit fee. At divisional level races bibs can be distributed the morning of the race. Start lists should also be available to the coaches so they can give the correct bib number to each of their athletes.

## **4.4 FUNCTIONS OF RACE OFFICIALS**

In section 4.2, the various key Officials required to operate a race were identified. The number of Officials vary considerably with the caliber of the race.

With this premise in mind, let's now focus on the functions of race Officials, keeping in mind that many of these positions can be combined in a small race as long as all the responsibilities are covered.

#### **4.4.1 Chief of Race/ Race Chairman**

For a PSO race, the Chief of Race and Race Chairman can be merged. Leadership skills of the Race Chairman include the ability to wisely choose the subcommittee Chiefs and get the best effort from each of them. The role of the Chairman is to manage all the committees (except the ROC) from their inception to the completion of the event.

The Chief of Race must possess good technical knowledge and be able to advise on all the technical operations of the race. Moreover, he/she must be a good organizer, capable of obtaining the most from the organizing committee.

As a Chief of Race, he/she directs and controls the technical work of all the Officials and presides over meetings on all technical matters. He/she is responsible of the medical and crowd control facilities. In larger races, a Chief Steward will be responsible for this aspect of the race but in smaller races this is a direct responsibility of the Chief of Race. In fact, the Chief of Race assumes responsibility for all the duties of any other Chief positions that are not appointed. He/she also are a member of the Jury and works closely with the Technical Delegate and other Jury members.

#### **4.4.2 Chief of Event Quality**

With the assistance of the Chief of Ski Area Relations and Chief of Awards & Media Relations will ensure the following are covered:

1. Setting up race dates with ski area, communication regarding local race rules, and monitoring of racer activity in the day lodge or public areas throughout the race.
2. Arranging logistics of lift tickets, installation of banners and other promotional material.
3. Arrange public relations, location of PR areas, results to media, arranging the awards ceremony.

#### **4.4.3 Chief of Course**

The Chief of Course must have good technical knowledge, know the race rules and race course requirement. He/she will be responsible of all the key factors that will directly affect the success of the race and the conditions under which the racers race.

He/she must be familiar with the snow conditions of the area and have sufficient experience and knowledge to be able to make the correct decisions in poor snow or weather conditions.

He/she is responsible for the preparation of the course and its maintenance throughout the race. It is imperative that the Chief of Course has adequate course crew for the above tasks. He/she is responsible for the course marking, including direction marking and marking pole positions as well as providing the course setter with assistance and all the necessary equipment in order to be productive. This includes having a sufficient number of people available to make course setting go as quickly as possible. He/she must provide all the required equipment for numbering and flagging the gates.

He/she must also take care of the preparation of the start and finish areas.

The Chief of Course must make sure that the course crew is well prepared and have course crews available during any race holds.

#### **4.4.4 Chief of Equipment**

In larger races, this is a designated Chief position but generally at lower level races the various other Chiefs do the duties. The list of equipment will serve as a guide for the requirements of the race. Items include: gates both flex and bamboo, gate flags, dye, gate numbers, stop watches, radios, fencing, poles, course protection equipment, rakes, shovels, fertilizer, drills, gate keys, wedges, scoreboard, stationary supplies, office equipment, gate judge equipment etc.

#### **4.4.5 Forerunners**

Before the race starts, forerunners must ski through the course. A forerunner must be capable of skiing the course at racing speed. They set the line and provide information on course conditions to the Officials. It is very important that forerunners are qualified and provide information on course conditions to the Jury. A minimum of 3 forerunners are required for each race.

#### **4.4.6 Timing and Starting Personnel**

The start and finish personnel work as a team to start the racers and to record the finish time of each racer. There are many variations concerning the equipment and the personnel available. Some methods are illustrated below.

In all cases, the starter is responsible for giving the correct start to each racer. The assistant starter is responsible for arranging the racers in the correct starting order.

## 1. Electronic Timing

Electronic timing is mandatory for all carded races. In FIS races, it is mandatory to use two electronic timing systems. The timing systems requires two pairs of wires be in place from the start to the finish to carry both the timing signal and communications between the areas, the start wand, finish beam with reflectors and a timing unit to receive and process the start and finish signals.

Many models of electronic timers are available.

The principles of timing are the same. The starter gives the start signal. When the racer moves the start wand, the circuit is broken and the start signal is sent to the timing machine. When the racer breaks the light beam at the finish the circuit is again broken and the finish signal is sent to the machine which calculates the elapsed time of the racer.

## 2. Hand Timing & Time of Day Timing

This method is used primarily as backup timing for the electric timing systems. Hand timing is mandatory in all carded races.

The watches required for hand timing are called "splits". They are different from single event stop watches in that when the split button is pressed after the watch is started, the display is frozen to allow the display to be read and recorded. At the same time, the watch is still running internally. When the split button is clicked again it shows the total time that has elapsed since the watch was first started.

In this method, the manual start timer and the manual finish timer start their watches simultaneously approximately 30 minutes before the race. The start timer presses the split button each time a racer starts and the reading is recorded. When the racer crosses the finishing line, the finish timer presses the split button and records the reading. The difference between the start and finish reading is the time the racer took to complete the course. In hand timing, times are measured only to the 100<sup>th</sup> second. 1000<sup>th</sup> of a second, even though displayed on the watches are not used.

Here is a calculation example:	Start Time:	01:01:48.01
	Finish Time:	<u>01:01:01.69</u>
	Time:	46.32

**The above personnel and functions are under the supervision of the Chief of Timing and Calculations. This person is responsible for the coordination of the start and finish personnel, including timing, calculations and the scoreboard.**

#### 4.4.7 Chief of Administration (Race Secretary)

Racing involves considerable paperwork, most of which is the responsibility of the Chief of Administration, previously known as the Race Secretary. This person is responsible for sending the race notice, taking minutes at all race committee meetings, Jury meetings and Team Captain's meetings, handling all correspondence, receiving all entries and race entry fees, preparing the draw cards, preparing start lists, distributing and collecting bibs as well as giving out information.

He/she is also responsible for the preparation and the distribution of the results.

This is a very demanding job that requires excellent organizational and administrative skills as well as good knowledge of the many different aspects of race organization.

The Chief of Administration's duties and responsibilities are covered in the Level 2 course.

#### 4.4.8 Gate Judges and Chief of Gate Judges

The Chief of Gate Judges is responsible for recruiting, training and organizing sufficient Gate Judges for the race. He/she should be prepared to undertake any training of Gate Judges prior to the race and issue them with a clear and concise set of instructions of their duties. He/she must place each Gate Judge in a strategic position to perform their duties and designate the gates they are responsible for.

Each Gate Judge must be easily identifiable. They must have with them all the required material to perform their duties: clipboard with cover, Gate Judge cards, pencils and a start lists. Each Gate Judge is issued with a GJ card for each race and instructed in the proper method of filling in the card.

During the race, the Chief of the Gate Judges must continually work with the Gate Judges to ensure that the team members perform their duties effectively. He/she should also make sure of their comfort.

The Gate Judge is the most important official during the race and only through efficient gate judging will a race be successful. A Gate Judge is responsible for judging the passage of each competitor through the gates and deciding whether the passage is correct. If there is any doubt the advantage must always go to the competitor. Incorrect passage results in disqualification.

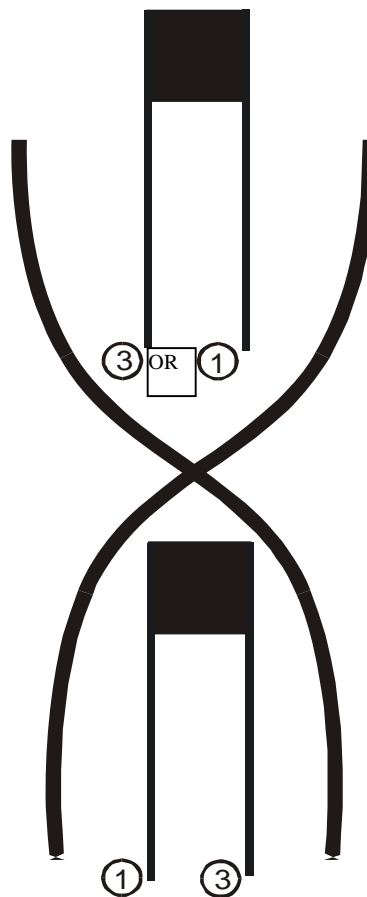
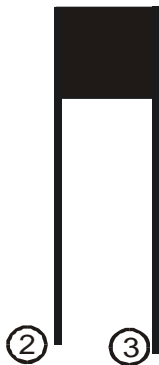
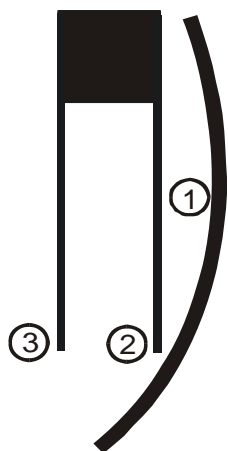
What constitutes the correct passage of the gates?

**A racer's boots and ski tips must cross the imaginary line that joins the two poles of the gate in either direction.**

The following drawings illustrate different situations where the passage is correct.

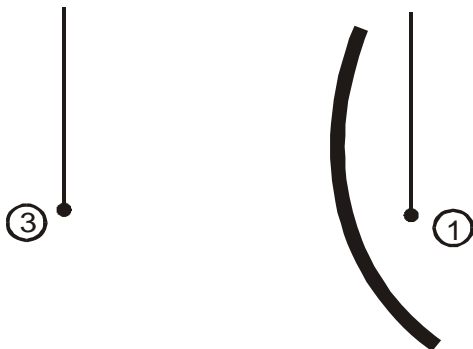
A GATE IS CORRECTLY PASSED WHEN BOTH SKI TIPS AND BOOTS OF THE RACER HAVE CROSSED THE GATE LINE.

- 1- TURNING POLE
- 2- INSIDE POLE
- 3- OUTSIDE POLE



THE GATE LINE IN DOWNHILL, GIANT SLALOM AND SUPER G, WHERE A GATE CONSISTS OF TWO PAIRS OF FLAGGED POLES AND THE IMAGINARY LINE IS THE SHORTEST BETWEEN THE TWO INSIDE POLES. EX 2 AND 2

THE GATE LINE IN SLALOM IS THE IMAGINARY SHORTEST LINE BETWEEN THE TURNING POLE AND THE OUTSIDE POLE. TURNING POLE - 1 OUTSIDE POLE - 3



The racer may dislodge or knock down a pole when passing through the race course. However, all turning poles locations are marked with dye (the same color dye at each gate for each race) and should always serve as a reference point.

If a pole is displaced both feet and ski tips must pass on the inside of the poles marked position. Straddle of a gate is a disqualification.

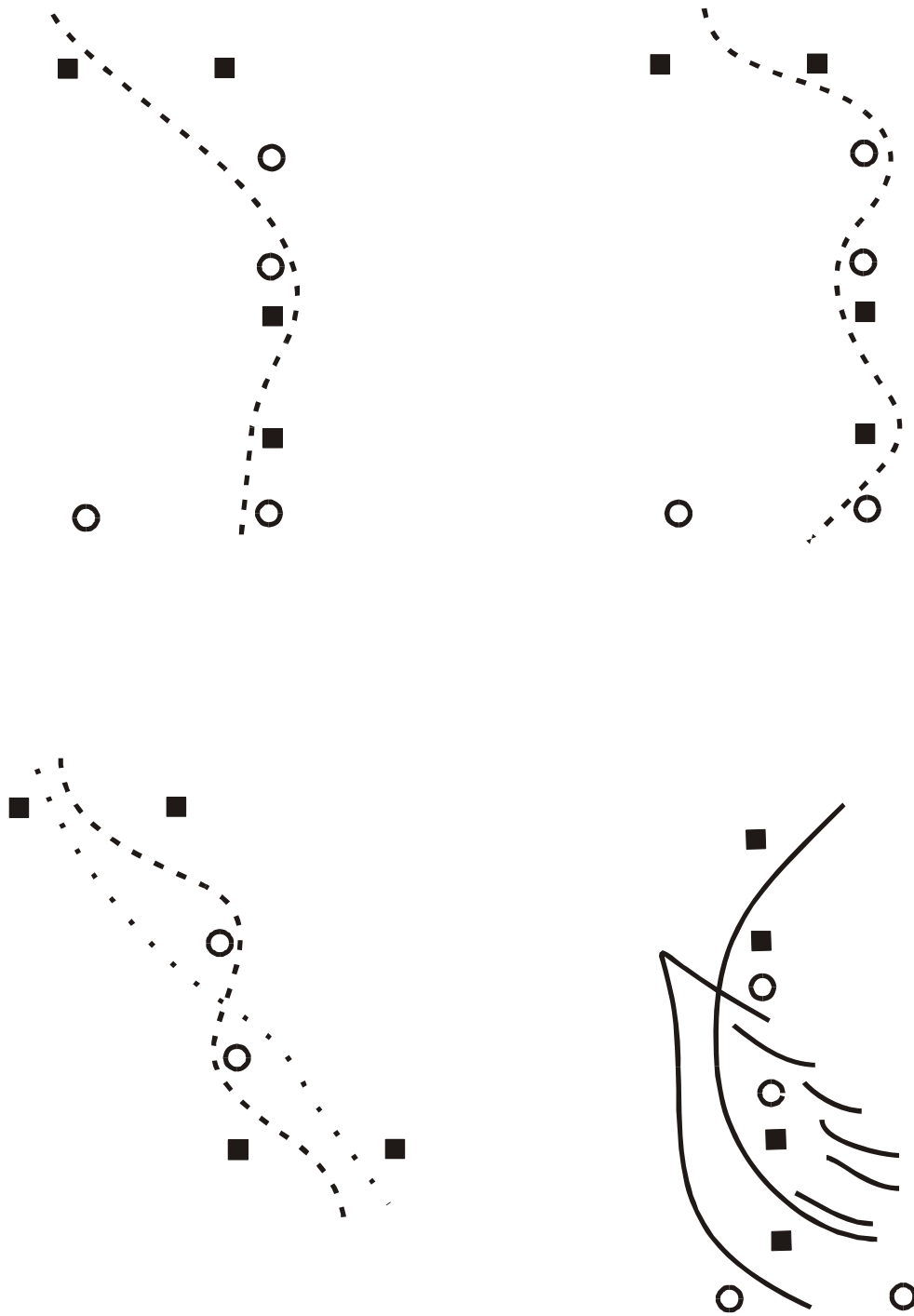
As long as **both feet** and **ski tips** cross the imaginary line between the pole locations, the racer's passage is correct even if he/she:

- a) Knocks down one or both of the gates;
- b) Slides through the gate on some part of their body other than their feet;
- c) Temporarily loses one or both skis;
- d) Hikes back up to a gate and crosses the line between the gates;
- e) Passes through the gates out of their numerical order.

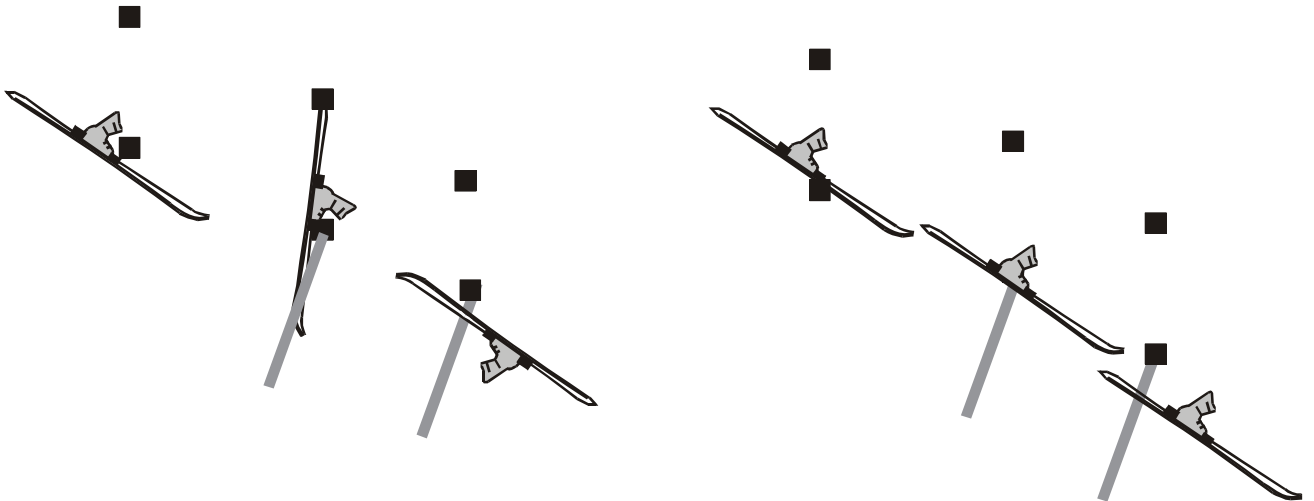
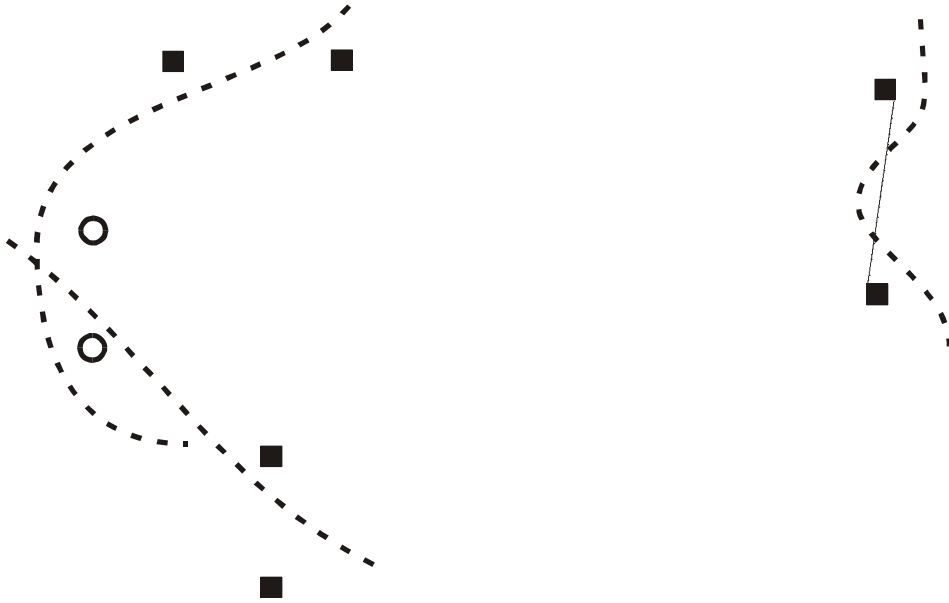
Examples of legal and incorrect passages are illustrated on the following pages.



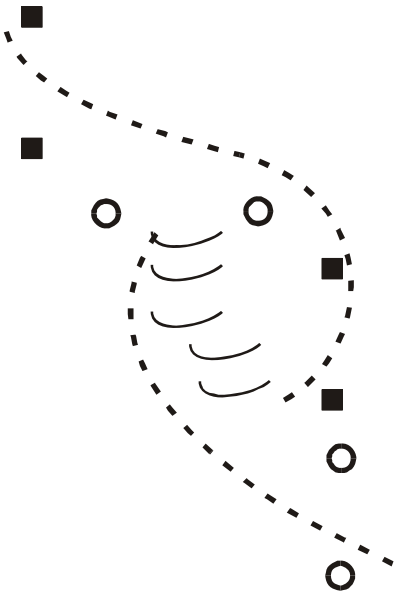
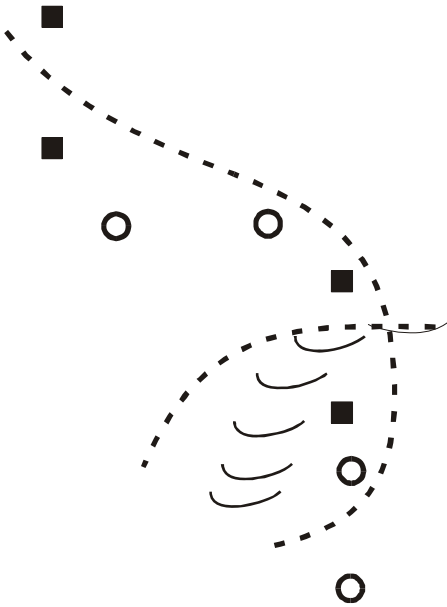
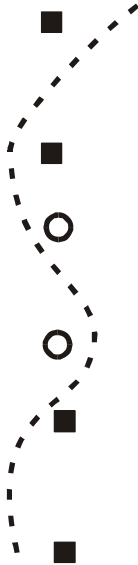
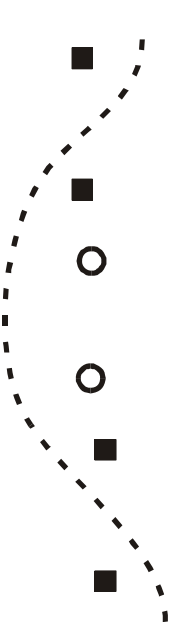
**FIGURE 4.5 a - EXAMPLES OF LEGAL OR CORRECT PASSAGES**



**FIGURE 4.5 b - EXAMPLES OF LEGAL AND INCORRECT PASSAGES**



**FIGURE 4.5 c - EXAMPLES OF ILLEGAL OR INCORRECT PASSAGES**



A racer having made an error or fallen can ask the Gate Judges what his/her status is. The Gate Keeper must then answer clearly and assertively:

**“GO”**

(If the racer has passed the gate correctly);

Or

**“BACK”**

(If the racer has committed a disqualification or fault)

**A racer should not receive assistance of any kind.** Any outside assistance may result in sanctioning of the competitor.

Each Gate Judge should wear some means of identification such as a vest and be supplied with a Gate Judge card for each of the races. The Chief of Gates must ensure the Gate Judges are instructed to fill in the card correctly.

The Gate Judge must fill out his card accurately. The following information is required on the Gate Judge card:

- a) The name of the Gate Judge.
- b) The number(s) of the gate(s) he/she is responsible for.
- c) Mark as to whether it is the 1<sup>st</sup> or 2<sup>nd</sup> run, men or women's race.
- d) The date of the event.

On arrival at their course position the Gate Judge should draw the gates he/she has to watch while distinctively identifying his/her position, the gate(s), number(s) and its/their color(s).

In the event a racer does not correctly pass through the gate, the Gate Judge will only have to write down the racer's number, the number of the gate where the fault was committed and the type of fault committed by drawing a small clear diagram.

Two card examples are illustrated on pages 4 – 16, 4 – 17, 4-18 (figure 4.6 a, b & c). A number of Gate Judge cards are used in Canada, the Ski Québec Alpin card and BC Alpine card are used as an example.

When the Gate Judge cards are reviewed by the Referee and members of the Jury, it must be absolutely clear whether the competitor correctly passed through the gate or if he/she has been rendered liable to disqualification. The Gate Judge may not discuss the disqualification with anyone other than the Chief of Gates and members of the Jury. Gate Judges who have disqualified a competitor must be available to explain the circumstances to the appropriate race officials at the end of the race.

**FIGURE 4.6 a SKI QUEBEC ALPIN GATE JUDGE CARD**

<b>SKI-QUEBEC ALPIN</b>		
Date : _____		
Judge's name : _____		
Gate (s) : _____ Run : _____		
Men – Women		
Bib	DSQ at gate #	Comments

**FIGURE 4.6 b**

**GATE JUDGE'S CARD (inside)**


Figure 4.6 c

**BC ALPINE GATE JUDGE CARD**

<div style="text-align: center; margin-bottom: 10px;"> <p>⊕ - Your Position   ◆ - Blue Gate   ○ - Red Gate</p> </div> <div style="border: 1px solid black; height: 150px; width: 100%; margin-bottom: 10px;"> <div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); border: 1px solid black; width: 80%; height: 80%;"></div> </div> <div style="text-align: center; font-size: 2em; font-weight: bold; margin-bottom: 10px;">Diagram</div> <p><b>INSTRUCTIONS FOR THE GATE JUDGES</b></p> <ol style="list-style-type: none"> <li>1. Upon arriving at your assigned gate(s) remove your skis and place them on the ground parallel to course fencing and away from any spill zone.</li> <li>2. Stand where you can best see all your gates while maintaining a position of maximum safety. You may be assisted in this task by your Section Chief, Chief of Gate Judges or the Technical Delegate.</li> <li>3. Fill out the front of the card and then immediately draw a picture of your assigned gates. Draw the ⊕ symbol to indicate your position. Mark all blue gates with a diamond ◆ symbol and all red gates with a circle ○ symbol.</li> <li>4. Mark only DSO's/faults and note the racer's number in the corresponding box.             <ol style="list-style-type: none"> <li>a. Draw a detailed diagram of the DSO/fault on the pre-drawn gate picture.</li> <li>b. Be prepared to explain all faults.</li> <li>c. Do not discuss the fault with anyone except the Chief Gate Judge or Jury Members.</li> <li>d. If you are a witness to a fault be prepared to attend a jury meeting and do not leave the finish area until dismissed by the Chief Gate Judge. This rule applies even if the fault occurs at a gate that you are not assigned (ie witness).</li> <li>e. Do not record a fault in doubt. Give the athlete the benefit of the doubt.</li> </ol> </li> <li>5. Record on the card the circumstances of any interference with a racer's run.</li> <li>6. If a racer questions a Gate Judge or commits an error that might lead to disqualification, the Gate Judge must communicate with the racer by saying "go" or "back."</li> <li>7. If necessary replace any gate poles to the exact spot marked in the snow with dye, replace gate flags and maintain course condition until assistance from the Race Crew arrives.</li> <li>8. Remain in place until your card is picked up by your Section Chief or the Chief Gate Judge.</li> </ol> <p style="text-align: center; font-weight: bold; margin-top: 10px;">***** REMEMBER *****</p> <p style="text-align: center; font-weight: bold; margin-top: 5px;">BOTH SKI TIPS AND BOTH BOOTS MUST CROSS THE IMAGINARY LINE JOINING THE BASE OF THE POLES.</p>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; border: 1px solid black; height: 150px;"></td> <td style="width: 50%; border: 1px solid black; height: 150px;"></td> </tr> <tr> <td style="border: 1px solid black; text-align: center; font-size: 0.8em;">Bib Number Gate</td> <td style="border: 1px solid black; text-align: center; font-size: 0.8em;">Bib Number Gate</td> </tr> </table> <div style="margin-top: 20px;"> <p><b>Gate Judges Card</b></p> <p>Race: _____</p> <p>Date: _____</p> <p>Men <input type="checkbox"/>      Women <input type="checkbox"/>      Run# _____</p> <p style="margin-left: 40px;">DH <input type="checkbox"/>      GS <input type="checkbox"/>      SL <input type="checkbox"/> SG <input type="checkbox"/></p> <p style="margin-left: 40px;">DSQ's/Faults <input type="checkbox"/>      No Faults <input type="checkbox"/></p> <p>Gate No(s): _____</p> <p>Name: _____</p> <p>Signature: _____</p> </div>			Bib Number Gate	Bib Number Gate
Bib Number Gate	Bib Number Gate				

The Gate Judges can be assigned:

Downhill and Super G ~ one gate per Gate Judge

Slalom and Giant Slalom ~ maximum of three gates per gate Judge

The work of the Gate Judge begins when a racer approaches the gates he/she watches and ends when the racer makes his way towards another judge's territory after passing through the last gate under his/her responsibility. In Downhill and in Super G, the Gate Judge watches the course area visible above and below him.

In addition to recording disqualifications, the Gate Judge can undertake the following functions:

- a) Resets the poles in a vertical position. A leaning pole could aid or hinder a racer;
- b) Replaces any poles that have been knocked down in their exact spot, which is marked by dye in the snow;
- c) Replaces any broken poles with another of the same color (red or blue.) The broken pieces must be picked up and placed out of the way so they cause no danger to the racers or spectators;
- d) Re-attaches or replaces any flags that have been knocked off or torn;
- e) Repairs the section of the course under his/her control, if it was agreed to be part of their duties prior the start of the race.
- f) Makes sure the course is **CLEAR**.
- g) If there is no Official assigned the task of maintaining order on the course, the Gate Judge must make sure others in the course area keep at a reasonable distance so they do not disturb the competitor Eg: the photographers, the spectators, the coaches, other racers.
- h) If a racer is interfered with during his/her run by someone or something outside his/her control, he/she is entitled to a re-run. The Gate Judge must report the incident to members of the Jury. The incident must be noted on the Gate Judge card and the Gate Judge must send the racer to the Finish Referee or to another Jury member while reminding him/her not to ski on the course and not to cross the finish line.

If someone or something is on the course which should not be there, such as a spectator, an Official, a broken pole, goggles, a piece of equipment, another racer, etc; it constitutes an interference only if it causes the racer to slow down, to change direction or to miss a gate.



# Gate Judges

Are responsible for judging the passage of each competitor through the gate/s they are assigned and deciding whether the passage is correct.

If there is any doubt, the advantage must always go to the competitor.

## Correct Passage

When both the racer's feet and ski tips cross through an imaginary line between two gate poles in either direction.

# Doubt

If a competitor having made an error or fallen, can ask the Gate Judge what his/her status is. The Gate Judge must respond clearly and strongly to the racer in one of the following ways:

- ◆ « **GO** » if the racer passed through the gate correctly
- ◆ « **BACK** » if the racer has been rendered liable for disqualification.

## RE-RUN

If a racer is interfered with on course, he/she must stop at the site of interference if they want a re-run.

Gate Judge notes:

- ◆ Bib number
- ◆ Gate number
- ◆ The circumstances
- ◆ The witnesses
- ◆ The competitor proceeds off course to the Finish Referee to ask for a re-run

If the racer does not stop and continues to ski the course, he/she will not be eligible for a re-run.

# GATE JUDGE CARD

## Fill in before the race:

- ◆ Your name
- ◆ The assigned gate number/s
- ◆ The date, run and gender of the race
- ◆ Draw a few sketches of the assigned gates

## Fill out if there's a fault:

- ◆ Bib number
- ◆ Gate number(s) where the fault was committed followed by the letter « **F** »
- ◆ Sketch the fault made by the competitor

## Comments

- ◆ In serious doubt, the benefit of the doubt goes to the competitor.
- ◆ If you have any questions, you address them to the Chief of Gate Judges or to a member of the Jury.
- ◆ Do not let the public influence you.
- ◆ Watch what is happening before and after your gates: you could be an important witness (write down what you see.)
- ◆ Wait for the Chief of Gate Judges to collect your GJ card before leaving your position.
- ◆ If you have a disqualification, you must be available for the Jury and until the end of the protests if there are any.

## Other Gate Judge Related Duties

- ◆ Straighten up or replace the poles
- ◆ Control the spectators
- ◆ Watch the course
- ◆ Clear any hazards off the course

**Be very attentive!**

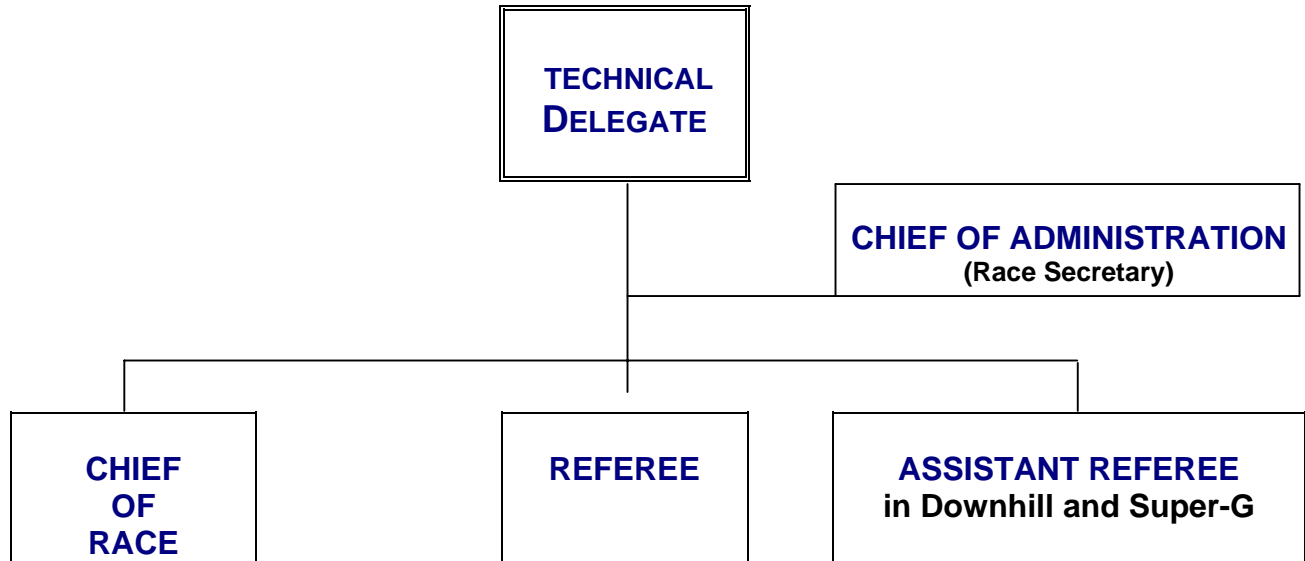
#### **4.4.8 The Jury**

At every race, a Jury is appointed and assumes the following responsibilities:

- a) Application and implementation of the rules
- b) Conduct the draw
- c) Inspect the course
- d) Supervise the start and the finish
- e) Rule on all provisional re-runs and protests
- f) Interrupt, postpone or cancel the race;
- g) Approve the timing and calculation methods.

The composition of a jury is illustrated figure 4.7 on page 4 - 26, along with the specific title of each member.

**FIGURE 4.7 - MEMBERS OF THE JURY**



	Olympic World Championships	Nor-Am	FIS International	National	PSO
<b>TECHNICAL DELEGATE</b>	FIS	FIS	FIS	ACA Nat.	Division
<b>CHIEF OF RACE</b>	HOST Level 3+	HOST Level 3+	HOST Level 3	HOST Level 2	HOST Level 2
<b>REFEREE</b>	FIS	BY TD	BY TD	BY TD	BY TD
<b>ASSISTANT REFEREE</b>	FIS	ONLY IN DOWNHILL AND SUPER-G AND APPOINTED BY TD			

The Technical Delegate is Chairman of the Jury appointed to the race. He/she has the full authority on safety matters. He/she works closely with the other Jury members and the race committee. He/she is there to assist and advise the race organization

#### 4.4.9 Qualifications for Jury Members

##### a) Downhill and Super G Races

- |                        |   |
|------------------------|---|
| 1. Chief of Race:      | FIS - Level 3 – Official certification<br>PSO race – Level 2 certification  |
| 2. Assistant Referee:  | Coach with at least a Level 2 Coach certification, plus<br>Level 2 Officials certification.   |
| 3. Referee:            | Coach with at least a Level 2-Coach certification and<br>a Level 2 Officials certification, or a FIS or Division<br>licensed Speed TD |
| 4. Technical Delegate: | FIS -FIS Technical Delegate<br>PSO – Technical Delegate – speed certification &<br>minimum Level 3                                    |

##### b) Technical Events

- |                        |  |
|------------------------|--|
| 1. Technical Delegate: | FIS - FIS Technical Delegate<br>PSO - Minimum of Level 3 Divisional Technical.<br>Delegate<br>Regional races – Level 2 |
| 2. Chief of Race       | FIS – Level 3 Official<br>PSO – Level 2 Official   |
| 3. Referee:            | Level 2 Coach and Level 2 Officials certification.   |
| 4. Assistant Referee:  | Level 1 or 2 Coach   |

Note: the above are minimum qualifications for race Jury positions..

#### START & FINISH REFEREES

In addition to the above, there are two Jury advisors - Start Referee and Finish Referee. They are appointed by the Race Committee. They are responsible for the start and finish areas respectively. They advise the Jury concerning competitor disqualifications and may approve provisional starts/re-runs.

##### c) REGIONAL RACES &/or NANCY GREENE SKI LEAGUE

All races, including weekly races must have a Level 2 and three Level 1 Officials in charge.



## 4.5 SYNOPSIS OF A RACE

Now that all of the necessary people have been identified to run a race, let us take a look at a diagram of the activities that go on before, during and after a race and some of the Officials involved at each stage.

### Off the Hill Activities

#### **Before the Race**

Planning  
Publicity  
Race Notice  
Entries

Team Captains Meeting  
Information Distribution  
Jury Selection  
Draw  
Bib Distribution  
Preparation of 1st Run Start Lists

#### **During the Race**

Start List 2nd Run

Results

Awards preparation  
Awards ceremony

### On the Hill Activities

Course Preparations  
Check Communications

Set First Course  
Final Hill Preparation  
Timing Installation

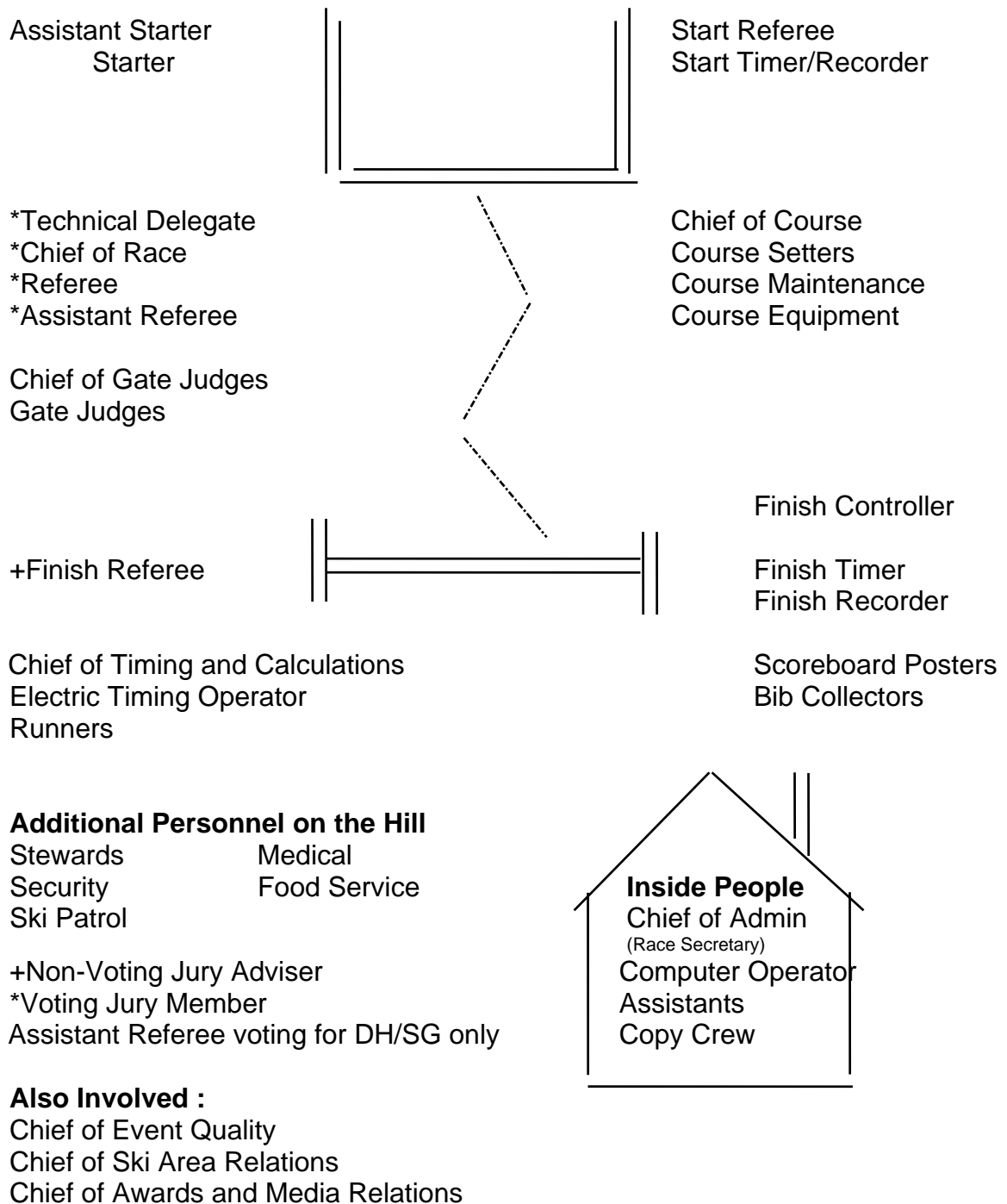
Course Inspection  
Jury Meeting

Start of Race  
Ski Patrol  
Stewards  
Gate Judges  
Timing Personnel  
Course Crew  
Post / Announce DSQ's  
Jury Meeting

Tear Down/Clean Up

## 4.6 RACE PERSONNEL

The following diagram shows the location of race personnel according to responsibilities.



## 4.7 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 events.
- c) Obtain approval for the event at the Zone meeting for inclusion in the PSO's calendar.
- d) Appoint a Race Chairman and Chief of Administration (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 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 required during the race event.
- 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 Chief of Administration (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.

## 4.8 CALCULATION OF RACE POINTS

Competitors in Alpine Skiing are ranked according to their point standings in each of the four disciplines i.e. Downhill (DH), Super Giant Slalom (Super G), Slalom (SL), and Giant Slalom (GS). Points are calculated to an accuracy of two decimal places with the top racer in the world having 00.00 points. In other words, the better the racer, the lower the points.

What are race points and how are they calculated, what is a penalty and how is the National Points list determined?

Points are a handicap system which compares a racer's time with the winner's time and are calculated for each race using a standard formula -

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

where P = race points, T<sub>x</sub> = racer's time in seconds, T<sub>o</sub> = winner's time in seconds and F is a statistically determined value which is calculated every two years and is different for each discipline.

The winner of a race always receives "zero" points and all other racers receive points according to how far behind in time they finish behind the winner. However, 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 that is a direct measure of the caliber of the race. The lower the penalty, the better the caliber of the race. Luckily, we now have computers that do all these calculations and produce the final set of race results very quickly.

In order to determine how a racer did, you then add race points + penalty points for each racer to determine total points for the race. Let us look at an example to see how this works:

	<u>Time in Seconds</u>	<u>Race Points</u>	<u>Penalty</u>	<u>Total Points</u>
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

This calculation is done by the National Points system and is stored in the data bank.

The value that appears for each competitor on each 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

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

Should competitor A then get a result in this season which is better than either of the two values used above, then the points will improve. If he doesn't, then he will maintain the above result.

Simple, isn't it?

## 4.9 POINTS TO PONDER

### A SKI RACING PRIMER

Nothing is more confusing to newcomers to ski racing than “**POINTS**”....

In part this is due to the fact that the simple expression “points” can refer to RACERS CURRENT POINTS VALUE in each discipline (slalom, giant slalom, super G and downhill) as shown on the NATIONAL POINTS LIST or FIS LIST or we could be referring to RACE POINTS or to PENALTY POINTS. POINTS will be used here to refer to the points a racer has in each discipline and we will lead the reader through the nuances of points, their use and the various expressions using or referring to points.

Without a thorough understanding of POINTS, race entry forms cannot be completed, the start lists produced and race results cannot be made. Expressions like “*chasing points*”, “*points fixing*”, “*no result*”, “*giving away points*” and “*good or bad penalty*” cannot be understood. It is especially important that ski Officials understand points. That is why POINTS figure prominently in Level II and higher officials courses.

What follows is a basic primer on POINTS. It is intended for both those who need to know (coaches and race officials) as well as for those who want to know (parents and new racers).

**POINTS** : Who needs them? Most sports have devised methods of turning athletes performance into numbers. The numbers tell us the times taken to walk, run or swim specified distances, heights cleared and distances the javelin, shot-put or discus has been thrown. The golfers handicap and the ball player’s batting average are also examples of evaluation of performance and can be compared on a one to one basis. Points in skiing numerically compare the ability of one racer to another by converting the times taken to complete the race to a numerical value then adjusting that value to reflect the “quality” of the race.

#### **MEET JOHN AND JUDY MOGULL**

Our discussion begins with the twins John and Judy MOGULL ( born Dec. 1 1993). John and Judy are leaving the Nancy Greene Ski League and entering the K1 program.

All competitors must have a **COMPETITOR’S CARD**, therefore the first step in becoming a K1 racer is to apply for this card. It is required for insurance purposes, for tracking of every competitor on the **NATIONAL POINTS LIST** and for entry into any sanctioned race. Applications are usually made for each athlete by the Club Coach Once the application has been processed, John and Judy’s names will appear on the NATIONAL POINTS LIST but, as new racers, they will have no points values shown against their name. The term **625er** is commonly used to refer to racers such as John and Judy. It doesn’t mean that they have 625 points but that their point value is either higher than the maximum value of 624.99 for the National Points List or that, as is the case here, they have no earned points at all.

For the rest of their career, John and Judy will be trying to REDUCE or LOWER the number of points they have in each discipline in which they participate. What follows is how they do it!

### **ENTERING A RACE**

John and Judy's coach enters them along with the other K1s in their first race, a slalom. The race entry is usually faxed or e-mailed to the Chief of Admin (Race Secretary) for the event at least a week in advance of the race. John and Judy are eligible because they are **CARDED** racers (i.e. have a registered competitors card) and appear on the National Points List.

The Chief of Administration puts all the entries into a computer and prints both boys and girls list of competitors in order of points - low points through to 624.99 then all those with no points value. Remember the **lower** the points value, the **better** the racer. Since this is their first race, John and Judy are in the last group of those with no points - 625ers.

### **THE COACHES (TEAM CAPTAINS) MEETING**

The Coaches or Team Captains meeting is held the evening before the race. This meeting is also attended by the Race Organizing Committee (ROC) for the event and the **TECHNICAL DELEGATE (TD)** appointed to the race.

Many matters are dealt with at this meeting but, because this is about POINTS, focus is on the draw.

### **THE DRAW**

**THE DRAW** is the procedure used to create the start lists for the first run of the boys and girls races. It begins with a careful review of the race entry prepared by the Chief of Admin to confirm that all names and points are correct. Errors, if any, are corrected and any last minute changes are made. John and Judy, as expected, appear in alphabetical order among the 625ers at the end of their respective lists - at the **BACK OF THE PACK!**

The actual DRAW, once done by hand, is now normally done by computer. The computer takes the 15 lowest point holders (the **FIRST SEED**) and assigns them randomly to the first 15 start positions. The remaining racers, except for the 625ers, are assigned start positions 16 and up according to their points - lowest point holders to highest point holders. The computer then does another random draw for all 625ers and assigns them to the remaining start positions.

Coaches and officials then check both start lists and if everyone is satisfied, the **START LISTS** are approved and each racer is given a BIB number that corresponds with their position on the Start List.



## **THE RACE**

Since this is a Slalom (SL), the race consist of two runs with the winner having the lowest combined times. Each run is on a different course. In many races, all racers ski the same courses with the girls racing first. Racers start in the order they appear on the first run Start List approved at the Draw.

The time each racer takes to complete the first run is recorded to the nearest 100th of a second. These times are normally posted on the scoreboard so that racers and coaches have that information. John and Judy complete their first run successfully.

After the first run has been completed, there is a break during which the racers warm up and eat lunch, the course for the second run is set and the Chief of Admin produces the second run start list or **BIBO**. This is again normally done on the computer.

Remember that the start order for the first run was based on the points of all entries with random assignment of numbers for the lowest 15 point holders and for 625ers at the end of the pack. However, the start order for the second run is based on the **TIMES** for the first run. Racers appear on the **START LIST FOR THE SECOND RUN** in order of their finish result for the first run - lowest time to highest time - except for the first fifteen who are listed in reverse order of finish on the first run. Thus the boy and girl with the fastest time on the first run start in 15th position on the second run and the boy and girl finishing 15th on the first run are the first to start the second run. The remaining racers are sorted according to their time in the first run - lowest through highest - and start in that order.

Judy was the 25th fastest girl in the first run and therefore starts 25th in the second run. John was 63rd and starts in that position for the second run.

## **THE RESULTS**

Since this is a Slalom, the boy and girl with the lowest combined times are the winners and the ones with the highest combined times finish last.

Other results are possible: **DNS** - did not start; **DSQ** - disqualified; **DNF** - did not finish.

That is all one needs to know to give out the medals, but hold on because this is where the mystery of how we go from times to **POINTS** will become clear.

## **RACE POINTS**

After listing the racers in order of finish, the computer calculates and assigns **RACE POINTS** to each racer.

Without getting into the mathematics of this calculation, it is enough to know that the **RACE POINTS** assigned to each racer are a function of the difference between the winner's total time and each racer's total time. The winner gets a value of 0.00 **RACE POINTS**. Racers whose total time is close to the winner get low **RACE POINTS** while slower racers get higher **RACE POINTS**.

John and Judy finish far behind the winner in their respective races and as a result get high race points. This is OK as it is their first race.

### **THE RACE PENALTY/PENALTY POINTS**

While RACE POINTS describe each racers time in relation to that of the winner, the **RACE PENALTY** describes the results in terms of the caliber, based on NATIONAL POINTS, of the racers in the competition. This then allows the results of this race to be standardized with those of other races held across Canada.

Once again the computer is called upon to do the calculation of the RACE PENALTY that is based on the results of the top ten finishers and also the points of the best five starters in the race. That's all you need to know for now - trust us!

In any event, the **RACE PENALTY** or **PENALTY POINTS** are then added to the RACE POINTS for each finisher to yield a race result in terms of POINTS- **POINTS RESULT**. These are then sent to the **NATIONAL POINTS CHAIR** who uses them to calculate new NATIONAL POINTS for competitors whose POINTS RESULT is lower than their current NATIONAL POINTS.

Remember John and Judy and other racers are not only trying to win races but also to lower their POINTS.

### **THE NATIONAL POINTS LIST**

On the NATIONAL POINTS LIST a racers POINTS for each discipline is the average of their **BEST TWO FINISHES** in terms of points results. John ended up with 500 points for this race while Judy received 580 points.

If they don't finish any more slalom races before the next NATIONAL POINTS LIST is published, their points on the list will be the average of 625 and the points they received in this race. .. 567.50 for John and 602.50 for Judy.

If they finished another slalom before the next list was published and received 525 and 540 points respectively, their NATIONAL POINTS would be  $525 + 500$  divided by 2 = 512.50 for John and  $580 + 540$  divided by 2 = 560.00 for Judy.

### **CLOSING THE LOOP**

That is how POINTS are calculated and how racers try to reduce their NATIONAL POINTS in each discipline in which they race.

It can also be seen how a racer might complain that, in spite of a good finish (possibly even a medal) he or she got "**NO RESULT**". This happens when his or her POINTS RESULT for a given race is higher than their NATIONAL POINTS for that discipline. Since averaging these results with their next best result would increase rather than decrease their NATIONAL POINTS, the National Points Chair will simply disregard the result. For the racer, this is a "NO RESULT" .. the race will not lower his or her NATIONAL POINTS in that discipline.

The incentive to **CHASE POINTS** should also be apparent. Chasing points is going out of the way to enter races where there are competitors having much lower points. The effect of the low point holders will be to reduce the penalty for the race. With a good result, even 15th or 20th, the combined effect of low penalty and low race points could give a points result which, after averaging, might significantly reduce one's NATIONAL POINTS.

Remember, lowering his or her NATIONAL POINTS could greatly improve their start position in subsequent races, raise their ranking relative to others in their age group, bring their points down enough to qualify for an "**ALL AREA PASS**", meet selection criteria for a team or summer camps or qualify them for other forms of recognition.

**GIVING AWAY POINTS** involves low point holders entering races so that higher point holders can benefit from the reduced penalty but the low point holder will not benefit from the result.

**POINTS FIXING**, which is prohibited, is conducting the race or participating in the race in such a way as to artificially reduce the penalty.

### **CONCLUSION**

**RACE POINTS - RANK COMPETITORS IN A PARTICULAR EVENT.**

**NATIONAL POINTS - RANK COMPETITORS ACROSS CANADA FOR EACH DISCIPLINE, FOR ALL AGE GROUPS, FOR MALES AND FEMALES.**

That's it... all you need to know (for now) about POINTS. Reviewing a race results package with your coach or official is a good idea).

John and Judy will be surprised and pleased when you ask about their points or whether a race had a good (low) penalty.

Now you can help introduce new racers and ski club members to the wonderful world of **POINTS!**

***Peter Engstad***

Technical Delegate Level II

BC Alpine TD Education Coordinator

**NOTES:**



