

# North Bay Ski Racing Club

## "RACE DAY"

### Volunteer / Parent Manual

The following manual has been put together to help explain the rules and expectations of any volunteer position you may be asked to do.

\* Please be aware that when volunteering you must be at the hill for **8:00am** in order to fulfill the duties of your position.



**Thank you**

**The NBSR Executive**

## Volunteer / Parent Manual

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**WHAT IS A 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 simple statement belies the organization and experience needed to stage most races but the principle is the same for all – the fastest racer wins.

For any race, there are three principal groups of officials on the course necessary to conduct a race.

- At the Start:** We 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:** We must ensure that each competitor correctly passes through the gates and that the course is properly maintained.
- At the Finish:** We must accurately record the time of the finish of each competitor and that it is done according to the rules.

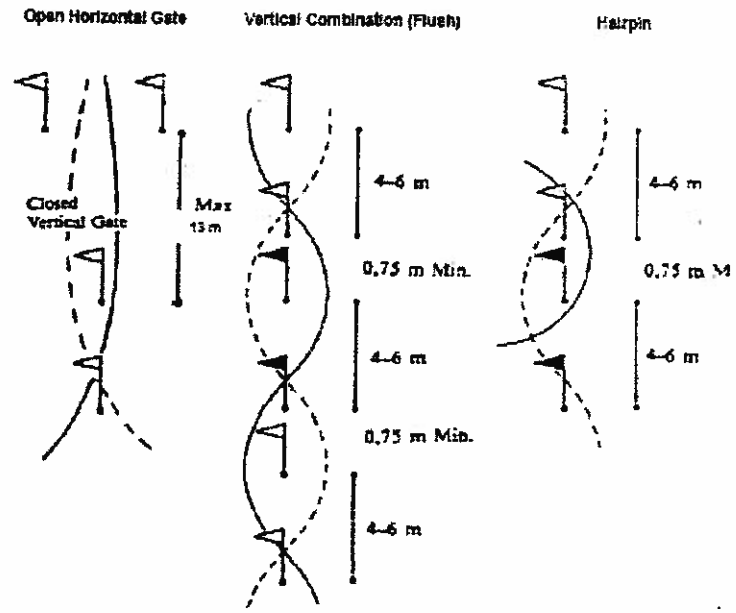
Other essentials, which are common to all races, are that the course must be prepared, the track laid out in advance of the competition and there must be competent personnel to do all the documentation prior to the race and to produce the results. The duties of the various groups of the Officials will be dealt with in greater details later. First let us look at the various types of Alpine Racing:

There are three main types of courses. They are as follows;

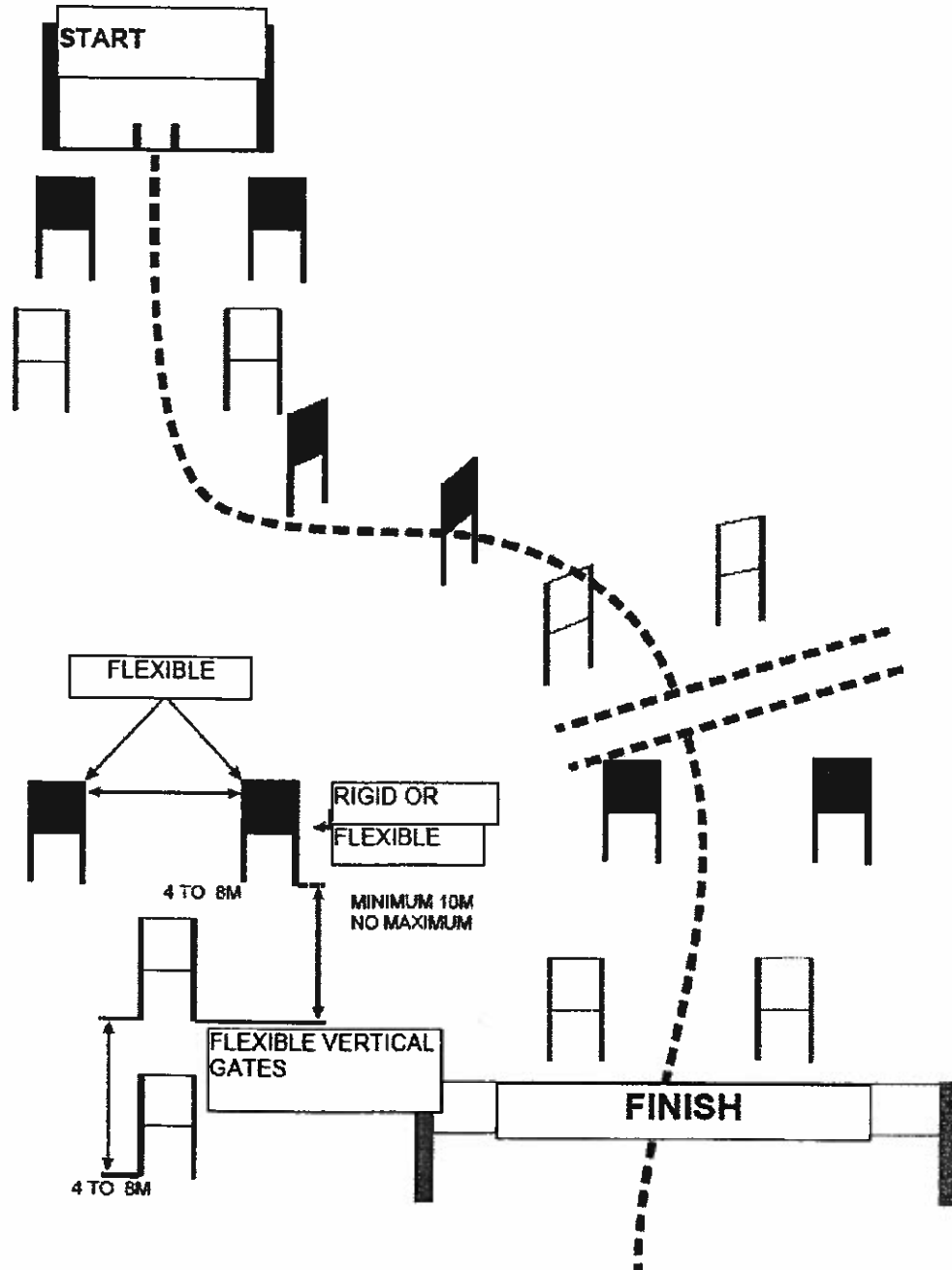
**Type of Races/Courses**

A **SLALOM** is a race in which competitors 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 with a vertical drop between 120 and 220 m. Racing is mostly down the fall line with a combination of open and closed gates.

The gates are narrow, 4-6 m., close together and considerable turning skill is required on the part of the competitor to safely negotiate the course. A good slalom course allows a racer to combine speed with a wide variety of ski technique.

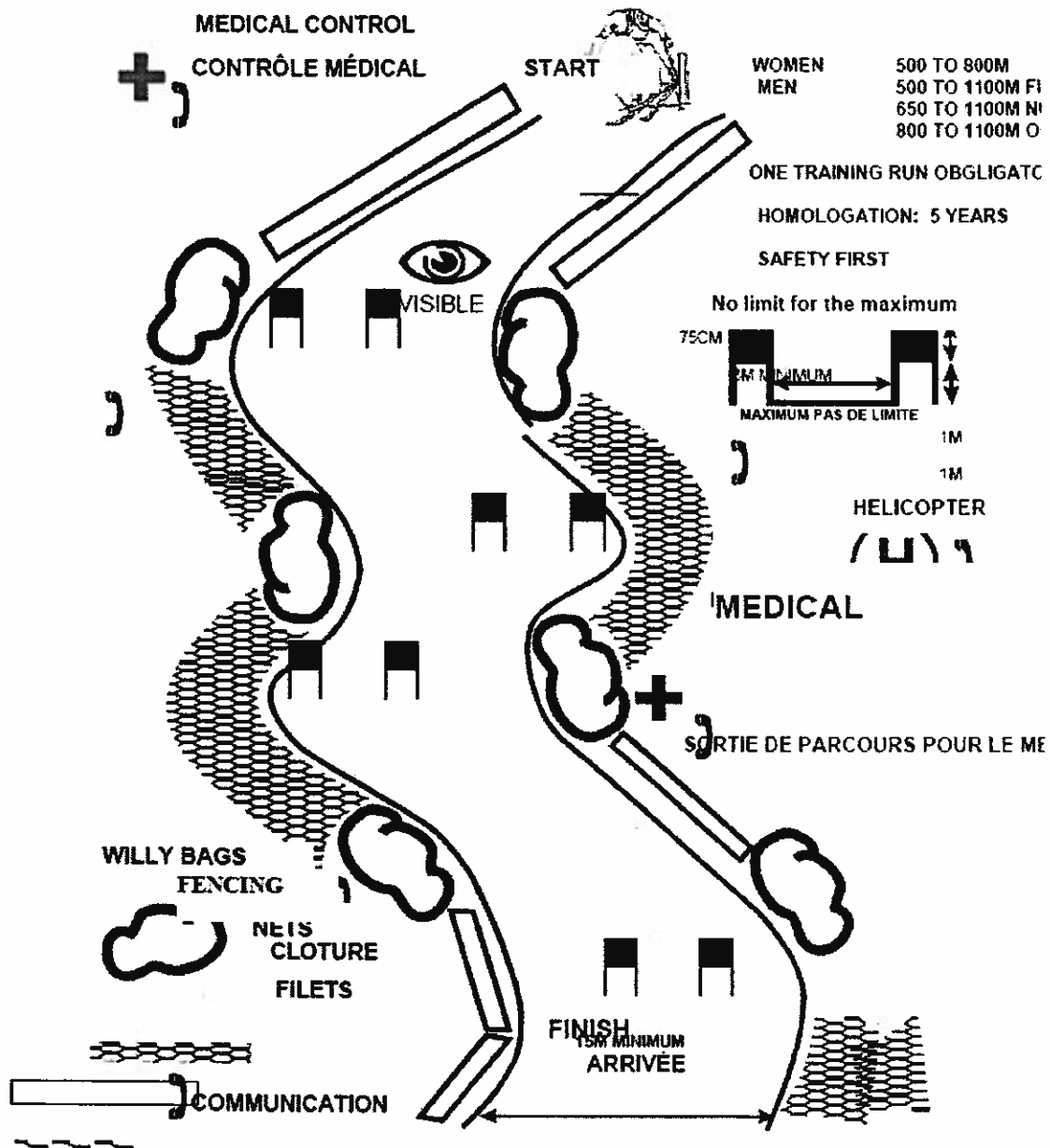


A **GIANT SLALOM** is a race combining the features of both the slalom and the downhill. The course is moderately long and preferably undulating and hilly with a vertical drop between 250-450 m. Turns are a variety of long, medium and small turns set considerably faster than the slalom but still not approaching the speed of downhill. The gates are placed further apart and they control speeds as well as testing turning ability. Giant Slalom gates are double pole gates in the same manner as for downhill but with slightly smaller flags and alternating between blue and red. The blue flags preferably have a white diagonal stripe.



A **DOWNHILL** race is an event in which the racer must demonstrate excellent skiing techniques, agility, concentration, marked endurance and physical fitness as well as courage at high speed. A downhill course is the longest of the alpine races with a vertical drop between 500 and 1100 m., the terrain is varied and the gates are set to control and direct the skier rather than demanding turning techniques. No technical figures are allowed and the gates are wide and open to the racing line. Speeds are thus considerable and special safeguards must be taken to ensure that the safety of the racer is maintained. Training runs are required prior to the final competition run.

**FIGURE 3.3 - DOWNHILL**



## Race Organization Committee

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

### Chief of Race

Responsible for all technical and safety aspects of the race.

In a small race these two positions (Chief of Race / Race Chairman) are often combined. The "chief" qualities of a race chairman are the ability to choose chairmen wisely and to obtain the most effort from each. The duties of race chairman will involve the direction of all the committees from their organization to the completion of the race. When the two positions of Chief of Race and Race Chairman are combined, in addition to the above, the Chief of Race must possess a good technical knowledge and be able to advise on all technical operations of the race. Again, he/she must be a good organizer and be able to obtain the most from his/her race committee. As Chief of Race he/she directs and controls all the technical work of all the officials and will conduct meetings on technical matters when required. He/she will be responsible for the medical and crowd control facilities. The Chief of Race assumes responsibility for all duties of any other chairmen who are not appointed specifically and whose duties are not specifically assigned to other chairmen. He is also a member of the Jury and must work closely with the Technical Delegate and other Jury members.

### **Chief of Course**

Supervises on-the-hill arrangements such as course preparation and maintenance, course marking including flags, dyeing and numbering, course clean up and works with Course Setter.

The Chief of Course must have good technical knowledge as well as a good understanding of race rules and race course requirements. He will be responsible for every key element which will directly affect the success of the race and the conditions under which the racers race. He must, therefore, be familiar with the snow conditions of the area and have sufficient experience and knowledge to be able to reach the right decisions in poor snow or weather conditions. He is responsible for the preparation of the course and the condition of the course during the race. Therefore, it is imperative that he has adequate assistance for this task. He is responsible for all the course marking required, including direction markers and marking pole positions and for providing the course setter with assistance as required. This would involve not only the necessary equipment, but also a sufficient number of people to make course setting go as quickly as possible. He is also responsible for the numbering and flagging of the gates, and the preparation of the start and the finish area including start and finish corals.

### **Chief of Equipment**

Responsible for obtaining all equipment required for the preparation and operation of the race. This is a position whose duties are more often than not split amongst the various other chiefs and chairmen.

The following lists of equipment will serve as a guide to the requirements for a race.

1. Slalom poles, 150 for each slalom course; 200 for each Giant Slalom or Downhill course - with equal numbers of red and blue poles or all red for downhill.
2. 140 Slalom flags - red and blue; 100 Giant Slalom flags - red and blue; 50 downhill flags - red.
3. Directional flags - mandatory for Downhill and optional for Giant Slalom.
4. Dye in suitable containers for marking pole position - different colour for each course
5. Stop watches - minimum of 9, preferably 12, together with spare batteries.
6. Gate numbers - these can be as simple as tape and felt pen.
7. Radios for timing communication and separate frequency radios for Jury.
8. Snow fences or poles, flagging and willy bags or other form of protection as required
9. Shovels and rakes as required for course preparation.
10. Snow preparation materials such as salt or fertilizer.
11. Bars, drills and wedges for setting slalom poles.
12. Loudhailer for assistance starter.
13. Scoreboard with some kind of protection against inclement weather together with marker and pencils as necessary.
14. Required stationary supplies for the office; copy paper, computer /printer, disks, staplers, thumbtacks, pencils, erasers, record cards or sheets with clipboards for the records.
15. Gate keepers' cards, boards and identification vests.
16. Refreshments for officials.

### **Chief of Timekeeping and Calculation**

Supervises all timing, communications and calculations, plans and sets up timing and communication systems, oversees timers, starters, calculators, recorders and spotters.

The start and finish personnel work as a team to start the racers and record a time for each one. There are several variations on the equipment and personnel available and some of these methods will be illustrated here. In all cases, the starter is responsible for giving the correct start to each racer. The assistant starter has the responsibility of arranging racers in the correct starting order. When the starter is informed that the timers are ready for the next racer, he alerts the racer, then gives him a count down. Let us now consider the following timing and communication situations.

**Race Secretary**

In charge of all records, the draw, registration, bibs and results production.

Racing unfortunately involves considerable paperwork, most of which is the responsibility of the Race Secretary. This person is responsible for sending notices of the race, taking minutes of all race committee meetings and Jury meetings, handling all correspondence, receiving all entries, preparing all record cards, registering racers, gathering entry fees, preparing start lists, distributing and collecting bibs and giving out information. He/she is also responsible for the preparation and distribution of the results. This is a very demanding job that requires good administrative ability and good knowledge of the many different aspects of race organization.

**Chief of Gate Keepers**

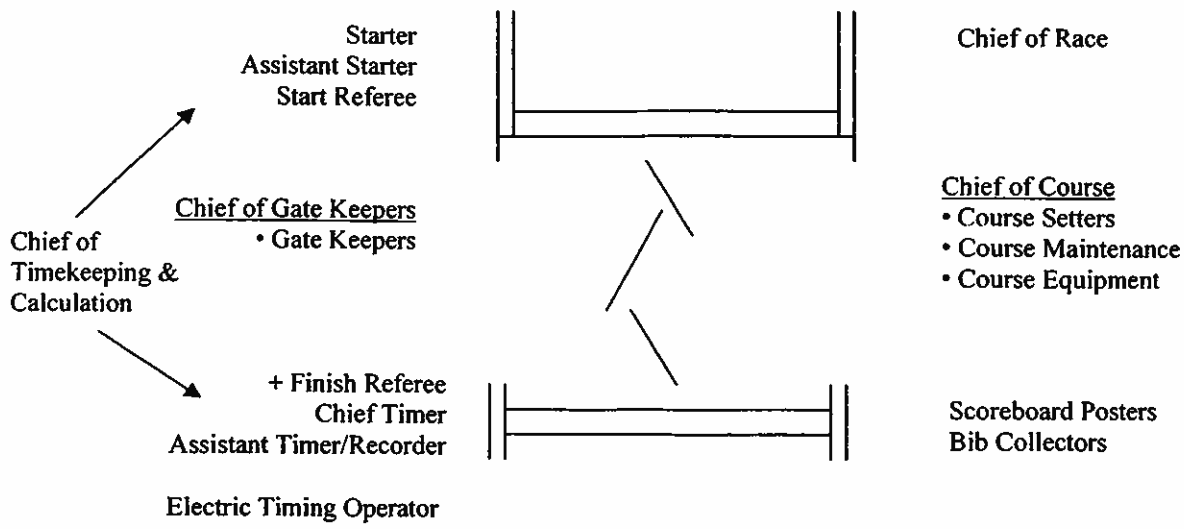
Organizes and instructs Gate Keepers

The Chief of Gate Keepers is responsible for obtaining, training, organizing and controlling sufficient gate keepers for the race. He should be prepared and able to undertake any training of gate keepers as necessary prior to the race and issue them with a clear and concise set of instructions as to their duties. He must place each gate keeper in the most advantageous position on the course and designate the gates for which he is responsible. The gate keepers must be readily identifiable and each must be issued a control card, a pencil and start list.

Each gate keeper is issued with a card and must be instructed in the proper method of filling in his card. During the race, the Chief of Gate Keepers must continually work with his gate keepers to ensure that they are fulfilling their duties efficiently and he also must look after their comfort.

**The Race Personnel who work under above Chiefs**

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



### THREE BASIC RACE COMPONENTS

i) The start, ii) The course iii) The finish.

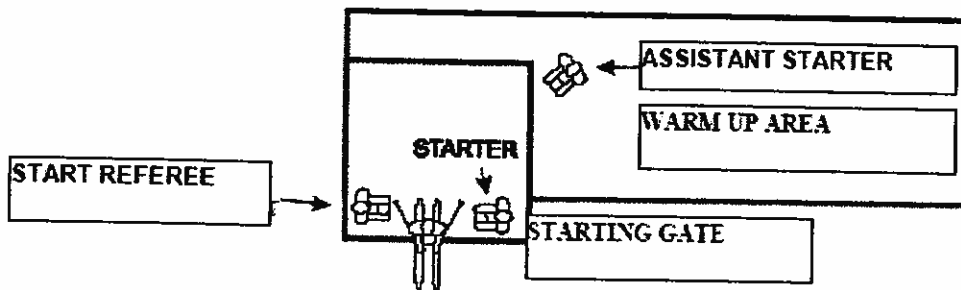
#### i) Starting and Timing Personnel

Located at the start area are the following:

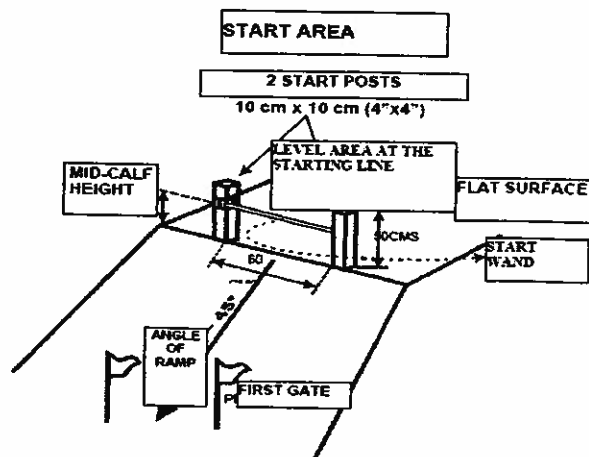
The **Starter** is the person who gives the warning and the start command to each racer. Working with the Chief of Timing, he is also responsible for the accuracy of the interval between these signals.

The **Assistant Starter** calls the racers to the start in correct order.

The **Start Area** should be large enough so that the competitors can stand relaxed at the starting line. It must be large enough to contain the racers, any necessary officials and coaches. It must also have the outrun of the ramp constructed steeply enough to give the racer good acceleration but not so steep that the racer will start at more than 45 degrees to his standing position. The lip of the incline should be strengthened by packing together items such as poles, hay or snow. It is then iced using water and/or salt. A shovel is an essential component at the start for constant maintenance of the start ramp.



The **Start Gate** consists of the two posts that mark the start line; again these should be well iced in. Bury cocoa mats on either side and in front of the start posts. This provides a solid base for the ski poles at the start. The racer's two feet must be behind the start line until the start command is given. The start wand is mounted on a set of posts approximately 60 cms apart, which do not extend more than 50 cms from the snow. The wand itself should be placed at approximately the mid calf height of the average racer.



### **Radio Communication between Start and Finish**

Radios are at the start and finish. The starter gives the racer the warning signal of ten seconds then counts down "five, four, three, two, one, GO". The racer leaves at "GO" at which time the timers, having heard the signal over the radio, start their watches. When the racer crosses the finish line, they stop the watches and the time shown on the watch is the precise time that the racer has taken to cover the set course. The watches are then reset to zero for the next racer. This method may not be used for anything but club races as it is not an accurate start system to have the racer start a specific command of "GO" nor is it in accordance with the rules.

**b) Radio communications or telephone line between start and the finish, manual timing with a wand at the start connected to a signaling device.**

### **ii) The Course & Gate Keepers**

The gate keeper is the most important official of the race and only through efficient gate judging will a race be successful in this aspect. A gate keeper is responsible for judging the passage of each competitor through the gates and deciding whether the passage was correct. If there is any doubt, the advantage must always go the competitor. Incorrect passage results in a disqualification. What, therefore, constitutes going through the gate?

The gate keeper shall be in charge of gates as follows: One gate keeper per gate for Downhill and Super G and one gate keeper for a maximum of three gates for Giant Slalom and Slalom. The duties of a gate keeper begin with the approaching of the competitor to the first gate he controls and ends when the competitor has passed through the last gate under his jurisdiction.

Other functions of gate keepers other than recording disqualifications are:

- a) Reset the poles in a vertical position. A leaning pole could aid or hinder a racer.
- b) Replace any poles that have been knocked down in their exact spot. This spot is indicated by a coloured spot in the snow.
- c) Replace or re-attach any flags that have been knocked off.
- d) Replace any poles that have been broken, making sure to use the same colour as the broken one (blue or red). The broken pieces of pole must be picked up and placed out of the way so they cause no danger to the racers or spectators.
- e) Repair the section of the course under his control if it has been decided prior to the start of the race that this will be one of his duties.
- f) Make sure the course is "FREE".
- g) If there is no official appointed to the task of maintaining order along the course, the gate keeper must make sure that all personnel (spectators, photographers, other racers, etc.) keep a safe distance away from the course and in no way should these people be allowed to disturb the racers.
- h) If a racer is disturbed during his run by someone present on the course (or for any other reason) and he requests the opportunity to re-start his run, the gate keeper must be in the position to objectively explain the incident to the appropriate race official. This incident must be noted on the control card.

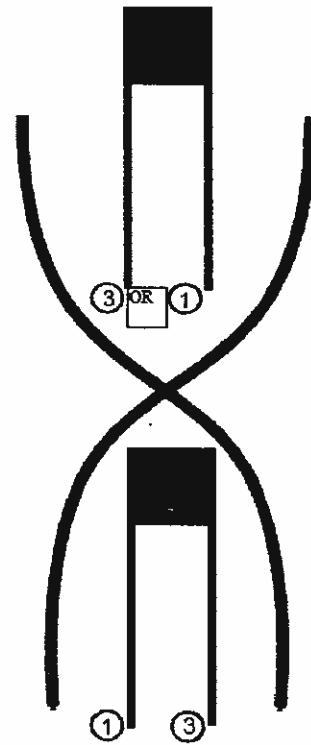
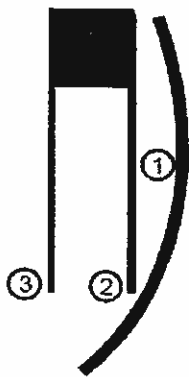
If a racer is interfered with on the course, he is entitled to another run - a re-run. Interference can occur if there is anything on the course which "should not be there" e.g. spectator, race official, fallen pole, goggles, another racer, etc. but only if it causes him to change direction and lose time or to miss a gate. **The racer must leave the course at the point of interference and not ski down through the remainder of the course.**

Each gate keeper is issued with a card and must be instructed in the proper method of filling in his card. During the race, the Chief of Gate keepers must continually work with his gate keepers to ensure that they are fulfilling their duties efficiently and he also must look after their comfort. The gate keeper is the most important official of the race and only through efficient gate judging will a race be successful in this aspect. A gate keeper is responsible for judging the passage of each competitor through the gates and deciding whether the passage was correct. If there is any doubt, the advantage must always go the competitor. Incorrect passage results in a disqualification. What, therefore, constitutes going through the gate?

A racer's feet and ski tips must pass through an imaginary line between two poles in either direction. All the following, therefore, are considered correct passage.

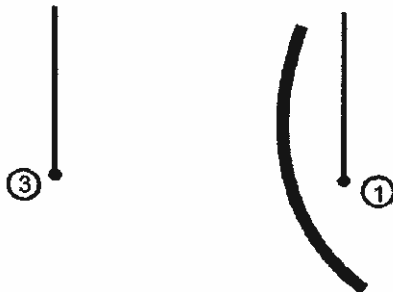
A GATE IS CORRECTLY PASSED WHEN BOTH SKI TIPS AND BOOTS OF THE RACER HAVE CROSSED THE GATE LINE.

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



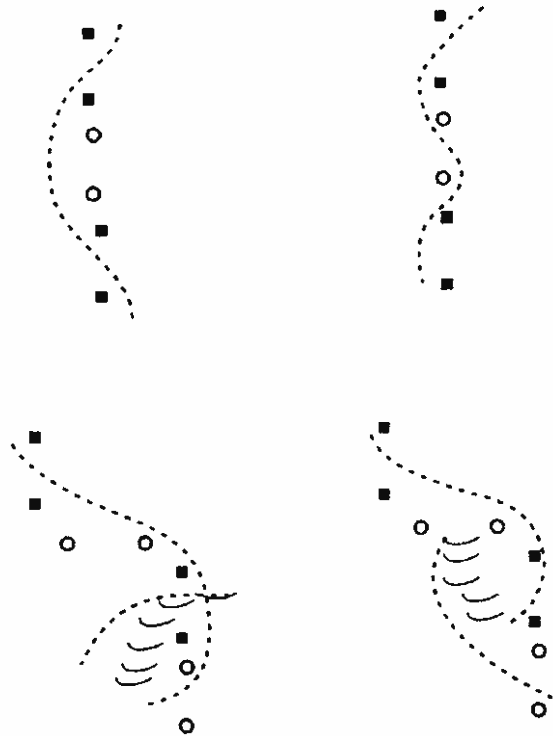
THE GATE LINE IN DOWNHILL, GIANT SLALOM AND SUPER G, WHERE A GATE CONSISTS OF TWO PAIRS OF FLAGGED POLES AND THE IMAGINARY LINE IS THE SHORTEST BETWEEN THE TWO INSIDE POLES. EX 2 AND 2

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 one or both poles when passing through. All pole locations are marked with dye. 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.

FIGURE 4.5 c - EXAMPLES OF ILLEGAL OR INCORRECT PASSAGES



As long as **both feet** and **ski tips** cross the imaginary line the racer is "O.K." even though;

- a) He knocks down one or all poles of the gate.
- b) He slides through the gate on some part of his body other than his feet.
- c) He temporarily loses one or both of his skis.
- d) He hikes back up to a gate and crosses the line between the gates.
- e) He passes through gates out of their numerical order.

A racer having made an error or fallen, can ask the gate keeper what his status is. The gate keeper must in this case respond clearly and strongly to the racer in one of the following ways:

"GO" if the racer has passed the gate correctly.

"BACK" if the racer has been rendered liable to disqualification.

However, if a racer commits a fault that would make him susceptible to a disqualification, the gate keeper, if possible, must inform him.

A racer may not receive assistance of any kind. Any outside aid must result in a disqualification.

Each gate keeper should wear some means of identification such as a vest or a bib and shall be supplied with a recording card and a pencil and shall mark such cards as instructed by the Chief of Gate Keepers.



**iii) The Finish**

Preparation of the finish area is very important. The run out area must be large and the surface firmly packed and smooth as racers are coming through the finish line at high speed. It is especially important to pay attention to the finish area after a new snowfall. The tendency is for course prep to pull away prior to the finish line or if slippers are coming through, to tuck the finish area. This leads to accumulation of loose snow and a rough surface making a safe high speed stop difficult.

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

<u>Discipline</u>	<u>Minimum Finish Line Width</u>
Slalom	10m
Giant Slalom	15m

The finish posts should be well padded to protect the racer. Padding must be either "Willie bags", insulation bales or hay loosely packed into bags but may **not** be hay bales. Note that the last gates are set so that the racer is directed to the center of the finishing gate. The finish area should be roped off to protect the racer from intrusion and the scoreboard is located so that it is out of the way of finishing racers.

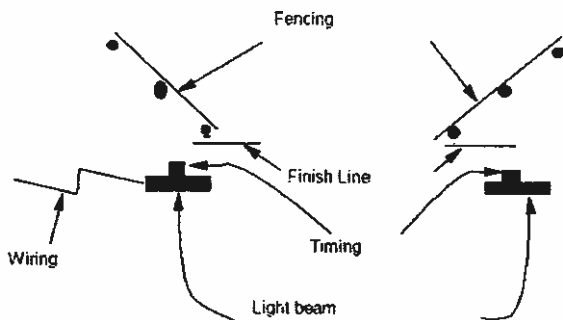
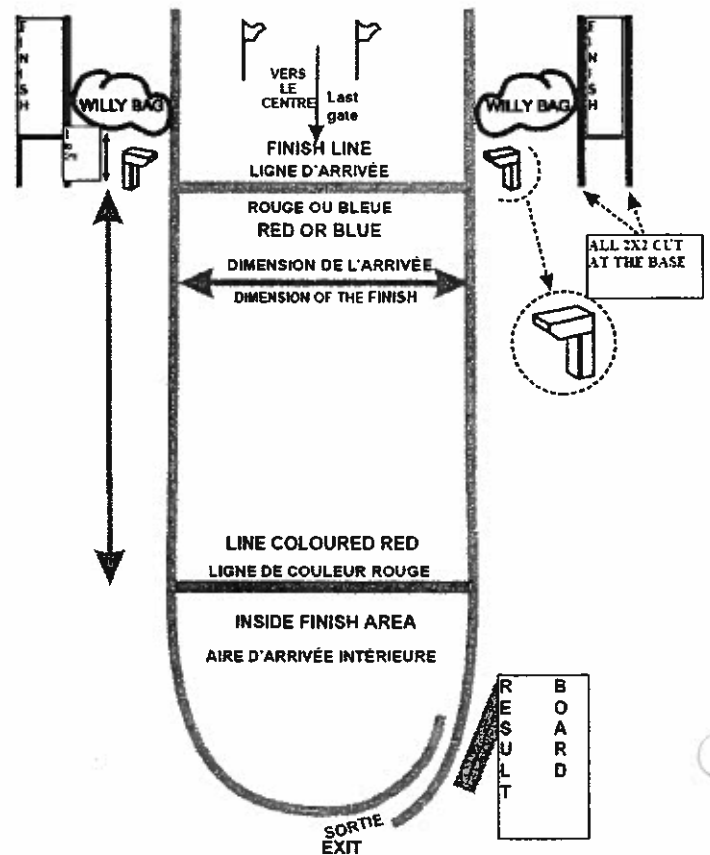


FIGURE 3.7 - FINISH AREA

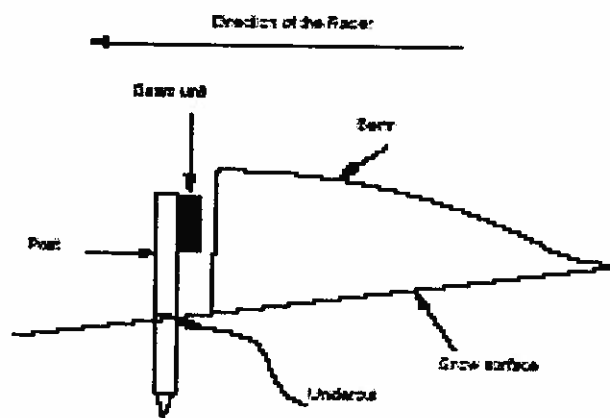


The finish timing equipment is mounted on posts at the finish line and some points must be observed with them:

1. The posts should be cut to be no higher than necessary or pounded in to such a level
2. They should be 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. See diagram below.
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.

### Post Holding Timing Eye Beams

#### FINISH TIMING POSTS



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.

Located at the finish line are several key people:

- Timers:** Take finish times of all racers.  
**Recorders:** Record time taken for all racers.  
**Bib Collector:** Collects bibs from racers at the completion of the races.  
**Finish Controller:** Supervises the proper crossing of the finish line and recording the order of finish of competitors.  
**Finish Referee:** Makes sure that the rules for the organization of finish are observed as well as supervising the timing and crowd control.  
**Scoreboard Operator:** Posts the times of each racer on the scoreboard as soon as they are calculated.

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