

Alpine Canada Alpine National Officials Program Level III Certification



ALPINE CANADA

November 1st, 2017

INTRODUCTIONS

NAME:

CLUB:

INVOLVEMENT IN RACING:

- Racer, Official, Parent etc.?

WHY THE LEVEL III OFFICIALS COURSE:

EXPECTATIONS OF THE COURSE:



AGENDA

- INTRODUCTION
- PRE-COURSE ASSIGNMENTS
- OFFICIALS PROGRAM
- RULES of SKI RACING
- CERTIFICATION & THE JURY
- PRE-RACE ADMINISTRATION
- THE RACE COURSE & SECURITY
- TIMING and the POINTS SYSTEM
- GATE JUDGING . . . Common Problems
- MORE RULES
- RACE ORGANIZATION CHECKLISTS
- EXAM



OBJECTIVES

- To enhance participants' ability to assume leadership roles within alpine and para-alpine race structures.
- Understanding of race organization
 - Race organization officials – roles and responsibilities
 - Race structure – Administration, Start, Course, Finish, Timing, Results
 - Race protocols :
 - entries, team captains' meeting, draw, course inspection, race jury / ROC, protests, jury meeting, timing, results, points



An Effective Official

- Serves the best interests of all competitors
- As unobtrusive and inconspicuous as possible
- Committed to the quality of officiating
- Respects the abilities and efforts of competitors and other officials
- Honours commitments and is timely
- Impartial, encouragement is equal, doesn't coach
- Flexible, adapts to bring the event to a successful conclusion



Pre-course Assignment

- Review and discussion of pre-course homework and Case Studies





Officials Program

Why the Officials Program

- Risk Management (security) first
- Fairness Always
- Reliable Race Results
- Standard methods of race organization
- Enable Volunteers to become Officials
- Support Officials in applying theory to practice
- Supporting the athlete's race program



Officials Program

- 4 Levels of Officials
- Parallel development - Race Administration, Timing/Results, Race Operations, Course, Jury
- 4 levels of Technical Delegates



Officials Program

- Classroom study and examination



- Approved Course Conductors
- Approved TD Examiners



Officials Job Categories

Administration	Event Quality	Course	Timing	Jury
Race Organizing Committee		Chief of Race (also Jury Member)	Chief of Timing and Calculations	Technical Delegate
Race Chair		Chief of Course	Chief of timing	TD Candidate
Chief of Administration		Chief of Gate Judges	Timer	Referee
		Gate Judge		
Secretariat	Chief of Event Quality	Chief of Equipment	Calculator	
Finance			Recorder	
Accommodation	Chief of Ski Area Relations	Chief Steward	Finish Controller	
Scoreboard	Chief of Awards and Media Relations	Steward	Assistant Starter	



Technical Delegate Program

- Five levels of Technical Delegate (TD).
- Certification must be maintained.
- TD training program (Candidate).



Jury Case Studies



**Put on your
thinking cap**

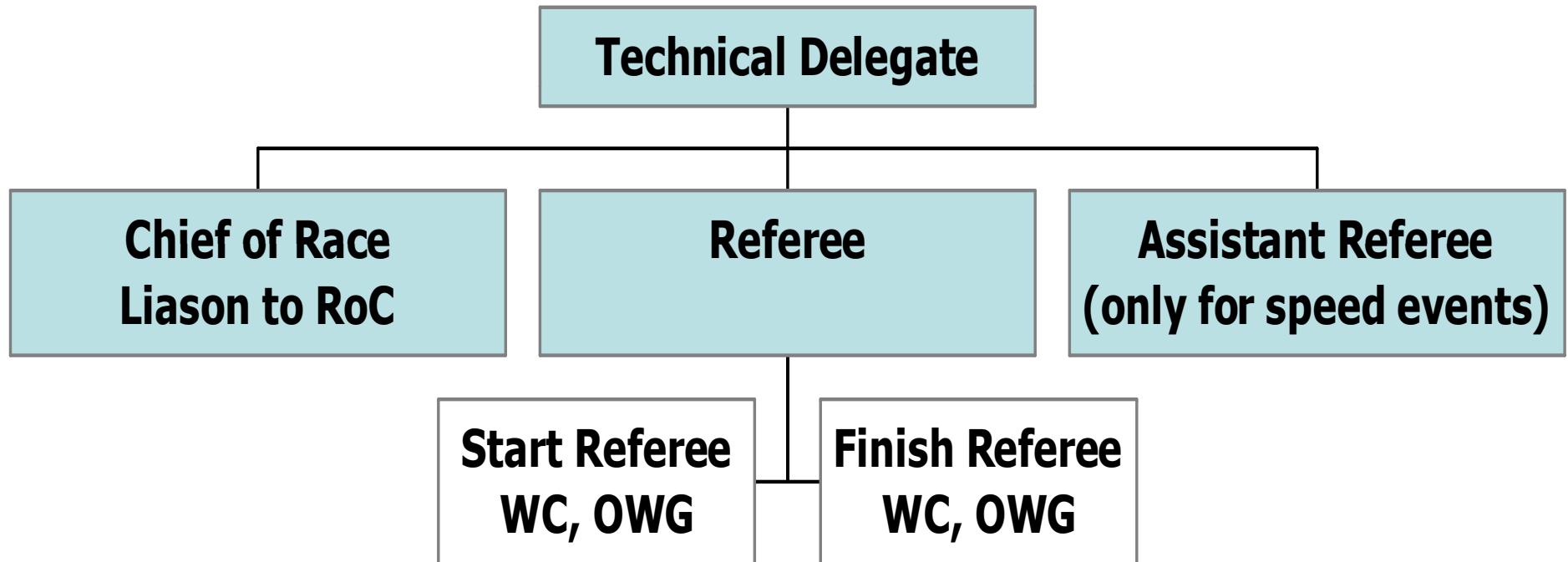




Jury Detail

- Overview
- Responsibilities
- The Technical Delegate
- Re-runs, Sanctions, Disqualifications, Protests

Race Jury – ICR 601.4



Race Jury – 601.4.6

Duty:

While each member of the jury has some specific responsibilities (TD - ICR 604.9, Referee - 604.10), the **voting jury members** are jointly and equally responsible/accountable for the decisions the jury makes.

Guiding principles for decision making include:

- **compliance** with the rules of racing,
- the **security** of the athletes / participants, and
- the delivering the **fairest** competition environment for the circumstances at the time (variables: weather, time, resources, equipment, etc.).
- consistent application of *due process* and *hard evidence* protocols to resolve protests.



Race Jury

- Voting members & their appointment
- “Jury Advisors” and “Eyes of the Jury”
- Non-Points Races
 - All age groups, calendared by divisions with PSO
 - Club specific ‘house-league’ and ‘fun-n-glory’ programs usually are not under PSO sanction
- National Points Races
 - U14 and older, calendared at ACA by PSO
 - Competitive stream to qualify for provincial and national championships
- FIS Races
 - U18 and older, calendared FIS by ACA
 - Competitive stream to qualify for provincial and national teams that compete at the Continental Cup and World Cup circuits



Jury Responsibilities

- Rules
- Security
- General responsibilities
 - Technical Delegate
 - Chairing the Jury
 - Referee & Assistant Referee
 - Start Referee, Finish Referee, Course Setter
 - Chief of Race
 - Operations
 - Jury Advisors
 - Start Referee
 - Finish Referee



Technical Delegate – ICR 602, 601.4.9

- rules advisor, security advisor, certifies race results

Representative the Sanctioning Body 602.1.1	Chair of the Competition Jury 601.4.5	Member of the Race Organizing Committee 601.3
FIS or Alpine Canada Alpin, as applicable <ul style="list-style-type: none"> • Certification of race results (sole discretion, not a jury decision) • Enforcement of technical standards 	<ul style="list-style-type: none"> • Leader, facilitator, advisor • Panel of equal votes except for breaking ties • Chief of Race Referee / Asst Referee, as applicable 	<ul style="list-style-type: none"> • Chief of Race • Referee(s) • Start Referee • Finish Referee • Jury advisors / eyes of the jury, as appointed • Chief of the Course • Chief of Timing and Calculations • Chief of Administration • Chief of Gate Judges • Chief of Medical and Rescue • Chief of Equipment





Race Secretariat

- Chief of Administration (Race Administrator / RA)
- RA Forms
- Team Captains' Meeting
 - Entries, Draw, 1st Run Start List, Snow Seed

Race Secretariat

- Secretariat checklist
- List of supplies
- Race Notice
- Race entry form
- Team Captain's meeting ~ checklist
- Draw Board
- Results



Chief of Administration



R A Forms

[illegible]

Officials / Officiels / Offizielle			
Surname , First Name Nom de famille, Prénom Familiennamen, Vorname	Arrival Arrivée Anreise (dd.mm.yy)	Departure Départ Abreise (dd.mm.yy)	Position on the team Position en l'équipe Position im Team
			Team Captain / Chef d'équipe / Mannschaftsführer
			Trainer / Entraîneur / Trainer
			Doctor / Médecin / Arzt
			Physiotherapist / Masseur / Masseur
			Technicians / Techniciens / Techniker
			Service personnel / Personnel de service / Servicepersonal
Place, Date / Lieu, Date / Ort, Datum	Signature / Signature / Unterschrift <small>(please print and sign)</small>		



R A Forms



PROGRAM / PROGRAMME / PROGRAMM WC Alpine Technical L ☐ M ☐

Date / Date / Datum	Site / Lieu / Ort	Country / Pays / Land	Event (SL / GS)
Name of event / Nom de l'événement / Name der Veranstaltung			
Place of jury inspection / lieu d'inspection du jury / Ort der Besichtigung Jury		Place	Time
Radios / Radios / Funkgeräte			
Liaison Coaches			
Lift open / Ouverture des remontées mécaniques / Lift öffnet			
Warmup and training area / Piste d'échauffement et d'entraînement / Aufwärm- und Trainingspiste			
Run / Manche / Lauf	1st / 1ère / 1.	2 nd / 2ème / 2.	
Course setter / Traceur / Kurssetzer			
Inspection (one) / Reconnaissance (une) / Besichtigung (eine)			
Entry for racers closed / Entrée fermée pour coureurs / Zutritt für Werkschläpfer geschlossen			
Photographers on place / Photographes en position / Fotografen am Platz			
Entry for all closed / Entrée fermée pour tous / Zutritt für alle geschlossen			
Coaches on place / Entraîneurs en position / Trainer am Platz			
POV Camera Number / Nombre / Anzahl	Start time 1st camera racer / Heure de départ caméra 1 / Startzeit Vorläufer 1		
Forerunners Number / Nombre / Anzahl	Start time 1st Forerunner / Heure de départ coureur 1 / Startzeit Vorläufer 1		
Start time racer no. 1 / Heure de départ no 1 / Startzeit Nr. 1			
Start interval / Intervalle de départ / Startintervall			
Television breaks / Televisione intermedia / TV Pause			
Slip crews / Lisseurs / Rutschkommandos			
Intermediate times / Temps intermédiaires / Zwischenzeiten			
		Place	Time
Flower ceremony / Cérém. Des fleurs / Blumenzeremonie			
Prize giving ceremony / Remise des prix / Siegerehrung			
Public draw / tirage au sort / Öffentliche Auslosung	Racers must appear		
Press conference / Conference de presse / Pressekonferenz			
Course setter next race / traceur prochaine compétition / Kurssetzer nächste			
Next team captains meeting / Prochaine séance des chefs d'équipes / Nächste Mannschaftsführersitzung			
Miscellaneous / Divers / Verschiedenes			



FÉDÉRATION INTERNATIONALE DE SKI
INTERNATIONAL SKI FEDERATION
INTERNATIONALER SKI VERBAND



PROGRAM FOR / PROGRAMME / PROGRAM WC Alpine Speed L ☐ M ☐

Date / Date / Datum	Site / Lieu / Ort	Country / Pays / Land	Event (DH / SG)
Name of event / Nom de l'événement / Name der Veranstaltung			
Place of jury inspection / lieu d'inspection du jury / Ort der Besichtigung Jury		Place	Time
Radios / Radios / Funkgeräte			
Liaison Coaches			
Lift open / Ouverture des remontées mécaniques / Lift öffnet			
Warmup and training area / Piste d'échauffement et d'entraînement / Aufwärm- und Trainingspiste			
Inspection (one) / Reconnaissance (une) / Besichtigung (eine)			
Entry for racers closed / Entrée fermée pour coureurs / Zutritt für Werkschläpfer geschlossen			
Photographers on place / Photographes en position / Fotografen am Platz			
Entry for all closed / Entrée fermée pour tous / Zutritt für alle geschlossen			
Coaches on place / Entraîneurs en position / Trainer am Platz			
POV Camera Number / Nombre / Anzahl	1st camera racer	Start time / Heure de départ / Startzeit	
Forerunners + reserve Number / Nombre / Anzahl	Forerunner interval	Start time / Heure de départ / Startzeit	
Start time racer no. 1 / Heure de départ no 1 / Startzeit Nr. 1			
Start interval / Intervalle de départ / Startintervall			
Television breaks / Televisione intermedia / TV Pause			
Yellow zones / flags / Zones jaunes / drapeaux / Gelbe Zonen / Flaggen		Places	Back to start
		1st	
		2nd	
		3rd	
Slip crews / Lisseurs / Rutschkommandos			
Intermediate times / Temps intermédiaires / Zwischenzeiten		speed	Time
Flower ceremony / Cérém. Des fleurs / Blumenzeremonie			
Prize giving ceremony / Remise des prix / Siegerehrung			
Public draw / tirage au sort / Öffentliche Auslosung	Racers must appear		
Press conference / Conference de presse / Pressekonferenz			
Course setter at start / Traceur au départ / Kurssetzer am Start			
Next team captains meeting / Prochaine séance des chefs d'équipes / Nächste Mannschaftsführersitzung			
Miscellaneous / Divers / Verschiedenes			



FÉDÉRATION INTERNATIONALE DE SKI
INTERNATIONAL SKI FEDERATION
INTERNATIONALER SKI VERBAND



Team Captains' Meeting



Team Captains' Meeting

- Constitute the Jury
- Confirm entries
- Confirm representation
- Confirm seeding
- Execute the draw
- Present and confirm program
- Confirm timing and location of next TCM



Start Order – ICR 621

- One run race event
- Two run race event
 - 1st run
 - Tie for 30th place
 - 2nd run
- Snow Seed
- Starting order for FIS races (1st & 2nd run)



Snow Seed

- Extraordinary circumstances (when snowing)
- In advance of the race the Jury may change the start order in DH, SG, GS
- 6 competitors are drawn from the last 20% of the field.
- Start before Bib #1
- In reverse order of their start number

% TABLE

# of Racers	20%	Bib Numbers	# of Racers	20%	Bib Numbers	# of Racers	20%	Bib Numbers	# of Racers	20%	Bib Numbers
30	6.0	25 - 30	63	12.6	51 - 63	96	19.2	78 - 96	129	25.8	104 - 129
31	6.2	26 - 31	64	12.8	52 - 64	97	19.4	79 - 97	130	26.0	105 - 130
32	6.4	27 - 32	65	13.0	53 - 65	98	19.6	80 - 98	131	26.2	106 - 131
33	6.6	28 - 33	66	13.2	54 - 66	99	19.8	81 - 99	132	26.4	107 - 132
34	6.8	29 - 34	67	13.4	55 - 67	100	20.0	82 - 100	133	26.6	108 - 133
35	7.0	30 - 35	68	13.6	56 - 68	101	20.2	83 - 101	134	26.8	109 - 134
36	7.2	31 - 36	69	13.8	57 - 69	102	20.4	84 - 102	135	27.0	110 - 135
37	7.4	32 - 37	70	14.0	58 - 70	103	20.6	85 - 103	136	27.2	111 - 136
38	7.6	33 - 38	71	14.2	59 - 71	104	20.8	86 - 104	137	27.4	112 - 137
39	7.8	34 - 39	72	14.4	60 - 72	105	21.0	87 - 105	138	27.6	113 - 138
40	8.0	35 - 40	73	14.6	61 - 73	106	21.2	88 - 106	139	27.8	114 - 139
41	8.3	36 - 41	74	14.8	62 - 74	107	21.4	89 - 107	140	28.0	115 - 140
42	8.4	37 - 42	75	15.0	63 - 75	108	21.6	90 - 108	141	28.2	116 - 141
43	8.6	38 - 43	76	15.2	64 - 76	109	21.8	91 - 109	142	28.4	117 - 142
44	8.8	39 - 44	77	15.4	65 - 77	110	22.0	92 - 110	143	28.6	118 - 143
45	9.0	40 - 45	78	15.6	66 - 78	111	22.2	93 - 111	144	28.8	119 - 144
46	9.2	41 - 46	79	15.8	67 - 79	112	22.4	94 - 112	145	29.0	120 - 145
47	9.4	42 - 47	80	16.0	68 - 80	113	22.6	95 - 113	146	29.2	121 - 146
48	9.6	43 - 48	81	16.2	69 - 81	114	22.8	96 - 114	147	29.4	122 - 147
49	9.8	44 - 49	82	16.4	70 - 82	115	23.0	97 - 115	148	29.6	123 - 148
50	10.0	45 - 50	83	16.6	71 - 83	116	23.2	98 - 116	149	29.8	124 - 149
51	10.2	46 - 51	84	16.8	72 - 84	117	23.4	99 - 117	150	30.0	125 - 150
52	10.4	47 - 52	85	17.0	73 - 85	118	23.6	100 - 118	151	30.2	126 - 151
53	10.6	48 - 53	86	17.2	74 - 86	119	23.8	101 - 119	152	30.4	127 - 152
54	10.8	49 - 54	87	17.4	75 - 87	120	24.0	102 - 120	153	30.6	128 - 153
55	11.0	50 - 55	88	17.6	76 - 88	121	24.2	103 - 121	154	30.8	129 - 154
56	11.2	51 - 56	89	17.8	77 - 89	122	24.4	104 - 122	155	31.0	130 - 155
57	11.4	52 - 57	90	18.0	78 - 90	123	24.6	105 - 123	156	31.2	131 - 156
58	11.6	53 - 58	91	18.2	79 - 91	124	24.8	106 - 124	157	31.4	132 - 157
59	11.8	54 - 59	92	18.4	80 - 92	125	25.0	107 - 125	158	31.6	133 - 158
60	12.0	55 - 60	93	18.6	81 - 93	126	25.2	108 - 126	159	31.8	134 - 159
61	12.2	56 - 61	94	18.8	82 - 94	127	25.4	109 - 127	160	32.0	135 - 160
62	12.4	57 - 62	95	19.0	83 - 95	128	25.6	110 - 128	161	32.2	136 - 161

ICR - 602.1.9

In extraordinary conditions, the Jury may change the starting order of a Downhill race, a Giant Slalom or a Super G (when snowing, etc.). A group of at least 6 competitors, nominated in advance, start before start number 1. These 6 competitors are drawn from among the last 20% of the start list. They will start in reverse order of their start numbers.





Race Course Preparation & Security

Course Preparation

- **Planning**
- **Selection of Race Course**
- **Snow Preparation**
- **Protection Installations**



Course Preparation

- Machine Grooming – tilling
- Snow making
- Water
- Water Bar
- Chemicals



Protection Installations

- Fencing
 - ‘C’ fencing
- Netting
 - ‘A’ system - ‘B’ netting
- Padding
 - Willey bags



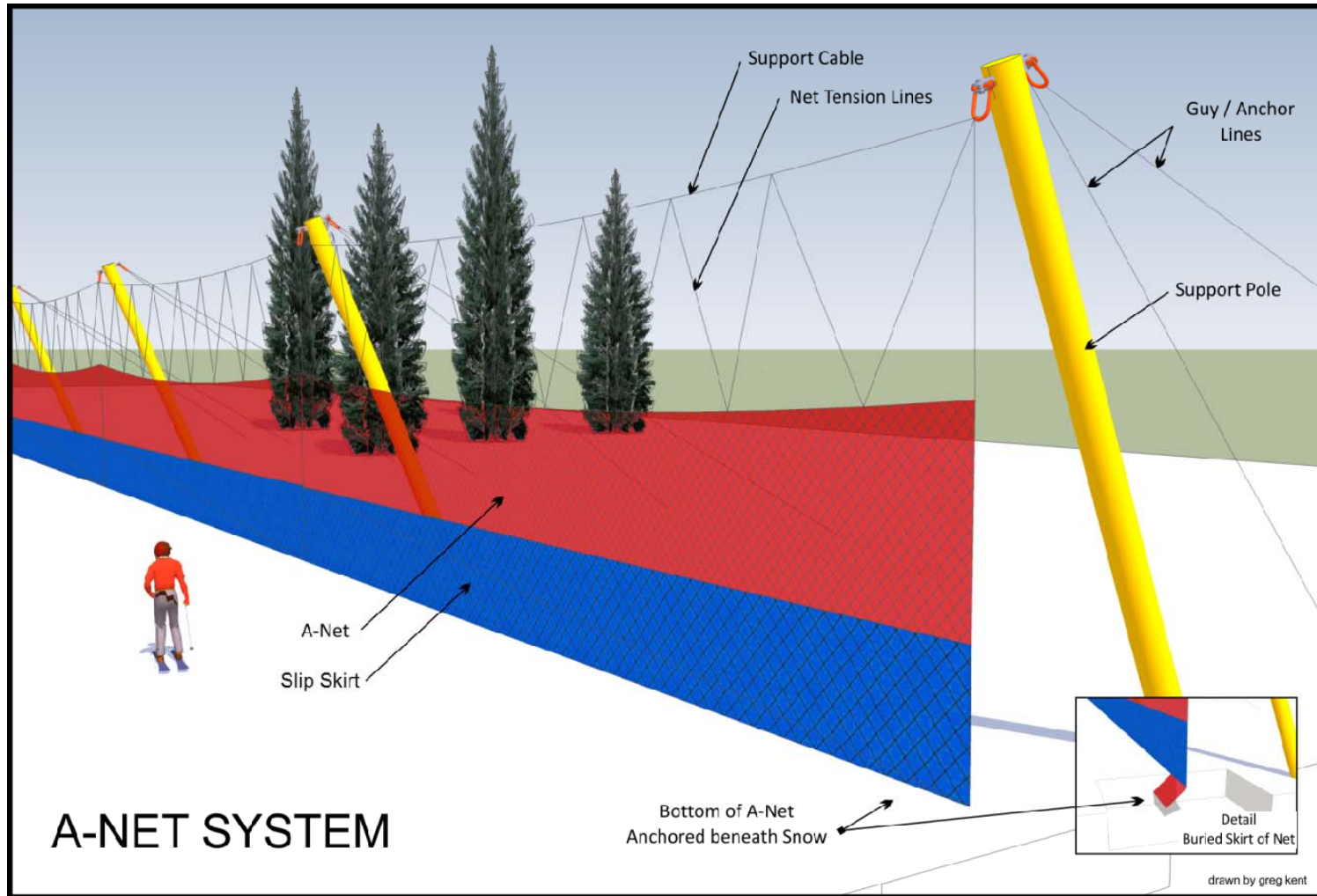
Protection Installations



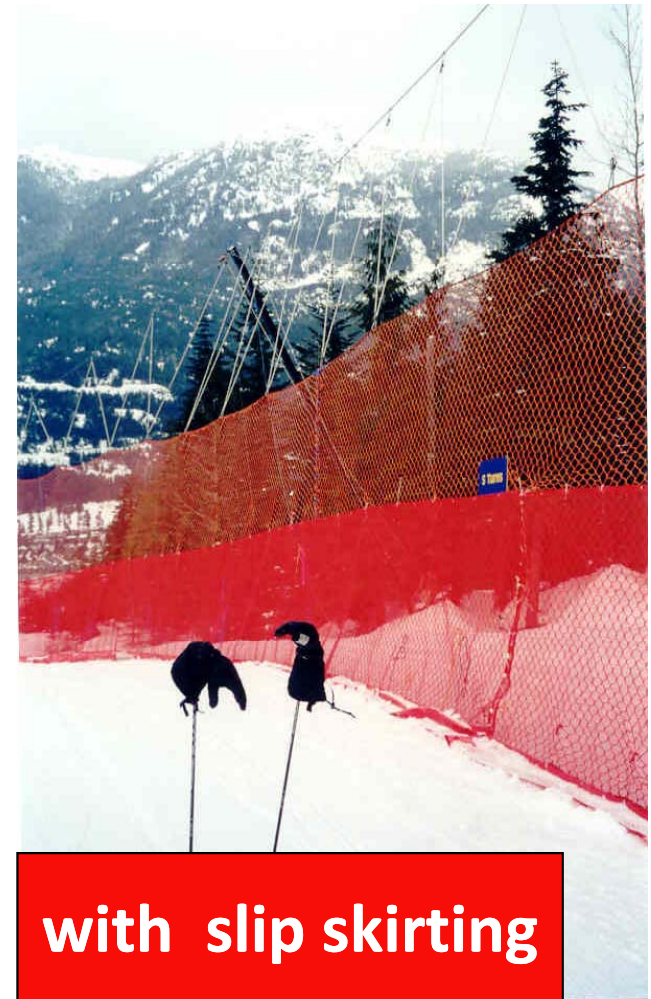
Protection Installations



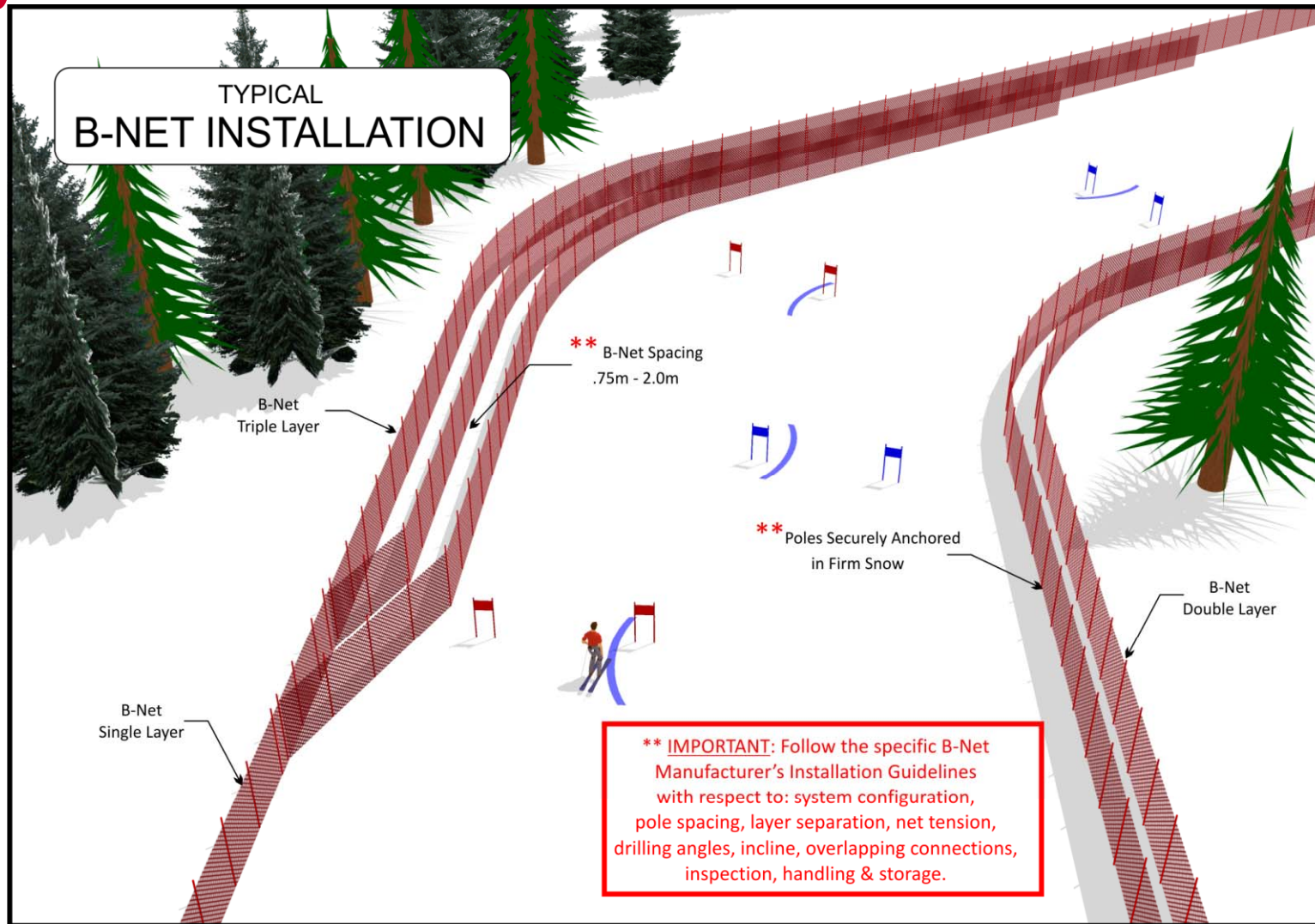
A systems



A systems



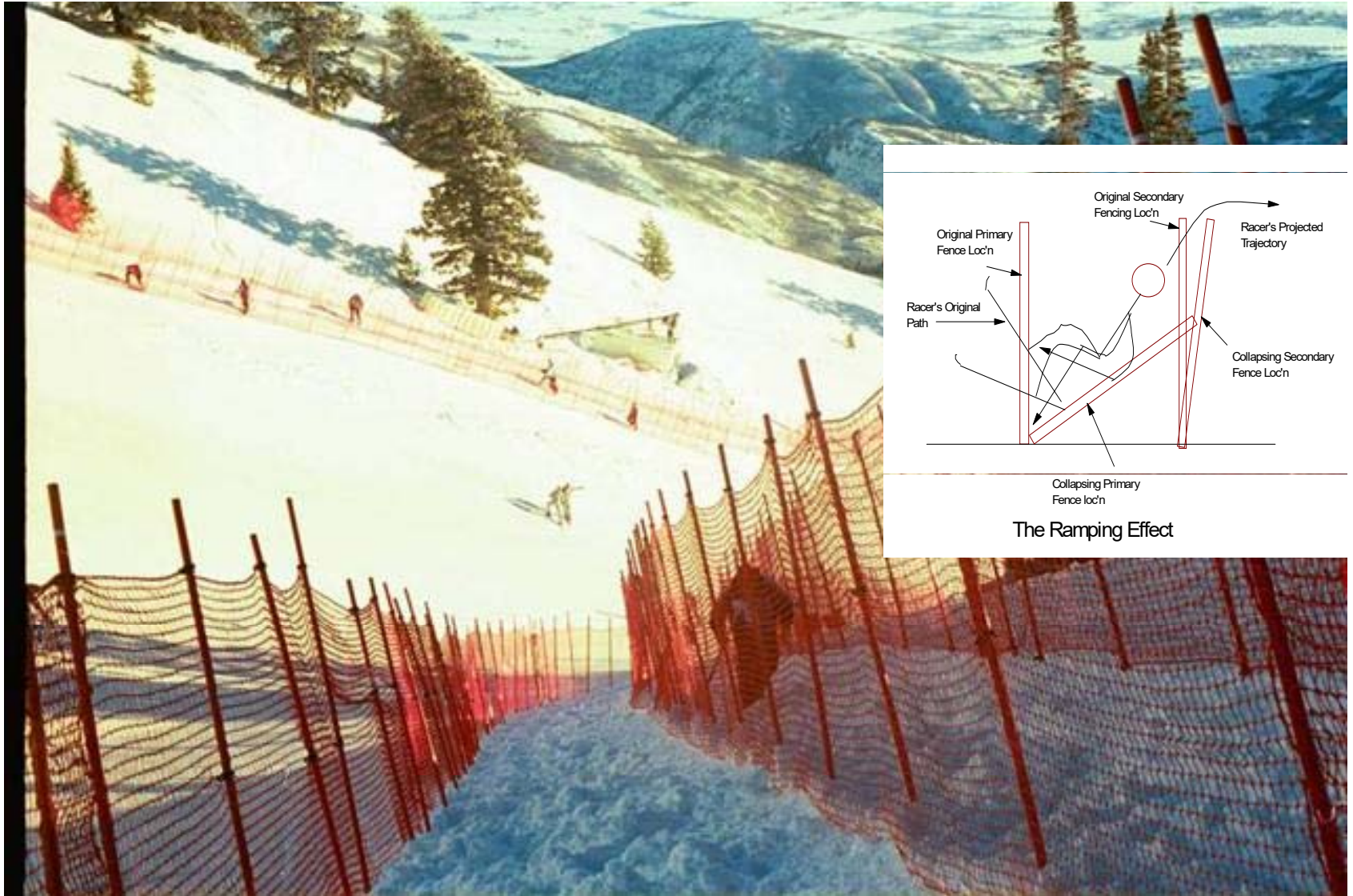
B System



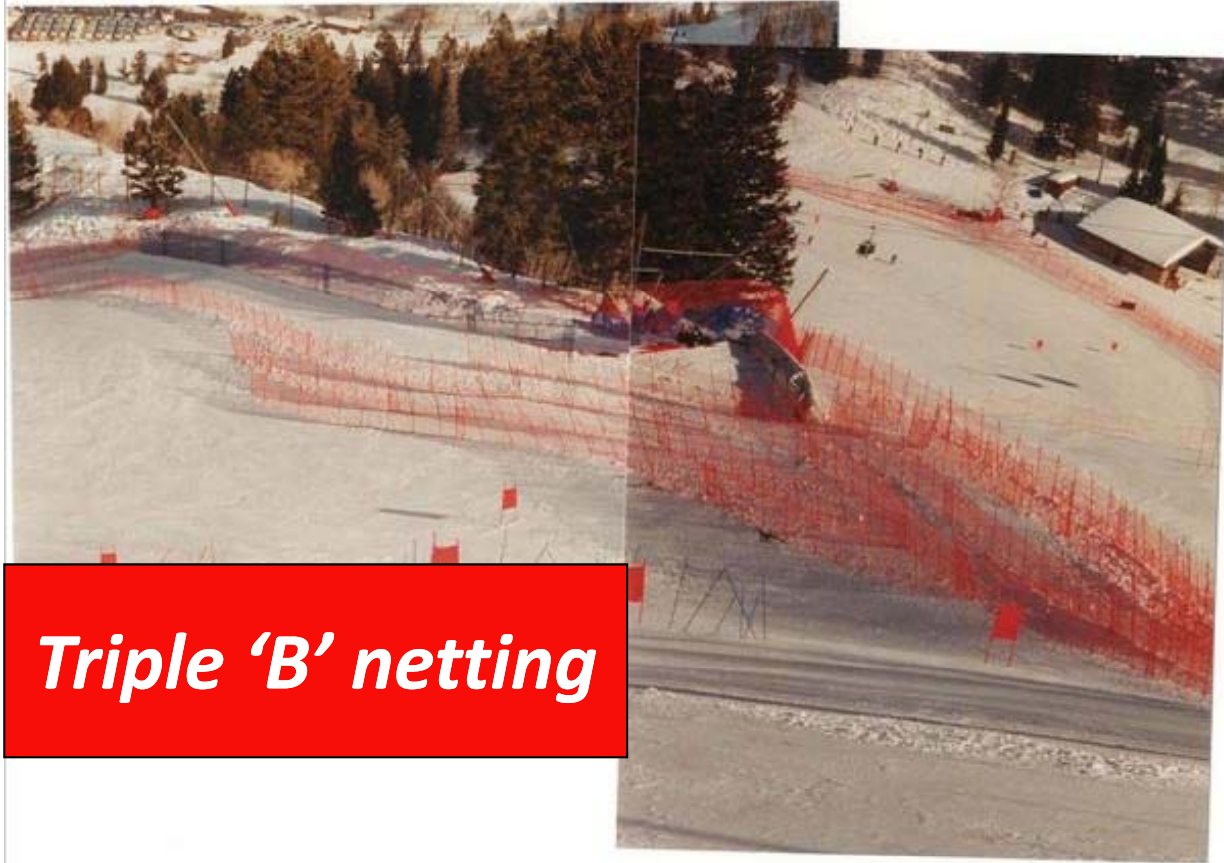
B net



B net



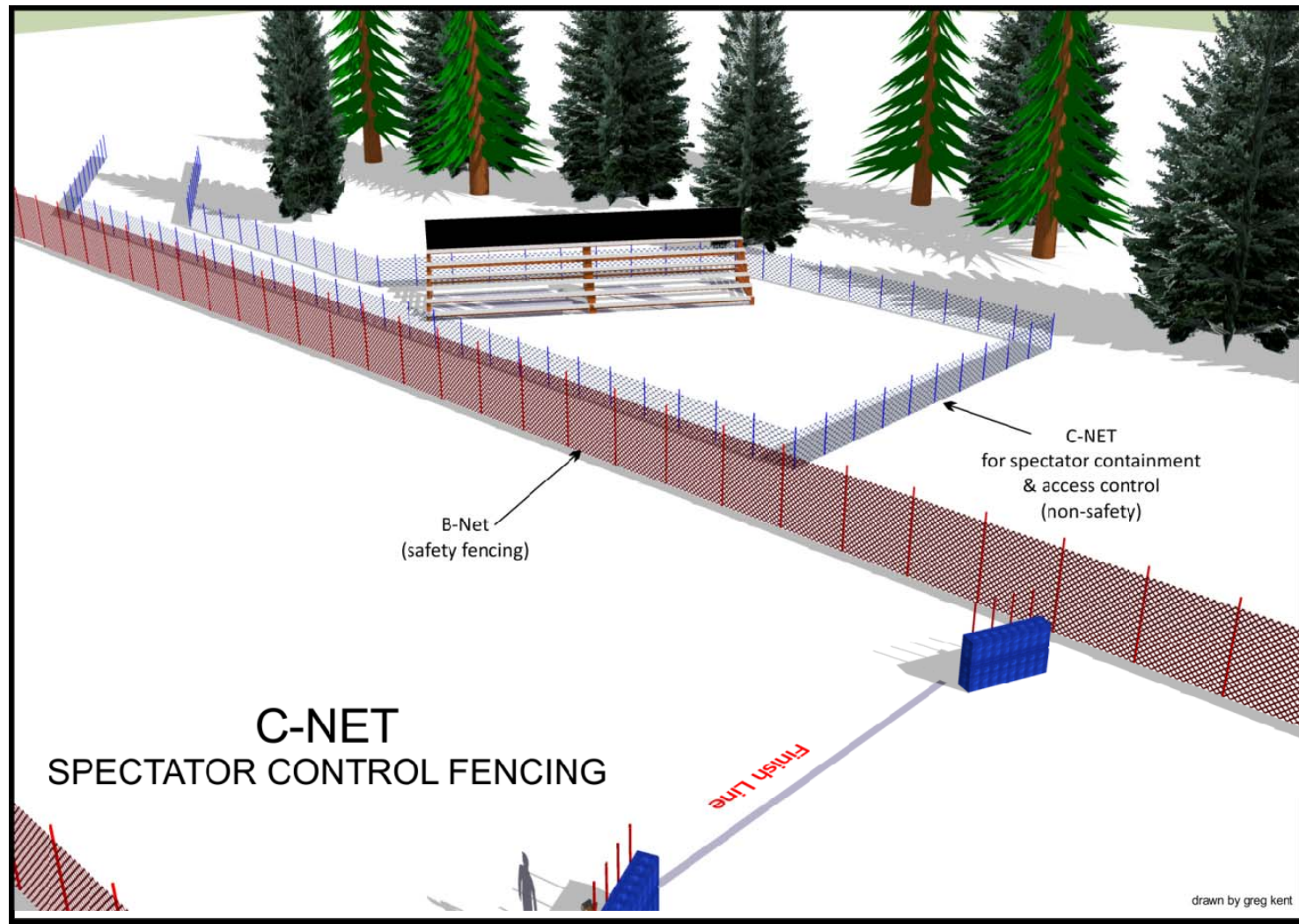
Course Setting Terms



Triple 'B' netting



C fencing



Obstacle Protection

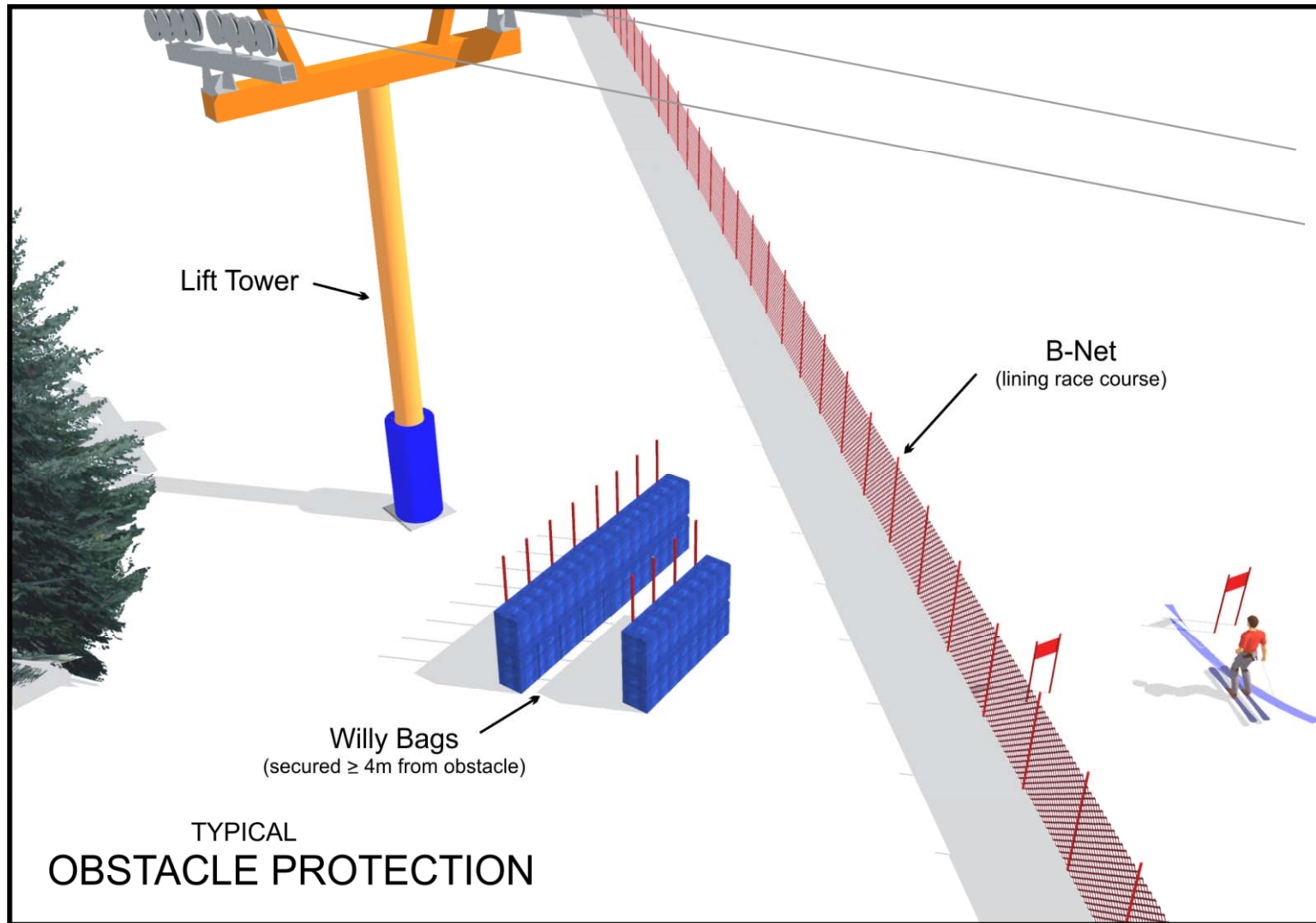
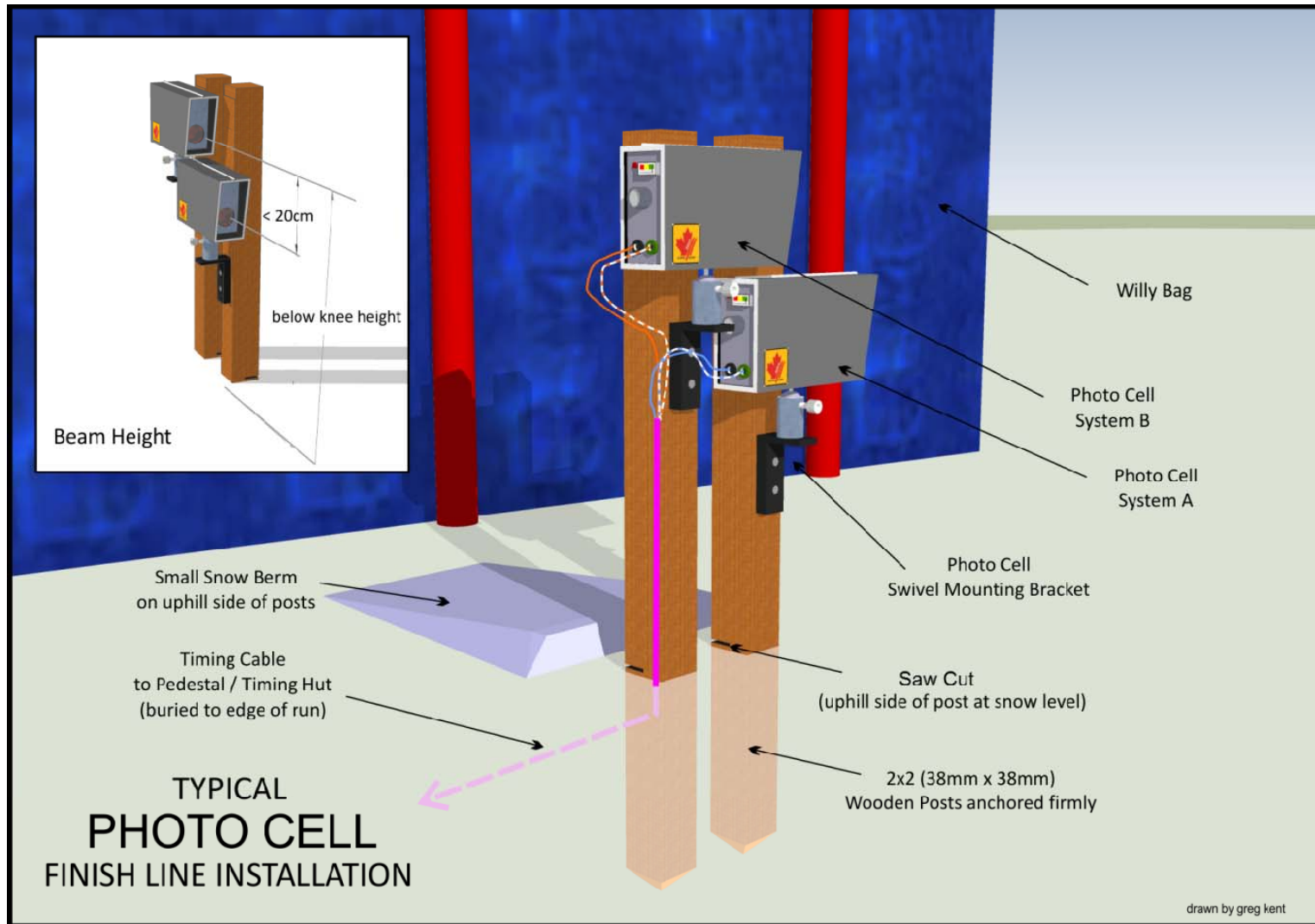


Photo Cell Protection



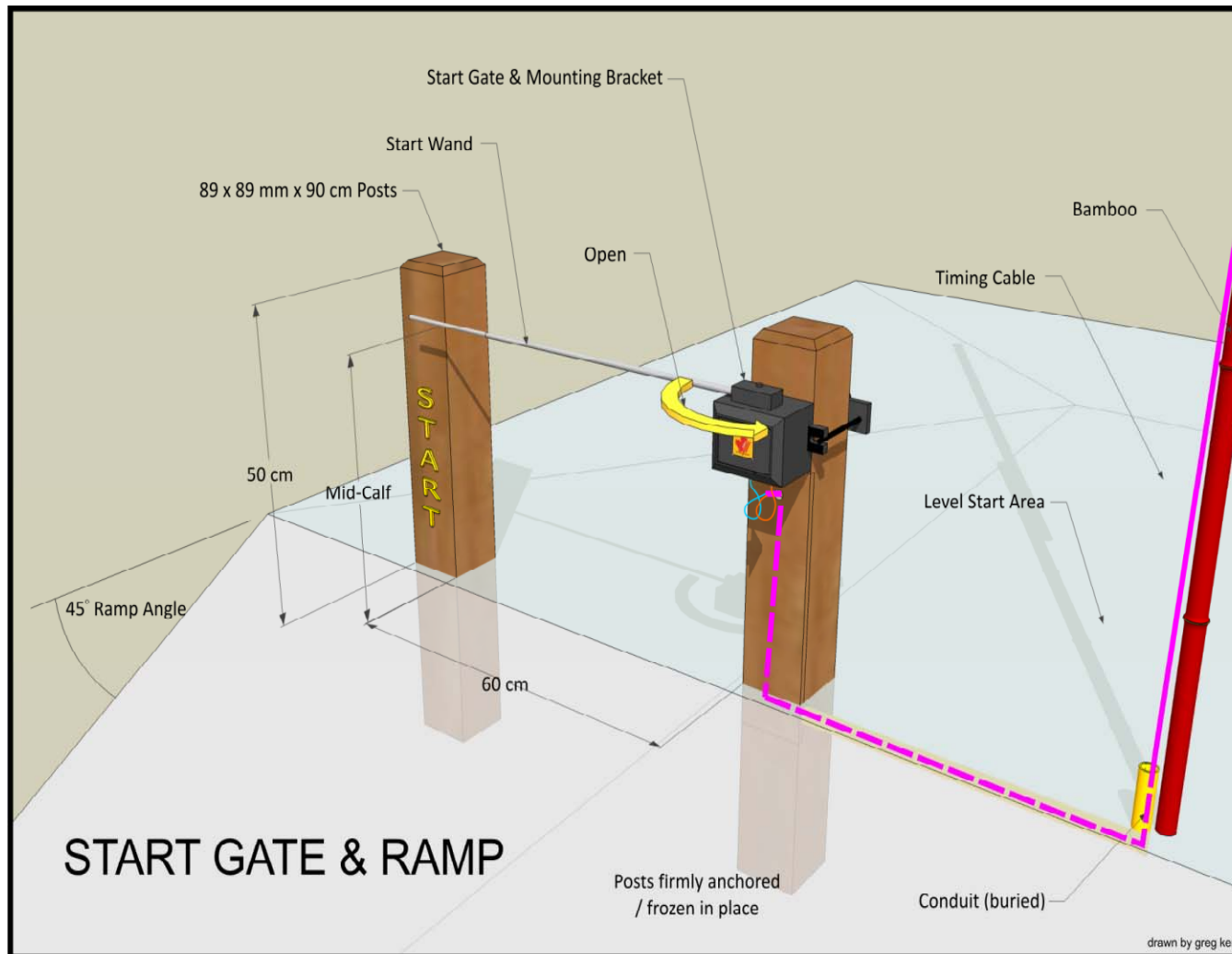
Discuss



Discuss



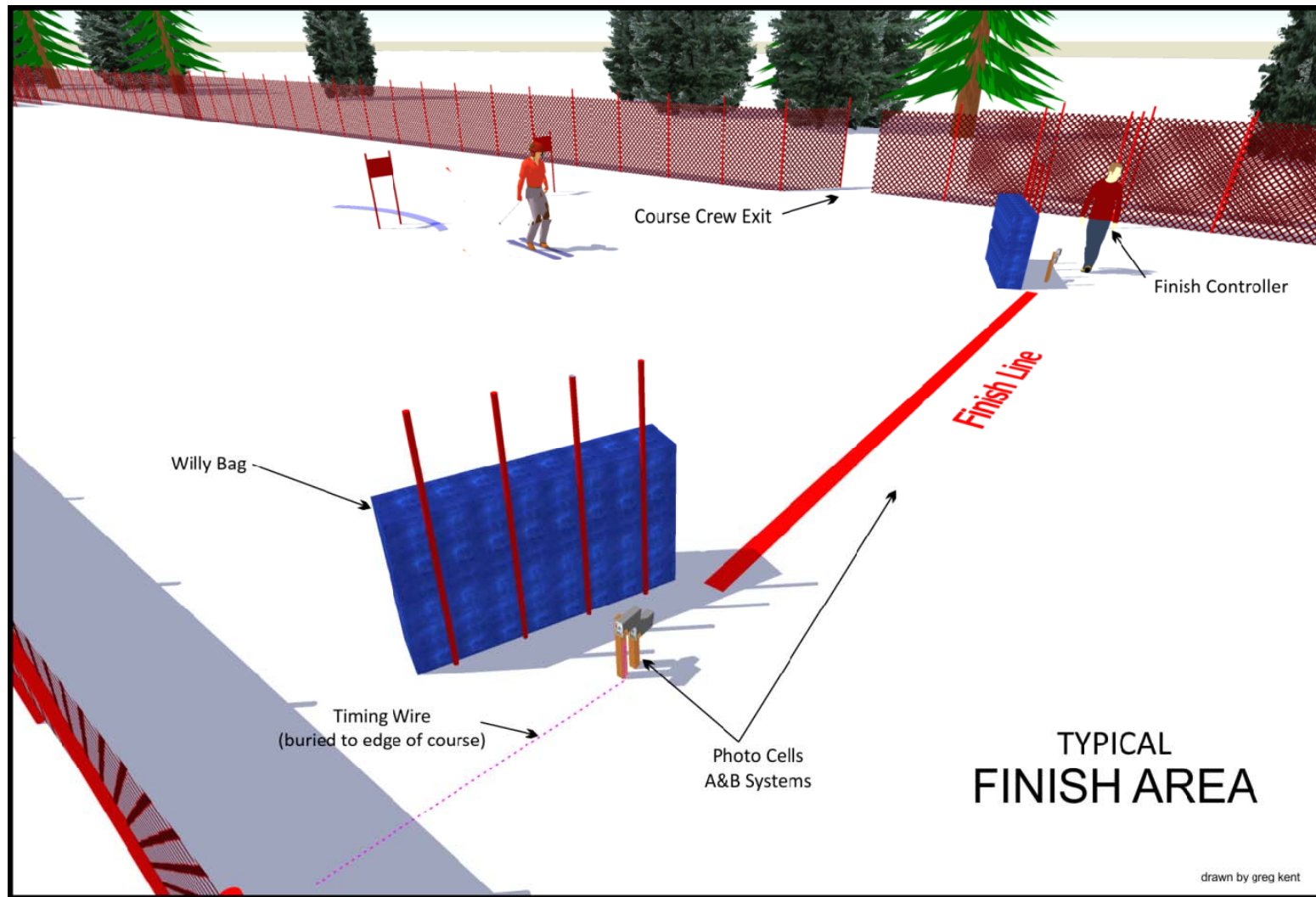
Start Area – ICR 613.1, 613.2



Start Area



Finish Area – ICR 615.1, 615.2



Finish Area





Course Setting

Course Setting

- “ . . . ready in time” for inspection
- Gate detail
- Correct passage
- Obligation to inspect
- Inspection method



Race Course Technical Specifications

Check List for vertical drop (VD), number of gates (NG) and number of direction changes (DC)

EVENT		OWG/WSC	WC	COC	FIS	CHI	ENL
DH (Art. 700)	L	VD	450 – 800				1 Run: 400-500m 2 Runs: 300-400m
		Gate Panel	0.75 x 0.50 //colour for gate panels (see art. 701.3.2)				
	L						
	M	VD	350 – 450 (2 Runs Race)				
		NG	as required				
Downhill	M	VD	800 (750 ¹) - 1100	500 - 1100	450 - 1100		1 Run: 400-500m 2 Runs: 300-400m
	L	VD	140 - 220	120 - 200		100 - 160	80 – 120 3 Runs: 50 min
			Number of direction changes				
	L	DC	30%-35% (+ / - 3)			32%-38%(+/-3)	30%-35% (+ / - 3)
	M	VD	180 - 220	140 - 220		100 - 160	80 – 140 3 Runs: 50 min
SL (Art. 800)	L	VD	300 - 400	250 - 400		200 - 350 ²⁾	200 - 250
			Number of direction changes				
	L	DC	11% - 15%			13 % - 18%	13% - 15%
	M	Gate Panel	0.75 x 0.50 red (orange)& blue (see art. 695)				
	M	VD	300 - 450	250 - 450		200 - 350 ²⁾	200 - 250
GS (Art. 900)	L	VD	400 - 600	350 - 600		250 - 450	350 - 500
			Number of direction changes				
	L	DC	6% min		7% min	8% - 12%	7% min
	M	Gate Panel	0.75 x 0.50 red (orange)& blue (see art. 695)				
	M	VD	400 - 650	350 – 650		250 - 450	350 - 500
SG (Art. 1000)	L	VD	80 - 100			U14: 60-U16: 80	
	L	NG	20 - 30			U14: 12 – 15 U16: 15 – 22	
		Gate Panel	0.75 x 0.50	red course / blue course			
	M						
P (Art. 1220) Parallel							

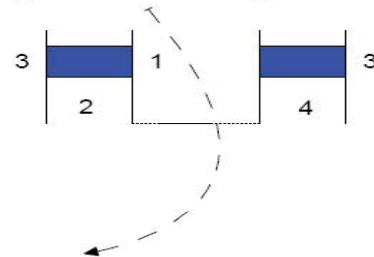
¹⁾ In exceptional case (see art. 701.1.1)

²⁾ see art. 901.1.4



Course Setting Terms

Fig A Giant Slalom/Super G/Downhill



- 1. Turning Pole
- 2. Turning Gate
- 3. Outside Pole
- 4. Outside Gate

Fig C Slalom

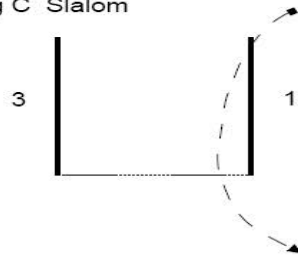
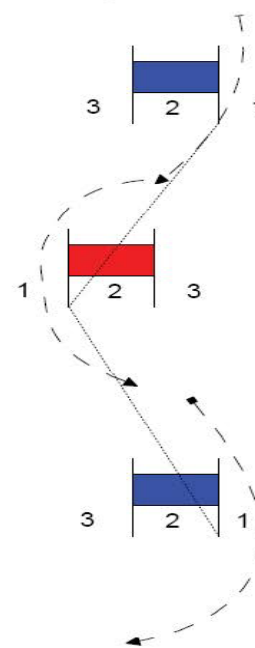
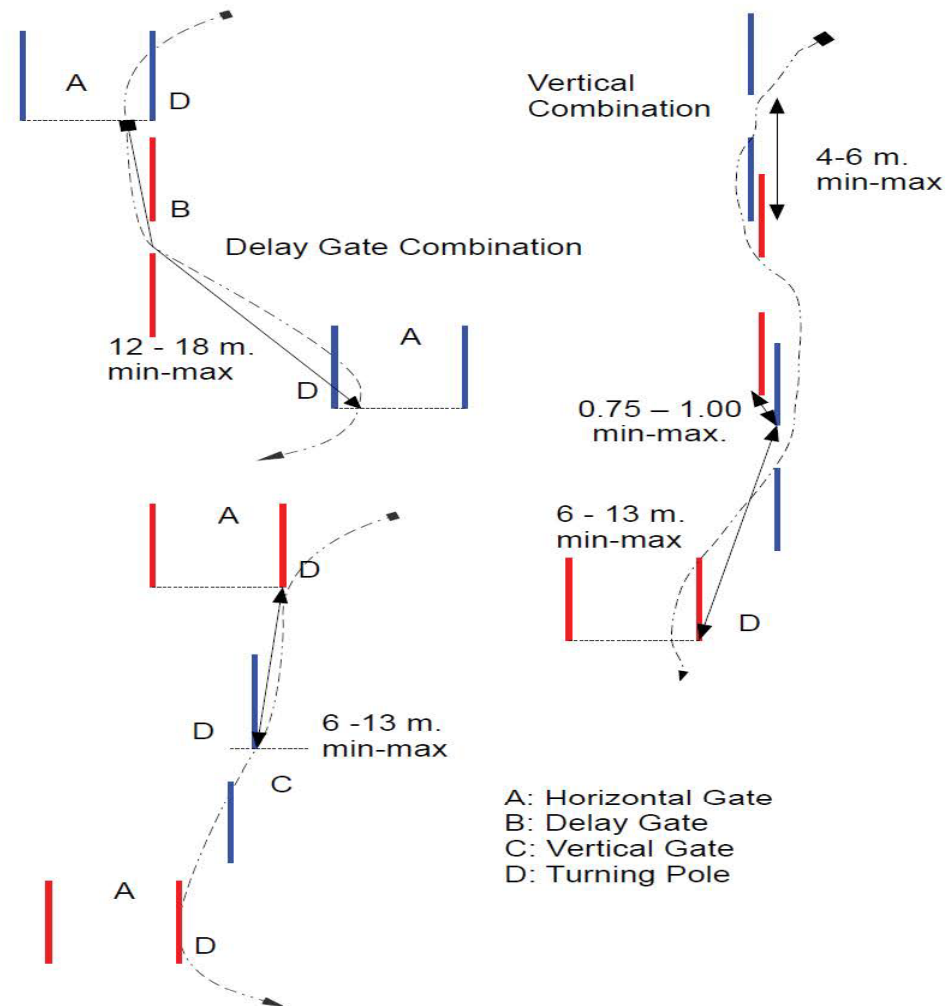


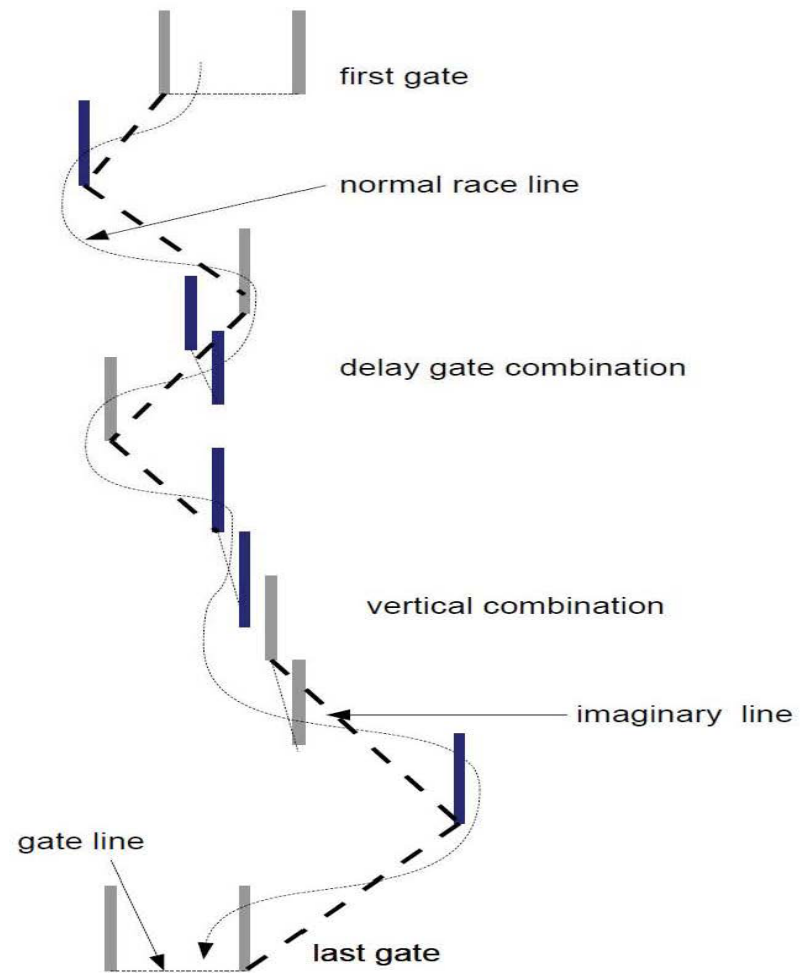
Fig B Parallel



Slalom



Slalom





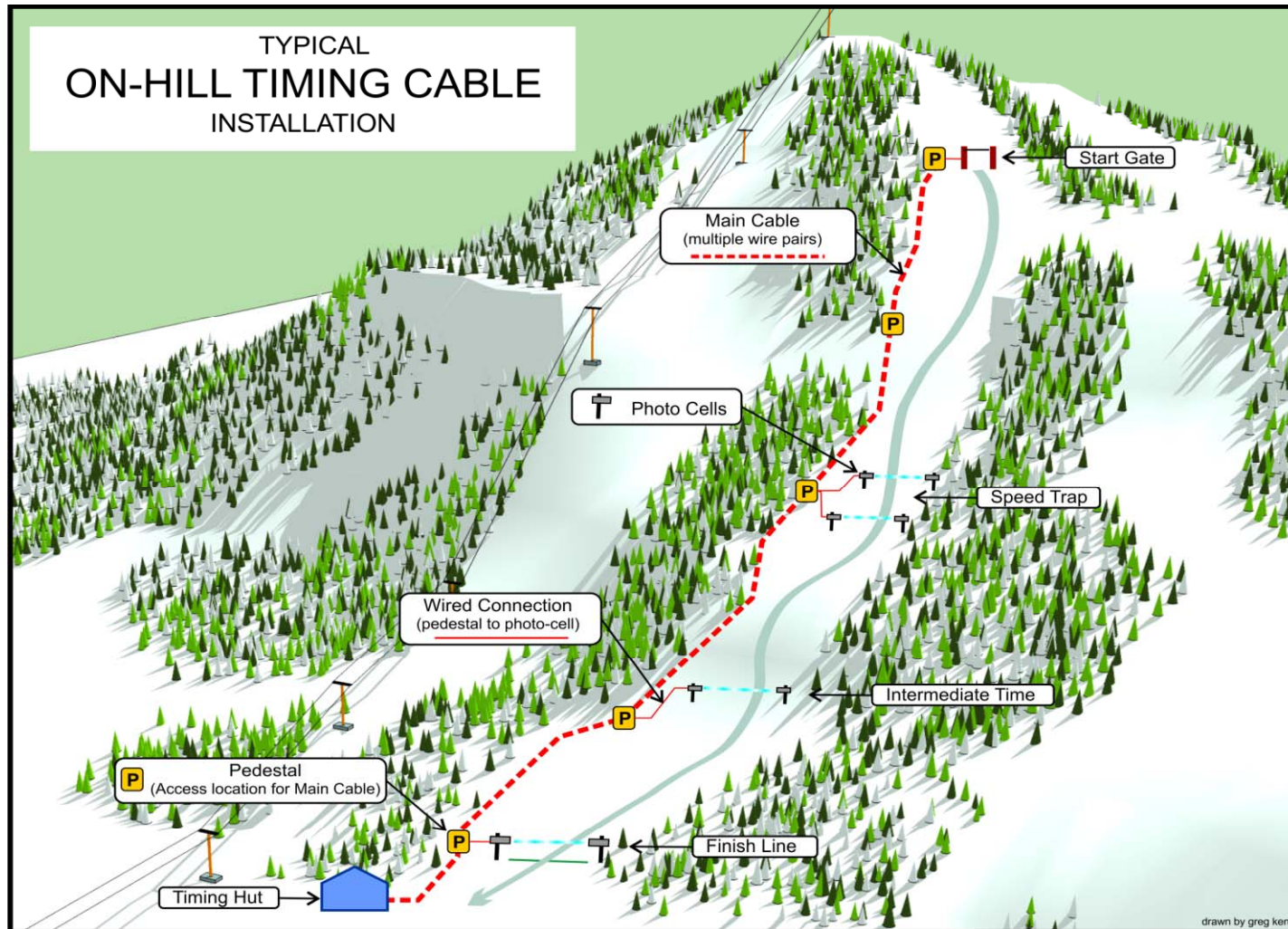
Timing

Timing - ICR 611

- Rules of Timing
 - Multiple communications
 - Printed electronic timing to 1/100th second
 - Hand timing mandatory
 - Electronic timing failure
- Equivalent Electronic Time – EET
- National Timing Form



Timing



Timing Synchronization

- **Timing Booklet, Alpine Skiing, v2.54 May 2016**
- Synch confirm at +1 minute:
- Synchronization to the Time of Day for **all** systems must be accomplished. Connect all timing devices that run in time of day at one start source (**one single contact only for checking**) and start the time of day of all timing devices. Trigger the timing devices again after 1 minute and check if the time of day for this impulse is within a **1/1000ths (0.001)** for System A and System B timers. **If they are not, you must re-synchronized** and try again.

. . . .



Timing Synchronization

- Homologated starting gates have two separate contacts. It is not sufficient to synchronize the timers by simply opening the start gate.
- Synchronization must be executed with all timers connected to receive the start impulse from a single source. Use of a single “plunger” trigger is the preferred method. Alternatively, all timers must be connected to just the System A pair or just the System B pair of plugs from a start gate.

A Timing Best Practice:

- After the forerunner reports have been received from the Finish Referee, the TD should seek or receive confirmation from the Chief of Timing that:
 - all of the timers are correctly synchronized,
 - both the start and the finish hand timers are operating correctly, and
 - both the start and the finish hand timers are being operated correctly.



Electronic Equivalent Time

611.3.2 Utilization of times taken by hand

Hand times may be used in the official results after a correction has been calculated.

Effective fall 2017, the missing System A **time of day** element (start impulse or finish impulse) is calculated to the precision of the System A timer (1,000's or 10,000's of a second, as applicable) and manually inserted into the timing data (M flag).



EET

- TOD Replacement produces better result, most of the time
- TOD replacement works with or without synchronization
- Math can be done either way, alternate minus primary or primary minus alternate
- For athletes missing both start and finish time, NET Time calculations (old method) produces exact same result as doing the math with a replaced TOD start and replaced TOD finish
- Replacement calculations should be done to the .001 precision
- **Look for and use electric system B whenever possible, no matter how you do the math, electric gives a much better result!**



EET

611.3.2.1

Calculation of the correction **time of day impluse**:

Subtract the electronic time from the time taken by hand (or vice versa) for the all of the 10 competitor times preceding the missing time. If there are not 10 times before, complete the calculation with the remaining times after the missed time.

The sum of the 10 time differences is divided by 10 and rounded up or down (0.044 -> 0.04, 0.045 -> 0.05) to give the correction which must be applied to the hand time of the competitor without an electronic time.

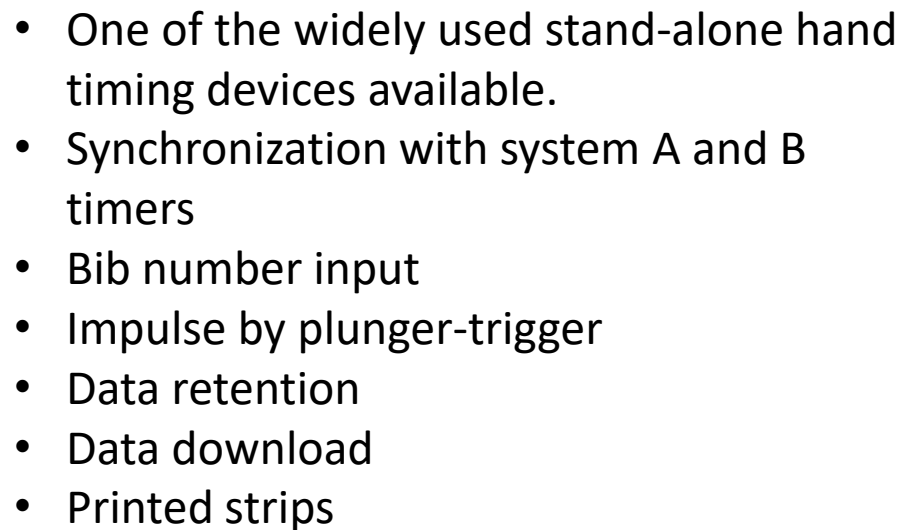


EET

.001 primary and .01 replacement system (hand timing)					Calculate to
	Bib	Sys A TOD Fin	HT Finish TOD	Sys A - HT	Sys A precision
	27	08:19:18.019	08:19:17.88	0.139	
	30	08:21:20.141	08:21:19.92	0.221	
	31	08:27:20.215	08:27:20.14	0.075	
	32	08:28:01.178	08:28:01.13	0.048	
	33	08:28:40.759	08:28:40.58	0.179	
	34	08:29:21.983	08:29:21.94	0.043	
	35	08:30:03.018	08:30:02.86	0.158	
	36	08:30:38.179	08:30:38.03	0.149	
	38	08:31:20.619	08:31:20.52	0.099	
	39	08:32:01.521	08:32:01.43	0.091	
Missing	40		08:32:43.89	1.202	
			/10	0.120	
		Replacement Finish	Add adjust to HT	Primary Start	Resulting Net Time
		08:32:44.010		08:31:24.489	00:01:19.521



- Using digital stop watches means using recording forms



CODEX : F= _____ – M= _____ Recorded by/Chronométré par: _____
v.2011-10



Start, Countdowns, Finishes

- **Start Timing** – shall measure the exact time the competitor crosses the start line with his leg below the knee
- **Start Countdowns**
 - Start signal / interval 613.4
- **Valid and False Starts** (613.6, 613.7, 628.5, 629.3)
- **Determination of Finish** (614.1.1, 615 f)
- **Timing of the Finish**



Technical Timing Report

Required for all FIS races, and ACA provincial / national championships.

Submit to the National Timing Group c/o
officials@alpinecanada.org



Technical Timing Report

FIS		Timing & Data Technical Report		Alpine		CODEX example 0247	
		To accompany TD Report Immediate transmittal. One form required for each Codex				321	
						Version 7.1	
Location:	Bromont, Quebec			DH <input type="checkbox"/> SL <input type="checkbox"/> GS <input checked="" type="checkbox"/> SC <input type="checkbox"/> SC <input type="checkbox"/>			
Nation:	CAN					MEN: <input checked="" type="checkbox"/> LADIES: <input type="checkbox"/>	
Event Name:	SUPER SERIE SPORTS EXPERT						
Date (dd/mm/yy):	02-16-12						
Sys A Timer:	Brand	Model	Serial Number	Homologation #			
Sys B Timer:	TAG HEUER	CP540	1587	TAG.070T.08			
Start Gate:	TAG HEUER	CP540	1215	TAG.070T.08			
Finish Cells A:	ALGE	STSnM2S	0212038	ALG.S53T.10			
Finish Cells B:	TAG HEUER	HL 2-32	769	TAG.L49T.10			
Finish Cells B:	TAG HEUER	HL 2-32	770	TAG.L49T.10			
Software	Brand	Version	Date	Results = Tapes			
Scoring and Results Preparation:	SplitSecond	National FIS 6.24 rev 9	2012-02-09	Confirmed			
Connections to Start:	System A	System B	Voice Comm.				
Cable, Radio or other- (Specify)	Cable	Cable	Cable/Radio				
POWER ON Time (warm-up):	7:16						
Time of day expressed in thousandths:	At least 20 minutes before Synchronization.						
	1st Run		2nd Run				
	System A (TOD) #	System B (TOD) #	Hand Sync.	System A (TOD) #	System B (TOD) #	Hand Sync.	
Synchronization Time	9:50:00		9:50:00	13:57:00		13:57:00	
Synch confirm at +1 minute	9:50:59,657	9:50:59,657		13:57:59,901	13:57:59,901		
Start TOD First Competitor *	10:00:35,232	10:00:35,230	Net Time	14:08:37,734	14:08:37,732	Net Time	
Finish TOD First (1) (52) *	10:01:16,529	10:01:16,527	41,29	14:09:22,789	14:09:22,787	45,05	
Hand Time First Competitor *			41,41			44,94	
TOD Last Competitor *	10:58:41,257	10:58:41,245		14:41:27,308	14:41:27,300		
Finish TOD Last (83) (65) *	10:59:29,319	10:59:29,306	48,06	14:42:11,470	14:42:11,462	44,16	
Hand Time Last Competitor *			48,08			44,32	
* First and Last to Finish with complete data.							
Best run-time System A	Bib : (1)		41,29	Bib : (15)		40,13	
Were all Results from system A?	Indicate: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No						
List any or all bib numbers used in the results timed on any system other than system A in all runs (indicate run):							
WHY? <input type="checkbox"/> Batteries <input type="checkbox"/> Snow obscuration <input type="checkbox"/> wire break <input type="checkbox"/> Photo cell alignment <input type="checkbox"/> Other? (describe)							
Data Source for replacement system A time. (resp. ICR 611.2.1) ? <input type="checkbox"/> System B <input type="checkbox"/> System C <input type="checkbox"/> Manual							
Comments:							
We certify that the timing and calculations of this event adhered to the FIS rules.							
YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>							
Chief of Timing - Name (Print)	Bissonnette Roch		Email, Telephone	roch@diacarb.com 450-357-6100		Signature	
Technical Delegate - Name, NAT (Print)	Lambert, John (CAN)		Email, Telephone	J.LAMBERT-SC SYMPARCO.CA 647.222.135		Signature	
						FIS TD #	
						1018	

Download this form from www.fis-ski.com





Points, Penalty, Results

Points System

- National Points System
- FIS Points System
- Points List – On the FIS & ACA web sites
- Race Points – Specific formula
- Race Penalty – Calculated number to equalize races on different hills
- Racer Points or Result – $\text{Race points} + \text{Penalty} = \text{Result}$
- Points – average of two results in each discipline



Race Points

$$P = [(Tx/To)-1] \times F$$

- All calculations must be done to at least 4 decimal places ~ no rounding off till calculation complete
- Round off to 2 decimal places as follows:
 - Ignore 4th decimal and use the value of the 3rd decimal place to round the 2nd decimal place
 - 0 – 4 ~ stays the same 5 – 9 goes up



Penalty Calculation

Procedure:

1. List top 10 finishers
2. Add up list pts for the best 5 list point finishers from the top 10
3. Add up the list points for the best 5 list points who **started** the race irrespective of finish
4. Add the results of the best 5 who finished and who started
5. Deduct the race points of the best 5 list points holders
6. Divide by 10
7. Adjust by Z and adder values



PENALTY CALCULATION CALCUL DE LA PENALITE PUNKTEZUSCHLAGSBERECHNUNG

Name of event Nom de l'événement Name der Veranstaltung		
Date Date Datum	Event Epreuves Bewerbe	Name of the TD Nom du DT Name des TDs

The best 10 at finish / 10 meilleurs à l'arrivée / Die besten 10 im Ziel						
Result Résultat Resultat	Number Dossard Nummer	Name Nom Name	Time Temps Zeit	FIS-Points Points FIS FIS-Punkte	Best 5 5 meilleurs 5 besten	Race points Pts de course Rennpunkte

FIS Points of the best 5 started / 5 meilleurs points FIS ayant pris le départ / Die 5 besten gestarteten FIS-Punkte

TOTALS / TOTALS / SUMMEN

(B)	FIS Points of best 5 started Points FIS des 5 meilleurs ayant pris le départ Die 5 besten gestarteten FIS-Punkte	
(A)	FIS Points of best 5 to finish in top 10 Points FIS des 5 meilleurs dans les premiers 10 Die 5 besten FIS-Punkte aus den ersten 10	
(C)	Race Points of corresponding competitors Points compétition de ces concurrents Rennpunkte der entsprechenden Wettkämpfer	

Calculated penalty / Pénalité calculée / Berechneter Zuschlag

A + B - C = : 10 =

Correction value / Valeur de correction / Korrekturwert (-z → +z Art. 4.4.7)

Category Adder / Additif de catégorie / Kategorie-Adder

Penalty applied / Pénalité appliquée / Angewandter Punktezuschlag

Signature TD / Signature du DT / Unterschrift des TDs Nr/No/Nr

FÉDÉRATION INTERNATIONALE DE SKI
INTERNATIONAL SKI FEDERATION
INTERNATIONALER SKI VERBAND



Penalty Calculation

- **Some Important Points to Note in National Race Penalty Calculation:**
- The maximum penalty value for a National Level race is **500.00**.
- The “Fill In” point is to be use in case there are less then five racers with NATIONAL points is **500.00** for all discipline. This fill in must also be use if the racer’s points are over **500.00**
- There will be no “**ADDER**” used at National level races.
- There will be no “**Z**” factor’s used at the National level races.
- If two or more competitors have the fifth best points, which should be taken into consideration for the penalty calculation, the competitor with the higher
- race points will be considered for the penalty calculation. (Reason: better penalty).



Source for current variables



Alpine Skiing

2017/2018

1st FIS points list 2017/2018

Valid from 01-07-2017 to 09-08-2017

Category/Catégorie/Kategorie	Race level	Minimum penalty	Maximum penalty
OWG,WC,WSC	0	0.00	0.00
COM	0	0.00	4.00
FQUA,EQUA	0	9.00	999.00
FEC,SAC,UVS,NAC,EC,WJC,ECOM,ANC	1	6.00	999.00
NC	2	8.00	999.00
AWG,CISM,FIS,CIT,UNI,JUN,CORP,NJC,NJR,YOG	3	9.00	999.00
ENL	4	40.00	999.00

MEN							GENERAL		LADIES						
ADDER						Z-Value	Men/Ladies		ADDER						Z-Value
Disc.	Level 0	Level 1	Level 2	Level 3	Level 4		F Value	Max points	Disc.	Level 0	Level 1	Level 2	Level 3	Level 4	
DH	0	0	2	3	13	0.00	1250.00	310.00	DH	0	0	2	3	13	0.00
SL	0	0	2	3	13	0.00	720.00	145.00	SL	0	0	2	3	13	0.00
GS	0	0	2	3	13	0.00	980.00	200.00	GS	0	0	2	3	13	0.00
SG	0	0	2	3	13	0.00	1080.00	250.00	SG	0	0	2	3	13	0.00
AC	0	0	2	3	13	0.00	1150.00	250.00	AC	0	0	2	3	13	0.00

FÉDÉRATION INTERNATIONALE DE SKI
INTERNATIONAL SKI FEDERATION
INTERNATIONALER SKI VERBAND



Penalty Example

Slalom Ladies final SS 2017-01-08
FIS PENALTY CALCULATION

THE BEST 10 AT FINISH:

RACE RESULT	BIB NR.	CODE	COMPETITOR SURNAME+NAME	FIS POINTS	BEST 5	RACE POINTS
1	13	107648	BURGESS, Georgia	47.26	47.26	0.00
2	11	107759	ROUSSIN, Heidi	41.16	41.16	4.31
3	6	107990	SMITH, Sierra	62.41	62.41	4.69
4	9	107811	PATTERSON, Soleil	66.60	66.60	9.25
5	18	107758	OBRIEN, Mikaela	75.90		
6	16	107763	LEVEILLE, Florence	67.38	67.38	15.68
7	22	108023	FAUCHER, Dorothee	78.38		
8	17	107804	THOMAS, Abby	69.13		
9	28	107873	FORTIN, Roxanne	87.78		
10	27	107984	CARDINAL, Frederique	87.29		

THE BEST 5 AT START:

2	11	107759	ROUSSIN, Heidi	41.16
DNF1	4	107696	CUMMING, Meg	42.92
DNF1	12	107695	WEARMOUTH, Antonia	45.40
1	13	107648	BURGESS, Georgia	47.26
DNF2	15	107589	NOLIN, Frederique	47.33

TOTALS

(B) FIS POINTS OF BEST 5 AT START	224.07	-----	
(A) FIS POINTS OF BEST 5 TO FINISH IN TOP 10		284.81	-----
(C) RACE POINTS OF CORRESPONDING COMPETITORS			33.93

CALCULATED PENALTY $284.81 + 224.07 - 33.93 : 10 =$ 47.495
(A) (B) (C)

ROUNDED 47.50
CATEGORY ADDER 3.00
CORRECTION VALUE (Z) +0.00

PENALTY APPLIED: 50.50

LAMBERT JOHN (CAN)#1018

08-01-17 / STATION MONT SAINTE-ANNE LIST: FLW0817 CAN6283.1018 SF9 / 1

DATA PROCESSING BY SPLIT SECOND SOFTWARE TIMING ALGE TIMV2

PXE

8 janvier 2017



Results

- Rules for the form and content of results
- **Accuracy** of input of data is essential for correct preparation of results
- Distribution of race results available from FIS, ACA or PSO depending on level of race.



Results

ALPINE ONTARIO SOUTH PARMALAT ONTARIO CHAMPIONSHIPS CRAIGLEITH SKI CLUB FEBRUARY 26 2000 WOMEN'S SLALOM

OFFICIAL RESULTS

JURY:

TECHNICAL DATA:

TECHNICAL DELEGATE: JF BROUSSEAU CAN NAME OF COURSE: BIG JOHN

REFEREE: ANDREA MARCHAND CAN START ELEV.: 400
CHIEF OF RACE: GRAHAM HESS CAN FINISH ELEV.: 229
VERTICAL DROP: 171

HOMOLOGATION: 403/125/72

COURSE SETTER: BLAIR THOMPSON CAN KIP HARRINGTON CAN
FORERUNNERS: CARRIE GRINTER CAN T. SIMMS-BROWN CAN
TAYLOR S. BROWN CAN C. GRINTER CAN
C. SAVAGE OBR

NO. OF GATES: 62 55
START TIME: 10.50 2.00

WEATHER: PARTLY CLOUDY SNOW: GRANULAR
TEMPERATURE: START 14 C FINISH 15 C ADDER = 5 Z = 8.05 F = 58.0

POS	BIB NO.	CODE NO.	COMPETITOR SURNAME, NAME	NAT	TIME 1ST RUN	TIME 2ND RUN	TOTAL TIME	RACE POINTS
1	2	106345	DAVIS Ashley	CAN	0:52.76	0:50.87	1:43.63	0.00
2	11	106251	VACCHINO Angela	CAN	0:54.20	0:50.03	1:44.23	3.36
3	20	106259	BREAN Jessie	CAN	0:54.36	0:49.96	1:44.32	3.86
4	15	106465	LAWRENCE Sherry	CAN	0:54.60	0:50.14	1:44.74	6.21
5	1	106372	LATTIMER Lauren	CAN	0:54.04	0:50.98	1:45.02	7.78
6	7	106404	WALKER Rachel	CAN	0:53.62	0:51.62	1:45.24	9.01
7	4	106371	LAMBROPOULOS Yota	CAN	0:54.51	0:51.20	1:45.71	11.64
8	18	106378	MORTON Kaylyn	CAN	0:55.93	0:50.65	1:46.58	16.51
9	6	106274	KALTENBOCK Natalie	CAN	0:54.83	0:52.32	1:47.15	19.70
10	8	106351	EMPEY Jennifer	CAN	0:55.80	0:51.36	1:47.16	19.76
11	16	106494	CREED Joanna	CAN	0:55.71	0:52.74	1:48.45	26.98
12	22	106138	CHAPMAN Christina	CAN	0:56.50	0:52.66	1:49.16	30.95
13	3	106353	FORAND Julie	CAN	0:55.90	0:53.40	1:49.30	31.73
14	31	106320	COLLIVER Jennifer	CAN	0:57.41	0:52.49	1:49.90	35.09
15	27	106321	DANSON Emily	CAN	0:56.58	0:53.76	1:50.34	37.55

26-02-2000/CRAIGLEITH SKI CLUB CANS710.580 SF8 / 1

ALGE TIMING
MEASURES

Pg. 1

POS	BIB NO.	CODE NO.	COMPETITOR SURNAME, NAME	NAT	TIME 1ST RUN	TIME 2ND RUN	TOTAL TIME	RACE POINTS
16	35	106322	MACNAUGHTON Amanda	CAN	0:57.90	0:53.69	1:51.59	44.55
17	21	106380	NEWMARCH Andrea	CAN	0:57.55	0:55.14	1:52.69	50.71
18	36	106491	BLACKETT Hilary	CAN	0:58.08	0:55.13	1:53.21	53.62
19	26	106475	MONTIS Jennifer	CAN	0:58.28	0:55.76	1:54.04	58.26
20	55	106498	SORICCHETTI Nicole	CAN	0:59.99	0:54.35	1:54.34	59.94
21	47	106453	JAMES Stephanie	CAN	0:59.84	0:55.37	1:55.21	64.81
22	39	106325	ADAMSON Elizabeth	CAN	1:00.33	0:54.90	1:55.23	64.92
23	60	106392	ROSENFELD Joanna	CAN	0:59.71	0:55.55	1:55.26	65.09
24	40	106265	DONALDSON Sarah	CAN	0:59.44	0:55.89	1:55.33	65.48
25	61	106448	GOODMAN Fiona	CAN	1:00.96	0:55.23	1:56.19	70.30
26	42	106454	JENSEN Inger	CAN	1:00.63	0:56.62	1:57.25	76.23
27	25	106346	DEBOU Lindsay	CAN	0:59.68	0:57.71	1:57.39	77.01
28	44	106328	BENEDICT Stephanie	CAN	1:01.08	0:56.50	1:57.58	78.08
29	48	106305	LITTLE Jessica	CAN	1:00.71	0:57.02	1:57.73	78.92
30	30	106502	TOWPICH Kim	CAN	1:03.88	0:54.78	1:58.66	84.12
31	19	106387	PRIOR Ashleigh	CAN	1:00.88	0:58.40	1:59.28	87.59
32	9	106402	VANDERBEEK Kelly	CAN	1:06.39	0:53.26H	1:59.64	89.61
33	50	106400	TILLEY Sarah	CAN	1:02.31	0:57.69	2:00.00	91.62
34	45	106331	BILOSKI Erin	CAN	1:02.55	0:57.97	2:00.52	94.53
35	5	105738	FERGUSON Linsey	CAN	1:04.03	0:57.15	2:01.18	98.22
36	68	106520	MURPHY Dawn	CAN	1:02.65	0:58.83	2:01.48	99.90
37	56	105842	GIBSON Lindsay	CAN	1:02.56	0:59.18	2:01.74	101.36
38	54	106469	MAGEE Elizabeth	CAN	1:04.74	0:59.02	2:03.76	112.66
39	52	106493	CREED Jenny	CAN	1:04.80	1:00.40	2:05.20	120.72
40	63	106359	GEORGE Alanna	CAN	1:04.77	1:00.54	2:05.31	121.34
41	66	106519	KHUTYKA Renee	CAN	1:05.06	1:00.77H	2:05.83	124.25
42	23	106456	KENNEDY Lillie	CAN	1:11.11	0:56.76	2:07.87	135.67

DID NOT START (1ST RUN)

14 106130 PRASER Fairlie CAN

DID NOT FINISH (1ST RUN)

10	106148	MAC NAUGHTON Carrie	CAN
13	106386	PATTILLO Maggie	CAN
17	106122	DEBRUYN Margaret	CAN
32	106276	MACDONALD Whitney	CAN
33	106361	GRUEN Gillian	CAN
34	106467	LUSH Marie	CAN
38	106171	VANDERBEEK Laura	CAN
43	106126	EAGLESON Lindsay	CAN
46	106307	LAURNUMBERG Tiia	CAN
49	106437	DAKERS Jessica	CAN
51	106350	DYSON Paige	CAN

26-02-2000/CRAIGLEITH SKI CLUB CANS710.580 SF8 / 2

ALGE TIMING
MEASURES

Pg. 2

POS	BIB NO.	CODE NO.	COMPETITOR SURNAME, NAME	NAT	TIME 1ST RUN	TIME 2ND RUN	TOTAL TIME	RACE POINTS
53	106409	LARKIN Kelly	CAN					
64	536927	FERRI Andrea L	USA					
67	106505	VOGRIN Caylee	CAN					

DISQUALIFIED (1ST RUN)

DID NOT START (2ND RUN)

DID NOT FINISH (2ND RUN)

12	106176	WRIGHT Carolyn	CAN
24	106355	PRASTACEY Alexandra	CAN
37	106296	SIMPSON Bryony	CAN
29	106357	GAUDET Lindsey	CAN
28	105942	FLYNN Erin	CAN
41	106417	DELAROSSEL Kelsey	CAN
57	106450	HEDICAN Krista	CAN
65	106422	FRANZES Laura	CAN
62	106504	VENABLES Christina	CAN
58	106481	PETRELLA Vaylen	CAN

DISQUALIFIED (2ND RUN) GATE:

59 106426 COXON Francine CAN

26-02-2000/CRAIGLEITH SKI CLUB CANS710.580 SF8 / 3

ALGE TIMING
MEASURES

Pg. 3



Results

Race results with penalty calculation are submitted on-line by uploading .xml files in the prescribed formats. The files are emailed to alpineresults@fisski.ch. Files are to be named in the following format:

CANcodex_TD#.xml CAN1383_1018.xml

note: race codex must be 4 digits e.g. 0567 not 567.

The subject line for uploading emails should be "Results CANcodex.TD # e.g. Results CAN1383.1018

.com not .ch

TTRs are submitted on-line by uploading .xml files in the prescribed formats to alpineresults@fisski.com. The TTR software has an email facility built in. Copies should be sent to the RA, the TD and the Canada FIS TD Commissioner at the same.

yearALcodexTR.xml 2017AL1383TR.xml

The TD Report is prepared and submitted on-line by the FIS TD using his/her secure FIS portal. The TD is to send a copy to the Race Administrator for record keeping.

Hardcopy and scanned copies of all reports are to be retained by the Race Administration for 1 year. In addition to the results, penalty, TTR and TD Report, retained records include all minutes, 1st Run Start Lists, Referee Reports, Accident Reports, supplementary reports and timing strips.





Gate Judging

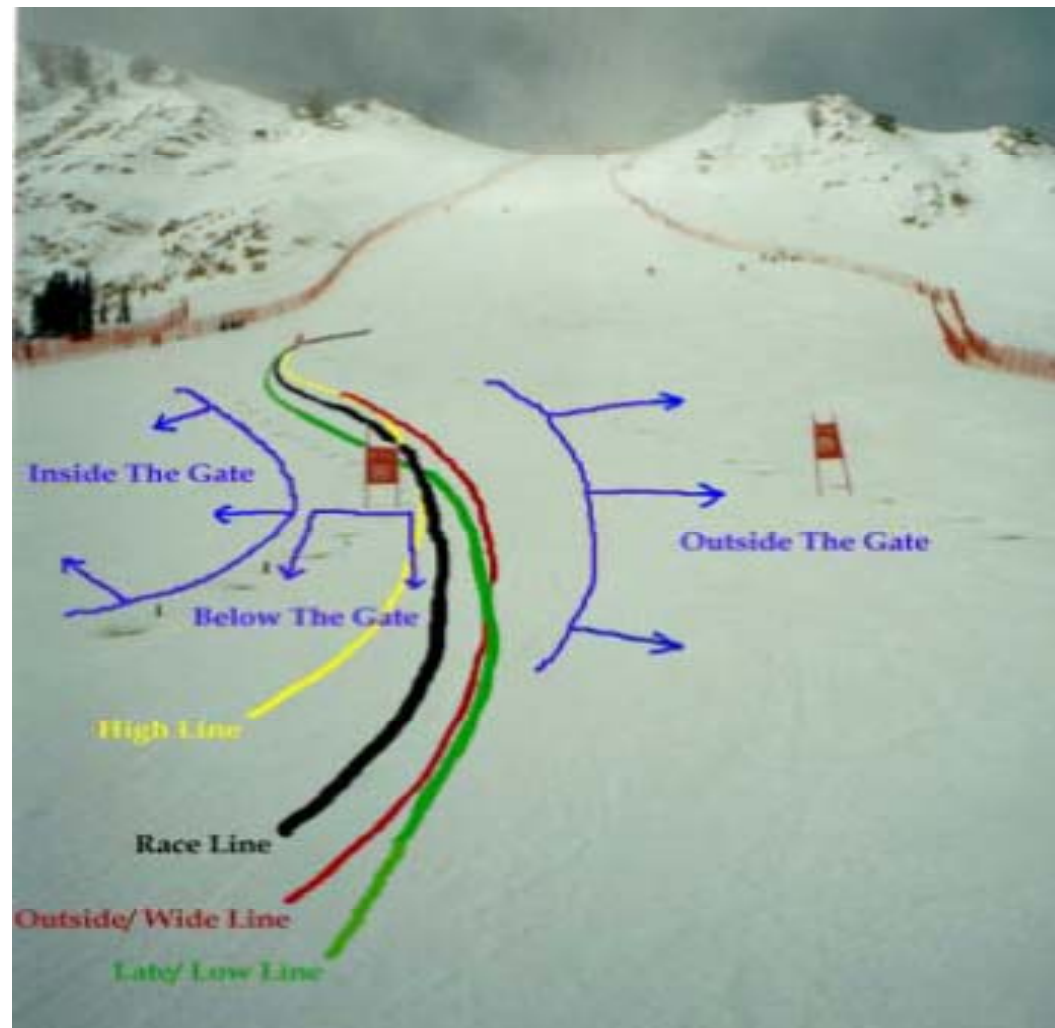
Gate Judges

ICR 660 - 669

- Checklist for Chief of Gates
- Guidelines for Gate Judges
- Number of Gates per GJ
- GJ Quiz



Gate Judging Terms

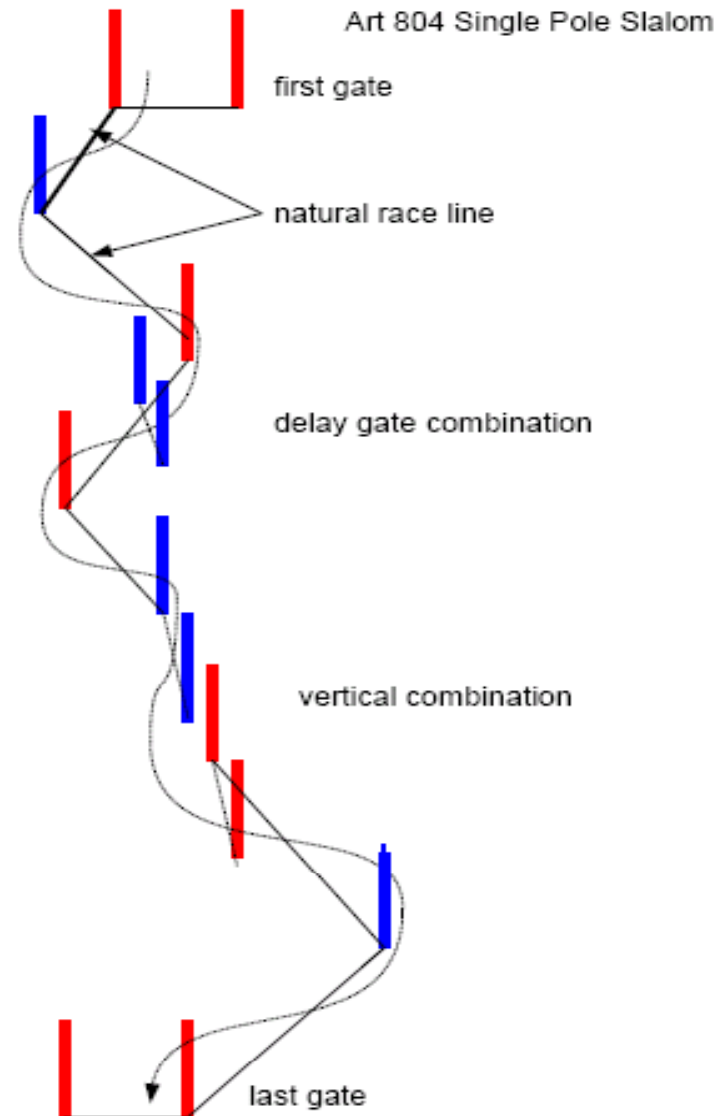


Correct Passage

Single Pole/Panel

804.3, 904.3

In single pole SL and GS, both feet and ski tips must have passed the turning pole on the same side, following the normal race line crossing the imaginary line from turning pole to turning pole.



Correct Passage

NO CLIMBING

614.2.3

If a competitor comes to a complete stop (e.g. after a fall), he must no longer continue through previous or further gates.

- All fixed start disciplines (GS, SG, DH)

Climbing permitted for SL as long as the competitor does not interfere with the run of the following competitor **OR** [the competitor] **has not** been passed by a following competitor.

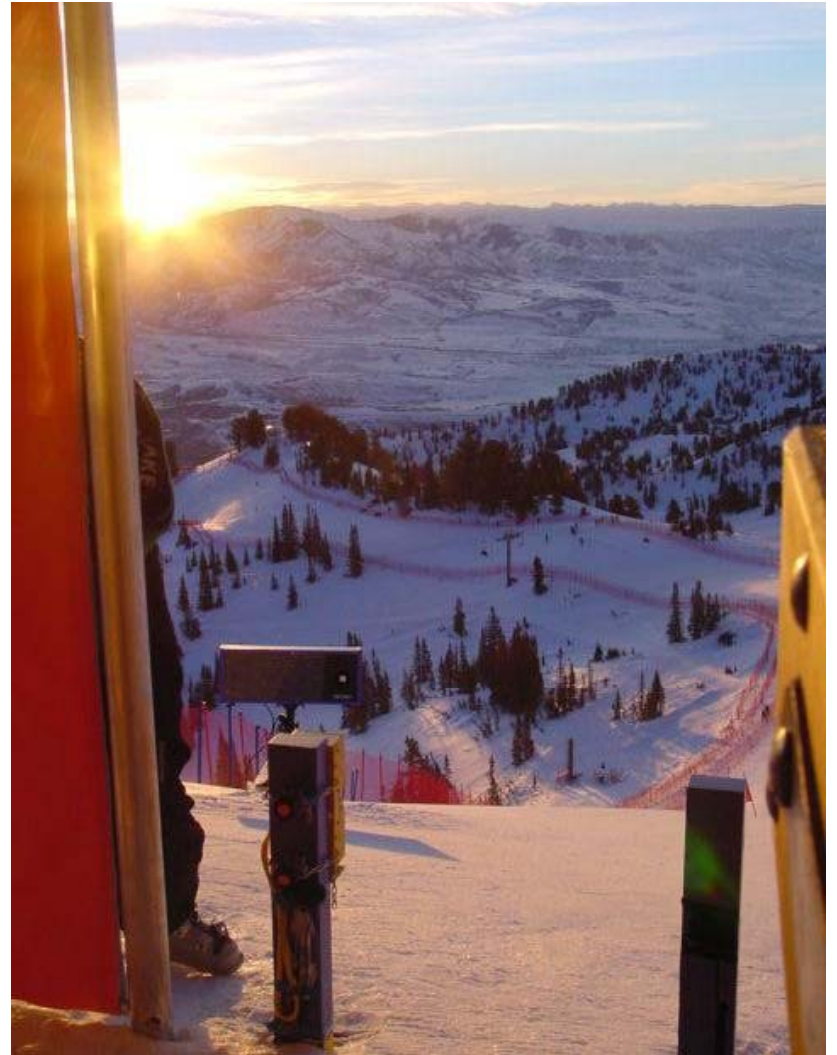


Correct Passage Videos



Thank you

- *Thank you to the countless volunteers and Officials that make ski racing in Canada what it is today.*
- *Your dedication is appreciated both in the classroom and on the hill.*





ALPINE CANADA