

NATIONAL TIMING BOOKLET

Version 2.2 January 2012

# TABLE OF CONTENTS

National Timing Rule Information	.1
FIS Timing Rules	. 2
National Timing Rules Timing Equipment	
Electronic Timing	. 2
Hand Timing	. 2
Timing Report Information National Timing Report Information	
Introduction Pre-requisites:	
Timing Technical Report Explanation Text ~ Timing Technical Report Form	
Filling in the Technical Timing Report	. 6
CODEX Location/endroit: PSO/Province:	
Date: Brand:	6
Model: Serial Number	. 7
Homologation # Sys A Timer Sys B Timer	. 7
Start Gate	7
Finish Cells Connections to Start	
Software / Logiciel	8
Time Data Section POWER ON Time (warm-up)	
Synchronization Time	
Synch confirm at +1 minute	
Start TOD First Competitor* Finish TOD First Competitor*	
Start TOD Last Competitor*	
Finish TOD Last Competitor*	
Net Time Hand Time	-
Best run-time System A	-
Were all times from system A?	
Comments	
Chief of Timing and Technical Delegate	
Example of Timing Technical Report	
Conclusion	13

### **National Timing Rule Information**

Timing rules for National race events are based on the current FIS timing rules. In addition to the FIS timing rules there are a number of National timing rules that amend the FIS rules for use at ACA and PSO sanctioned races.

FIS Timing rules are available in the current addition of the ICR, the Precisions and the FIS Timing Booklet. Timing information including equipment set-up, set-up diagrams, technical installations, the start gate and photo cells, and criteria for approved FIS timing devices is provided in the FIS Timing Booklet.

National timing rules with their modifications of the FIS timing rules should be used at all ACA and PSO calendared races.

It is recommended the Chief of Timing for all National and PSO sanctioned races have a copy of the FIS Timing Booklet and National Timing Booklet readily available when preparing for and timing a race event.

Please check for the latest version of the FIS timing booklet on the FIS website : <u>http://www.fis-ski.com/uk/disciplines/alpine-skiing-rules/alpine-skiing-rules/timing.html</u> (see Alpine Skiing / Rules / Timing)

# The National Timing Booklet is available on the ACA web site at <u>www.alpinecanada.org/officials</u> ~PDFs and Forms ~Timing material

National Timing Rules are set by the National Officials Committee (NOC). Contact information for the NOC is available on the ACA web site <u>www.alpinecanada.org/officials</u>.

The National Timing Group (TWG) is a sub-committee of the NOC. Its role is to analyze the need for timing rules, recommend timing rules to the NOC, implement timing standards, develop timing documents, collect and evaluate timing data, and communicate timing rules information to the Provincial Sport Organization (PSO) Official Chairs'.

National timing rules are reviewed by the NOC annually. New &/or changed rules will be published on the ACA Officials site prior to the start of the National and PSO calendared race season.

Timing questions can be addressed to your PSO Officials Chair or by e-mailing <u>officials@alpinecanada.org</u>

# **FIS Timing Rules**

See FIS Timing Booklet and ICR rules

### **National Timing Rules**

Rules amended from the FIS Timing Rules

#### **Timing Equipment**

- It is highly recommended electronic timers, start gates and photocells be homologated as per the FIS standards for all National calendared races.
- Clubs interested in purchasing new equipment should review the list of homologated equipment in the FIS Timing Booklet prior to making a purchase decision.

#### **Electronic Timing**

- For all provincial K1 & K2 Championships, Western & Eastern K2 CanAm, K2 Nationals and National Master Championships: two synchronized electronically isolated timing systems operating in time-of-day must be used.
- A minimum of one electronically isolated timing system operating in time-of-day is required for all other ACA National calendared races. The ROC has the option to use a second synchronized timing system if they so choose. ROC's using one electronic timing system should consider synchronizing with their manual timing system.

#### Hand Timing

Manual (hand) timing, completely separate and independent of the electronic timing is mandatory for all competitions listed on the National and PSO race calendar. Stopwatches or hand operated battery powered timers that are installed at both the start and the finish and capable of expressing times to at least 1/100th (0.01) precision qualify as proper hand timing devices. If stopwatches are used 2 watches should be available at the start and 2 watches at the finish.

The watches must be synchronized prior to the start of each run.

The watches should also be synchronized with the electronic timing system.

Printed records, either automatic or hand-written, of recorded hand times must be immediately available at the start and at the finish. At the end of each run the hand time records are to be delivered to the Chief of Timing.

### **Timing Report Information**

The National Timing Report Information document outlines the National timing goals, the requirements for the National Timing Technical Report, the recommended and mandatory use of the National Timing Technical Report, information to complete the form and the addresses to send the form after the race event

Timing documents are available on the ACA web site Officials section ~ Timing Menu.



### National Timing Report Information

#### Introduction

The ACA Timing Work Group (TWG) is working toward standardizing and verifying timing accuracy at ACA National races. The goal for National races is to parallel the FIS Timing standards by using homologated timing equipment, use two electronic timing systems and document timing information for all races.

• The National TWG and the National program continue to focus on "teaching" timing standards and the use of the TTR report to educate timers. Timers using the Technical Timing Report should focus on looking for timing information not racer information.

With the high cost of purchase and maintenance of timing equipment, clubs are encouraged to share equipment and timing expertise.

The v11.0 National Timing Technical Report (TTR) is <u>mandatory</u> for all for provincial championships, CanAm events, non-FIS national championships and Masters National Championships.

The v11.0 National Technical Timing Report is <u>recommended</u> for all other races calendared for national points.

One National Technical Timing Report per day is required. The TTR should be completed for the  $1^{st}$  Codex number of the day's race events and submitted as per the timing procedure. E.g. TTR for  $1^{st}$  Codex run each day (doesn't matter which gender) ~ if a 2 run race the TTR must be filled in for both runs; if a 1 run race the TTR must be filled in for the one run.

The timing form is updated annually and available on the ACA web site at <u>www.alpinecanada.org/officials</u> ~PDFs and FORMS~ Timing material. The timing forms should be added to the PSO Race Packages.

#### **Pre-requisites:**

- Race package including the latest version National Timing Technical Report must be received by the ROC one month prior to the event via the PSO office... This may include downloading forms from the ACA web site by the ROC.
- The assigned Technical Delegate must confirm the ROC did receive and the Chief of Timing understands the forms in his/her pre-race discussions.

#### **Procedure:**

- 1. The Timing Technical Report must be completed and signed by the Chief of Timing. The TD must review the report by verifying the times with the timing tapes and verify timing information prior to also signing the document.
- 2. The Technical Delegate's signature confirms the race should be scored for ACA points.
- 3. If the race should not be scored Dick Beare ~ ACA points chair must be notified immediately <a href="mailto:rbeare@shaw.ca">rbeare@shaw.ca</a> .
- 4. In addition to being submitted with the results packages, TTR files for the events noted above are to be emailed to the East timing rep Camille Courchesne <u>camille.courchesne@videotron.ca</u> [events taking place in Ontario, Quebec and the Atlantic provinces] the West timing rep Dave Bartle <u>dibartle@xplornet.com</u> [events taking place in the Territories, Manitoba, Saskatchewan, Alberta, British Columbia], as applicable. TTR files for non-mandatory events may be sent also.

# **Timing Technical Report**



# National Timing Technical Report Compte rendu technique du chronométrage

ALPINE CANADA ALPIN To be included with official results package - One form requ Un formulaire pour chaque journée (1 °CODEX) doit être (				l	Alpin	SEASON /SA/S	ON 2011-2012
Un formulaire nour chaque inumée // CODEVI dell fun-	complété et annexé aux résulta						C/1 2011-2012
Contracting pour chaque journee (1 - CODEA) doit etre		ats officiels.					— Sep. 2011
Location / Endroit :						□ DH□ SL □ G5 □	s:□ x □ sx [
PSO / Province :							
Event Name / Nom de l'événement :						MEN/Masculin :	LADIES/Féminin
Date(dd-mm-yy) / date(ij-mm-aa):	 Brand/Margue	Model/Modèle	Serial I	Numbe	r / # série	Homologation #	Homologation
Sys A Timer: (at finish/à l'arrivée)	Branamargue	in out in not one					gener
Sys B Timer: (at finish/à l'arrivée)							
Start Gate / Portillon :							
Finish Cells A / Photocellule A:							
Finish Cells B / Photocellule B:							
	System/Système A	System/Système B	Voice Con	nm./Co	mmunication		
Cable or other/Avec ou sans fil						]	
Software / Logiciel	Brand/Margue	Version/Version	Date/date		Results = tapes ?	/ Résultats = rubans?	
Timing / Chronométrage :	,						
Results / Résultats :					Yes / Oui :	No / Non :	
POWER ON Time (warm-up):		At least 30 minutes before	Synchronization.				
Heure de début du réchauffement		Au moins 30 minutes avant i					
	1 <sup>st</sup>	Run I 1 * Manche			2 <sup>nd</sup> Run / 2	2 <sup>e</sup> manche	
	System A (TOD)*	System B (TOD)*	Manual sync.	-	em A (TOD)*	System B (TOD)	
*Les secondes de rheure du jour exprimées en millieme S Synchronization Time	Systèrne A (Hr du jour)*	Systèrne B (Hr du jour)*	Synch. manuel	System	ne A (Hr dujour)*	Système B (Hr du jo	ur)* Synch. man
Heure de synchronisation Sync confirm at + 1 min.							
Chronoamivee ±1 min. après synchro							
Start TOD First Competitor * Heure de départ du premier coureur			Net Time Temps net				Net Time
Finish TOD First Bib: ( )* ( )*			remps net				Temps ne
Heure d'arrivée du premier coureur Hand Time First Competitor *							
Temps manuel du premier coureur							
Start TOD Last Competitor ' Heure de départ du dernier coureur							
Finish TOD Last Bib: ( )* ( )*							
Heure d'arrivée du dernier coureur Hand Time Last Competitor *							
Temps manuel du dernier coureur							
* First and Last competitor to Finish with complete data each Best run-time System A	ch runi Premier et dernier coureur						
Meilleur temps de la manche (chroro A)		Bib: ( )	:			Bib: ( )	:
Were all Results from system A? Tous les résultats proviennent-lis du chrono A ?	Yes / Oui : 🗆	No / Non 🗇					
	to timed on any system	other than sustam A in all	nune (indiante n				
List any or all bib numbers used in the result Énumérez le ou les dossard(s) qui n'a (n'ont) par					):		
WHY? Batteries Sn	now obscuration	Wire break		Photoce	ell alignment	Other? (de	
Pourquoi? Piles Bro	ouillage par la neige	Rupture d'un fil		Alignem	ent des cellules	Autre? (sp	ecifiez)
Data Source for replacement system A time			System B Système B		System C	Manual	
Provenance des temps en remplacement des	temps A (RIS 611.2.1)?	U	Système B		Système C	<sup>└─</sup> Manuel	
Comments / Commentaires :							
We certify that the timing and calculations of Nous certifions que le chronométrage et les calc			glements nation	aux en vi	igueur.		
	YES/OUI :	NO/NON : []					
Chief of Timing /Chef du chronométrage		Telephone, En				Signature / Signature	
Name (Print) / Nom (lettes moulées)		Téléphone, cou				Signature / Signature	
Technical Delegate - Name, NAT (Print)		Telephone, En	nail				TD Level
Délégué technique - Nom, NAT ( lettres moulées )		Téléphone, courriel		Signatu		e / Signature	Niveau D
	wnload this form from	Télécharger ce formulaire d	le : www.cansk	i.ora - O	fficials section		ACA-TWG.20

CODEX

Alpine

#### Explanation Text ~ Timing Technical Report Form

The National Timing Technical Report Form is a required document for specific National/PSO races and recommended for all other National/PSO calendared races. The form is a valuable tool and audit document. When correctly completed, it is to be submitted to the National TWG for designated alpine events (pg.4 info).

An annual summary of the data from timing forms is conducted by the National TWG.

There is without a doubt a need to have all information concerning the correct determination of an event by the timing equipment, and techniques being used, properly indicated on the Timing Technical Report Form. The form asks questions that can only be replied to if certain minimum technical standards are met. It ensures that one and in some cases two homologated, synchronized Time-of-Day systems, plus hand timing are used, and it makes the timer pay attention to the details of how well the systems operate together.

The use of the procedures described in timing booklets and the use of the Timing Technical Report Form will minimize errors and is designed to assist the timer to make the event fair for all who take part.

*Please take note:* For all events with two runs where the second run is started more than 60 minutes after of the initial synchronization, the timers must be re-synchronized before the start of the second run.

This document represents a step-by-step explanation of what is needed in each cell of the National Timing Technical Report Form (TTR). Since some of the information being provided will most likely remain consistent (example: equipment being used, equipment serial numbers, event locations...) you can fill out most of this information once and make a computer file or photocopies if you use the same equipment throughout all of your competitions.

Quite fortunately, alpine ski racing is judged purely from the standpoint of objective criteria. Make it through the course correctly, and a skier is judged by the passage of time alone.

The Homologated Timing Equipment list that is approved by the FIS, the rules described in section 610 of the ICR, familiarization of this booklet and the FIS timing booklet and the use of the Timing Technical Report Form ensure that many common mistakes that can jeopardize the simple truth of this timing judgment are minimized or avoided.

The Chief of Timing must make certain that all timers and printers work in the physical environment of the start and finish regardless of the weather conditions and temperature particularly if the temperature is expected to be less than  $-10^{\circ}$  C. All timers and ancillary equipment must be capable of running independently of mains power, i.e. battery operated for the duration of the race.

The National Timing Working Group is certain that your attention to detail will contribute to a successful event and we extend our thanks and best wishes for the serious work that you undertake for the benefit of ski racing in Canada.

#### Filling in the Technical Timing Report

#### CODEX

All events in the National Calendar are assigned a code number so that each event can be correctly identified. This race ID code number is called the "CODEX" and there is one codex for each race that is assigned by discipline and sex.

The Codex for your race is found in the National Calendar <u>www.acapoints.ca</u> it must match the Codex number used on your Official Results. Do not include information other than the NATyy + four-numeric-character code.

#### Example: NAT12.7512

Location/endroit:

**PSO**/*Province*:

Use the location as described in the National Calendar, or if the event has been moved, the name of the ski area you are at. Also include province, name of race, discipline, and race gender information, using the DH/SL/SG/GS/SC or KK and Men / Women indicators as appropriate.

Example: MT. WASHINGTON | GS ⊠ BC

#### Évent Name/Nom de l'événement:

Enter the same name of the event as it is described in the National Calendar and on your Official Results documents. Include category details. **Example: ZONE FINAL | LADIES**/féminin 🖾

#### Date / date:

Uses the dd/mm/yy format.

The following section identifies the timing equipment you use at your race.

Brand / Marque: This is the brand name of the manufacturer. Examples: Longines / ALGE / TAG Heuer

Model / Modèle:

This is the model name of the particular device you are using. **Examples: TL5005 / TdC 8001 / CP 540** 

### Serial Number / # série

Each device should have a manufacturer's serial number. This is found in a variety of places on timing equipment depending on the model and manufacturer. If not found on the bottom, rear or side of the device, check inside the printer or battery compartment or even the invoice from the supplier. Contact your manufacturer or agent for complete information and have it handy. If one cannot be found, a number should be assigned and marked on the device.

#### Homologation # d'homologation

The FIS issues a list of timers, start gates and photocells that have met the technical standards required for use at FIS events. At this time National races do not require the use of FIS homologated timing equipment. However, the National TWG highly recommends the use of FIS homologated timing equipment.

The FIS Timing Booklet will be published from time to time and additions or deletions to the list of homologated timing equipment will be contained in the precisions to the FIS rules published each fall. In all cases you can find all updated information on the FIS website at <a href="http://www.fis-ski.com/uk/disciplines/alpine-skiing-rules/alpine-skiing-rules/timing.html">http://www.fis-ski.com/uk/disciplines/alpine-skiing-rules/timing.html</a>

Each piece of approved timing equipment (timers, startgates and photocells) will have a code number associated with it. A complete list of those codes can be found in the Homologated Timing Equipment List. Use the appropriate code number for the approved device you are using.

Example: The Tag PTB 605 Homologation code number is TAG.005T.10

### Sys A Timer

This is the Main Timing System used for timekeeping at finish. It is referred to as the "Primary".

#### Sys B Timer

This is mandatory for designated Provincial and National Championship races. This is the electronic Backup Timing System installed at the finish. If not using a B or Backup system insert N/A in these excel document cells.

#### Start Gate / Portillon

Describe the start gate you used with the name of the manufacturer and model designation. Include the serial number (and homologation code)

#### Finish Cells / Photocellules

Describe the homologated Finish Cells of Systems A (and B) using the name of the manufacturer and the model designation. If different models are used for the A or B system, describe them both. Include serial numbers (and homologation codes).

#### Connections to Start / Liaison au départ

This section deals with how your **connections to the start** were made for both the Main (System A) [and Back-Up (System B) timers if used], and how you handled the voice communications requirements. In the boxes, insert the method used based on how you set up the one or two systems and the voice communication.

Use the word "Cable" or "Wireless" to indicate how the start time data was transmitted or carried to the timer at the finish.

### Software / Logiciel

Write the software brand, version and release date of the software which was used to capture the times from the timer and compute the results.

At the right, you must confirm if times recorded by the software correspond to the timer printed times.

#### **Time Data Section**

This is the section that provides the proof that your two systems and hand timing were synchronized and functioning as required by the rules. There are 15 pieces of information for each run that you can get only from the timer tapes and that allow the National Timing Group to see that you did the timing correctly. Two other times come from Hand timing data. Be prepared to gather this information from the timer tapes as it happens, or at least to know where to find it after each run. It is critical that this information be correctly retrieved and indicated on the form. The times appear in 24 hr format i.e. 2:00pm is 14:00 hrs.

#### POWER ON Time (warm-up)

Every timing system needs a period of time for the quartz time base to stabilize after the timer is first switched on. This box is provided to remind you to do so in advance of run synchronization. It is recommended that as soon as you enter the timing hut /office you turn on all the devices and leave them running or at minimum turn on the power at least 30 minutes prior to synchronization.

Write time of the day when you started the systems.

### Synchronization Time

Once System A and System B are set up and turned on, the rules require that they all be synchronized to the Time of Day no more than 60 minutes before the start of each run. Indicate the time of day the timers were preset to and synchronized at. To accomplish this you may need to turn the timing device off and restart setting it in time of day mode, as in the case of an Alge S4. All the devices are set to the time of day you are to start them, i.e. 10:00:00.00. This then becomes the official race time. Set all the devices to the same time a few minutes ahead of the current time. At the exact time you have set all the devices too have the starter open the start wand. This will trigger every device correctly connected to the start and all will now be running in time of day mode. The exact time at which the devices are triggered can be found on the NIST website <a href="http://nist.time.gov/">http://nist.time.gov/</a> or your own watch previously synchronized to NIST.

This Time of Day must appear on the System A and System B Timing Tapes.

When using only one electronic timing system ~ System A, synchronization of the manual watches should be done at the same time and noted on the Technical Timing form.

Indicate the Time of Day this was done. Example: 10:00:00.00

#### Synch confirm at +1 minute

When using two electronic timing systems, once synchronization to the Time of Day has been accomplished, have the starter open the start wand again (or use the same synchronizing contact) after exactly 1 minute has elapsed since the synchronization.

Observe the times recorded on all systems and make sure the System A and System B timers are truly running at the same time of day and are giving you very similar times from the triggering of the start. At Synchronization time plus 1 minute, the times you get on each system should be identical, or be within a few 1/1000ths (0.001 sec.). If they are not, you must re-synchronize and try again.

Indicate the actual readings in Time of Day (TOD) you take from the System A and System B tapes to the  $1/1000^{\text{th}}$  of a second or better (same precision as printed on the timing tape). Example: 10:00:59.225

#### Start TOD First Competitor\*

Give the Start Time of Day from the first competitor to completely finish his/her run. Record the bib # where the \* appears

#### Finish TOD First Competitor\*

Give the Finish Time of Day from the first competitor to finish his/her run. Record the bib # where the \* appears.

### Start TOD Last Competitor\*

Give the Start Time of Day from the last competitor to completely finish his/her run. Record the bib # where the \* appears

#### Finish TOD Last Competitor\*

Give the Finish Time of Day from the last competitor to finish his run. Record the bib # where the \* appears.

This above data section has on the left side space to insert the times of the first run, and on the right side space for the second run. These 8 boxes provide locations for the readings from the two systems of the start and finish times of your first and last racers who make it through the course.

# Insert the Time of Day Times that is recorded on the System A (and System B) tapes for these racers to the 1/1000th (0.001) of a second or better.

Use only the first and last skiers who finish having **complete timing data**. Note there are spaces for indicating what the bib numbers of the particular racers used.

#### **Net Time**

These 4 cells are used to indicate the actual elapsed net times on course for the two samples of the first and last racers on course who made it to the finish, as recorded on System A.

# These must be identical to the net times used on the results, and are indicated to the 1/100th (0.01) of a second.

This allows you to check if the calculation of the net times on course, as derived from the Time of Day times recorded to 1/1000ths on the System A tapes, was done correctly. Times are expressed in Min/Sec/100ths. You should also use this as an opportunity to check that the times used on the results match those calculated from the timer tapes. **Example: 1:00.91** 

#### Hand Time

Hand Timing is mandatory for all National calendared Events. The boxes allow you to provide the evidence that hand timing was used and how well it was done. The hand times used here are net times on course calculated from the Time of Day start and finish times your hand timers' record. There is no requirement to record the start or the finish time on the report, just the elapsed time.

Calculate the elapsed hand times on course for these athletes and indicate them here. The Net Time of the Hand Time should be comparable (no big time difference).

#### Best run-time System A

Indicate the fastest time obtained in that run and which bib it was assigned to.

### Were all times from system A?

If using 2 systems, before the start of the race designate which system is to be A, the Primary and which is to the B, the Backup.

Indicate if all racers were timed during this run using System A as required by the FIS Rules. Check the appropriate box "yes" or "no".

# List any or all bib numbers used in the results timed on any system other than system A in all runs (indicate run)

If you answered "No" in the section above, list the bib number(s) of the racer(s) and the respective run number, who were timed on System B or using Hand Timing for each **replacement System A time calculation**.

Indicate the reason for the problem(s) and describe it.

If a time is used from a system other than System A, an Equivalent Electronic Time (EET) calculation must be carried out.

## Comments

Describe any problems or comment upon corrective actions that were necessary during the timing of any run held during this series. Obviously if you have any racers who have times used on the results from anything other than System A, you should explain this here. The TD should indicate if any timing component used requires verification or service before the next event. This provides the opportunity to indicate if any of the equipment, wiring or other components requires service or corrective actions before the next event. This could apply to staff and procedures as well as equipment. This can include comments even if all times were derived from System A.

## Chief of Timing and Technical Delegate

Both the Technical Delegate and the Chief of Timing must review and complete this documentation and attest to the accuracy of the information contained herein. Print and sign your names and provide the other **details requested.** 

### We certify that the timing and calculations of this event adhered to the rules.

This is a direct statement that requires a "yes" or "no" answer.

Both have to confirm the given data by signing a hard copy of the TTR. When e-mailing the document if electronic signatures are not available the TTR may be sent without the 2 signatures but must include both Officials e-mail address and phone number in case of questions.

# Example of Timing Technical Report



National Timing Technical Pepert					CODEX	
National Timing Technical Report Compte rendu technique du chronométrage					NAT11.7512	
To be included with official results package - One form Un termulaire pour chaque journée (1 ° CODEX) doit of	SEASON /SAISON 2011-2012 Version 11.0 - Sep. 2011					
Location / Endroit:			] si [] sx [] xo			
PSO / Province :	Mt Washing BC					
Event Name / Nom de l'événement :	Zone Finals				MEN/Masculin   LAD	IES/Féminin []
Date(dd-mm-yy) / date(j-mm-aa):	14 - 04 - 11					
	Brand/Marque	Model/Modèle	Serial	Number / # série	Homologation # Hom	ologation
Sys A Timer: (at finish/à l'arrivée)	Alge	TdC8001	200504-82		ALG.003T.10	
Sys B Timer: (at finish/å l'arrivée)	Longines	TL5005	8805-1z0		LON.003T.10	
Start Gate / Portillon:	Microgate	FIS	0008-12		MGA.S56.03	
Finish Cells A / Photocellule A:	TAG Heuer	HL 2-33		1045	TAG.L50.03	
Finish Cells B / Photocellule B:	Seiko	PBU-810		0503-128	SEI.L65.0	3
Connections to start/Liaison au départ	System/Système A	System/ Système B	Voice Con	nm./Communication	Ι	
Cable or other/Avec ou sans fil	Cable	Cable		Radio		
Coltrary						1
Software / Logiciel	Brand/Marque	Version Version	Date/date	Results = tapes ?	/ Résultats = rubans?	
Timing / Chronométrage:	SplitSecond	6.21 rev 6	06/01/2011			
Results / Résultats :	SplitSecond	6.21 rev 6	06/01/2011	Yes / Oui : 🗹	No/ Non :	
POWER ON Time (warm-up):	07.00	At least 30 minutes before				
Heure de début du réchauffement	07:00	Au moins 30 minutes avant	la synchronisation	old D.	of manaka	
	1" System A (TOD)*	Run / 1 ° Manche System B (TOD)*	Manual sync.	2 <sup>re</sup> Run / 2 System A (TOD)*	2 <sup>e</sup> manche System B (TOD)*	Manual sync.
* TOD seconds in thousands, at least * Les secondes de l'houre du jour exprimées en millièrre	Système A (Hr du jour)*	Système B (Hr du jour)*	Synch. manuel	Système A (Hr du jour)*	Système B (Hr du jour)*	Synch. manuel
Synchronization Time Heure de synchronisation	09:15		09:15	12:00		12:00
Sync confirm at + 1 min. Chrono arrivée ±1 nin. après synchro	09:16:02,342	09 : 16 : 02,341		12:01:02,342	12:02:02,341	
Start TOD First Competitor *	09:31:01,294	09:31:01,294	Net Time	12:30:01,142	12:30:01,142	Net Time
Heure de départ du premier coureur Finish TOD First Bib: (1)* (21)*	09:31:30,452	09:31:30,434	Temps net 01 : 29,43	12:31:30.493	12:31:30,492	01 : 29,34
Heure d'arrivée du premier coureur Hand Time First Competitor *			01:29,48			01 : 29,41
Temps manuel du premier coureur Start TOD Last Competitor	11:03:00.254	11:03:00.250		13:05:00.321	13:05:00.322	
Heure de départ du dernier coureur Finish TOD Last Bib: (85)* (49)*	11 : 04 : 35,596	11 : 04 : 35,597	01 : 36,34	13 : 06 : 29,547	13 : 06 : 29,547	01 : 29,22
Heure d'arrivée du dernier coureur Hand Time Last Competitor *	11 : 04 : 33,390	11 : 04 : 33,397	01 : 36,49	13 : 00 : 29,347	13 : 00 : 29,347	01 : 29,29
Temps manuel du dernier coureur * First and Last competitor to Finish with complete data			01.00,40			01.2020
Best run-time System A	Capit runy Premier et demier courteu					
Meilleur temps de le manche (chrono A)		Bib:( 2 )	01 : 29,25		Bib: (2)	01 : 29,18
Were all Results from system A? Tous les résultets proviennent-ils du chrono A?	Yes / Oui:	No / Non 🖅				
	when sizes along any province	ather than motors A in all				
List any or all bib numbers used in the re- Énumérez le ou les dossard(s) qui n'a (n'ont)						
	Show obscuration	Wire break		Photocell alignment	Other? (describ	e)
Pourquoi? Piles	Brouillage par la neige	Fupture d'un fil		Nignement des cellules	Autre? (spécifiez	)
Data Source for replacement system A t		5	System B	System C	Manual	
Provenance des temps en remplacement o	265 temps A (HIS 611.21)?	bid	Système B	Système C	<sup>La</sup> Manuel	
Comments / Commentaires :						
We certify that the timing and calculation Nous certifions que le chronométrage et les			àdamaate nation			
nous ceruions que le chronometrage et les	and an and a second		ogrements nation	aux on viguour.		
Chief of Timing /Chef du chronométrage	YES/OUI :	NO/NON :	mail			
Name (Print) / Nom (lettes moulées)		Téléphone, courriel		Signature / Signature		
Charlie Brow	(555) 123-5555 to name@mail.ca			Charlie Brown		
Technical Delegate - Name, NAT (Print)		Telephone, Email		Signature / Signature		TD Level
Délégué technique - Nom, NAT (lettres moulles)		Téléphone, courriel (444) 321-4444				Niveau DT
Sam RULE	name@isp.c	a_		Sam Rule		
	Download this form from	/ Télécharger ce formulaire	de:www.cansk	Lorg - Officials section		ACA-TW0.2011

### Conclusion

The National Timing Group was established in September 2003. Its role is to analyze the need, implement timing standards for National calendared races and assist with teaching timing education.

National timing standards are based on FIS timing standards. The FIS Timing Booklet, current ICR and precisions are the primary resource documents used for the National Timing Booklet and related national documents and forms. The National Timing Booklet should be used in conjunction with the above FIS resource material.

Alpine ski racing is judged purely from the standpoint of objective criteria. Make it through the course correctly, and a skier is judged by the passage of time alone. Timing accuracy with documented data on the timing technical report assists and verifies the event is fair for all that took part.

The National Timing Group would like to acknowledge the FIS Timing Group for their contribution to timekeeping regulation and documentation that benefits all levels of alpine skiing competitions and sets the standard for national timing data. Their progress reflects the balance between accepting new technologies and ensuring the correct evaluation of human performance through fundamental timekeeping concepts.

The National Timing Group would also like to acknowledge the contributions of timing officials and volunteers as well as race organizers who give so much of their time and expertise to meet and surpass the standards required to run successful alpine race events.

#### References:

- 1. www.fis-ski.com (see Rules and Publication / Alpine Skiing / Alpine Timing)
- 2. FIS Timing Booklet ~ Version 2.46
- 3. FIS Timing Technical Report