**Why Do We Complete a Timing Data Technical Report?**

**Ski Racing is a competition against the clock.**

1. Why do we collect the data on the TDTR?
	1. To ensure minimum technical standards are met
	2. Allows the Chief of Timing (CoT) to see how well systems operate together
	3. Minimizes errors in accuracy of the event, techniques being used
	4. An audit of the event, integrity check
	5. Designed to assist you in making the event fair for all competitors
2. What are we are looking for on the TDTR?
	1. Two homologated systems
	2. Time-of-Day synchronized systems
	3. Manual (Hand) timing is being used and synchronized
	4. Synchronization is taking place before first racer’s first run to.001 accuracy
3. Synchronization of the timers
	1. As close as possible to start of first run.
	2. The synchronization impulse for all timers must come from one single source (one contact) for all timing devices.
	3. A new impulse must be sent by the same source. Why: Confirm synchronization accuracy of systems A and B.
	4. The maximum allowed difference between systems A and B may not be more than 1/1000ths (0.001); if larger than maximum, a complete resync is required.
	Note: a difference between the two start impulses may happen, depending on how starter opens the wand. Instruct the starter to open the wand with a sharp, crisp motion near the hinge of the start wand.
4. Manual Timing training and how to use the TDTR to help guide your hand timers
	1. Manual (Hand) timing is required for all events on the U.S. Ski & Snowboard calendar.
	2. Handheld manual devices recording to 1/100th second are synchronized to time of day.
	3. Training of the manual (HT) personnel needs to be completed by the CoT, as this official is responsible for their accuracy.
	4. Manual timing (HT) can be used in official results, after a replacement time (electronic equivalent time - EET) has been calculated.
5. Replacement Time (EET)
	1. What: A “Replacement Time” (EET) is a calculation used to replace either a missing start or missing finish time of day (ToD) System A impulse.
	2. Why: Provides an average difference or correction, between the replacement times and System B ToD impulses or Manual Times.
	3. If failure of System A occurs, then replacement time (EET) is completed using System B impulses. If failure of both systems occurs, the replacement time (EET) is completed using the Manual Times.
	4. Make sure that the replacement time calculation (EET) is submitted with the TDTR.
6. Posting of times

It is recommended your announcer reminds everyone that the announcement and posting of times is unofficial.

*For further information refer to the current version of FIS Timing Booklet located on the FIS website.*