

## ***Split Second Software Change Request***

**Software version:** National/FIS 6.12 rev 3

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**Subject:** Masters second run start order changed to ~~slowest to fastest~~ **reverse bibbo** in age class

**Type:** correction

**Importance:** moderately high

### **Description:**

The second run start order rule for masters championship events (regional and national championships) was changed for the 2009 season ***and again for the upcoming 2011 season***. It's likely that this rule change in the Masters Comp Guide wasn't communicated as a change request to update the second-run start order sort rules in the Split Second software.

Up through 2008, the second start order rule for masters championships was in order of first run finish (fastest-to-slowest) within age class. For the 2009 season, a rule change was adopted to change to reverse finish order within each class (in order of slowest to fastest on first run time). Believe that most masters divisions have also converted to the reverse order formula for second run start order for their races *[not all however, I think Intermountain is still using 1<sup>st</sup>-run finish order; I'll check that]*

At the spring 2010 national masters committee meeting, an additional revision to the rules was made to use reverse bibbo on the top 5 finishers in each age class for the 2011 season:

*Motion was made ... for running order for second run of Masters Regional or National Championships be as follows: Within each class the top 5 finishers in the first run will run in reverse order, with the rest of the class running in order of finish.*

Implementing this start order rule manually at championship events would be a significant burden on the RA to perform what is now a relatively complex sort, separately for each age class, and under time pressure to get the second run start order turned around quickly and out on the hill for the race crew. Without software support, this creates into an error-prone situation for the RA to balance manual steps, reviewing for correctness, and trying to get the start order completed expeditiously.

**Workaround:**

There are two basic variations of the procedure for generating the second run start list, depending on whether first-run non-qualifiers (DNF and DSQ) are allowed to take a second run at the end of their class or at the end of the field.

If non-finishers are not allowed to take a second run, such as at championship events or when the race jury has determined that permitting non-scoring competitors to take an extra run would impair course conditions for qualified competitors, follow the procedure for placing non-qualified competitors at the end of the field. (Other variations of allowing “just for fun” second runs for DNF/DSQ racers, such as at the end of the qualified women/men, have similar techniques and may be implemented manually)

The manual procedure for generating a second run Masters start list under the new 2011 top-5-only-reversed rule:

1. Sort by the competitor list in finish order of first run time (**Sort** operation selection *First Run, Ascending* order)
2. Sort the competitor list into age class running order (**Sort** operation selection *Running order by Class*).
3. Working down the list from first to last age class in the running order, select the top 5 finishers in each class and re-sort them in reverse finish order (**Sort** operation selection *Reverse Current Order* order on the selected racers). The remaining competitors in each class follow in their first-run finish order (6, 7, ...)

The manual procedure for generating a second run Masters start list when non-finishers are allowed to take a second run at the end of their age class is as follows:

1. Sort by the competitor list in reverse order of first run time (**Sort** operation selection *First Run, Descending* order)
2. Sort the competitor list into age class running order (**Sort** operation selection *Running order by Class*).
3. Working down the list from first to last age class in the running order, select all DNF/DSQ/DNS racers in each class. (The reverse first-run finish sorting performed in steps 1 and 2 results in non-qualified competitors being placed before all the first run finishers in the class). Move them from the beginning of their age class down to the end of their age class (drop the move target on the first racer in the next age class).

The manual procedure for generating a second run Masters start list when competitors are allowed to take a second run at the end of the field or when only qualified competitors are allowed to take a second run is as follows:

1. Sort by the competitor list in order of first run time (**Sort** operation selection *First Run, Ascending* order). This will place all qualified competitors at the top of the list, followed by all non-qualified racers (DNF, DSQ, DNS) at the end.
2. Select all the qualified competitors at the top of the competitor list (racers who finished the first run) and sort them into reverse order of first run time (**Sort** operation selection *First Run, Descending* order)
3. With the qualified competitors at the top of the list still selected, sort them into age class running order (**Sort** operation selection *Running order by Class*).
4. Select and sort the unqualified racers at the end of the list into a suitable order if allowed to take second run.

**Important:** the Automatic Sort option must be turned **off** and all prompts from report operations asking whether to sort should be denied: Just Say No!

**Additional Information:**

Not sure what the policy should be in the built-in second run start order sort for handling DNF/DSQ racers for the second run. Believe most divisions let their non-finishers take a second run at the end of the age class if the competitor wishes; this has also been fairly common practice at regional championship events. At the national championships, however, it's generally the rule that only qualified competitors are allowed to take a second run so that eligible competitors have the best possible course conditions.

Prompting the user to indicate whether non-qualified competitors should be placed at the end of their class or at the end of the field might be a nice solution, but not sure whether the additional complexity in the implementation justifies providing this option (vs. just building in a specific rule for the standard second run sort and using manual sort/move procedures to implement alternate policies).