

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

**Subject:** Masters age classes handling (labels and sorting)

**Date:** 13-Sep-2019

**Type:** enhancement request

**Importance:** medium

**Software version:** National/FIS 6.90 for 2019-20

**Submitter:** Deb Lewis

**Contact Info:** djlewis@acm.org

### **Description**

When running US and FIS alpine masters races, we run into several cases related to report labelling and sorting of masters age classes that would be desirable to improve.

- report label for Class 1 has incorrect age range of 21-29. Min age for masters was dropped to 18 several years ago, so class 1 should be 18-29  
CLASS 1: Men 21-29 (M1)  
CLASS 1: Women 21-29 (F1)
- when we run a FIS masters race and edit the masters age classes to install the FIS masters age class ranges in Split Second settings (see Table 1 and Figure 1 below), the report label for Class 1 uses min age of 21 for the age range label:  
CLASS 1: Men 21-34 (M1)  
CLASS 1: Women 21-34 (F1)  
FIS class 1 has min age 30 and should be labelled "30-34"
- when a competitor is entered or imported into a race with a birth year for an age below the minimum masters age, class 1 is computed rather than leaving age class blank or installing a value that is not in the usual 1..nn defined age class numbers (e.g, set to 0)
- when competitors are sorted using masters age class order, any competitor with an age class value in their competitor entry which is not in the standard 1..14 defined class numbers gets included in class 1. This requires manual intervention to untangle into actual classes for start lists and reports and is easy for the RA to miss. Occurs with class 0 for under-30 competitors in a FIS masters race, as well as US division races when special classes are broken out separate from the normal age classes and mixed-age masters+family Summer Fun race (*details below in Additional Information section*)

Proposed solutions:

- support explicit lower limit on age classes for masters so that report labelling can correctly report age range for class 1 when we have FIS masters age class ranges defined. Alternatively, implement built-in lower limit value for masters age class which provides US or FIS min age based on the race level settings on the Header tab
- when computing age class from year-of-birth when entering/importing a competitor, set class to blank or 0 when age is less than the minimum
- when sorting competitors by masters age class order, if competitor age class is not an integer class number 1..nn in the defined age classes, put them in a separate "class X" sort group which sorts following class 1 men/women according to gender. Competitor sort within the generated class X sort group would follow same rules as applied to any other class (random, by time, bibbo, etc).

## **Additional Information**

### **US and FIS Masters Age Classes**

US masters age classes start at age 18 for class 1, up to class 14 to 90+. FIS masters age classes start at age 30 for class 1, up to class 13 for 90+. All FIS masters age classes are 5-year brackets; all US masters age classes are 5-year brackets except for Class 1 age 18-29.

<b>Masters Age Classes</b>	<b>US Masters</b>	<b>FIS Masters</b>
<i>Min age</i>	<i>18</i>	<i>30</i>
Class 1	18-29	30-34
Class 2	30-34	35-39
Class 3	35-39	40-44
<i>... etc ...</i>		
Class 12	80-84	85-89
Class 13	85-89	90+
Class 14	90+	

*Table 1. US and FIS Masters age classes*

Figure 1. US and FIS Masters age class settings in Split Second

### US Masters Age Classes

Need min age 18

Age Range	Class Number
ages 0 to 29	1
ages 30 to 34	2
ages 35 to 39	3
ages 40 to 44	4
ages 45 to 49	5
ages 50 to 54	6
ages 55 to 59	7
ages 60 to 64	8
ages 65 to 69	9
ages 70 to 74	10
ages 75 to 79	11
ages 80 to 84	12
ages 85 to 89	13
ages 90 to 99	14

### FIS Masters Age Classes

Need min age 30

Age Range	Class Number
ages 0 to 34	1
ages 35 to 39	2
ages 40 to 44	3
ages 45 to 49	4
ages 50 to 54	5
ages 55 to 59	6
ages 60 to 64	7
ages 65 to 69	8
ages 70 to 74	9
ages 75 to 79	10
ages 80 to 84	11
ages 85 to 89	12
ages 90 to 99	13

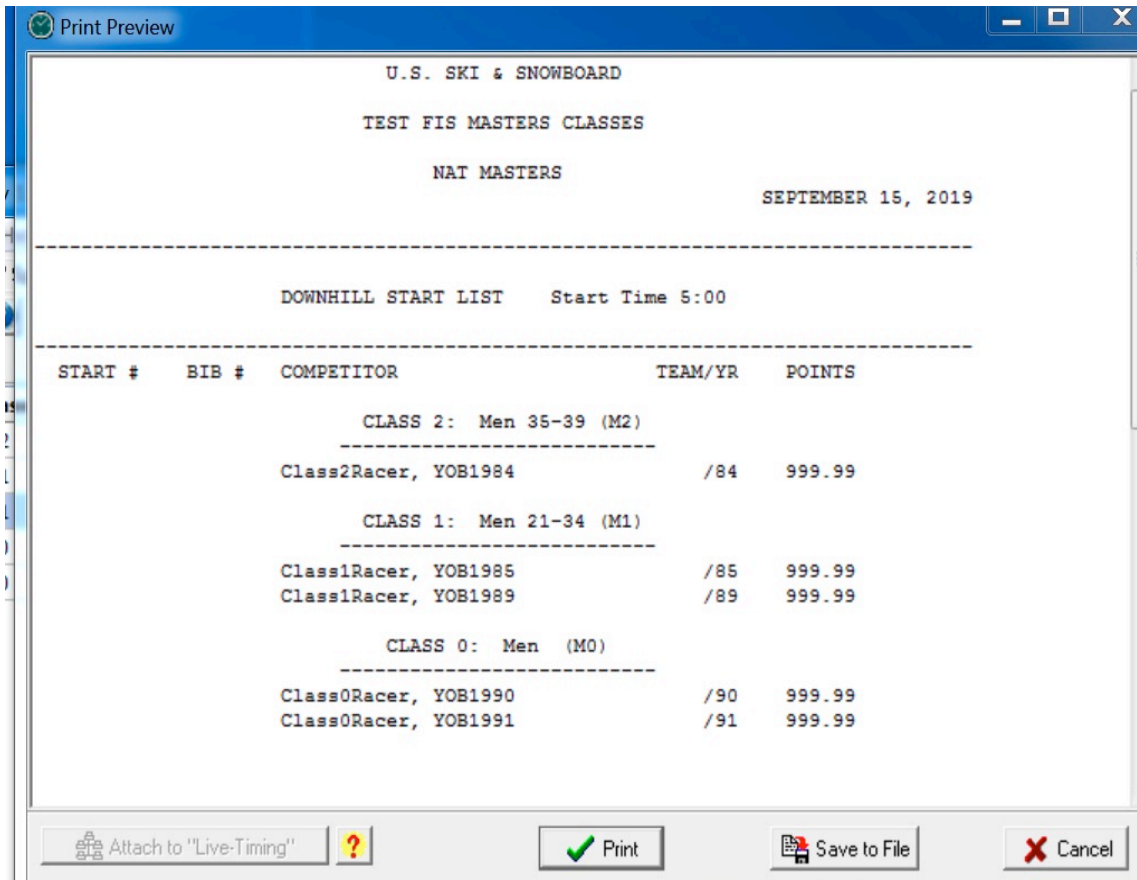
When we run a FIS masters race in the US, the RA needs to manually edit the masters age class settings in Split Second to shift from US to FIS age class ranges. Note that the Classes editor has no way to display or edit the minimum age for class 1.

### FIS Masters events in US

When we run a FIS masters race in the US, we typically also calendar the event as a US masters competition to allow US athletes under age 30 to compete even though not eligible for FIS masters awards or points. The Class 0/U30 class runs at the end of all other age classes of the same gender.

Current convention in the race file is to set the age class of under-30 athletes to class 0. Currently this has to be done manually after inserting/importing competitors, as the default age class computation does not currently apply a min-age lower bound when computing class 1.

Age class label in reports for class 1 in FIS masters race produces incorrect label of 21-34 rather than 30-34.



**Workaround:** Manually edit the Class 1 labels to correct the age range before printing start list and results reports. This is easy to forget and error-prone for the RA.

**Failed workaround:** We've tried setting up FIS masters age class ranges with a class "0" or "U30" defined for ages under 30 so that class 1 has age range 30-34. However, the report labelling seems to index into the age classes on class number rather than using numeric-string value of the age class name, with the result that all the age class report labels are off (class 1 picks up the class 0 age range 0-29 rather than the intended 30-34)

Classes

Regular  Masters

ages 0 to 29    U30

ages 30 to 34    1

ages 35 to 39    2

ages 40 to 44    3

ages 45 to 49    4

ages 50 to 54    5

ages 55 to 59    6

ages 60 to 64    7

ages 65 to 69    8

ages 70 to 74    9

ages 75 to 79    10

ages 80 to 84    11

ages 85 to 89    12

ages 90 to 99    13

ages 100 to 99    14

U.S. SKI & SNOWBOARD

TEST FIS MASTERS CLASSES

NAT MASTERS SEPTEMBER

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DOWNHILL START LIST    Start Time 5:00

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START #	BIB #	COMPETITOR	TEAM/YR	POINTS
CLASS 2: Men 30-34 (M2)				
-----				
		Class2Racer, YOB1984	/84	999.99
CLASS 1: Men 21-29 (M1)				
-----				
		Class1Racer, YOB1985	/85	999.99
		Class1Racer, YOB1989	/89	999.99
CLASS 0: Men (MU30)				
-----				
		Class0Racer, YOB1990	/90	999.99
		Class0Racer, YOB1991	/91	999.99

### **Non-standard Classes in US masters division races**

Some of our US divisions introduce a special "Open" class for ranking competitors from multiple age classes (Far West) or a "superseed" class for breaking out the top-10 competitors based on first run time (Intermountain). These are handled by editing the age class of competitors to "OP" or "SS" respectively.

When sorting by masters age class, the desired result is that competitors with non-standard age class would be grouped separately from the standard age classes for ordering and ranking within class, with the OP/SS class placed at the end of other age classes by gender.

Currently any non-standard age class is included in class 1, so RA must manually edit the sorted competitor list to break out OP/SS from class 1 before printing a start order or race results report.

### **Family-friendly Masters races (Summer Fun race)**

Every summer a "Summer Fun" masters race is held at Mt Hood which encourages family participation by including junior athletes along with their parents. The junior athletes run in their respective age classes (U16, U14, U12....) on the same course with masters age classes (typically on the "C/D" course with women and older men's masters classes). We code the juniors with their US age classes and operate the race with all competitors on the course in a single race file so we can generate start list for the course. Junior age classes have to be manually split from class 1 anytime we sort the competitors using masters age class order for a start list or to produce results.