UNITED STATES SKI AND SNOWBOARD ASSOCIATION

ALPINE OFFICIALS' MANUAL

CHAPTER XII

COMPUTERS AND SKI RACING

2011-2012

OVERVIEW

Neither this Chapter, nor any of the others in this Manual, can possibly provide solutions for all the problems that can occur at a ski race; it is only an attempt to make the same information available to all Alpine Officials. This Chapter is only a starting point for Computers and Ski Racing, and as the use of computers continues to expand it will be necessary to amend it to meet our needs. As you use this Chapter, as well as the others in this Manual, please send suggestions, amendments, additions, deletions, etc., to the current Chairman of the Alpine Officials' Education Working Group as listed on the USSA website.

COMPUTERS IN SKI RACING

The world of the Race Administrator, as well as that of everyone else involved in ski racing, has been revolutionized by the use of computers. Even though the initial expense of computer equipment seemed formidable for many ski clubs, its use simplified many other functions including rosters/phone lists, bookkeeping, business records, meeting minutes, correspondence, newsletters and fund raising details. In addition, computers have drastically reduced the many hours previously needed to prepare the documents necessary for the proper running and scoring of a race. Finally, their costs have been reduced significantly. A system that cost over $1500.00 just two years ago can now be purchased for approximately $500.00.

This Chapter is organized in such a way that it should be easy to understand. Hopefully it will be as understandable for the novice computer users (travelers) as well as for the accomplished computer jockeys (hackers). It is important that this Chapter be used in conjunction with Chapter V - The Secretariat, and the documents listed in Chapter VI - Working Papers. Questions regarding standard/required documentation are answered in those Chapters.

With the increasing dependency on computers, there are some important items that must be given consideration. First and most important is the necessity for the Race Administrator to be fully knowledgeable in the preparation of race documents so that, if necessary, the documents could be prepared manually until they can be computer generated in the correct format(s) as prescribed by USSA and FIS; this affords the opportunity to continue and even complete a race. Second is the necessity to completely understand and accept the fact that all data that is keyed into a computer must be checked and rechecked for accuracy.

Computers can only do so much. One of the most common complaints is that the software has “frozen” and cannot complete a request. This problem is generally caused by a lack of available memory and can usually be solved by closing other software applications and/or windows that are open at the time the problem occurred.

Another consideration is the need to have a data management person other than the Race Administrator dedicated to data input, etc. USSA recognizes the importance of the duties of a data management person and offers certification in this area. At some higher-level races, professional race management teams perform all data processing functions, but it is a good idea not to take these individuals for granted as anyone can and does make mistakes. Even with a team/club data management official in charge of data input, the Race Administrator and the Chief of Timing and Calculations must verify all data prior to the duplication and distribution of any document because these two Officials are primarily responsible for the accuracy of the Results.

RACE PROGRAM SOFTWARE SPECIFICATIONS

If you already own or have access to a computer, it will be necessary for you to know its capabilities such as the number and type of drives, capacity of the CPU and the drives, portability, printer needs, operating system, etc. If you don't have access to a computer and need to purchase one, contact a Race Administrator/Data Management official who has varied race-level experience or a reputable computer company for assistance.

USSA provides Windows-compatible race result software at no charge. The available programs have been tested and meet all current USSA and FIS result format requirements. A list of all approved programs is available on the USSA website at http://www.ussa.org.

When considering software from an independent source, it would be wise to also consider the following questions:

1. Does the software produce the required matrix (XML) for electronic transmission to USSA and FIS? Does the software allow you to produce multiple formats (for example, USSA and FIS) from a single database? This is important as it saves data input time.
2. Does the software run USSA, FIS, Age Class, Ability, Youth Ski League, Adaptive, Snowboard and Masters' races with or without USSA/FIS points?
3. Does the software allow for downloading/importing of the USSA/FIS Points List as provided on the USSA website to allow for faster entry of competitor information?
4. Does the software allow the selection of the number of competitors needed for reversal on the Second Run Start List?
5. Does the software allow the selection of the number that will qualify for the Second Run?
6. Does the software deal correctly with ties for the last position of the reversed group? The last position of a qualifying group? In the rest of the field? In the Penalty?
7. Does the software allow you to edit Factors (F values)?
8. Does the software allow you to edit USSA/FIS maximum values?
9. Does the software allow you to edit race level Adders and Z values for FIS races?
10. Does the software allow for missing bibs?
11. Can you easily edit data for the header? For competitors? For competitor's points?
12. If you already own a computer, is the software compatible with it?
13. How easy is it to change from one function to another within the software?
14. Does the software allow manual input of the start order?
15. Will the software allow you to enter bib numbers that are different from the printed order of start for the First Run Start List (as in lower level races or when bibs are not re-issued for the second day of races)?
16. Does the software offer a variety of ways to sort and print competitors for different needs, e.g.: alphabetically, by points, by class, etc.?
17. Will software allow printing of either start numbers or bib numbers on Official Results?
18. Does the software allow data management person to add/delete competitors on race day?
19. Does the software allow each run to be a separate race? Will it allow the runs to be combined as needed?
20. Does the software offer a way to record financial transaction; e.g. paid entry/lift fees or allow for exports to interface with other financial software?
21. Does the software print alphabetical listing of competitors? [Necessary for proofing against the FIS or USSA Points List.] Team/Club/Nation list? List by Points?
22. Can the software automatically create a random start order?

23. If desired, can seed cards be printed from the software?
24. Will the software tell you when you have missed entering a competitor's time?
25. Will the software correctly calculate both USSA and FIS Penalties?
26. Is Technical Support available? Hours available? Is there a charge? Is there a toll free number?
27. Is the software 'User Friendly'? This is EXTREMELY important!
28. Who is currently using this software? Talk to several users and find out what they like/dislike about the software as well as how efficient the technical support is WHEN YOU NEED IT!
29. Is the software compatible with the computer you are using: MAC, Windows or other operating system?

The ability to produce results in XML format required for electronic submission is the key question when considering race result processing software for both USSA and FIS events. Results for scored events that are not submitted to FIS and USSA in this format will not be scored/posted until the format is correct. (Refer to "Procedures for Sending Race Result Files" in "Master Packet of Forms" available on the USSA website.)

Results for USSA non-scored events are also posted on the USSA website. In order for this to happen, multi-category events sanctioned and administered as an event for each involved category, e.g. Ladies' and Men's J1, J2, J3 and Youth must have separate results and USSA-assigned race transmittal numbers/codes for each gender and each category: Scored, Non-Scored and Masters. **Youth events that consist of two one-run races must have *separate results and separate USSA-assigned race transmittal numbers/codes* for each of the one-run races**.

Let's face it. Some of us are comfortable with computers and some of us are not. If you are new to the use of computers, check with local computer companies or Junior Colleges for the availability of introductory computer classes. Once you are comfortable using a computer, you will recognize its efficiency and will find yourself using it for more and more tasks. USSA and FIS procedural advances require that officials have a basic degree of computer competency.

BEFORE THE RACE

Personal organizational skills and knowledge of the race result software being used are very important to the success of the race. As in other areas of ski race organization, no amount of race day work can replace pre-race organization. Prior to the race, not race day, is the time to sharpen organizational skills and review or learn how to use your race result software. It is beneficial to design and test all race result software with a "test race" designed to create and evaluate all possible race situations. The "Data Management Study Guide" posted on the USSA website has test race documents that can, after loading applicable points lists and entering a field of competitors, be used to test race result software.

Experience has taught us that a new season requires updated software, current Points Lists and clean directories. Saving previous season's software versions, Points Lists and race files is a good way to slow down your computer and create problems. Uninstall previous season's software or overwrite with a current version, delete old Points Lists and transfer previous seasons' race files to a storage unit where they can be accessed as needed, and you'll notice improved computer response.

CREATING A "COMPETITION DATABASE"

For a race series, e.g.: Regional Championships, where most of the competitors are entered in more than one event, following procedure is recommended:

1. Create a "Competition Database"
2. Enter ALL competitors and include quota designation, when applicable
   (When 2, or more competitors, have the same last name and first initial, search with a competitor's USSA/FIS code to eliminate the possibility of selecting the wrong competitor.)
3. Print List of Competitors with Points in All Events
4. Proofread all information and make necessary corrections
5. Create event, e.g.: Slalom, from this "Competition Database"
6. Delete competitors not competing in the Slalom
7. For each succeeding event, repeat steps 5 and 6. In the long run, this will save time and the "Competition Database" file can be transferred from one venue to another!
8. Update "Competition Database" as needed to include new competitors

NOTE: It is extremely important that you "save" your data often and that you backup your race file after every major change, e.g. final editing of data, preparation of 1st Run Start List, entry of 1st Run times, etc. Creating systematic backups of your file can eliminate major issues in the event of a system crash with resultant data loss.

ENTERING COMPETITOR DATA

A "USSA ALPINE ENTRY CARD" used for entry in USSA non-FIS events, is printed in the back of the USSA Alpine Competition Guide. Many areas prefer receiving a Team Entry Form that is available in the "Master Packet of Forms" available on the USSA website. FIS competitors' entries are submitted *only* on a FIS Entry Form.

Many clubs are using online race registration procedures. If a club is using an online race registration process for a FIS event, it does not eliminate the need for a paper copy of the FIS Official Entry. In addition, if the online race registration process produces an actual race file that can be downloaded directly into your race result software, the accuracy of the downloaded data must still be verified.

USSA Points Lists/Officials' Roster and FIS Points Lists that have been formatted for race result software can be downloaded from the USSA website either onto a blank disk, a designated drive or directly into the race result software. Current membership information is also available on the website. A compatible race program and a hard drive with sufficient storage are required in order to operate these features.

NOTE: If a Points List needs to be reloaded, all previous versions must be deleted. Otherwise, the download process may simply verify that the list is already loaded on the computer and will go no further. Software may store copies of Points Lists in more than 1 location, and using the "search" function may be necessary in order to identify their location so that they can be deleted.

NOTE: *The FIS Points List available at the FIS ftp site is not formatted for downloading in race result software.*

The ability to download USSA and FIS Points Lists directly into the Race Result Software has made accurate keying of competitors' information - FIS/USSA code numbers and Points, competitor's year of birth, class, etc. - a relatively easy operation. However, it is important that this information be carefully verified against the original data source - the current FIS/USSA Points Lists and/or web-

based membership data - for accuracy after it is keyed into the computer. For FIS events, when a set of Official Results will be printed for submittal to USSA using competitors' USSA membership numbers and the names on the USSA List are spelled different from the FIS List, the names must be spelled as they appear on the FIS List.

Once all competitor data has been input in event database, print an alphabetical list of competitors and use it to proof the data against either online or downloaded copies of the applicable points list and/or membership roster. (FIS competitors' data can be verified against the FIS List loaded in FIS List Program available for downloading at the FIS ftp site; the current version of MySQL is required in order to run this program.) If there is an error in the spelling of a competitor's name, spell the name exactly as it appears on the appropriate list for your event - USSA or FIS. First, however, double-check the competitor's code number to make sure you have the correct competitor.

When retrieving data, some programs will not "pull-up" needed information if the name entered has a different spelling from that on the points list, so it may be easier to "pull-up" the information by USSA or FIS code number. "Pulling-up" a competitor with USSA or FIS code number also helps ensure that the correct competitor is selected.

USSA database only capitalizes the first character of a competitor's last name but FIS database capitalizes the entire last name. If your List of Competitors has different formats for competitors' last names, it is usually caused by the software having to search the USSA List for a competitor's name, etc. This is usually only encountered for USSA members with new FIS inscriptions; please edit your race database as required by the type of race.

All of the race programs approved by USSA enable the retrieval of all data for each competitor in one continuous operation. From the file you create, it should be easy to create additional race files for each day's race(s) regardless of the event. When creating new files, enter required USSA transmittal changes, e.g. event, date, USSA race code, FIS codex number, etc.

Information in the TEAM/AREA/NATION field, e.g. USA, CAN, AUT, etc., is part of the data provided in the USSA Points List download and is verification of required USSA membership. The CLUB/QUOTA field should be used to designate additional information the ROC wishes to display on official documents, e.g. USSA division or state, local club affiliation, school affiliation (required for FIS-U events), or year of birth for FIS Start Lists.

ENTERING HEADER DATA

The "header" is composed of information such as the names of Jury members, location of race, racecourse name, etc. The working papers listed in Chapter VI – Working Papers, contain a suggested form for gathering this information. The information must be verified against the original source: Course name and homologation number against the original homologation file – not an old race result, start and finish elevations against the Technical Delegate's verification of information found in the homologation file - not an old race result; USSA Jury-member names against the current Alpine Officials' Roster and race name, location, date and event against the Transmittal which can be downloaded from the USSA website.

NOTE: Current Alpine Officials are included in the USSA Points List download and are accessed by keying in the Official's last name when using software currently provided by USSA.

NOTE: Do not use an ampersand when keying in the race title; XML format does not recognize the &" as well as other keyboard characters. A title with "&" will have to be keyed as "and".

COMPETITOR LISTS

Once all competitor/header data has been keyed into the computer and verified against the original sources, it is useful to print the following competitor lists: List of Competitor by Seed Points which is used to check the Seed Board at the Team Captains' meeting; List of Competitors by Nation/Club, which can be used to help Team Captains' verify their entries; and a corrected copy of the alphabetical listing which can also be used to help verify competitors' entries. These lists are not part of the documentation required in race result packets submitted to USSA and/or FIS.

START LISTS

The competitors' start order is determined and approved at the Team Captains' Meeting. [See Chapter V - The Secretariat, for an explanation of the Team Captains' Meeting and the Draw.] Also, additional header information - Forerunners, Course Setters and scheduled start times - are available at the Team Captains' Meeting for entry into the computer. This is also the time when any additions, deletions, or corrections to the competitors' database should be made. These changes and header data changes or additions should be completed prior to the assigning of start/bib numbers. The Jury may allow a computer-generated draw for all USSA-scored and regional FIS events; however FIS events require the approval of the Team Captains present at the meeting as evidenced by their signature on their entry forms. Some programs allow for a "random" sort function while others require that you do it manually. The Race Administrator must verify that any special instructions regarding the start order, such as for adaptive competitors ("Golden Rule" – USSA Alpine Competition Guide), collegiate competitions or Continental Cup (Nor-Am) seeding, have been communicated to the person creating the applicable race documents.

ASSIGNING BIB NUMBERS

Because of incomplete sets of competitor bibs, it is sometimes necessary to allow for missing bib numbers. After the Start List is created and each competitor is assigned the proper start number it is usually easy to assign bib numbers and allow for these gaps. However, the night of the Team Captains' Meeting is not the time to experiment with the procedure; this is something that should have been tested in advance. In the case of missing bib numbers, the First Run **BIB** number will not be the same as the First Run **Start** number. This is the situation where the software **must** allow the printing of Official Results with "bib number" instead of "start number" so that there is agreement with Reports by the Referee, which list competitors' bib numbers.

If the Jury allows a competitor to be inserted in the field, assign an out-of-sequence bib number and the correct start number. Reassign start numbers for all subsequent competitors; this will create an offset from bib number to start number. Assigning a numeric plus an alpha character start number (e.g. 15A) for an insertion following the fifteenth racer can result in unexpected and possibly wrong outcomes. The start number is used for sorting and since an Alpha character is not a number, it will always be treated as a zero. (Geoff Elder, USSA Race Software)

SNOW SEED

In Downhill, Super G and Giant Slalom, the Jury may require that a "Snow Seed" be drawn. If your chosen race program cannot indicate which competitors have been drawn for the snow seed, it is easily accomplished by editing your Start List in the print preview screen or by using a black pen and marking the designated competitors with an asterisk (*) BEFORE duplicating your First Run Start List. A First Run Start List is a required document in race result packets submitted to USSA.

NOTE: It is strongly suggested that the Snow Seed designations be removed from the race file if the Jury decides that the Snow Seed will not start or immediately after they start.

COMPUTER LOCATION

It is important to give careful consideration ahead of time as to where the computer will be located on race day. Primary importance is a location where distraction either to computer operator and other officials is minimal. If the computer is going to be located in the timing building, care must be used in its transport. Using a snowmobile can cause problems not only because of the rough ride and the cold temperatures, which can cause physical damage to disks and hard drives, but also because of the magnetic field generated by the snowmobile's engine, which can and has been known to erase or scramble the data on the disks and the hard drive. Proximity to drills and radios carried by race personnel can also cause loss of data.

Other questions that should be answered in advance of race day are the availability of power for the computer and also, whether or not there is a duplicating source available. Electronic timing equipment can only be linked to the computer if it can be shown that the timing system will still function when disconnected from the computer. If the timing equipment is not linked to the computer, and the computer is not located in the timing building, arrangements will have to be made so that the competitors' times are made available for input. Some systems allow for disk transfer of either the “race file” or the “timing file” from the result computer to the timing system and then back to the result computer. Transferring the “race file” overrides race files with the same designation and can cause problems with editing. Transferring the “timing file” involves transfer of only the competitors’ bib number and run time so header, official, course, etc., editing can be performed on the original race file with no danger of an overwrite.

NOTE: Although current operating systems safeguard against the problem, it is a good idea to use the “safely remove” function if using a memory stick to transfer race files. In some cases, failure to do so could result in the loss of data.

Regardless of the computer's location and the data input system used, competitors' times must be carefully checked for accuracy against the timing tapes from the homologated timer. When the official printing timer allows manual input or correction of a time, some type of indication – asterisk – concerning any effected change must be printed on the timing tapes. If the timing equipment does not record the information, it is suggested that the electronic clock operator mark the tape when a “DNF” or “DNS” is assigned. When an electronic time is not valid and a replacement time must be calculated, this falls under the category of correction of a time, and it must be so indicated.

NOTE: USSA Software (SplitSecond) will not allow you to time the race electronically (through a clock) by entering unknown bib numbers as the race progresses. For example, when timing a non-scored age class race and running girls then boys – youngest to oldest – and you decide to enter bib numbers with no associated names because you don’t wish to toggle back and forth between genders and/or files, the software will not allow this function for an entire race. It is best for timekeepers and Race Administrator/Data Management that all competitors are in one main race file with separate sections for each gender. This allows you to close the timing screen, change sexes quickly by using the CTRL+S keys, then re-opening the timing screen. *(CTRL+S are a USSA Software – SplitSecond – feature and may not be available with other race result software.)*

DURING THE RACE

Since the decision as to the location of the computer was made ahead of time it will be possible to test its operation prior to the start of the race. It is important to remember that the Race Administrator and the Chief of Timing and Calculations are responsible for what the data management person does. Trust in each other's judgments/decisions and a cooperative manner on the part of all Officials contributes to a more pleasant environment and fewer errors. This should be done well in advance of the race day and not the morning of the first day of competition.

Data management person must be given certain information as the race progresses, such as actual start time of the race; measured length of the racecourse (length measured from gate to gate along the racing line) for Downhill and Super G, as well as actual gate count for Downhill and actual gate count / number of direction changes for Super G, must be documented in the Minutes portion of the Program, Start Lists and Official Results. Giant Slalom and Slalom require documentation of actual gate count / direction changes in Minutes portion of the Program as well as on the Official Results. The data management person also needs: air temperature at the start and finish area at the beginning of the race; snow conditions; competitors' status: DNS, DSQ, and DNF. Header information must be verified by the Technical Delegate (TD) before any race related documents are duplicated.

ENTERING COMPETITORS' TIMES

Whether the computer is linked up to the timing equipment, times are entered manually, or times are transferred by disk, memory stick (remember to use the "safely remove" function when disconnecting from computer), or e-mail, competitor's times should be available as the race progresses. Times/standings can be announced or can be displayed on a remote screen for public viewing. This option will obviously depend on the individual situation, available equipment and personnel. However, these times/standings, whether announced or displayed are unofficial.

Competitors are accessed by the applicable bib number in order to enter their time. Whether the times are input in minutes and seconds or only in seconds, input must be correct.

Entering times is only part of this procedure. It must also be possible to enter DNS, DNF, and DSQ. When entering DSQ, the gate number where the DSQ occurred or the rule number for other infractions such as early/late start, equipment, etc. must be entered. Different programs have different procedures for this function; pre-race training allows familiarization with these functions.

After completion of the first run and after all competitors' times have been entered, a First Run Result can be printed. If the First Run Start List had 120 competitors, the First Run Result must also have 120 competitors; this allows verification that all competitors have been assigned either a time or a status (DNS, DNF, DSQ). In some cases, the program will not allow you to print results until every competitor either has a time or a status designator. Some programs have a default factor, which will appear if nothing has been entered for a competitor while others might list a competitor as a DNS if a time is not entered. This is another good reason for pre-race training. First Run Results are not part of the documentation required in race packets submitted to USSA and/or FIS.

NOTE: For events that have field-size cutoffs for the second run, it is imperative to verify that those competitors who did not qualify for the second run according to the First Run Results are designated as DNQ for the second run. Although the software will recognize the cutoff point, it may assign DNS to competitors who completed the first run but did not qualify for the second run; this problem will not be evident until you attempt to print Official Results.

It is also necessary to check for ties in time at the cutoff position. If a tie occurs at the cutoff position, it may be necessary to increase assigned cutoff number to include all of the tied competitors.

All times MUST BE VERIFIED AGAINST THE TIMING TAPES FROM THE HOMOLOGATED TIMER whether or not you choose the option of printing a First Run Result. DNS, DNF and DSQ competitor information must be verified against the Report by the Referee, and the data management person should never print a Second Run Start List before the end of the Protest period and before the DSQ'S have been removed from the field. Always account for all competitors by verifying that the number of competitors listed on the Second Run Start List is equal to the number on the First Run Start List minus all DNS'S, DNF'S, and DSQ'S that have not been protested. (Some lower level races and races where the runs count individually for selection purposes allow DNF'S and DSQ'S to take a second run.)

SECOND RUN START LIST

For races where second runs count individually for selection purposes or DNS's, DNF'S or DSQ'S from the first run are allowed to take a second run, special second-run seeding may be required. The data management person must be aware of these requirements, and the Second Run Start Lists for these events must be carefully checked for accuracy. Please refer to current USSA Alpine Competition Guide for Age Class, etc., seeding requirements.

A standard "bibbo" is 30, and 15 is the variation, and most programs allow the operator to select the exact number of competitors to reverse - "bibbo" - for the Second Run. If a Jury decides to allow a "bibbo" of 15, this announcement must be made one hour prior to the start of the first run, but it is recommended that the size of the "bibbo" be confirmed prior to generation of the Second Run Start List.

Remember that in USSA-sanctioned events when the "Golden Rule" is used to seed adaptive competitors for the first run, the adaptive competitors are entitled to run immediately after the bibbo group in the second run if their first run results haven't earned them a better start position. *(Refer to "Golden Rule", USSA Alpine Competition Guide; "Golden Rule" does not apply at FIS events.)*
When the race result computer is located in the timing/finish building and a copy machine is not readily available, it is important that the program feature a printing function for this document; 10 copies are sufficient for most races.

Always check for ties, especially at the last position of the reversed competitors, and verify that the race program has positioned the tied competitors according to current rules. Also, if there has been a change in the scheduled start time for the second run, verify that the change is indicated on the Second Run Start List.

If a computer failure should occur, you need to be familiar with rules, format and procedures so that a Second Run Start List can be generated manually. Second Run Start List is not part of the documentation required in race packets submitted to USSA and/or FIS.

NOTE: Do not, under any circumstances, edit competitors first-run start numbers so that they correspond to the second-run start positions. ***The software's tie-breaking function is controlled by the first-run start number.***

In addition, it is not recommended that you create separate race files for each function/gender: e.g. First Run Ladies, First Run Men, Second Run Ladies, Second Run Men, Final Result Ladies, Final Result Men. This creation of multiple files for one L/M race can result in multiple issues and errors. You only need one main race file with separate sections for each gender.

ENTERING COMPETITORS' SECOND RUN TIMES

Entering times for the second run is the same as entering times for the first run. If the software does not automatically bring up the next competitor on the Start List, the competitor's file is accessed by keying in the appropriate bib number. The correct Second Run time is entered and the race result software adds it to the First Run Time. The competitor is then moved to the proper finish order. Some programs will not let you put in a time if the competitor had a DNS, DSQ, DNF or DNQ in the first run. Similar checks to detect competitors who have missing times are once again necessary and *all* input must be verified against the timing tapes from the homologated timer.

AFTER THE RACE

This is when all input is again double-checked. You may be asked to print Unofficial Results for a Jury Meeting. These are often printed before the DSQ'S are deleted from the field; verify that these Results are marked "UNOFFICIAL" and are not mixed up with official documents. You may also be asked to print a set of Results by Class for the Awards Chairman. Results by Class and Unofficial Results are not part of the race packet documentation required for submittal to USSA and/or FIS.

OFFICIAL RESULTS

Official Results, (which include race points for scored events), are printed after all header data has been verified, competitors' times have been entered and verified against the timing tapes from the homologated timer, Protest period has expired and all DSQ'S have been entered per Jury instructions. The Chief of Timing & Calculations should be available in case a competitor's time is questioned and also to confer with the Technical Delegate if there are questions regarding the Official Penalty.

The data management person is required to produce clean and neat original documents (masters) of all required race documents as listed in Chapter V - The Secretariat, and must be available to either answer necessary questions or correct and reprint necessary documents. Official Results are not "Official" until the Technical Delegate has verified and signed them. Official Results are required as part of the race result packet submitted to USSA and/or FIS.

OFFICIAL PENALTY

For scored events, race result software programs calculate and print Race Points and Penalty. The Penalty is calculated and printed either as part of the "Result" function or as a separate function based on the Results. The Technical Delegate is responsible for verifying accuracy of Race Points, Seed Points and factors (event factors for USSA and event factors, "Z" correction values and race level adders for FIS), used in the calculation of the Penalty as well as the actual calculation.

A Penalty for USSA or FIS scored events is not "Official" until signed by the Technical Delegate. Computer- generated **or** hand-calculated Penalty (if computer is unable to perform calculation, e.g. insufficient number of finishers), is a required part of submitted race result packets.

USSA RESULTS: DATA TRANSMISSION

USSA requires that race results/penalties for scored events be transmitted electronically in XML format to alpineresults@ussa.org. USSA assigns an alpha character followed by a 4-digit number – a transmittal/race code number – that is used to identify USSA events. The subject line must be the USSA-assigned transmittal/race code number for the race being submitted. This enables the USSA autoscore system to quickly verify accuracy of the data and post the results on the USSA website. (See transmission information referring to non-scored events on page 4 of this Chapter.)

Multiple files of the same name cannot exist within a single subdirectory as the most recently generated or copied file will overwrite an earlier file of the same name. USSA-approved race result processing programs identify each event by the USSA-supplied transmittal race code so this should not be a problem. It is strongly suggested, however, that the transmission file be opened and the basic race information be verified. All race result files must be transmitted individually.

FIS RESULTS: DATA TRANSMISSION

Data transmission of results to the FIS also requires electronic transmittal in XML format. The FIS Bureau will not manually enter race results into their database and races with issues are the responsibility of the respective federation. FIS assigns a 4-digit number - a codex number - that is to be used to identify FIS events. The subject line must be the FIS-assigned codex number for the race being submitted. (Refer to "Rules of the FIS Points" for current FIS transmission address.)

In order for data transmission to be successful, an organizer will need to supply a computer with either an internal or external modem as well as Internet connection capability – network or wireless connectivity or dialup; if dialup is the only option, a "clean phone line is required. Phone lines with voice message service on them may not be "clean"; it may also be necessary to disable "call waiting".

Electronic transmission of the USSA and/or FIS Results and Penalty in XML format does not replace the requirement for submittal of official race result packets.*

***NOTE:** Refer to Chapter V – The Secretariat for USSA and FIS race result packet transmission procedures.

If the results are received in the proper format, you will most likely receive an immediate e-mailed confirmation of submission. If there is a problem with the results, you will receive an e-mailed status report. Following are possible replies you may receive following result submittal:

- File conforms; results usable and being loaded. (However, they will not be in points system until Report by the Technical Delegate is received.)
- File conforms but with some errors listed that are being corrected automatically. Following errors are corrected but need to be verified on paper copy and in Report by the Technical Delegate. Errors that need to be checked, corrected and reported are:
  - Category not same as in FIS Calendar (WC, COC, FIS, etc.)
  - Event not same as in FIS Calendar
  - Ranking of ties incorrect
- File cannot be loaded, as information is incomplete. File must be corrected and resubmitted.
  - Wrong codex
  - FIS inscriptions do not match (athlete FIS code numbers)
  - Unknown competitors

- File received but can't be identified; return to sender
- File not attached (may be necessary to "zip" attachment prior to submittal; FIS computer will automatically unzip the attachment).

Occasionally, the FIS parser will go down over the weekend. If you do not receive a confirmation email within approximately 10 minutes follow this procedure:

- Confirm that you are connected to the internet
- Have someone send an email to the email account that you are sending results from to confirm that you are receiving emails. (Setting up a secondary Yahoo! or Google type account is helpful for testing yourself without relying on an outside person.)
- If you can send and receive emails to/from another account, the FIS parser is down. DO NOT PANIC and resubmit your race result file numerous times. If it is over the weekend, you may need to wait until Monday to resubmit.
- Do not resubmit until you have verified that the results were not received!

PROGRAMMING CHANGE REQUEST

During the course of an event, data management personnel may encounter problems with USSA Race Software (SplitSecond). If the problems require a programming change, debug or enhancement, the Programming Change Request form should be completed and e-mailed to compservices@ussa.org. USSA staff will address these situations with the USSA software vendor. Changes, debug or enhancement of other software applications will have to be addressed by the user with the applicable vendor.

USE OF THE USSA AND FIS WEBSITES

USSA website (http://www.ussa.org) is utilized as a major communication tool. Available services are U.S. Ski Team news, current rules and regulations, race results, USSA/FIS Points Lists, competitor and official membership data, FIS website link, etc. The goal of USSA is to utilize the technology and resources already available with computerized processing and storage and electronic transmission of information in an effort to develop a more efficient system of communication.

Take some time and browse the items available on the USSA website. USSA staff's creation and maintenance of this website is an outstanding contribution to all members of the organization as well as other interested parties. The USSA Points List is only available at this site.

The general information FIS website can be accessed at http://www.fis-ski.com or through a link on the USSA website. FIS Points Lists and FIS Calendar are only available electronically. Software required for utilizing the Points List – MySQL – as well as data updates is available at the FIS ftp website: ftp://ftp.fisski.ch.

NOTE: Firewall protection or ad/spam blockers may have to be reset or deactivated in order to download and use MySQL. Computer may have to be rebooted following installation of all required programs and files.

RACE RESULT SOFTWARE SOLUTIONS

1. Verify that you are using an up-to-date version of the software.
2. Delete previous seasons' Points Lists.
3. Store previous seasons' races on external storage.

4. If software freezes, verify that you do not have an excessive number of programs running in the background. If you do have additional programs open, start shutting them down until your software starts responding again.

   Key CTRL+ALT+DEL and a TASK MANAGER window will appear. Click the "Applications" tab for a list of running programs; select individual open programs and select "End Task". A new box will appear that lists the program as not responding and allows you the option to shut it down. After shutting down other programs, if the race result software is still not responding, use the same procedure and shut it down. You should then be able to successfully reopen the software.

   If the software is still not responsive, shut it down and, using either CTRL+ALT+DEL again or the RESTART function, reboot the computer. The rebooting function should solve remaining issues. If RESTART or CTRL+ALT+DEL are not allowing you to reboot the computer, your next option is to power off and restart the computer. A "hard" powering off, however,—pressing the power button until the computer shuts down—should be used only as a last resort. A "hard" powering off is the equivalent of dropping a phonograph needle directly onto a phonograph record. (If you don't know what a phonograph is, Google it!)

   If you are using the Live-timing feature of the software and have intermittent or no internet connection, this will cause the software to appear frozen. DO NOT PANIC and start 'mashing the buttons' (hitting keys over and over). Step back and let software cycle through. This may appear to take several minutes (it's actually about 30 seconds). If you are connected wirelessly or by wire, disable your internet connection to see if this helps the 'freeze'.
5. If it is necessary to load a corrected Points List, accessing USSA's ftp points list site and reloading the lists will not be adequate. When you request a download, the ftp site checks your computer recognizes that the list is already loaded and does not overwrite the previous points list file; you must delete the original version.
6. When deleting list, it is important to remember lists may be stored in more than one area.
   a. If not sure of actual storage location, use search function, identify actual storage locations and delete them.
   b. For USSA Race Software (Split Second), use the "on-line load points list option" and load required list only when the USSA ftp site says the list <u>is not already loaded</u>.
   c. After reloading required lists, refresh competitors' points and verify them against the appropriate source.
   d. If you are having problems retrieving both USSA and FIS data for the same competitor, rekey the competitor's last name.
7. If selections are not visible, *e.g. both Official Results and Unofficial Results* or both *USSA Results and FIS Results*, you may need to adjust the DPI (dots per inch) or screen resolution on the computer. Options are available in the "Display" section on the "Control Panel".
8. It is strongly suggested that the Snow Seed designations be removed from the race file if the Jury decides that the Snow Seed will not start or immediately after they start.

NOTE: In the real world and where a lack of trained personnel requires it, the duties of a Data Manager are often added to those of the Race Administrator. Nothing in this Study Guide in intended to restrict or deny this practice.