



ADVANCED TIMING & CALCULATIONS - ALPINE

SEASON 2024

STUDY GUIDE

This Study Guide is intended as an educational and review aid for individuals interested in alpine officiating. Downloading, printing, and reading the Study Guide must not be substituted for actual attendance at an approved U.S. Ski & Snowboard Alpine Officials' Clinic or used as a replacement for actual instruction at any approved clinic.

PLEASE NOTE: The Chief of Timing and Calculations is responsible for supervising, documenting, and enforcing the quality control of actual timing and results; the purpose of this clinic is refinement of the skills required by the position.

With the exception of lower-level events where availability of personnel makes it necessary, the Chief of Timing and Calculations should not also be the individual operating the electronic timing equipment or the timing/race result software.

Training the use of timing equipment and/or timing/result software will result in higher qualified officials, so it should be included in the curriculum. In an effort to address this issue, materials have been made available for a Timing Operations Workshop that can be used to facilitate this option.

REFERENCE PUBLICATIONS: *

1. U.S. Ski & Snowboard Alpine Competition Regulations (ACR)
2. ICR of the FIS, Online Edition
3. Rules for the FIS Points
4. U.S. Alpine Officials' Manual
5. FIS Timing Booklet

** It is strongly recommended that individuals sitting for the Level 3 Chief of Timing & Calculations have paper copies of these publications available for review.*

CERTIFICATION EXAMINATION:

Advanced Timing & Calculations (Level 3) Certification Examination will be available at approved U.S. Ski & Snowboard Alpine Officials' Clinics. Allowed time limit is 2.5 hours. The examination is open book, and it must be administered only at scheduled clinics. It is NOT A TAKE-HOME EXAM. Allowing the use of computers for the calculation sections is not allowed. Completed examinations are to be retained by the clinic examiners; they are not returned to the individuals taking them. Please refer to Region/Division publications for schedules. *The Study Guide is not intended as a replacement for taking notes or for use during an open-book examination at any Alpine Officials'-approved clinic.*

If you have problems with this Study Guide or have suggestions for improvements, please contact the Chair of the Alpine Officials' Education Working Group: aoewgchair@gmail.com. Thank you.

U.S. SKI & SNOWBOARD

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PLEASE NOTE: Procedures which impact your event operations and programs must be relayed to all event officials, Team Captains, and competitors. The procedures must – without question – be respected and observed.

Alpine Officials' resource materials are prepared to be accurate and in compliance with current rules and procedures while maintaining a nationwide outlook. The content of the material is reviewed by senior Alpine Officials prior to being submitted for acceptance by appropriate U.S. Ski & Snowboard authorities. If an item included in the resource materials appears to be in conflict with current rules and procedures, please contact U.S. Ski & Snowboard Competition Services for clarification and/or interpretation.

There is much information available to us - no one can possibly know it all. What we **SHOULD** know is **WHERE** to find it. Some of the sections of this Study Guide may require research by the user. This research will aid in the ability to understand the layout of applicable rule books/publications and will reinforce their content.

NOTE: The U.S. Ski & Snowboard Schedule Agreement and ACR U203.2, require that the Chief of Timing & Calculations have a current U.S. Ski & Snowboard Officials membership, be appropriately certified for their position, and have attended a biennial Continuing Education Clinic (Update) prior to the event. The OC should appoint the most qualified individual available to serve as Chief of Timing & Calculations. *The Chief of Timing & Calculations for National Championship, Nor-Am Cup, and World Cup events **should** be certified as a Level 3 or higher Chief of Timing & Calculations.*

REFERENCE DOCUMENTS:

The following reference items can be found at the end of this Study Guide, in “Miscellaneous Study Guide Forms”, or on the FIS website. Document numbering is not sequential because it agrees with numbering in the “Master Packet of Forms” (MPF) as posted on the U.S. Ski & Snowboard website. All forms contained in the MPF have been reviewed and, when required, have been updated for season 2024. It is suggested that forms be printed for easy reference while using the Study Guide.

- 42. Timing Checklist (MPF)
FIS List Cover Page (U.S./FIS websites)
- 39. FIS Penalty Calculation Form (MPF)
FIS Timing Booklet (FIS website)
- 32. Replacement Manual (Hand) Time-of-Day (ToD) EET Worksheet (MPF)
USA Wireless Timing Application

MINOR ATHLETE ABUSE PREVENTION POLICY (MAAPP) & SAFESPORT CODE

The following information is being repeated in Season 2024 materials due to its critical nature and is only a brief summary of information found in many documents. These documents are updated as required, so please refer to links posted on the U.S. Ski & Snowboard website for access to complete and current information. usskiandsnowboard.org/safesport-athlete-safety/safesport-resources

1. MINOR ATHLETE ABUSE PREVENTION POLICY (MAAPP)

MAAPP applies to “In-Program Contact” within the Olympic & Paralympic movement. Its implementation is required for the U.S. Olympic & Paralympic Committee (USOPC), National Governing Bodies (NGB), Member Clubs (also known as Local Affiliated Organizations or LAO), and Paralympic Sport Organizations (PSO).

MAAPP applies to all U.S. Ski & Snowboard employees, contractors, athletes, officials, and members. It also applies to participating non-members, e.g., foreign officials, timing companies, volunteers, and any adult participants. MAAPP has three primary components: 1) Education & Training, 2) Required Prevention Policies, and 3) Recommended Prevention Policies. *MAAPP should be implemented alongside the SafeSport Code.*

2. SAFESPORT CODE

U.S. Federal Law requires that adults who have frequent contact with, or who are in positions of authority over athletes, must receive consistent education on prevention and reporting of all allegations of sexual misconduct, bullying, hazing, and abuse of all forms. This impacts all U.S. Ski & Snowboard member clubs, coaches, officials, and Club Volunteer members. All members turning 18 years of age and older during the season are required to complete SafeSport training through the U.S. Center for SafeSport (substitutions are not permitted).

3. ADMINISTRATION PER MAAPP & SAFESPORT CODE:

The Local Organizing Committee (LOC), as well as other individuals and entities as set out in the MAAPP and the SafeSport Code, are responsible for monitoring and enforcing all requirements. These requirements include, but are not limited to:

- **Memberships:** Using the U.S. Ski & Snowboard website, the Race Administrator must verify that all individuals who are granted competition arena access: Jury members, Jury Advisors (Start and Finish Referees), Chief of Course, Course Setters, Coaches, Competitors, Forerunners, Chief of Timing & Calculations, Race Administrator, technicians, and medical staff, etc., have current and applicable U.S. Ski & Snowboard memberships. *Individuals whose memberships are “pending”, or whose names appear either on the Centralized Disciplinary Database or the Pending Membership List must not be issued any access that would allow competition arena access.*
- **Alpine Official Certification Status:** Using the U.S. Ski & Snowboard website, the Race Administrator must verify that all Jury members, Jury Advisors, Chief of Course, Course Setters, Chief of Timing & Calculations, and Race Administrator have appropriate certification as required by their position.
- **Alpine Official Continuing Education (Update) Status:** Using the U.S. Ski & Snowboard website, and with the exception of Technical Delegate, the Race Administrator must verify that the Chief of Race, Referee, Assistant Referee (if required), Chief of Course, Course Setters, and Chief of Timing & Calculations, have attended the required biennial Continuing Education Clinic. (For Season 2024, the allowed minimum is Season 2023 attendance.) Unless excused, Race Administrators and Technical Delegates are required to attend a certification-specific Workshop every season.
- **Centralized Disciplinary Database:** List of individuals subject to temporary or permanent restrictions pending investigation of violation of SafeSport Code. Names of all persons with credentials or venue access that allows access to the competition arena must be checked against the U.S. Center for

SafeSport’s Centralized Disciplinary Database. If listed, presence not allowed. *Site allows filtering to sport. However, an individual may not be listed under one sport but may be listed under another; searching by name is the best practice. If you have a name match but cannot verify whether or not it is the individual attending the event, please contact Member Services.*

0. Volunteer Competition Worker Registration: Completion of a current “Volunteer Competition Worker Registration” is required for any workers/volunteers who are over the age of 18, are not U.S. Ski & Snowboard members, properly credentialed FIS officials, coaches and trainers, or regular employees of Organizer or of Ski Area/Landowner acting within the scope of their employment.
1. “Blocks” of coaches’ tickets must not be provided for participating clubs. This practice does not allow the OC to make their best effort to comply with SafeSport requirements. Due to circumstances, it may be necessary to allow one coach to pick up all of a team’s coach credentials/lift tickets. In this case, the coach must list all the names to whom the credentials/lift tickets will be issued. The Race Administrator must verify membership status, non-presence on membership pending lists, and non-presence on Centralized Disciplinary Database for all recipients, and the coach must sign for receipt of the credentials/lift tickets thereby confirming identity of the recipients.

Please Note: The responsibility for communication and enforcement of MAAPP and SafeSport policies is the responsibility of the Local Organizing Committee (LOC) as well as other individuals and entities as set out in the Competition Administration Summary, the MAAPP, and the SafeSport Code. All this information is available on the U.S. Ski & Snowboard website at usskiandsnowboard.org/safesport-athlete-safety/safesport-resources. The Jury is only responsible for technical matters within the **closed competition areas**. [601.4] The **closed competition areas** are defined as the “race arena” which is accepted as being those areas which the Jury inspects and accepts as being suitable for competitors’ presence; e.g., start arena, race course, finish arena.

SEASON 2024 ADVANCED TIMING & CALCULATIONS STUDY GUIDE

- I. **Focus of this Study Guide is primarily FIS-level events**
 - A. Regional FIS
 - B. Nor-Am (Continental Cup)
 - C. World Cup, World Championship, and Olympic Winter Games
- II. **Characteristics of Events**
 - A. Competitors are top level racers
 - B. Team Captains are highly astute and knowledgeable professionals
Depending on type and level of event, one or more Team Captains may be appointed to serve as Connection Coaches. Connection Coaches:
 - Serve as liaison between all Team Captains and the Jury
 - Serve as on-hill “Eyes of the Jury”
 - May supervise yellow flag zones in DH and SG
 - Have voice but no vote in Jury matters/decisionsDepending on the terrain and course set, Connection Coaches may also be appointed for other events, e.g., Giant Slalom, Slalom, Parallel, etc.

- C. Organizing Committee (OC); may also be referred to as Local Organizing Committee (LOC):
- Is highly experienced and qualified
 - Is committed to a quality event
 - Is aware media exposure can make any off-the-cuff statement, “news”
 - Is aware of financial commitment and need for sponsors
 - Includes Technical Delegate as appointed by U.S. Ski & Snowboard or FIS Technical Delegate Working Group representative
 - Includes Referee, and Assistant Referee (speed events) as appointed by the Technical Delegate [601.2.3, 601.4]
 - Includes Forerunners as appointed by the OC

D. Race Jury

- World Cup: FIS Chief Race Director and FIS Race Director serve as Referee and Assistant Referee for all events – both speed and technical [601.2.1]
- World Championships and Olympic Winter Games: All Jury members, including Start and Finish Referee, are appointed by FIS and have voting rights [601.2.2, 601.4]
- In all other races* the Technical Delegate appoints the Referee and for Downhill and Super G, the Assistant Referee [601.2.3]
- By appointment, the above become members of the Organizing Committee [601.2.4]

*Referee, Assistant Referee, and Course Setters are appointed by Nor-Am Cup Committee for Nor-Am Cup events. These officials may also be appointed by U.S. Ski & Snowboard for Championship events.

- E. Additional support officials, as required, have a high level of certification, knowledge, and experience

F. Professional Timing Company and Timing System Requirements [611]

G. FIS Computer Company

1. FIS Points
 - a. Validity [4.2.4 – the current season]
 - b. Rule Observance [1.1 – rules not observed; race not scored]
 - c. FIS List [5.1 – FIS List is only available electronically]
 - d. FIS Points may only be corrected by FIS Bureau. FIS Points marked “C” on FIS website version of FIS Points List are verified as being “confirmed”.
 - e. FIS Base Points are calculations based on prior season’s results, have not been adjusted for the next season and are posted for informational purposes only. *Points posted in the Season 2024 FIS Base Points List must not be used for event seeding or penalty calculation purposes.*
2. **Continental Cup**: Updated Nor-Am Cup Points (updated after every event), are used for seeding of the first group of fifteen (15). The first group of 15 is followed by 450-overall cup point holders, and top 30 WCSL competitors present for event. Nor-Am Cup points are then used to fill to the 30th position after which seeding is done by current FIS Points.

- a. Entry to Nor-Am Cup events is quota controlled.
 - b. The **Overall 450-point holders from prior season** not included in first group are seeded at 16th position
 - c. Any Overall 450-point holders who were injured and unable to utilize special seeding during previous season may use it at the first 3 races of the following season. This is valid for a maximum of 3 starts irrespective of the events.
 - d. The Overall 450-point holders are followed by entered competitors ranked within the top 30 of the WCSL (World Cup Start List) for the respective event.
3. **World Cup:** Updated World Cup Points (updated after every event), are used to seed first group of thirty (30).
 - a. The Overall 500-point holders from among top 30 WCSL present are seeded at 16th position
 - b. Any Overall 500-point holders from remainder of field are seeded no later than 31st position

*** Refer to current Continental Cup Rules and World Cup Rules if more detail is required.**

III. What is SCORING?

A. Dimensions of scoring are:

To ensure that ALL scoring functions come together and function as a unit: Classic ICR descriptions are found as follows: Chief of Timing & Calculations [601.3.6]

1. Chief Timekeeper [612.4]
2. Assistant Timekeepers (Manual/Hand Timekeepers) [612.5]
3. Finish Controller [612.6]
4. Chief of Calculation [612.7] (When appointed.)

B. Scoring interacts with:

1. Timing/Data Company
2. Announcer, Scoreboard and an Official Notice Board

Announcer should be available to announce competitors' *unofficial* times. Announcer should also announce DSQ's. When an announcer is announcing *unofficial* times, DSQ competitor data announcement may be used to replace actual posting of Report by the Referee. ***Team Captains must be notified beforehand if announcement of DSQ information is going to replace actual posting.*** [617.2.2]

The scoreboard as well as the Official Notice Board are usually located at or near the finish. However, the OC may advise participants that they choose to only use an online format for either or both of these items. In each case – actual or online – the rules are satisfied; *unofficial* results and other documents such as the Report by the Referee are made available for review.

The Official Notice Board can also be replaced by an official communication channel; e.g., WhatsApp, Live-Timing, etc. [617.2.3]

Rules do not specify which system – acoustic, visual, or online – is preferred. Team Captains must be notified at the Team Captains' Meeting if official notices (DSQ's, etc.) are going to be communicated via an actual board, an announcer, or online posting.

3. Race Secretariat/Race Administrator

It is strongly recommended the Race Administrator not assume additional duties beyond those required for the position. Accurate event documentation is imperative for all events as these

documents may be required in a legal review. *This becomes even more critical with the additional duties required in order to be in compliance with MAAPP and SafeSport Code.*

4. Press Chief
5. Technical Delegate
 - a. Verifies timely synchronization of timing equipment
 - b. Verifies accuracy of Official Results and Penalty
 - c. Verifies accuracy of data contained in “Timing & Data Technical Report Form” (TDTR) prior to its electronic transmission to FIS and U.S. Ski & Snowboard
 - d. Provides a signed PDF copy of TDTR for Race Administrator files (signed by both Chief of Timing & Calculations and Technical Delegate)
6. Referee (Report by the Referee).
 - a. Chief of Timing or Assistant should track/enter NPS, DNS, and DNF bib numbers on the Report by the Referee
 - b. Chief of Timing should meet with Referee (and Assistant Referee for speed events) and assist with entering DSQ competitor data, e.g.: Name, team, name of Gate Judge, type of fault, and either gate # where fault occurred or rule number applicable to infraction.
8. A competitor is “Not Permitted to Start” (NPS) [627] who:
 - a. Wears obscene names and/or symbols on clothing and equipment
 - b. Behaves in an unsportsmanlike manner in the start area
 - c. Violates the rules in regard to the competition equipment and commercial markings
 - d. Trains on a course closed for competitors
 - e. In training for Downhill has not participated in at least one timed training run
 - f. Does not wear a crash helmet that conforms to the Specifications for Competition Equipment [606.4]
 - g. Does not have ski brakes on their skis [606.3]
 - h. Does not wear or carry an official start number* according to the rules

**An “official start number” refers to any bib issued by the local event organizer; this includes replacement bibs furnished by the Start Referee.*

9. Recording “NPS” Situation - U.S. and FIS Events
 - a. Due to rule(s) violation(s), athlete is not permitted to start; this could apply to either run of a 2-run event and must be noted on the Start Referee’s Report; Jury must be advised.
 - b. Software will include “NPS” designation
 - c. If the old Report by the Referee is being used, athletes who are not permitted to start (NPS) should be clearly noted on the Report by the Referee.
 - d. If new Report by the Referee posted on the U.S. Ski & Snowboard website in the MPF is being used, the athlete’s status is recorded in NPS section; bib #, name, club/nation and reason (in “Note” section).
 - e. If the new Report by the Referee posted on the FIS website is being used, a section is only provided for documenting bib #'s for NPS athletes.
 - f. Technical Delegate must verify accuracy of Official Results and Penalty posted on U.S.

Ski & Snowboard/FIS websites.

NOTE: Due to *force majeure*, the Technical Delegate may prepare, sign, and post the Report by the Referee or may assign this duty to another official. A Report by the Referee signed by the Technical Delegate or designee is valid.

10. Jury [601.4.6-601.4.7]
 - a. In cases of system malfunctions, e.g.: timing systems or absence of a gate, Jury allows reruns [623.1.2; 623.2.5]
 - b. In cases of doubt, Jury allows provisional reruns not based on system malfunctions
 - c. In cases of doubt, Jury allows provisional starts
 - d. Confirms validity of provisional starts and provisional reruns
 - e. Establishes start intervals for GS, SG, and DH and communicates the intervals (fixed/regular) to Chief of Timing or assistant.
 - f. In cooperation with Chief of Timing or assistant, establishes start intervals for Slalom (non-fixed/irregular)
 - g. In accordance with rules regarding minimum start intervals, establishes start intervals for Giant Slalom, Super G, Downhill Training and Downhill
 - h. Confirms start intervals for Giant Slalom, Super G, and Downhill and communicates any changes with Chief of Timing or assistant
11. Provides instruction to manual/hand timekeeping crew in order to provide required manual timekeeping that is consistent and accurate

C. **QUALITY** - Establish confidence in "Real Time" timing/scoring presentations

1. Familiarize yourself with available timing systems: Start, Finish, Net Time
2. Verify scoreboard is available with: Bib #'s, Names, Unofficial Times
3. Verify location of intermediate timing points
4. Verify location and accuracy of video displays
5. Furnish progress reports to media with respect for deadlines
6. Document NPS, DNS, and DNF on Report by the Referee and be available to verify NPS and DSQ competitor data, e.g.: Bib, Name, Team, Rule #
7. Aid in preparation of accurate official reports according to format

IV. Initial Actions of Scoring are:

A. Coordinate with the following:

1. Secretariat: Verify Race Administrator is using updated race result software, current/applicable Points List(s), and confirmed technical data, etc.
2. Timing Company: Verify use of homologated timing equipment
3. Scoring Computer Operations: Verify scoring software has been updated and is compatible with race result software
4. Chief of Manual/Hand Timing: Verify availability of supplies, equipment, and knowledge of procedures
5. Technical Delegate

- a. Confirm timely synchronization of timekeeping equipment: electronic and manual
- b. Prepare Timing & Data Technical Report in PDF format (TDTR) for Technical Delegate's review prior to electronic submission of TDTR XML file. When approved, TDTR PDF paper copy is signed by the Chief of Timing & Calculations and the Technical Delegate.
- c. Oversee electronic transmission of Timing & Data Technical Report, as required
- d. Provide consistency and accuracy
- e. Be available to verify all official times

B. Facilities and Schedules

1. Verify schedule for Team Captains' Meeting and plan on attending. *If meeting is online, verify time and platform details have been communicated to all teams and that adequate connectivity is available*
2. Verify schedule for creating seed board
3. Verify location of Press Room and identify press room liaison personnel
4. Verify location and availability of results reproduction facilities
5. Inspect Finish Building and Finish Line/Finish Area [615.2]
 - a. Finish Photocells: Are they homologated?
 - b. Width between Finish Posts
 - 1.) DH and SG finish line dimensions – no less than 15 m*
 - 2.) SL and GS finish line dimensions – no less than 10 m*
 - 3.) Line is marked horizontally with a coloring substance so that it is clearly visible to the approaching competitor
 - 4.) Timing equipment/competitor security installation

*Distance is between finish posts/banners not length of finish line. Timing posts must be at least this far apart. The Jury may decrease this distance for technical reasons.
6. Start Area, Start Facilities and Start Gate/Area specifications [FIS Timing Booklet 2.58]
 - a. Homologated Start Gates
 - b. Dimensions
 - 1.) Width: Support posts should be 50 – 80 cm apart
 - 2.) Wand should be mounted approximately 35 – 50 cm from the snow
 - c. Start Wand Installation
 - 1.) Description: small diameter rod
 - 2.) Mounting
 - a.) Only one wand is permitted
 - b.) Wand cannot be so stiff that it could cause injury or not break, but must be stiff enough to eliminate false starts
 - c.) Wand must stay open once it is triggered; *auto return wands are not permitted*
 - d.) Duplicate start wand must be on hand for replacement purposes
 - e.) Mounted horizontally above the starting line and at an elevation that places it at or below a racer's knees

- f.) Mounted on a hinge. As the racer propels forward across the starting line, the wand is forced to swing forward and to the side by the racer's leg. Placement of start gate must be marked on the support posts.
- g.) Replacement must be with identical gate, at same position and with same rotation
- h.) If two start gates are used in concert, they must be solidly mounted on same physical bracket. Both mechanisms and box must be stiffly connected together.

NOTE: Refer to current FIS Timing Guide for information regarding angular range and accuracy of the start wand.

3.) Starting Gate

- a.) Minimum of 2 electrically isolated contacts activated by 1 wand.
- b.) Timing wires must be connected to separate start gate contacts using separate connections.
- c.) Wand must be installed so that starting is impossible without it opening.
- d.) Exact replacement gate must be available, if required due to failure

4.) Communication

- a.) Wiring between the start wand and the timekeeper's booth is generally available through another pair or wires or is piggybacked onto an existing pair – usually backup.
- b.) A headset may be plugged into a jack at the start so that the Starter can be in constant voice communication with the timing room

7. If possible, accompany Jury on course inspection and check for the following:

- a. Location of "yellow flag" zones and "blind" areas. Yellow flags as required for DH and SG. *Depending on terrain and/or course set, the Jury may also require them for GS*
- b. Staffing and location of Manual/Hand Timekeepers (Assistant Timekeepers)
- c. Staffing and location of intermediate timing positions, if available

V. Questions You Need to Ask:

- A. Are all entries in? Are all entries on the Board? *(This is important for Downhill Training where rules require that all qualified competitors be entered and drawn in all training runs.)*
- B. What computer-scoring program is being used and has it been updated? Is the operator familiar/comfortable with its use?
- C. Does it meet the requirements of 611.3.5, which requires that computer software that calculates net times must use precision of ToD as used in the timing device?
- D. Is the correct and current Points List available?
- E. Is the scoring computer up to date on entries?
- F. Have all the preliminary reports been prepared?
- G. Has the timing room and equipment been checked in advance of the event? **(Refer to MPF #42. Timing Checklist)**

- H. Has all of the required header data been entered in the race file?
- I. What timing equipment is being used? Is the operator familiar/comfortable with its use?
- J. What system will be used to transfer data between results computer and timing
 - 1. Transfer of race file which does not allow the Race Administrator to perform race data editing during race
 - 2. Transfer of timing file which involves only bib numbers, competitors' names and times does allow for race data editing
 - 3. Verify transfer process been established and tested: email, cloud, thumb drive, or runner
- K. What start gate is being used?
- L. What finish photocells are being used? Photo Finish timing has been approved for use at FIS events for *backup purposes only*. FIS has established criteria for photo finish systems, and they must be followed (see current edition of FIS Timing Booklet). ***Required for Level 0 FIS competitions, e.g., OWG, WSC, WC, COM, WQUA.***
- M. Is all equipment: timing equipment, start gates, and finish photo cells on the current homologated lists? [611.2]

NOTE: All timekeeping equipment MUST meet stipulated standards. Use of equipment that does not meet standards will result in an event not being considered (scored).

- N. Are requirements for electronic data transmission of Official Results and Penalty – wireless or network – in place?

It may seem that we are delving into areas of responsibility belonging to other officials; however, it is necessary to verify all interfaces have been established, tested, and are functioning smoothly and efficiently. There is not enough time to try to establish or fix procedures while the competition is in progress. The Chief of Timing & Calculations or Scoring – in cooperation with other officials – should evaluate these interfaces and take whatever action is necessary to get the job done without sacrificing QUALITY!

VI. Quality Assurance Actions:

- A. Team Captains' Meeting, Seeding and the Draw. According to National and FIS rules, the draw must be conducted (or confirmed) at a Team Captains' Meeting. A Team Captains' Meeting, attended in person or online by Team Captains, Jury, and race officials is an inseparable and mandatory part of the competition and is important for communication of Jury instructions, support of the OC, as well as conveying OC requests and information. ***It is also a critical element for risk management and liability-related matters.*** [Refer to 621.8, 604.3]

With the approval of the Jury and at a time and place announced to all Team Captains, and where a computer-generated draw* has been approved or is not required (e.g.: YSL where TRS by class and gender is used to determine the start order), an informational meeting is still required. The meeting may be held either immediately after the completion of a race for the next day's event or on the morning prior to a race.

- 1. Keep in contact with Secretariat (RA)
- 2. Attend Team Captains' meetings

3. Review the Seed Board before and after the Draw
 - a. Verify accuracy of the Board
 - b. Verify seed-point ties are identified
 - c. Verify correct seeding of competitors entitled to 16th/31st position, if applicable (U.S. “Golden Rule”, FIS Nor-Am Cup, and FIS World Cup)
 - d. Verify grouping of competitors without points
 - e. Verify additional special seeding groups as authorized by the Jury
4. Verify correct application of rule regarding “Snow Seed”
5. Verify number of available Forerunners
6. Independently record the Draw
7. Verify the Start or Training List against the Board
 - a. Verify header information against the appropriate source: Homologation file **
 - b. Verify accuracy of footer information

NOTE: USE OF ELECTRONIC SEED BOARDS: Electronic seed boards should have the capability to **simultaneously and legibly display the entire competition field**. Simultaneous display of all competitors allows all Team Captains and officials to verify the overall accuracy as well as additions and deletions to the starting order in “real time”. *Using the race result software to display portions of the competition field is not acceptable.*

* It is important to remember that computer-generated draws are governed by a random identifier and unless this identifier is changed prior to each draw, results of a draw involving the same competitors may only have minimal changes. Only the software writer has the access required to change a random identifier.

** **NOTE:** Homologation files are available for review on the following websites. The websites are the only valid sources for verification of a course homologation:

media.us skiandsnowboard.org/CompServices/Homologation/
(Login is required: User ID = homologation; Password = Allout2022!)

fis-ski.com/DB/alpine-skiing/homologations.html
(Maps, photos, reports, etc. not accessible at this site.)

A new inspection of an existing course (FIS or National) voids the previous homologation of an existing course.

B. Downhill Training

1. Verify all timing equipment and personnel will be in place for all training runs
2. Verify accuracy of Start List in scoring computer
3. Address intermediate timing considerations
It is best to coordinate with the Technical Delegate and the Jury for placement of intermediate timing equipment. To avoid the cells being triggered by anyone other than the competitors, it is recommended that the person responsible for intermediate timing points use a push-button to arm the photocells when a competitor crosses the line.
 - a. Timing equipment operators
 - b. Necessity of having on-hill operators
4. Data Presentation

- a. Verify that scoreboard, either electronic or paper, is available to display competitors' times
 - b. Verify that forerunners' times will not be displayed
 - c. Verify accuracy of time-of-day printouts
 - d. Verify status of press room video displays, if available
 - e. Verify status of Announcer's display, if available
5. Press Reports (UNOFFICIAL) Standard format not required
 - a. Establish contact with Chief of Press
 - b. Establish system for press report production and distribution
 - 1.) Verify accuracy of documents released to press
 - 2.) Keep copy of all documents released to press
 - 3.) Coordinate with Press Room for electronic transmission if no runner is available
 6. Other Reports

Accurately prepare all required reports in a timely manner
- C. Race Day - Be prepared for the unexpected.
1. First Run
 - a. If possible, attend Jury inspection
 - b. Verify schedule
 - 1.) A run or race that is rescheduled for a later time slot **on the same day** is **delayed**
 - 2.) A run or race that is rescheduled to a different date **within the series** is **postponed**
 - 3.) A run or race that is **started but cannot be completed** is **terminated**. There is no set number that has to start or finish. If even one forerunner has started and the Jury determines that the event cannot continue, it is a "terminated" event.
 - 4.) A run or race that cannot be rescheduled **within the series** is **canceled**; cancellation of an event vacates the U.S. Ski & Snowboard race code/FIS codex and invalidates the event liability insurance.
 - c. Verify number of 2nd Run "Bibbo" [Reverse 15? 621.11.3]
 - d. Verify synchronization checks with TD; assist with compilation of "Timing & Data Technical Report"
 - 1.) Online filing of the TDTR XML file is required for all **FIS** events. The required program is currently available at fis-ski.com/en/inside-fis/document-library/timing-data. It is available for Windows 8.1, 10, and MAC OSX 10.10+ and is updated as required. Software will alert when an updated version is available; please update to current version.

A PDF paper copy of the TDTR, as well as any required Replacement Time (EET) calculations, must be made available for inclusion in required electronic or paper copy race result document packets as noted in "Distribution of Documents – FIS Events."
 - 2.) The FIS TDTR software is also used for preparing and submitting a TDTR XML file for **non-FIS** events. The software will produce the required PDF paper copy report. The software will accept a "National Race Code" which is used for a U.S. Ski &

Snowboard Race code number (alpha character + 4-digit number). “Race Codex” may require data, and “JUN – Junior” category must be selected. (Refer to current TDTR tutorials for additional information; TDTR PPT is available on the U.S. Ski & Snowboard website.)

The U.S. TDTR available in the MPF on the U.S. Ski & Snowboard website is only intended to assist in gathering data for entry into the FIS TDTR software.

As with FIS events, a paper copy of the TDTR as well as any required Replacement Time (EET) calculations, must be made available for inclusion in the required Race Result Document Packet.

- e. Verify course and weather data for headers and communicate the information to Race Administration
- f. Follow preparations of timing and computer operations
- g. Verify instructions for manual/hand timekeeping crew
- h. Verify Downhill and/or Super G competition course length measurement has been accomplished by wheel, tape, or GPS
- i. Recheck start order in computer
- j. Plan press report production; follow plan
- k. Keep "Report by the Referee" up to date by noting bib #'s for NPS, DNS, and DNF competitors
- l. Observe timing company operations
 - 1.) Verify accuracy of time-of-day printout
 - 2.) Verify accuracy of interval timing reports prior to distribution
 - 3.) Make notes on Start List; especially important for documenting anomalies
 - 4.) If possible, track differential between main and backup timing
 - 5.) Identify five best (lowest) point holders who start race regardless of result
- m. Print unofficial listing immediately after last competitor finishes
- n. Meet Jury at finish with complete unofficial listing and “Report by the Referee”
 - 1.) Assist Referee/Assistant Referee with review of Gate Judge Cards
 - 2.) Provide a copy of unofficial competitors’ ranking for the Technical Delegate
 - 3.) Deliver DSQ list to announcer
- o. Publish Unofficial Results report
- p. After protest period has expired, verify appropriate action taken on DSQ's with computer operations and/or Race Administrator
- q. Print/verify 2nd Run Start List or 1st Run Results
- r. Verify Race Administrator has been made aware of any Jury decisions that may require documentation (Jury Minutes), e.g.: application of snow hardening agents, change in start order, change in start times, change in announced start intervals for Giant Slalom, Super G, Downhill Training, and Downhill.
- s. Although not necessarily part of your responsibilities, notify Race Administrator of any incidents that may require filing of injury reports

2. For Second Run of Two-Run Events
 - a. Verify completion of “Timing & Data Technical Report”
 - b. Verify 2nd Run cutoffs
 - c. Verify accuracy of Second Run Start List. [6.21.11]
 - 1.) “Bibbo”; check for ties at last position of flipped group (30th or 15th)
 - 2.) Verify start order of ties outside of “bibbo”
 - 3.) For scored non-FIS events, verify if 1st Run NPS, DNF, DSQ competitors are included on 2nd Run Start List
 - a.) Suggested Procedure for Tracking 1st Run NPS (track in DNS section), DNF, DSQ athletes in 2nd Run:

The Chief of Timing & Calculations and the Race Administrator account for all competitors, and the U.S. Technical Delegate Report requires documentation of these calculations. For events where 1st Run NPS, DNF, and DSQ athletes are allowed to start in the 2nd Run, this can create a unique challenge.

It is important that the Chief of Timing & Calculations continue recording after all valid 2nd-run starters have completed their run. Not continuing to record 1st Run NPS, DNS, and DNF competitors who are being allowed to take a 2nd Run will result in an incomplete record of the event, so the following recording method is suggested:

- Start Referee notifies Timing when last classified 2nd-run starter has left the start
- Chief of Timing & Calculations (or assistant), makes appropriate notations in the DNS and DNF sections of the Report by the Referee

Report by the Referee will now concisely reflect how many actual 2nd Run DNS and DNF competitors are to be considered in the calculation of “Finishers/Total Ranked” on Official Results.

The following is suggested method. Chief of Timing or assistant may use recording method of their choice; e.g.: End 2nd Run, Run 1 Racers, etc.

Did not start (No.)/Pas au départ (No.)/Nicht am Start (Nr.)		4	27								
2nd Run complete	18	34	42								
Did not finish (No.)/Pas à l'arrivée (No.)/Nicht im Ziel (Nr.)		1	7	23	29	31	37	41	45	49	52
65	72	77	81	82							
2nd Run complete	6	15	21	34							
Time published / Heure d'affichage / Anschlagzeit H:mm		Deadline / Délai / Ablauf H:mm			Date / Date / Datum m/dd/yy			Signature Referee Signature du juge arbitre Unterschrift des Schiedsrichter SI			

- d. Complete additional duties performed during 1st run
- e. If time permits, complete hand calculation of Penalty and include calculation draft when meeting with Technical Delegate after race.

D. USA Wireless Timing Application

Wireless timing has been approved for non-championship events. If an Organizing Committee

wishes to use wireless timing, they must complete an online application (forms.gle/DsHR5Hi6pvy7w1EG6). Refer to “U.S. Wireless Timing Application” for details.

The following section is useful for areas that do not require attendance at a Continuing Education Clinic (Update) prior to attending a specialty-area clinic. It includes update and review items that apply to both Timing & Calculations and Race Administration.

VII. Update and Review for Continuing Education: [Contains portions of “2023-2024 Update & Review for Continuing Education”; please refer to original document for additional information; 2024 edition of U.S. Ski & Snowboard ACR, online edition of current ICR and, if applicable, current Precisions].

1. EVENT REGISTRATION and HEAD TAX CALCULATION/VERIFICATION/PAYMENT

U.S. Ski & Snowboard will no longer provide an online Event Registration platform. Race Organizers are encouraged to use systems currently being provided by private vendors; (e. g., skireg.com or adminskiracing.com). Regardless of whether or not the registration system of choice calculates and submits required Head Tax, the Organizing Committee is responsible for calculation, verification, and payment of all National, Regional, and Divisional Head Taxes. *All Head Tax forms must be submitted with payments submitted by an Organizing Committee.*

2. GOLDEN RULE CLARIFICATIONS

Athletes who have requested Golden Rule seeding may compete using the equipment appropriate to their disability.

3. U.S. SKI & SNOWBOARD FIRST REPORT OF ACCIDENT

Lockton Companies is the new insurance carrier for U.S. Ski & Snowboard. Injury reporting forms and procedures can be found at usskiandsnowboard.org/sport-development/club-development/club-insurance under Participant Accident. Online reporting is preferred.

4. RESULT PROCESSING – XML FILE and EVENT DOCUMENT PACKETS

The submittal process for race result XML files and Event Document Packets has changed; the email functions will be disabled. (Refer to 2. Procedures for Sending Event Files in MPF for instructions.)

- Individual event XML race result files are uploaded at: race-results.usskiandsnowboard.org/
- Following successful uploading of the XML race result file, individual “Event Document Packets” in PDF format are uploaded at: race-results.usskiandsnowboard.org/

PLEASE NOTE: Login for clubs hosting sanctioned events or a previously-approved login for individuals who do not have access to the club login will be required in order to access the upload platform. If an official is unable to log in, or if uploads are not successful, contact Competition Services for assistance.

5. U12 and U14 SUPER G TRAINING RUN

Official training for U12 and U14 Super G must include at least one Super G training run prior to the first competition. Official training for these age groups is an integral part of the competition, and all athletes are required to participate. In exceptional cases, a Jury can authorize a controlled freeski run in lieu of an official training run. The Jury decision must be documented in Jury Minutes. If racing with U16 athletes, ACR U1256.4 applies, and a training run must be calendared.

All sanctioned speed training runs/camps – Downhill or Super G – require that a full Jury be empaneled. In addition, they must also carry either liability insurance coverage through the U.S. Ski & Snowboard provider or through the Organizing Committee’s provider.

6. INTERDICTION TO CONTINUE - SLALOM

U.S. Ski & Snowboard ACR Arts. U614.2.3, U661.4.1, U804.3 are now designated as “U” (non-FIS) rules to indicate competitors in non-FIS Slalom may hike to continue passage of a missed gate and continue on course after coming to a stop. FIS rules do not allow hiking/continuing on course in any event.

7. RANDOM SEEDING – TRS (BUTTERFLY)

Random seeding has been approved – but is not mandatory – for scored single or multi-day events. Start Lists for run 3 and run 4 of a multi-day series will be produced using the TRS Butterfly system. If required from an athletic standpoint, Team Captains may request that the Start Referee increase the interval prior to an individual athlete’s start. (The Start Referee must announce any start interval changes over the Jury radio channel.)

Athletes that are only entered in the second day of a multi-day event using TRS seeding will be inserted in the middle of the start order by class/gender for run 3.

8. THE GOLDEN RULE AND TRS (BUTTERFLY)

- First Run: Adaptive athletes will be seeded in special groups by class/gender with start order: 16-20, 36-40, 56-60, etc., unless TRS affords them a more favorable start position.
- Second and Subsequent Runs: Adaptive athletes will start in the 31st position by class/gender unless TRS affords a more favorable start position.

9. SKILLSQUEST

- The Jury members for a sanctioned SkillsQuest Tournament are: Technical Delegate, Referee, and Chief of Race. (*The Chief of Race may also be serving as the SkillsQuest Tournament Director.*)
- A SkillsQuest Technical Delegate’s Checklist for U.S. Ski & Snowboard sanctioned SkillsQuest events has been drafted and added to the Master Packet of Forms.

10. U16 NATIONALS SEEDING

The Super G fields will be randomized. TRS (Butterfly) will be used for Giant Slalom and Slalom seeding.

11. ALPINE OFFICIALS’ CERTIFICATION MATRIX CHANGES

- **Race Administrator:** Unless excused by Division/Region AO Chair, prior to serving, Race Administrator must attend seasonal Race Administration Continuing Education Workshop (or equivalent). *They must attend a Workshop every two years in order to retain current certification level.*
- Recommendations for Advancement:
 - Recommendations for advancement must be submitted by appropriately certified officials with appropriate levels of certification.
 - Submitted recommendations for advancement must be current: Technical events should be within two (2) seasons of submittal; Speed events should be within three (3) seasons of submittal.

12. SKI CROSS

Ski Cross has been approved to move from Freeski to Alpine. Coordination for events will continue with USASA and the Hole Shot Freeski Tour.

13. WIRELESS TIMING

Wireless timing has been approved for U.S. Ski & Snowboard non-championship events. FIS further restricts its use to FIS Level 3 and FIS Level 4 only. An application for the use of wireless timing at U.S. Ski & Snowboard events has been drafted and is available in the Master Packet of Forms (MPF). Please contact John Jett (jjett@cjtiming.com) or Matt Howard (matt.p1timing@gmail.com) for complete details.

FIS COMPETITION CONTINUING EDUCATION (UPDATE) SEASON 2024:

1. COMPLETE STOP FOR SLALOM EVENT – INTERDICTION TO CONTINUE

- **614.2.3:** If competitors come to a complete stop (e.g., after a fall), they must no longer continue through previous or further gates.
- **661.4.1 and 804.3:** Provisions within these rules regarding climbing back up (hiking) have been stricken from the rules.

2. OFFICIAL NOTICE BOARD (Also applicable at non-FIS events.)

The official notice board can be replaced by an official communication channel announced at the first Team Captains' Meeting by the Jury. **[617.2.3]**

3. DISTANCE BETWEEN GATES WITHIN TURNING POLES (Also applicable at non-FIS events.)

The distance between the gates within a delayed combination must not be less than 0.75m from either turning pole. **[801.2.3]**

4. COLOR OF SUPER G GATE PANELS (Also applicable at non-FIS events.)

The gates must be alternately red and blue. In special circumstances, where a panel color cannot be seen properly against the backdrop, (e.g., netting), the Jury can decide to use an alternative color for the gate panel for that specific gate to improve visibility.

5. TIMING RULE CLARIFICATION

- “Or System B” has been added to clarify replacement times may be calculated using System B times as well as those taken by hand.
- “Of Day” has been added to clarify times being used in the calculation of a replacement time are “time of day times”. **[611.3.2.1]**

6. FIS TIMING BOOKLET

A new FIS Timing Booklet is scheduled for publication. It will include a change to procedure for synchronization, timing guidelines for parallel, and new guidelines for wireless timing. *Please refer to current edition of FIS Timing Booklet.*

7. COMPETITOR TIES IN PARALLEL EVENTS

- **Added:** In case of a tie in both runs, the competitor with the lower bib will advance to the next round. **[1232.4]**

- Revised: If both competitors are tied after the second run in the Final and/or the Small Final, competitors will be ranked equally (tied). They will be ordered by descending bib number. [1232.5]

GENERAL REVIEW AND CLARIFICATION - U.S. SKI & SNOWBOARD AND FIS:

1. MINOR ATHLETE ABUSE PREVENTION POLICY (MAAPP) & SAFESPORT CODE

- MAAPP should be implemented alongside the SafeSport Code.
- Administration applies – but is not limited to – events, participation requirements, membership requirements, officials’ certification and continuing education, race arena access, volunteers, etc.
- In order to ensure compliance, all requirements must be continually monitored and completed for same-day participants, and they must be informed of the provisions of MAAPP and the SafeSport Code. This can be accomplished by posting a QR code which, when scanned, provides required information.

Please refer to links posted on the U.S. Ski & Snowboard website for access to complete and current information. usskiandsnowboard.org/safesport-athlete-safety/safesport-resources.

2. MISCELLANEOUS NOTE: MAAPP & SAFESPORT

The responsibility for communication and enforcement of MAAPP and SafeSport policies is the responsibility of the Local Organizing Committee (LOC) as well as other individuals and entities as set out in the Competition Administration Summary, the MAAPP, and the SafeSport Code.

All information is available on the U.S. Ski & Snowboard website at usskiandsnowboard.org/safesport-athlete-safety/safesport-resources.

The Jury is only responsible for technical matters within the **closed competition areas**. [601.4] The **closed competition areas** are defined as the “race arena” which is accepted as being those areas which the Jury inspects and accepts as being suitable for competitors’ presence; e.g., start arena, race course, finish arena.

3. HOMOLOGATION FILES

Paper copies of homologations and homologation information posted on independent websites may be outdated. The only accurate sources for course homologation data verification are the U.S. Ski & Snowboard and FIS websites.

Please note a new inspection of an existing course (FIS or National) voids the previous homologation of an existing course.

Homologation files may be accessed at: media.usskiandsnowboard.org/CompServices/Homologation/ (Login is required: **User ID = homologation; Password = Allout2022!**)

Files may also be accessed at: fis-ski.com/DB/alpine-skiing/homologations.html; maps, photos, reports, etc., are not available at this site.

4. NO ADVANTAGE – NO DISQUALIFICATION

Art. 223.3.3 states: “Competitors shall only be disqualified if their mistake would result in an advantage for them with regard to the end result; unless the Rules state otherwise in an individual case.”

Rules that address grounds for disqualification are:

- Art. 629.2 – jeopardizes the security of persons or property or causes actual injury or damage
- Art. 629.3 – does not pass through a gate correctly in accordance with Art.661.4
- Art. 629.3 – does not start within the time limits defined by Art. 613.7.

Please note unsportsmanlike behavior is subject to sanction which may or may not include disqualification. [Art. 223.1.1; Art. 223.3.2]

5. DUE PROCESS [224.7]

Prior to the imposition of a penalty (except in cases of verbal reprimands and withdrawal of accreditation), the person accused of an offense shall be given the opportunity to present a defense at a hearing, verbally or in writing. Defense can include, but is not limited to the following:

- Calling witnesses, including athlete, coach, Gate Judge, etc.
- Questioning witnesses – including athlete, coach, Gate Judge, etc. – upon whose testimony the Jury relies
 - Consider infraction
 - Hear and consider all testimony and other evidence
 - Allow accused person the opportunity to present a defense and review all evidence (question witnesses, etc.)

Considering information from a witness who is unavailable for questioning by the accused would create a serious issue. It is also unwise for Jury members to discuss a situation and consider possible penalties prior to considering all evidence. The Jury must adhere to the following policy:

- Consider infraction
- Hear and consider all testimony and other evidence.
- Allow accused person the opportunity to present a defense and review all evidence (question witnesses, etc.)
 - Deliberate
 - Make a fair decision
 - Review, vote, and sign prepared Jury Minutes of decision
 - Notify affected parties

6. VALID AND FALSE STARTS [613.7, 805.4] AND DELAYED STARTS [613.6, 805.3.1]

- Early/late start violation occurs when a competitor is in the start gate and does not start within the required period with respect to the start command – “GO”!
- Course workers and officials must have a reasonable expectation of when a competitor may be approaching their position. Competitors who either start early or late can minimize this expectation and potentially create an environment that is not secure. For these reasons, early/late start violations require DSQ. [613.7, 805.4]
- A “delayed” competitor is one who is not present in the start area or who is not ready to start when called [613.6, 805.3.1]
- A provisional start may be allowed by the Start Referee (*force majeure*) or the Jury (in case of doubt)
- Athletes who are given provisional starts are subject to SANCTION, which *may or may not* include DSQ. However, provisions of Art. 223.3.3 must be met.

7. PROVISIONAL STARTS – IMPORTANT POINTS

- An athlete who is granted a provisional start that is later found to be unjustified is subject to “sanction”
- Depending on circumstances, the sanction may include a DSQ. Prior to imposing the DSQ, Jury must decide whether or not the competitor’s later start provided an unfair advantage, e.g., improved weather conditions, etc.
- A competitor shall only be disqualified if their mistake would result in an advantage for them with regard to the end result, unless the Rules state otherwise in an individual case, e.g., gate fault; early/late starts. [223.3.3]
- If a provisional start is not approved, the competitor’s status must not be changed to DNS. The only available option is DSQ, but then only if the provisions of Art. 223.3.3 have been met.

8. COLLECTIVE OFFENSES [224.3]

In accordance with Art. 224.3, a “collective offense” occurs when several persons:

- Commit the same offense
- At the same time
- Under the same circumstances

When addressing sanctions related to collective offenses:

- Jury’s decision as to one offender may be considered binding upon all offenders
- Written decision shall include:
 - Names of all offenders concerned
 - Scope of the penalty to be assessed upon each of them
- Decision will be delivered to each offender

9. RACE ARENA vs RACE VENUE

The Jury is responsible for technical matters within the **closed competition areas**. [601.4] The **closed competition areas** are defined as the “race arena” which is accepted as being those areas which the Jury inspects and accepts as being suitable for competitors’ presence:

- **within** (the side-to-side fencing) and
- **without** (start area and finish arena) the confines of the competition area and
- any location connected with the competition [223.2.1]

The Jury does inspect and accept:

- the start and finish areas as well as the ingress and egress to these areas
- the racecourse
- the type and placement of the on-hill competitor security

The Jury does not inspect or accept:

- lift areas
- parking lots
- cafeterias

- terrain parks, public trails, meeting rooms, etc.

10. GATE JUDGES

The Jury along with the support of the Organizing Committee may opt to not use Gate Judges for Downhill, Downhill Training, Super G, Super G Training, and Giant Slalom, provided they take measures to cover the entire course with sufficient Jury members, Jury Advisors, Eyes of the Jury, and Connection Coaches [U669.3] Slalom requires regular assignment of Gate Judges.

Please note U669.3 is a non-FIS rule. FIS rules require that Gate Judges be present for all events.

11. TEAM CAPTAINS' MEETINGS

An actual meeting, attended in person or online by Team Captains, Jury, and race officials is an inseparable part of the competition and is important for communication of Jury instructions, support of the OC, OC requests, and information as well as a critical element for risk management and liability related matters. Art. 216 and 217 apply in all cases. [604.3]

12. FIS PENALTY WITH LESS THAN FIVE COMPETITORS: MAXIMUM VALUE

If there are less than five competitors with FIS points among the first ten of the result list, or there are not five competitors who started with FIS points, then those competitors without FIS points will receive the maximum value as noted in Rules of the FIS Points.

If less than three competitors with FIS points are ranked within the five or at least three competitors without FIS points are classified, the competition will be considered for FIS points with a double of the maximum value (of the respective event) as minimum penalty. [4.4.4 Rules of the FIS Points]

13. MINIMUM PENALTIES: NON-FIS EVENTS

If an event does not meet required minimum vertical drop (MVD), the greater of the calculated penalty, the calculated penalty plus the addition (for events that also do not meet minimum time), or the minimum penalty of 60.00, shall be applied.

If an event meets required minimum vertical drop (MVD), the greater of the calculated penalty or the minimum penalty of 40.00 shall be applied.

14. DOCUMENTS AND SIGNATURES

Rules require signatures on many documents including, but not limited to TD Report, TDTR, Jury Minutes, Team Captains' Meeting Minutes, Report by the Referee, Protests. Signatures confirm that rules and procedures were followed; original, signed documents may be required in a legal review.

If the Technical Delegate agrees to the use of electronic signatures on certain documents, s/he must verify availability of legally-acceptable document signing software, e.g., DocuSign, eSign, etc., which certify signatures with time and date, etc. *Copying and pasting a facsimile of a signature is not legally acceptable.*

15. ALPINE OFFICIALS' CERTIFICATION REQUIREMENTS

The Chief of Timing & Calculations for Nor-Am Cup and World Cup should be certified as Level 3 T & C. The Alpine Competition Guide specifies: "All events shall have the most qualified officials available." This modification clarified the intent that specific certification levels not be required for certain competition levels; e.g., Level 3 for a FIS event, etc.

16. TIMING & DATA TECHNICAL REPORT (TDTR) – non-FIS Events

A Timing Data Technical Report (TDTR) is required for all levels of competition, and the FIS TDTR software is used for preparing and submitting the report for all events, both non-FIS and FIS. The Chief of Timing & Calculations is responsible for submitting the report in XML format as required by the level

of the event. The PDF report must still be printed and signed as noted in instructions for preparing event document packets located in the Master Packet of Forms (MPF). The U.S. TDTR in the MPF is only intended for gathering data for entry into the FIS TDTR software. *If an event requires calculation of a replacement time (EET), copies of all calculations must be included with the PDF copy.*

17. KOMBI RULES

- Kombi events must be set using appropriately homologated hills. Slalom/Giant Slalom format (technical orientation) using a hill homologated for Giant Slalom; Giant Slalom/Super G format (speed orientation) using a hill homologated for Super G
- Rules are those that apply to the faster of the events: e.g., Slalom/Giant Slalom events are governed by Giant Slalom rules; e.g., Start commands and start intervals; helmets

U1259.10 clarifies In Kombi competitions, athletes must use the helmets designed for Giant Slalom, Super G, or Downhill. Athletes U14 and older must use helmets that meet the FIS standards.

18. FORCE MAJEURE

In Alpine competitions, "force majeure" describes those uncontrollable/unexpected events (such as extreme weather, extreme surface conditions) that are not the fault of any party and that make it difficult or impossible to carry out an event. *Force majeure is "uncontrollable and unexpected" - not "planned".*

- An unexpected weather occurrence that requires a program/course/assignment change
- A last-minute ski area management decree

19. TENURE OF THE JURY

In accordance with Art. 601.4.4.2, the active tenure of the Jury begins with its first meeting and ends, if no protests are submitted, at the expiration of the protest deadlines as noted in Art. 643 (Deadlines for Submittal). If protests are submitted, the tenure of the Jury ends after settlement of all submitted protests.

- If the Jury is no longer empaneled, they may not re-evaluate a previous decision
- If the Jury is no longer empaneled, they may not alter an athlete's status; e.g., assign/unassign DSQ based on previously unavailable video, etc.
- Jury decisions are final except those that may be protested (641) or appealed (U647.1.1, 647.1.1)
- A Jury may re-evaluate a previous decision (Art. 640.2) but only if tenure has not ended (Art. 601.4.4.2)

20. JURY MEMBERS AND THEIR VOTES

Start and Finish Referees are voting members of the Jury only for Olympic Winter Games and World Ski Championships. For other events, they must not be listed as "Jury Members Present", as they have no vote; they do not sign Jury Minutes. *Marking "NO" indicates a "NO" vote; it does not mean an official does not have voting rights.*



TIMING CHECKLIST

- Interconnects 1. Is there wire? Does it work? Are you sure?
- Equipment 2. Is the equipment on the current list of timing equipment homologated by the FIS Timing Working Group?
(fis-ski.com/en/inside-fis/document-library/timing-data)
- Setup 3. Are the Time-of-Day times immediately and automatically sequentially recorded on printing strips at the maximum precision of the timing device according to the requirements for homologation?
- Software 4. If timing software is used to calculate times, is it calculating net times using the precision of ToD as used in the timing device?
- Hand Timing 5. Is hand timing that records to 1/100th (.01) precision available?
- Quality 6. Is the timing crew aware that hand times, even if not used, should be within acceptable limits?
- Start Gate 7. Does the Start Gate meet the following requirements?
a. Does the start have 2 separate electronically isolated switch contacts for triggering the start inputs from both System A and System B?
b. One wand?
c. Installed at proper height?
d. Are identical Start Gate mechanism & Wand available for replacement?
e. Is the placement marked on the Start Posts?
f. Are the Start Posts solidly installed?
- Finish Eyes 8. Do the Finish Photocells meet the following requirements?
a. Are 2 sets available?
b. Are 4 posts with a maximum diameter of 6cm available for mounting photocells? (2 are acceptable; replacements must be available)
c. Is the vertical separation between the beams no greater than 20cm?
- Synchronization 9. Have system A and System B been synchronized as close as possible to the scheduled start time for the first run of the day?
10. Has the synchronization been performed from one single contact switch for all timing devices?
- Systems 11. If System A fails, is the timing crew aware of the requirement to use System B times to calculate a replacement time (EET) for the missing impulse?
12. Is the timing crew aware that manual timekeeping is not used to calculate a replacement time (EET) impulse unless both System A and System B fail?



Alpine Skiing

2023/2024

1st FIS points list 2023/2024

Valid from 01-07-2023 to 19-07-2023

Category/Categorie/Kategorie	Race level	Minimum penalty	Maximum penalty
OWG,WC,WSC	0	0.00	0.00
COM,WQUA	0	0.00	4.00
ANC,EC,ECOM,FEC,NAC,SAC,UVS,WJC	1	15.00	999.00
EQUA	1	23.00	999.00
NC	2	20.00	999.00
AWG,CISM,CIT,CITWC,CORP,EYOF,FIS,FQUA,JUN,NJC,NJR,UNI,YOG	3	23.00	999.00
ENL	4	60.00	999.00

MEN							GENERAL		WOMEN						
ADDER						Z-Value	Men/Women		ADDER						Z-Value
Disc.	Level 0	Level 1	Level 2	Level 3	Level 4		F Value	Max points	Disc.	Level 0	Level 1	Level 2	Level 3	Level 4	
DH	0	0	0	0	0	0.00	1250.00	330.00	DH	0	0	0	0	0	0.00
SL	0	0	0	0	0	0.00	730.00	165.00	SL	0	0	0	0	0	0.00
GS	0	0	0	0	0	0.00	1010.00	220.00	GS	0	0	0	0	0	0.00
SG	0	0	0	0	0	0.00	1190.00	270.00	SG	0	0	0	0	0	0.00
AC	0	0	0	0	0	0.00	1360.00	270.00	AC	0	0	0	0	0	0.00

FÉDÉRATION INTERNATIONALE DE SKI
INTERNATIONAL SKI FEDERATION
INTERNATIONALER SKI VERBAND

PENALTY CALCULATION

Name of the Event		Category	<input type="text"/>	Women (W)	<input type="text"/>
Date	Event	Name of the TD			

The best 10 at finish

Result	Number	Name	Time	FIS-Points	Best 5	Race points

FIS Points of the best 5 started

TOTALS

(B)	FIS Points of best 5 started	<input type="text"/>		
(A)	FIS Points of best 5 to finish in top 10		<input type="text"/>	
(C)	Race Points of corresponding competitors			<input type="text"/>

Calculated penalty

$$A \text{ } + B \text{ } - C \text{ } = \text{ } : 10 = \text{ }$$

Category Adder

Penalty applied

Signature TD	Nr/No
<input type="text"/>	<input type="text"/>

TIME-of-DAY (ToD) / MANUAL (ToD) REPLACEMENT TIME (E.E.T.) WORKSHEET

DATE: _____ EVENT: _____ MEN _____ WOMEN _____ RUN _____ CHIEF CALCULATIONS: _____

TIME-of-DAY (ToD) MISSING: _____ START or _____ FINISH

*Precision of time-of-day as used by timing device; minimum of 1/1000 precision required.

RACER BIB #	START/FINISH	START/FINISH	COLUMN A	COLUMN B
	SYSTEM B ToD* (or MANUAL ToD*)	SYSTEM A ToD* (or MANUAL ToD*)	SYS.B/MANUAL TIME SHORTER (+)	SYS.B/MANUAL TIME LONGER (-)
_____	____:____.____	____:____.____	____.____	____.____
_____	____:____.____	____:____.____	____.____	____.____
_____	____:____.____	____:____.____	____.____	____.____
_____	____:____.____	____:____.____	____.____	____.____
_____	____:____.____	____:____.____	____.____	____.____
_____	____:____.____	____:____.____	____.____	____.____
_____	____:____.____	____:____.____	____.____	____.____
_____	____:____.____	____:____.____	____.____	____.____
_____	____:____.____	____:____.____	____.____	____.____
_____	____:____.____	____:____.____	____.____	____.____
_____	____:____.____	____:____.____	____.____	____.____
_____	____:____.____	____:____.____	____.____	____.____
_____	____:____.____	____:____.____	____.____	____.____
_____	____:____.____	____:____.____	____.____	____.____
_____	____:____.____	____:____.____	____.____	____.____
_____	____:____.____	____:____.____	____.____	____.____
_____	____:____.____	____:____.____	____.____	____.____
_____	____:____.____	____:____.____	____.____	____.____
_____	____:____.____	____:____.____	____.____	____.____
_____	____:____.____	____:____.____	____.____	____.____
_____	____:____.____	____:____.____	____.____	____.____

COLUMN A TOTAL + _____

COLUMN B TOTAL - _____

DIFFERENCE = (+) or (-) _____

DIVIDED BY 10 = (+) or (-) _____ = CORRECTION _____

BIB #	TIME OF DAY	(+) or (-)	REPLACEMENT TIME OF DAY
_____	____:____:____.____	____.____	____:____:____.____
_____	____:____:____.____	____.____	____:____:____.____

PROCEDURE TO BE FOLLOWED WHEN BOTH START & FINISH SYSTEM A TIMES ARE MISSED.

****If both Start and Finish ToD impulses are missed, replacement ToD's must be calculated for each ToD impulse as outlined in ICR 611.3.2.1.**

Net time is then calculated and verified.

(Use 1 form for Start ToD replacement calculation and 1 form for Finish ToD replacement calculation; complete net time assignment on Finish ToD calculation form.) ALL CALCULATIONS MUST BE SUBMITTED WITH TDR!

Bib # _____

Fn. ToD _____:____:____.____

St. ToD _____:____:____.____

Net Time: _____



USA Wireless Timing Application

Application to use without wire solutions at a US Ski and Snowboard or FIS race sanctioned in the USA. The application must be complete and received not less than 2 weeks before the first day of racing of the event being applied for. Applicant MUST be a US Timing and Calculations certified official level 2. Event must be a non-championship event and is subject to approval.

Using the ONLINE FORM available at <https://forms.gle/DsHR5Hi6pvy7w1EG6>, provide description of the wireless solution and equipment to be used.

Example: Alge Timy and Alge TED at start, Timy to record A and B start, TED to transmit A start pulse to timing cabin. Finish photocells wired directly to two Timy's (A and B) in the timing cabin, TED receiver to A timer in the timing cabin for Start pulse. Finish B Timy only recording B finish pulse. Timing booklet diagram page 20 from version 2.61

Install exact equipment in exact position as would be for the race (start/Finish and timing cabin). If more than one location will be used (GS/SL), testing must be done from all positions, one test series from each location.

Provide start and finish for not less than 20 racers over a 20-minute period, timing them in the same fashion as would be used for the race. Testing can be done without athletes skiing by simulating actual starts and finishes. Communication between timer and start should also be simulated to be sure that this radio can be proven to not induce interference. Any additional electronics that will be located in or around the timing cabin and start locations should also be installed and powered on during the testing.

Provide results from timing/scoring software, timing log from same software, timing tapes from all timers and TDTR for the test. In addition to the sync check immediately after synchronization, a second sync check must be completed following the last racer and included in the comments section of the TDTR.

Provide analysis showing results from software and results from tapes (start and finish timers). Wireless solution must be proven to provide matching results as comparison from start and finish timer tapes. Differences must be shown for all racers.