CHIEF FINISH JUDGE & CHIEF JUDGE ELECTRONICS CLINIC

October 7, 2019

WELCOME

- The goal of any competition volunteer or official is to contribute to a fair, safe and positive competitive environment.
- The goal of the Chief Finish Judge and Chief Judge Electronics is to ensure the accuracy of times for each swimmer.
- The Chief Finish Judge position will allow you to perfect your accuracy and build your speed.
- The Chief Judge Electronics position will challenge your ability to move quickly and efficiently.

PREFERRED PREREQUISITES

- A general interest in the sport of swimming
- An interest in the fair conduct of sport
- Completed the Level 1 Clinic and two successful deck evaluations
- Volunteered at a number of meets as a Timekeeper
- Completion of Chief Timer clinic and successful deck evaluations

THE PROFICIENT SWIMMING OFFICIAL

The proficient swimming official is a judge of the competition, not the rules.

- The swimming rules must be followed. The official who has standards that differ from those set down in the rulebook may leave themselves open to having their decisions challenged by coaches and the referee.
- Following the rules puts a stake in the ground that tells everyone concerned with the competition that the decisions will be made in a fair and equitable manner against a known standard.
- The official’s job is to uphold the rules by applying them equitably and communicating their interpretation effectively

THE PROFICIENT SWIMMING OFFICIAL
(cont'd)

- As an official, an individual must operate from a strong base. That base is made up of two factors – one is the authority of the rulebook and the other is the basic philosophy that the officials conduct the competition in accordance with the rules.
- Each time a rule and the purpose of that rule are explained, the rule becomes easier to accept. Rather than hiding behind the statement "It's the rule", an official should explain why there was a violation so the official does not appear to be arbitrary.
- While the rules of swimming are clear, their application may differ slightly based on the level of competition.

QUALITIES OF A CHIEF FINISH JUDGE/CHIEF JUDGE ELECTRONICS

- Computer friendly
- Ability to work in fast paced and high pressure position
- Ability to troubleshoot problems
- An understanding of the operations of a swim meet
- Attention to detail with mathematical capabilities

KEY TERMS

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The following terms will be used in this clinic and are commonly used at the pool.

- Primary Time – The primary time is the time that is determined by the automatic officiating equipment (i.e. the primary time is the touchpad time).
- Back-up time – Back-up times are those times that are determined by the semi-automatic officiating equipment (i.e. button plunger times) or those times determined using watches.
- Manual time – The manual time is that time assigned to a swim in the event of a failure of the automatic officiating equipment. The manual time is assigned using the semi-automatic or the watch times.

KEY TERMS

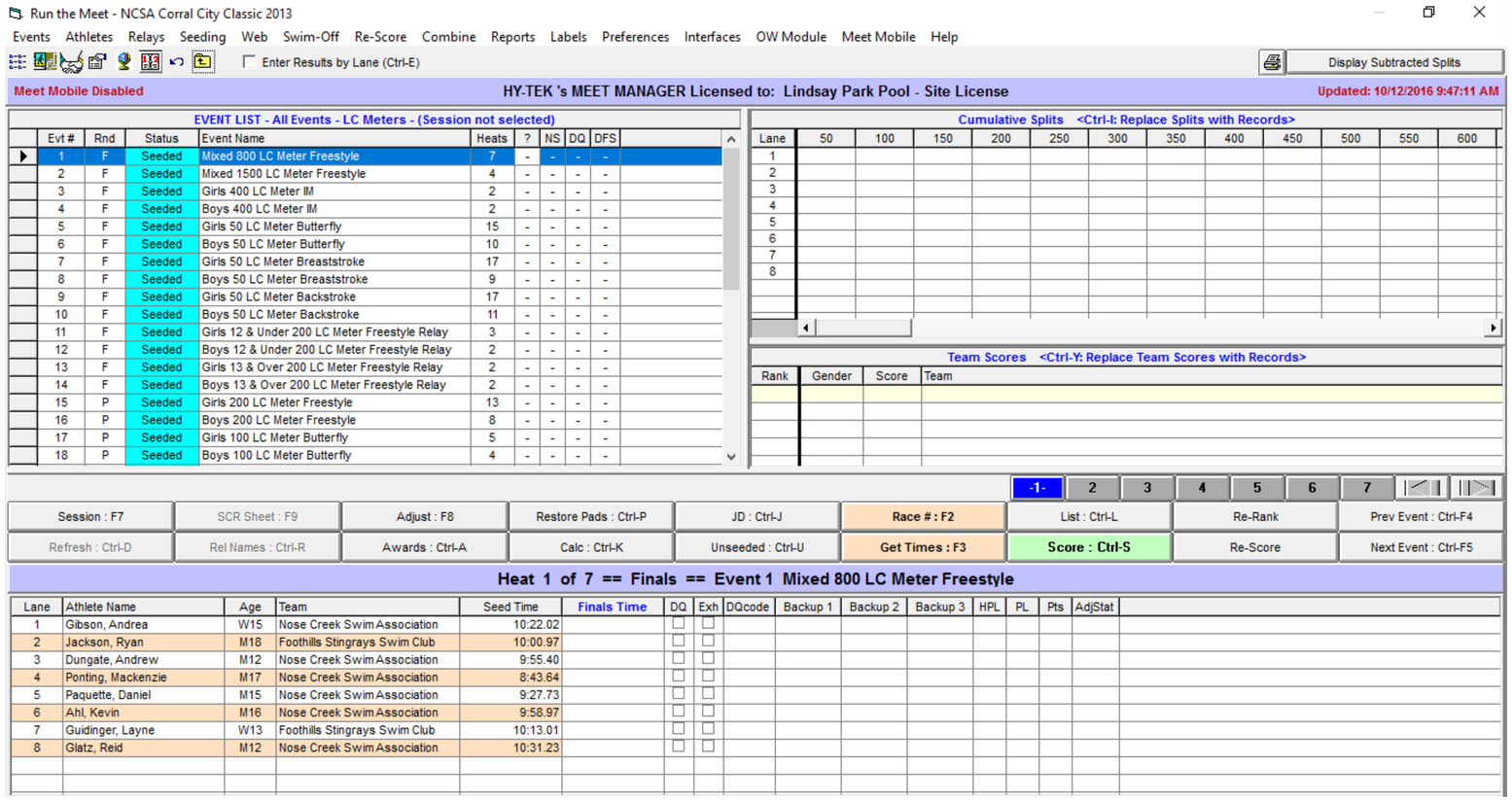
Key Terms:

- Automatic Officiating Equipment – is defined as any approved timing system that is started by the starter and stopped by the swimmer, most commonly touchpads.
- Semi-automatic Officiating Equipment – is defined as any approved timing system that is started by the starter and stopped by an official, most commonly, buttons or plungers and the Dolphin system.
- Manual Officiating Equipment – is defined as any approved system that is started by an official and stopped by an official, most commonly watches

MEET MANAGEMENT SOFTWARE

The following are examples of Meet Management software used in Canada that a Chief Finish Judge may use:

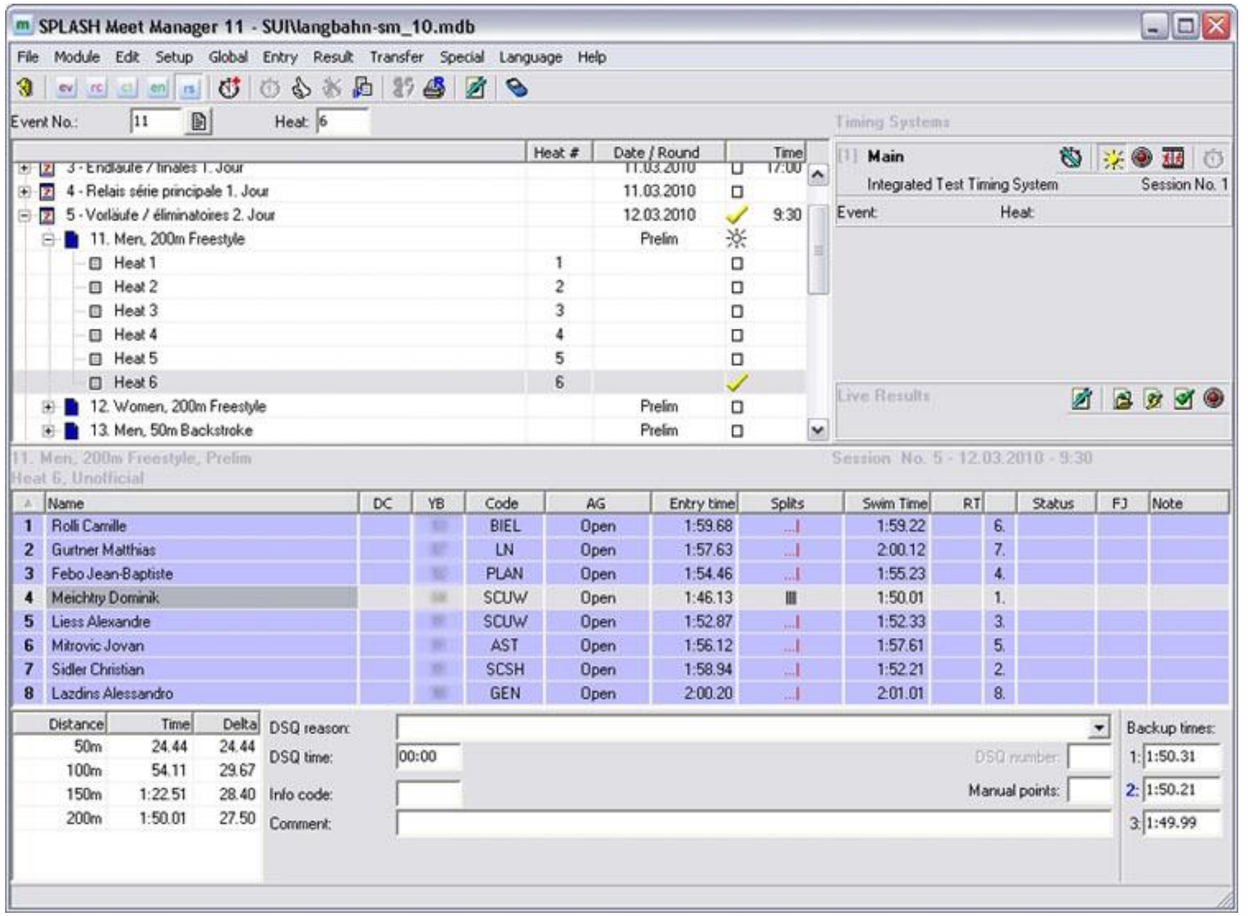
- Hy-tek Meet Manager



MEET MANAGEMENT SOFTWARE

The following are examples of Meet Management software used in Canada that a Chief Finish Judge may use:

- Splash



TIMING SYSTEMS

The following are examples of approved timing systems used in Canada that a Chief Judge of Electronics may use:

- ARES 21

TIMING SYSTEMS

- Quantum

TIMING SYSTEMS

- Colorado

TIMING SYSTEMS

- OmniSport (Dakronics)

CFJ/CJE DUTIES

CHIEF FINISH JUDGE ROLES AND RESPONSIBILITIES

- The key responsibilities of the Chief Finish Judge (CFJ) are to maintain the accuracy and integrity of the official times assigned to EVERY swim.
- A CFJ is most commonly used when automatic timing equipment is not available.
- The official time is assigned solely by using semi-automatic or manual watch times.
- The official time is determined by the CFJ
- The CFJ may work with Hy-tek Meet Manager or Splash software
- Only one role will determine the official time. A meet will not have both a Chief Finish Judge and a Chief Judge Electronics in place.

CHIEF FINISH JUDGE ROLES AND RESPONSIBILITIES

Before the session

- Meet with Referee and/or the Meet Manager and review what is expected of you and review any instructions specific to the pool or session
- Meet with the Referee to determine how they wish to be involved in the decision process in the event of timing discrepancies.
- Meet with the Chief Timekeeper and request they check in with you after the first few races are complete to provide feedback on the performance of the Timekeepers

CHIEF FINISH JUDGE ROLES AND RESPONSIBILITIES

During the session

- Process each set of results in a timely and accurate fashion
- Make sure you stay up with the meet. If problems arise with the timing systems and you get behind, then find some help.
- Ensure that results are accurate – Best Practices may include:
- Make sure the results you provide to the Recorder Scorer (RS) are clear and correct. Use red pen, initial the changes.
- Check the results report (from the RS) to ensure changes you made were correctly recorded.
- In a full manual meet all manual entries by the RS should be checked – cross reference official times on lane sheets

CHIEF FINISH JUDGE ROLES AND RESPONSIBILITIES

After the session

- Verify with the meet office that they have received all of the results from the session
- Resolve any outstanding issues before you complete your assignment as CFJ
- Report to the Referee and/or Meet Manager any concerns or outstanding issues

CHIEF JUDGE ELECTRONICS ROLES AND RESPONSIBILITIES

- The key responsibilities of the Chief Judge Electronics (CJE) are to maintain the accuracy and integrity of the official times assigned to EVERY swim.
- A CJE is used when automatic timing equipment is in use.
- The CJE shall observe the finish of each race and view the operations of the electronic timing equipment.
- The official time is assigned by the CJE
- The CJE may work with an Electronics Operator with the electronic timing equipment (i.e. ARES, Quantum, Colorado), or may act as the operator themselves
- A Recorder/Scorer shall be used in conjunction with the CJE
- Only one role will determine the official time. A meet will not have both a Chief Finish Judge and a Chief Judge Electronics in place.

CHIEF JUDGE ELECTRONIC ROLES AND RESPONSIBILITIES

Before the session

- Review the process with the electronic operators, including meet format, set-up of equipment and decision making process in the event of timing discrepancies
- Speak with the Referee to determine how they wish to be involved in the decision process in the event of timing discrepancies
- Confirm with the Referee that they will be taking order of finish (sweeps) for each heat, in the event of a system failure.
- Determine if scoreboard will be used to declare the results “official” and agree with Referee on procedure for input of DQ or the correction of a time prior to final approval
- Clarify the signal or scoreboard condition that will inform the Referee and Starter the timing equipment is ready for the next race

CHIEF JUDGE ELECTRONIC ROLES AND RESPONSIBILITIES

Before the session

- Test all equipment including the start device, touchpads, plungers and relay takeover equipment
- Test the outputs for the timing devices – data to the Recorder/Scorer

During the session

- Observe all touches to judge their quality
- Check for failures of the equipment or incorrect operation
- Oversee the correction of incorrect times by examining the results produced by the back-up timing device

CHIEF JUDGE ELECTRONIC ROLES AND RESPONSIBILITIES

After the session

- Remain available to the Recorder/Scorer to analyse any problems with the results
- Debrief with the Electronics Operator to correct any problems
- Discuss with the Referee and Meet Manager any difficulties encountered during the session and any outstanding issues

RULES RELATED TO THE CFJ & CJE

RULES RELATED TO THE ROLE OF THE CFJ

***SW 2.10* Chief Finish Judge**

SW 2.10.1 and 2.10.2 are not applicable in Canada

SW 2.10.3 *Where Automatic Officiating Equipment is used to judge the finish of a race, the Chief Finish Judge must report the order of finish recorded by the Equipment after each race*

SW 2.10 IN ACTION

- SW 2.10.3 – The final results should be reviewed by the CFJ to ensure correct placement prior to posting.

RULES RELATED TO AUTOMATIC EQUIPMENT AND TIMING

SW 11.3 *Any timing device that is terminated by an official shall be considered a watch. Such manual times must be taken by three timekeepers appointed or approved by the Member in the country concerned. All watches shall be certified as accurate to the satisfaction of the governing body concerned. Manual timing shall be registered to 1/100 of a second. Where no Automatic Equipment is used, official manual times shall be determined as follows:*

SW 11.3.1 *If two of the three watches record the same time and the third disagrees, the two identical times shall be the official time.*

SW 11.3.2 *If all three watches disagree, the watch recording the intermediate time shall be the official time.*

SW 11.3.3 *With only two (2) out of three (3) watches working, the average time shall be the official time.*

SW 11.3 OFFICIAL TIMES IN ACTION

If two or more times agree, that time shall be the official time.

Example: T1 – 2:20.22

T2 – 2:20.22

T3 – 2:20.34

The official time shall be 2:20.22

If three times are available and these times disagree the intermediate time shall be the official time

Example: T1 – 2:20.22

T2 – 2:20.26

T3 – 2:20.34

The official time shall be 2:20.26

SW 11.3 OFFICIAL TIMES IN ACTION

If two times are available the arithmetic average shall be the official time

Example: T1 – 2:20.22

T2 – 2:20.25

The official time shall be 2:20.23

(.25-.22)/2 = .235, reported to the 1/100 second = .23

- Rounding does not take place; the time is reported to the 1/100th of a second (truncated)
- Times are not to be averaged between 2 different systems – for example if you have a semi-automatic plunger time and a manual digital watch time that are in close agreement, only the plunger time is used, not the average of the two.

RULES RELATED AUTOMATIC EQUIPMENT AND TIMING

SW 11.4 *Should a swimmer be disqualified during or following an event, such disqualification should be recorded in the official results, but no time or place shall be recorded or announced*

SW 11.5 *In the case of a relay disqualification, legal splits up to the time of the disqualification shall be recorded in the official results*

SW 11.6 *All 50 metre and 100 metre splits shall be recorded for lead-off swimmers during relays and published in the official results*

RULES RELATED AUTOMATIC EQUIPMENT AND TIMING

SW 13 AUTOMATIC OFFICIATING PROCEDURE

SW 13.1 *When Automatic Officiating Equipment is used in any competition, the placing and times so determined and relay take-offs judged by such Equipment shall have the precedence over the Timekeepers and Inspectors of Turns.*

SW 13.2 *When the Automatic Equipment fails to record the place and/or time of one or more swimmers in a given race:*

SW 13.2.1 *Record all available Automatic Equipment times and places*

SW 13.2.2 *Record all human time and places*

RULES RELATED AUTOMATIC EQUIPMENT AND TIMING

SW 13.2.3 *The official placing will be determined as follows:*

SW 13.2.3.1 *A swimmer with an Automatic Equipment time and place must retain his relative order when compared with the other swimmers having an Automatic Equipment time and place within that race*

SW 13.2.3.2 *A swimmer not having an Automatic Equipment place but having an Automatic Equipment time will establish his relative order by comparing his Automatic Equipment time with the Automatic Equipment times of the other swimmers*

SW 13.2.3.3 *A swimmer having neither an Automatic Equipment place nor an Automatic Equipment time shall establish his relative order by the time recorded by the Semi-Automatic Equipment or by three digital watches*

RULES RELATED AUTOMATIC EQUIPMENT AND TIMING

SW 13.3 *The official time will be determined as follows:*

SW 13.3.1 *The official time for all swimmers having an Automatic Equipment time will be that time*

SW 13.3.2 *The official time for all swimmers not having an Automatic Equipment time will be the three digital watches or the Semi-Automatic Equipment time*

RULES RELATED AUTOMATIC EQUIPMENT AND TIMING

SW 13.4 *To determine the relative order of finish for the combined heats of an event, proceed as follows:*

> ***SW 13.4.1*** *The relative order of all the swimmers will be established by comparing their official times*
>
> ***SW 13.4.2*** *If a swimmer has an official time which is tied with the official time(s) of one or more swimmers, all swimmers having that time shall be tied in their relative order of finish in that event*

SW 13 PLACING IN ACTION

The order of finish is determined using the official time.

- If two or more swimmers in the same event have the same official time to the nearest 1/100th of a second, the results shall indicate the swimmers have tied

Swimmer	Official Time	Placing
A	1:00.02	1
B	1:00.14	2
C	1:00.14	2
D	1:00.32	4
E	1:00.45	5
F	1:01.01	6

SW 13 PLACING IN ACTION

In preliminary heats where swimmers are to advance to an A or B final, a tie in the results may impact which swimmer advances.

- It may be necessary to have a swim-off to determine which swimmer advances or could potentially advance.
- Swim-offs are usually arranged by other Officials (Recorder/Scorer, Clerk of Course, or Meet Manager). Swim-offs need to be scheduled asap and therefore the CFJ/CJE must notify the appropriate official as instructed in their pre-meet briefing.
- The results of a swim-off are official results and the CFJ or CJE shall ensure that the results of any swim-off are determined correctly

RULES RELATED TO THE ROLE OF THE CJE

<u>CSW 2.13.1.2</u> Chief Judge Electronics

a) *Shall oversee the operation of any Swimming Canada approved Automatic Officiating Equipment*

b) *Shall determine if the Automatic Officiating Equipment is in error and advise the Referee of any malfunction or light touch*

c) *Shall oversee the touches of all the swimmers and note any cases in which the Automatic Officiating Equipment fails to properly record the touch*

d) *Shall be positioned with the Automatic Officiating Equipment near the finish end with an unobstructed view of the finish end of each lane*

RULES RELATED TO THE ROLE OF THE CJE

e) *Shall be fully familiar with the rules of swimming and the operation of the Automatic Officiating Equipment*

f) *Shall ensure that the Automatic Officiating Equipment is activated manually to obtain placings when the system has failed to be activated by the starting signal*

g) *Shall have the same responsibilities as the Control Room Supervisor when the automatic timing operation is used as stated in SW 2.2.*

<u>CSW 2.13.1.3</u> Electronics Operator

Shall operate or assist in the operation of any SNC approved Automatic Officiating Equipment.

CSW 2.13.1.2 IN ACTION

In the event of a system failure the CJE will use manual (watches) or semi-automatic times (buttons or plungers) to determine the official time

Primary system failures commonly seen are:

- Light touch – where the swimmer does not hit the touchpad hard enough to initially register a time or touches the wall outside of the touchpad
- No primary time recorded – where the touchpad does not register a time at all when the swimmer finishes the race
- Early activation – where a swimmer or officials steps on top of the touch pad, which activates it prior to the swimmer’s touch.

RULES RELATED AUTOMATIC EQUIPMENT AND TIMING

***SW 11* Timing**

SW 11.1 *The operation of Automatic Officiating Equipment shall be under the supervision of appointed officials. Times recorded by Automatic Equipment shall be used to determine the winner, all placing and the time applicable to each lane. The placing and times so determined shall have precedence over the decisions of timekeepers. In the event that a break-down of the Automatic Equipment occurs or that is clearly indicated that there has been a failure of the Equipment, or that a swimmer has failed to activate the Equipment, the recordings of the timekeepers shall be official*

RULES RELATED AUTOMATIC EQUIPMENT AND TIMING

SW 11.2 *When Automatic Equipment is used, the results shall be recorded only to the 1/100 of a second. In the event of equal times, all swimmers who have recorded the same time at 1/100 of a second shall be accorded the same placing. Times displayed on the electronic scoreboard should show 1/100 of a second.*

SW 11 TIMING IN ACTION

The CJE or Electronics operator can determine that the Automatic Officiating Equipment has failed by observing the touch and observing (or listening) to the operation of the equipment.

- If through the observation of the equipment an equipment failure has occurred, the CJE will ensure that the back-up times are used to determine the official time for that swim
- A guideline has been established that if the back-up times varies from the touchpad time recorded by greater than 3/10th of a second, the CJE may determine that a failure of the Automatic Officiating Equipment has occurred
- The CJE shall observe the timekeepers to ensure that they are in position and obtaining accurate back-up times

SW 11 AUTOMATIC TIMING EQUIPMENT AND RELAY TAKE OVERS IN ACTION

An additional feature available with the Automatic Timing Equipment systems are Electronic Relay takeovers which will measure and report the time difference when the outgoing swimmer leaves the starting blocks and when the incoming swimmer touches the touchpads.

- The most common FINA approved systems in Canada are OMEGA or Daktronics
- The results of the electronic judging of a relay takeover will take precedence over the visual judging by the Referee or the Inspector of Turns, however these officials are still encouraged to observe the takeovers and call infractions as observed
- The CJE shall observe the touches of the incoming swimmer and review the semi-automatic times to ensure that a light touch has not taken place

SW 11 AUTOMATIC TIMING EQUIPMENT AND RELAY TAKE OVERS IN ACTION

OMEGA relay takeovers

- The OMEGA system has been assessed by FINA and has a tolerance of -0.03 seconds
- A positive differential or a differential up to and including -0.03 is a legal takeover
- A takeover of -0.03 is legal, a takeover of -.04 or less is illegal
- The CJE should test all equipment prior to the session to ensure it is working properly

SW 11 AUTOMATIC TIMING EQUIPMENT AND RELAY TAKE OVERS IN ACTION

Daktronics relay takeovers

- The Daktronics system has been assessed by FINA and it has a tolerance of 0.00 seconds
- A positive differential is a legal takeover and a negative differential is an illegal takeover
- A takeover of 0.00 is legal and a differential of -0.01 or-less is illegal
- Care must be taken to ensure that other swimmers or officials do not make contact with the top of the blocks during the takeover as it will result in a failure of the electronic takeover equipment

SW 11 AUTOMATIC TIMING EQUIPMENT AND RELAY TAKE OVERS IN ACTION

Reporting an early takeover

If following the review of the electronic takeover information the CJE is confident of an early takeover the CJE shall:

- Report to the Referee that an illegal takeover has occurred
- Indicate the heat, lane and swimmer
- Note that a light touch did not take place
- Report the takeover differential

Example: Lane 4, 3rd swimmer left early, back-up times prove the touch was not a light touch and the differential was -.07 seconds.

KEYS TO SUCCESS

KEYS TO SUCCESS

- Exercise excellent judgement – if you have questions, speak to the Referee
- Patience, you are a volunteer, working with other volunteers
- Ability to focus in an otherwise noisy and active environment
- Thorough knowledge of the rules of swimming
- Be efficient but most importantly accurate

QUIZ

QUESTION 1

Determine the Official Time – Manual digital watches

Primary Time	Timekeeper 1	Timekeeper 2	Timekeeper 3
Not available	1:11.45	1:11.40	1:11.47

a) 1:11.45

b) 1:11.40

c) 1:11.43

QUESTION 2

Determine the Official Time – Full electronics

Primary Time	Plunger 1	Plunger 2	Timekeeper 3
1:06.19	1:06.18	1:06.18	1:06.16

a) 1:06.19
b) 1:06.18
c) 1:06.16

QUESTION 3

Determine the Official Time – Full electronics – Light Touch

Primary Time	Plunger 1	Plunger 2	Digital watch
4:05.75	4:05.12	4:05.15	4:05.06

a) 4:05.75

b) 4:05.13

c) 4:05.06

QUESTION 4

Determine the Official Time – Full electronics

Primary Time	Plunger 1	Plunger 2	Digital watch
48.12	48.06	47.93	47.99

a) 47.99

b) 48.12

c) 47.12

QUESTION 5

Determine the Official Time – Manual digital watches

Primary Time	Timekeeper 1	Timekeeper 2	Timekeeper 3
Not available	4:05.12	4:05.16	4:05.13

a) 4:05.12
b) 4:05.13
c) 4:05.16

QUESTION 6

Determine the Official Time – Manual digital watches

Primary Time	Timekeeper 1	Timekeeper 2	Timekeeper 3
Not available	8:30.58	8:30.55	NT

a) 8:30.56

b) 8:30.57

c) 8:30.55

QUESTION 7

Determine the Official Time – Full electronics

Primary Time	Plunger 1	Plunger 2	Manual watch
Not available	2:10.01	Not recorded	2:09.99

a) 2:10.00
b) 2:10.01
c) 2:09.99

QUESTION 8

The primary time is the time that is determined by a touchpad.

a) True

b) False

QUESTION 9

The back-up times are those times that are determined by the use of buttons, plunger times or watches.

a) True

b) False

QUESTION 10

Swim-offs are not official results that are submitted in the meet results. Swim-offs are only used to break a tie.

a) True

b) False

QUESTION 11

When automatic takeover equipment is in use a Referee can only process a DQ for an early takeover if it is observed by an Inspector of Turns or Referee and documented with the electronics.

a) True

b) False

QUESTION 12

When timing to 1/1000th of a second is available the third digit shall not be recorded or used to determine time or placing.

a) True

b) False

QUESTION 13

A guideline has been established that if each back-up time varies from the touchpad time recorded by greater than 1/10th of a second, the CJE may determine that a failure of the Automatic Officiating Equipment has occurred.

a) True

b) False

QUESTION 14

When OMEGA Relay takeover equipment is in use, which takeover time will result in an infraction report?

a) -.04

b) -.03

c) -.01

d) +.03

QUESTION 15

When Daktronics Relay takeover equipment is in use, which takeover time will result in an infraction report?

a) -.04
b) -.03
c) -.01
d) +.03
e) a, b, c
f) all of the above

CONGRATULATIONS

You have now completed the Level II Chief Finish Judge and Chief Judge Electronics Clinics

Your next task is to obtain deck experience.

You will be required to mentor in both roles and be comfortable in making decisions before requesting deck evaluations. To be certified as a CFJ/CJE you must complete two on deck evaluations, one of which must be as CFJ.

The session referee must be informed prior to the session that you are requesting a deck evaluation. At the end of the session, the session referee will sign your officials card if the evaluation was successful.

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