



Electronic Timing Official Training Clinic

Electronic Timing 4/2021

1

Agenda

- Introductions
- Role of an Official
- Role of ET Official
- Certification Process
- ET Job Responsibilities
 1. Timing Console (Station #1)
 2. Time Verification/Paperwork (Station #2)
 3. HyTek Meet Manager (Station #3)
- Working Examples
- Questions

2

Role of an Official

OSI Officiating Philosophy

Fair and equitable conditions of competition are maintained and uniformity in the sport is promoted so that no swimmer has an unfair advantage over another

3

Role of an Official

What does that mean?

- Success of every meet depends on the official's integrity, knowledge, concern and regard for the competitive interest of the swimmer
- One set of rules applies to all swimmers
- Swimmers get the benefit of the doubt
- Demonstrate impartiality and professionalism on deck

4

Role of an Official

Professionalism on Deck

- Wear standard uniform
 - Typically white polo over black shorts, black shoes
 - Long pants/skirts for championship finals
 - Sometimes khaki instead of black
 - No team logos or advertising
- Wear credentials and name tag
- Be in position on time. Do not vacate position until replacement in place

5

Role of ET Official

What does an ET Official do?

- Operate electronic timing equipment (Timing Console-Station #1)
- Determine official time (Time Verification/Paperwork-Station #2)
- Record & post results and scores (Hy-Tek Meet Manager-Station #3)
- Work as part of a larger officiating crew (ie: Referee, Starter, Stroke & Turn, Admin Official)
- Assist AO (or Starter) with instructing timers in proper timing procedures or any other needed task

6

Certification Process

Certification Steps

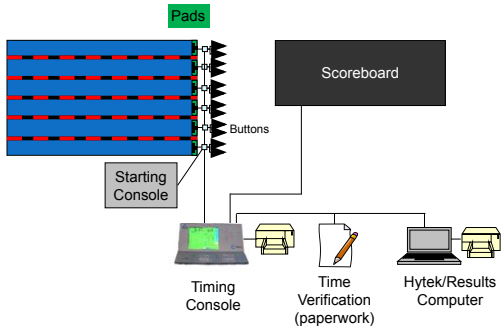
- Attend an introductory ET Clinic
- Register through Oregon Swimming(OSI) as non-athlete member of USA Swimming
- Pass a background check through USA Swimming
- Complete USA Swimming online Athlete Protection Training
- Complete USA Swimming online Concussion Training
- Upon application approval; acquire uniform; begin volunteering at meets
- Complete ET Training Record
- Forward Training Record and Evaluations to OSI ET Chair and wait for confirmation to take online test
- Take and pass on-line open-book test

Certification Process

ET Training Record

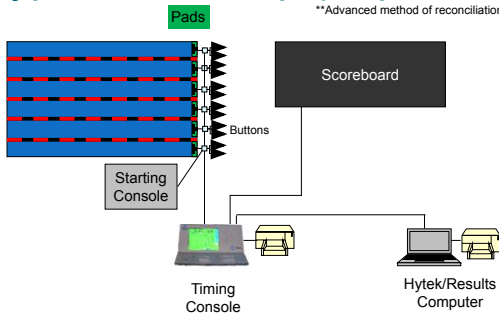
- Attend ET Clinic
- Complete a Deck Tour with Referee → should do at first meet
- Work a minimum of 5 ET sessions
- At least 2 of the first 6 hours must be with a designated ET Trainer
- 2 sessions at sanctioned 12&Under meet
- 1 session at a non-home meet
- 10 observed hours on Timing Console (become familiar with both Colorado and Daktronics)
- 10 observed hours on Time Verification/Paperwork
- 5 observed hours with the Hy-Tek operator
- Successfully complete a heat malfunction calculation (by hand)
- Receive 2 positive Evaluations from 2 different ET Trainers from 2 different sessions

Typical ET Setup



Typical ET Setup (Paperless)

**Advanced method of reconciliation.



Timing Console (1st Station):

Equipment:

- Colorado Data Systems 6
- Colorado Data Systems 5
- Daktronics Omni-sport 2000 or 6000
- Printer

Timing Console (1st Station):

Set Up Timing Equipment

- Be familiar with Colorado and Daktronics systems
- Help set up and know how to operate the equipment
- Allow time before the meet to set up and diagnose problems
- Home crew will often set up equipment, but you still need to check it over
- Ensure starting unit connected
- Ensure buttons and pads in place and connected
- Verify meet file has been downloaded
- **Perform test start and then reset for first race**

Timing Console (1st Station):

Daktronics (OmniSport)

- OmniSport operates with buttons similar to Colorado
- What is unique, is that it can be connected to a laptop by using an optional PC interface
- Beware that button averages on the Daktronics printout may be rounded up instead of truncated (depending upon version)



PC interface (laptop)

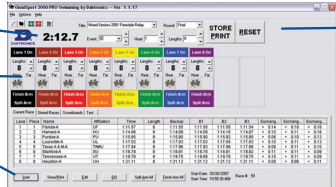
16

Timing Console (1st Station):

Daktronics (OmniSport)

- Added features of PC interface:
 1. Displays swimmer names & teams
 2. Access to stored races → contains unlimited race/meet memory (See Exhibit #1 for Race Log Instructions)

Race screen shot



Running Time: 2:12.7

Buttons: STORE, PRINT, RESET

Labels: Running Time, Lane Status, Start, Store Print & Reset

Heat	Lane	Swimmer	Time	Start	Finish	Time	Start	Finish	Time
1	1	...	...	...	...	...	...	...	...
1	2	...	...	...	...	...	...	...	...
1	3	...	...	...	...	...	...	...	...
1	4	...	...	...	...	...	...	...	...
1	5	...	...	...	...	...	...	...	...
1	6	...	...	...	...	...	...	...	...
1	7	...	...	...	...	...	...	...	...
1	8	...	...	...	...	...	...	...	...
2	1	...	...	...	...	...	...	...	...
2	2	...	...	...	...	...	...	...	...
2	3	...	...	...	...	...	...	...	...
2	4	...	...	...	...	...	...	...	...
2	5	...	...	...	...	...	...	...	...
2	6	...	...	...	...	...	...	...	...
2	7	...	...	...	...	...	...	...	...
2	8	...	...	...	...	...	...	...	...

17

Timing Console (1st Station)

Operate Timing Equipment

- Ensure ET Console set for correct event and heat and is "RESET"
- Avoid making changes and beeps just prior to the start.
- ET Console should start timing when Starter unit sounds
- If ET Console fails to start, start it manually & write "manual start" on ET Console Heat Sheet
- Check for No Shows and turn lanes on/off
- Mark No Shows on ET Console Heat Sheet with "NS" and strike through the name (if all swimmers present mark heat with "F")
- Write race number on ET Console Heat Sheet
- Watch for intermediate pad touches. Add/Delete touches as required
- Finish arm lane(s) if necessary
- Store-Print; Reset; Advance to Next Heat or Next Event
- Get console ready for next heat in a timely manner
- FOCUS ON DRIVING THE CONSOLE WHEN TASKED TO DO SO

18

Time Verification (2nd Station)

Timing System Designation (Rule 102.24.3)

Every race shall be timed with one or more of the following system; listed in their preferred order of use:

- Primary
 - The most accurate system available
 - Could be automatic, semi-automatic, or manual
 - Normally automatic PADS
- Secondary
 - Backup to primary system. Typically BUTTONS
- Tertiary
 - At least one WATCH should be used as a back-up for a automatic or semi-automatic system

19

Time Verification (2nd Station)

Determining the Official Time

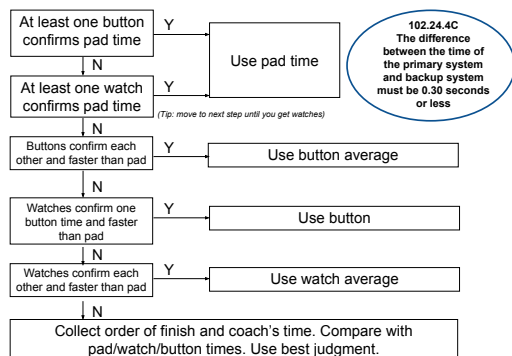
- All timing systems, including manual watches, will be resolved and recorded to one one-hundredth of a second. (0.01 second). The digits representing thousandths shall be dropped with no rounding (102.24.1B)

For example: 57.347 → 57.34

- When recorded by properly operating automatic timing equipment, the pad time shall be the official time (102.24.4A)
- A (lane) malfunction may have occurred if the difference between the time obtained by the primary system and the backup system(s) is approximately .30 second or greater (102.24.4C(1))
- Use the flowchart on the following slide to aid in determining the Official Time

20

Time Verification (Pad, Button & Watches) 5/1/16



21

Time Verification (2nd Station)

Documenting Official Time (Paperwork)continued...

- Obtain heat printout from console operator
- Check correct race#, event#, heat# and highlight printout
- Confirm that each lane with a swimmer has a time
- Document any no-shows
- Document any DQ's
- Calculate official time. (Validate within .30 - use flowchart)
- Clearly identify official time with check mark and strike out invalid times
- Initial paperwork
- Pass paperwork to Hy-Tek station

25

Time Verification (2nd Station)

Documenting Order of Finish (OOF)

- OOF is an aid when no clear validation between pads, buttons, and watches is clear
- Starters will provide the OOF, listing the lanes in the order that they arrived at the finish
 - Write OOF on paperwork: OOF 4-3-2-5-6-1

These Starter notations suggest unsure or too close to call for lanes 2,5,6:
43 --- 1 ; 43 ~~25~~ 1 ; 43 256 1

- OOF also useful in validating times when 3 watches are used as the primary timing system
- Do not confuse OOF with the finish place from console paperwork. It may not be accurate.

26

Time Verification (2nd Station)

Documenting DQ Slips

1. Compare DQ slip for correctness with ET Console Heat Sheet
 - a. Swimmer/Team Name
 - b. Event/Heat/Lane
 - c. Signed by referee
2. If there any discrepancies, send DQ back to referee
3. Initial top corner of DQ Slip
4. On Console Sheet strikeout swimmer name
5. Denote "DQ" along left side of strikeout
6. Write the lane(s) and name(s) of those DQed on Time Verification paperwork; strikeout lane/time
7. Attach DQ slip to back of printout, facing backwards – enables easy review later if required

ET TIP:
RED IS NOT REQUIRED
DQ notations written in red
are not overlooked BUT are
harder to erase!

27

Time Verification(2nd Station)

Heat Malfunction (102.24.4E)

- If the automatic system has had an early or late start (the manual start button is pushed), ALL times need to be adjusted
- For each valid lane (pad validated by button), calculate the average WATCH - PAD difference
- Discard any watch outliers that are more than 0.30
- Adjust all automatic and semi-automatic times by average WATCH - PAD difference
- Worksheet available

28

Hy-Tek Meet Manager(3rd Station)

Meet Manager software on the Hy-Tek/Results Computer

- Set up meets
- Manage entries
- Seed races with swimmers
- Prints heat sheets & psych sheets
- Captures the times from the timing console
- Assimilates the results
- Scores the meet
- Prints awards labels

29

Hy-Tek Meet Manager(3rd Station)

- Before the meet starts, the following should be ready:
 - Download meet file from Hy-Tek to console
 - Print Console Heat Sheet - 1 event per page
 - Print and deliver Lane Timer sheets
 - Print Heat Sheets / Session Reports as needed
- Hy-Tek operator "Get Times" to stay current with the meet
- Paperwork is sent over by heat or in one event batch
- Update official times after they are confirmed by Station #2
- Update DQs as they come in
- Confirm with Referee that events are closed before posting results
- Keep console turned on until Hy-Tek operator confirms that ALL race information has been transferred

30

Problem Solving

Communicate if something has gone wrong so that the problem can be fixed quickly. Examples:

- Pad not working→ Swap out a backup pad
- Button not working→ Swap out backup button
- Printer not working
 - Refill paper?
 - Ink / Toner?
 - Swap out different printer?
- Console not working→ Check all connections; set up 3 watches in each lane
- Hy-Tek not working→ Check all connections and cables; swap out cables or power cords
- Race logs are a handy tool if you missed a race due to connection failure between console and Hy-Tek (see Exhibit #1)

ET TIP:
To swap pads & buttons, ask Ref to pause the meet between heats, even if unused lane

34

Worked Examples

- Sample #1 (ET Training Material)
- Sample #2 (ET Training Material)

35

Resources

- Oregon Swimming, Inc (OSI) website: www.oregonswimming.org
- The following training material and quick reference guides are available on the OSI website (OSI>Officials>Training)
 - Time Reconciliation Flowchart
 - Heat Malfunction Worksheet
 - Exhibit #1 (Race log document under ET Training Material)
 - This presentation is available for printing individual slides
- USA Swimming website: www.usaswimming.org

36



Questions ?
