



OREGON
SWIMMING

**Electronic Timing
Official Training
Clinic**



Agenda

- Introductions
- Role of ET Official
- Certification Process
- Equipment Setup
- Operating the Console
- Paperwork – Determining the official time
- Worked Examples
- Questions



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

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

Professionalism on Deck

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

The ET Official

- Why?
 - No swimmer shall be required to re-swim a race due to equipment failure which results in unrecorded or inaccurate time or place. (USA Swimming Rule 102.16.4D)
- What?
 - Part of a larger officiating crew
 - Operate electronic timing equipment
 - Determine official time
 - Instruct timers in proper timing procedures

Certification Process

- Register through Oregon Swimming as non-athlete member of USA Swimming
- Must pass a background check through USA Swimming
- Must attend USA Swimming online Athlete Protection Training
- Attend ET Clinic before working on deck
- Begin volunteering at meets
- After minimum 20 hours of training & 5 sessions, obtain 2 positive recommendations from certified ET's
- Forward training record and recommendations to ET chair Await confirmation to take online test.
- Take and pass on-line open-book test

Minimum Training Requirements

- Attend ET Clinic
- At least 2 of the first 6 hours must be with a designated ET Trainer
- 10 observed hours on timing console
- 10 observed hours on time verification
- Complete a Deck Tour with Referee
- Work a minimum of 5 ET sessions
 - Work two sessions at sanctioned 12 & under meet
 - Work at least one session at a non-home meet
- Work one session with the Hy-Tek operator
- Be familiar with both Colorado and Daktronics and their setup
- Successfully complete a heat malfunction calculation (by hand)
- Receive two consecutive positive recommendations from two different trainers

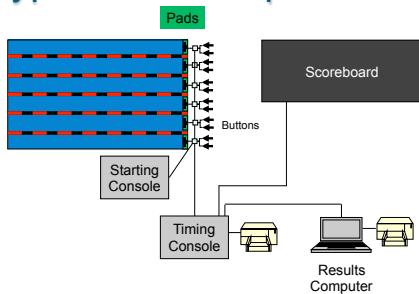
Proper Timing Procedures

- Instructions for Head Timers & Timers
 - Timer operates one watch and one button. No timer can operate both watches or both buttons
 - Start watch at strobe flash rather than sound if possible
 - Raise hand if you fail to start watch – head timer should have a backup
 - Stop watch and button when touch is seen
 - Record times legibly on supplied event sheet to 100ths of a second
 - Head timer will collect event sheets
 - Ring bell on long events

Set Up Timing Equipment

- Be familiar with Colorado and Daktronics systems
- Know how to set up and 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 using harness or deck plates
- Perform test start and then reset for first race

Typical ET Setup



Operate Timing Equipment

- Ensure ET console set for correct event and heat
- ET Console should start timing when starting unit sounds
- If ET console fails to start, start it manually & write "manual start" on ET heat sheet
- Check for No Shows/Lanes turned on/off
- Mark No Shows on ET heat sheet with NS and strike through
- Write race number on ET heat sheet
- When ET unit on deck avoid making console beep just prior to the start
- Check 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
- FOCUS ON DRIVING THE CONSOLE WHEN TASKED TO DO SO

ET TIP:
Display manual start for 10 sec so all know there was a timing problem

Determining the Official Time

- Automatic / Semi-Automatic / Manual
- Primary / Secondary / Tertiary times
- What is the official time?

Types of Timing Systems

- Rule 102.24.2
- Automatic
 - Automatic start. Finish on touch pads
- Semi-Automatic
 - Automatic start. Finish on buttons
- Manual
 - Watches

Timing System Designation

- Rule 102.24.3
- 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

Determination of Official Time

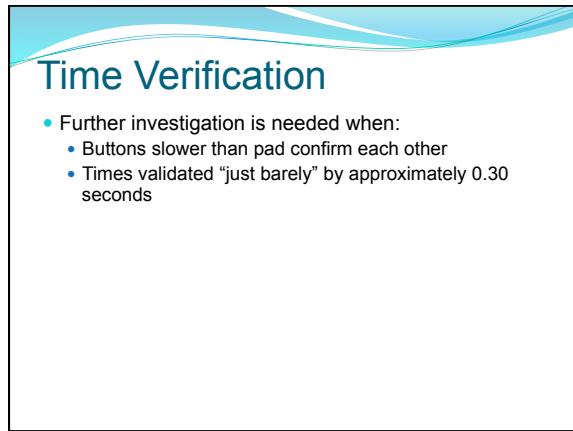
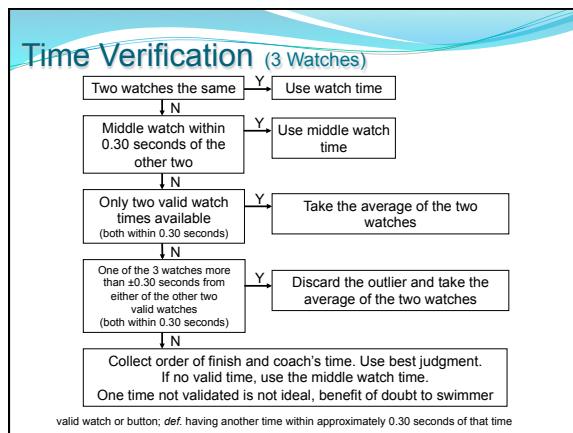
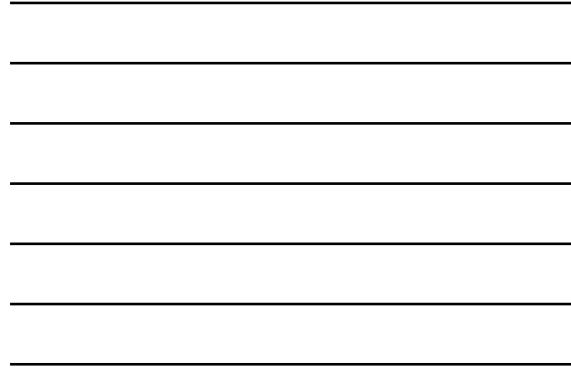
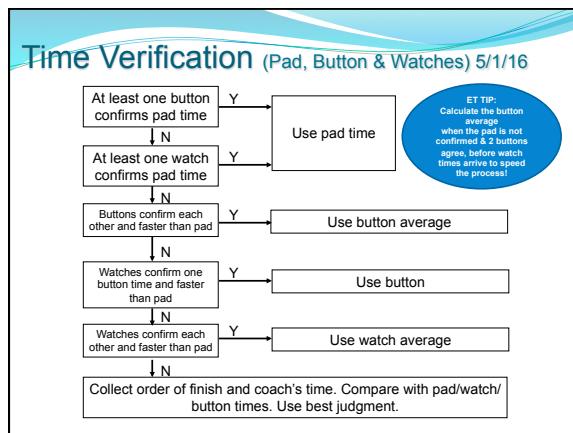
- Timing resolution in 100ths, not 1000ths of seconds. Thousandths are dropped with no rounding (102.24.1B)
- The time from the correctly operating primary system is the official time (102.24.4)
 - Automatic: Pad time
 - Semi-Automatic or Manual
 - Middle time of 3 buttons/watches
 - Average of 2 buttons/watches
 - Time of single button/watch (not a good idea)

Primary Timing System Malfunction

- 102.24.4C
- A malfunction may have occurred if:
 - The difference between the time obtained by the primary system and the back-up system(s) is approximately 0.30 second or greater, or
 - The place judge(s) reports a different order of finish, or
 - It is reported the swimmer missed the touchpad or had a soft touch.

Lane Malfunction

- 102.24.4D
- Effective May 1, 2016, back-up times do not need to be adjusted for timing differences.
- Use button time reported by timing console.
- Note that Colorado automatically deducts 0.15 seconds but Daktronics does not. Both are acceptable.
- Use watch time without adjustment.



Order of Finish

- Starter will provide the OOF, listing the lanes in order that they arrived at the finish
 - Example: OOF of 4-3-2-5-6-1 would be:

OOF	Lane	Place
1 st Lane 4	1	6
2 nd Lane 3	2	3
3 rd Lane 2 shown as:	3	4
4 th Lane 5	4	1
5 th Lane 6	5	3
6 th Lane 1	6	256
- Do not confuse OOF with finish place

Order of Finish

- OOF can be used to determine that a timing malfunction may have occurred
- OOF is an aid when no clear validation between pads, buttons, and watches is clear
- OOF also useful in validating times when 3 watches are used as the primary timing system
- OOF is valuable, but is the least reliable piece of information available to the ET Official
- Reliability is subjective

Common Timing Consoles

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

Colorado 6



- Can automatically calculate the pre-May 1, 2016 lane timing adjustment.
- Need to turn off the built in averaging system (see next slide).
- Button times already have built-in subtraction of 0.15 seconds

Colorado 6 (continued)



1. Use the softkeys on the right to select "Setups"
2. Use Up/Down softkeys to select "Timing"
3. Use Up/Down softkeys to select "Automatic Backup Time Adjustment"
4. Use Off softkey to turn off



Colorado 5



- Button times already have built-in subtraction of 0.15 seconds

Daktronics

- Does not do any button adjustment
- Beware that button averages on the Daktronics printout may be rounded up instead of truncated (depending upon version)
- When using optional PC interface, keeps a running race log with all touches and buttons that can be retrieved.



Hy-Tek Meet Manager

- Software on the 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

Hy-Tek Meet Manager

- Run Menu highlights timing anomalies in color

Heat 8 of 13 == Preliminaries == Event 7 Women 200 LC Meter Freestyle

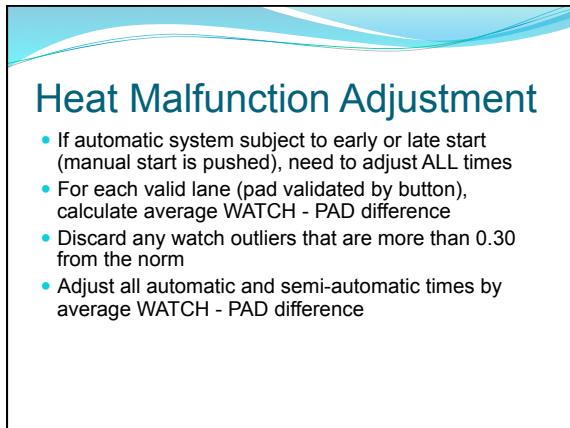
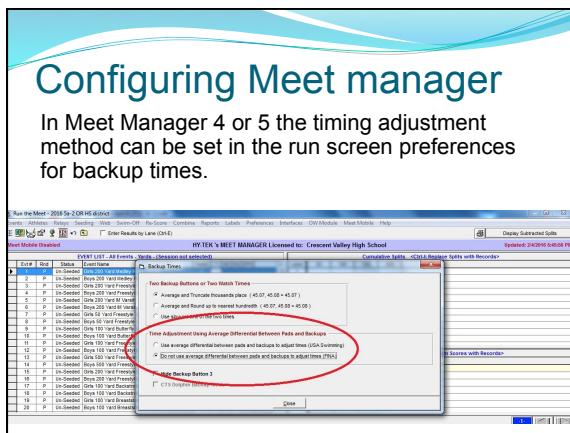
Lane	Athlete Name	Age	Team	Seed Time	Prelims Time	DO [D]	Decode	Backup 1	Backup 2	Backup 3	HPS	PL	AddStat
1	Hernan, Kyle	15	South Florida Aquatic Club-FG	2:15.07	2:15.04	[]	[]	[]	2:15.04	[]	50	51?	
2	Jordan, Avery	13	Sokolov Swimming Association	2:14.92	2:14.92	[]	[]	[]	2:14.92	[]	51	51?	
3	Welsch, Veronica	13	Florida Marlins-FG	2:14.71	2:14.69	[]	[]	[]	2:14.69	[]	52	52?	
4	Heron, Kelley	13	South Florida Aquatic Club-FG	2:14.55	2:14.62	[]	[]	[]	2:14.62	[]	54	54	
5	McKee, Michael	13	Florida Marlins-FG	2:14.29	2:14.29	[]	[]	[]	2:14.29	[]	55	55?	
6	Hutter, Michaela	17	Sokolov Swimming Association	2:14.26	2:23.22	[]	[]	[]	2:17.17	[]	56	56?	
7	Otto, Sophia	17	Plantation Swim Team-FG	2:14.56	2:13.81	[]	[]	[]	2:13.81	[]	57	57	
8	Adams, Allison	13	South Florida Aquatic Club-FG	2:14.72	2:14.72	[]	[]	[]	2:14.72	[]	58	58?	
9	Adams, Chloe	16	Plantation Swim Team-FG	2:14.80	2:13.91	[]	[]	[]	2:13.91	[]	59	59?	
10	Lacoste, Juliette	16	Belleair Swim Club-MF	2:15.21	2:16.37	[]	[]	[]	2:16.37	[]	60	60?	

BUTTON TIME VARIES MORE THAN .31 FROM PAD TIME

.31 PAD-TO-BUTTON DIFFERENCE—Late Button or No Button?

.31 PAD-TO-BUTTON DIFFERENCE—Early Button or Late Touch?

AVERAGE BUTTON TIME GREATER OR LESS THAN PAD TIME



Documenting Official Time

- Obtain heat printout from console
- Check correct race#, event#, heat#
- Check that times available for all lanes which had swimmers
- Document any no-shows
- Document any DQ's (see next slide)
- Calculate official time. (may need to wait for watch times)
- Clearly identify official time with check mark and strike out invalid times
- Initial paperwork
- Pass paperwork to Hy-Tek when appropriate
- Hy-Tek may send paperwork back if discrepancies

Handling DQ Slips

- Check DQ slip for correctness with ET heat sheet
 - Swimmer/Team Name
 - Event/Heat/Lane
 - Signed by referee
- If any discrepancies, send DQ back to referee
- Strike out times for swimmer
- Denote DQ alongside strikeout
- Write the lane(s) and name(s) of those DQed
- Attach DQ slip to back of printout, facing backwards – enables easy review later if required
- Console operator can advise of potential DQs so that paperwork can be held back until DQ's arrive
- Often DQ's arrive after paperwork passed on and has to be recalled

ET TIP:
DQ notations written in red
are not overlooked!

Other Official Times

- Rule 102.24.1A
 - Official times may be achieved in:
 - Any heat
 - A swim off
 - A lead-off leg in a relay
 - A split time recorded from the official start to the completion on an initial distance with a legal finish within a longer event, provided the swimmer completes the event or the lead-off portion of the relay in compliance with applicable rules
 - A time trial or a record attempt

Other Official Times

- A lead off leg in a relay
 - Relay lead off leg times are automatically entered into the SWIMS database and are available as official times.
 - If there is reason to believe that the pad time for the lead off time is inaccurate it can be removed from the meet database in the splits window of the run screen.
 - Splits can only be edited in the cumulative splits mode.
 - If it is known that a relay lead off swimmer is attempting to achieve a time 3 watches to record the split time are recommended so that in the event of a pad failure the swimmer has a valid primary timing system.

Other Official Times

- A split time recorded from the official start to the completion on an initial distance
 - Can be achieved in any swim.
 - If it is known that a swimmer is attempting to achieve an initial distance time 3 watches to record the split time are recommended so that in the event of a pad failure the swimmer has a valid primary timing system.
 - Initial distance split times are not automatically recorded in SWIMS as an official time.
 - OSI SWIMS manager must be informed.
 - Document the details.
 - Meet director can note all details with the meet results submission
 - Email to the OSI SWIMS manager

Working with Hy-Tek

- Before the meet starts:
 - Meet info is downloaded from Hy-Tek to console
 - Most current heat sheet is printed for ET
- Hy-Tek gets meet results from console
- Check for DQs before passing on paperwork, although DQs may arrive later anyway
- Often best to pass verified event paperwork over in one batch to Hy-Tek operator
- Keep console turned on until Hy-Tek operator confirms that ALL meet info has been transferred

ET TIP:
ET heat sheet printed
1 event per page is
useful

Working with the Referee, Starter, Timers, & Coaches

- Console operator needs to get console ready for next heat in a timely manner
- Request order of finish from starter if doubt over time validation (wait for starter to acknowledge you)
- Obtain watch times from lane timers
- Obtain watch times from coaches
- If timing issues are consistently from one lane then observe timers in that lane and talk to them if necessary
- Get referee to sign off on any unusual timing circumstances

Problem Solving

- Often something will go wrong and the problem needs to be fixed quickly
 - Pad not working
 - Know where a backup pad is to swap
 - Button not working
 - Know where backup buttons are to swap
 - Printer not working
 - Extra paper? ink/toner? printer?
 - Console not working
 - Do you have three stop watches per lane?

ET TIP:
To swap pads & buttons, press & hold the Reset button for 5 seconds.

Worked Examples

Summary

- Role of ET Official
- Certification Process
- Equipment Setup
- Operating the Console
- Paperwork – Determining the official time
- Worked Examples
- Questions

Questions ?
