

Heat Malfunction Calculation Worksheet

Event # _____

Heat # _____

Calculated by: _____

Lane #	Pad Time	Button Times		Watch Times		Average Watch	Official Time Before Adjust	Avg Watch Minus Pad	Official Time
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									

Total Difference: _____

Average Difference: _____

Process:

1. Fill in ALL information available for all lanes swum...Pad Time, Button Times, Watch Times
2. Review/Reconcile Pad Times before adjustment calculations; (are Pad Times validated by buttons? note → only look at buttons for this step; if verified, write the time in Official Time Before Adjust column)
3. If the buttons don't verify the Pad Time, DO NOT use that lane in the malfunction calculations
4. Calculate average Watch Times for all lanes where Watch Times verify each other
5. If the Watch Times don't verify each other, DO NOT use that lane in malfunction calculations
6. Calculate the difference between the Watch Times and Pad Times (Watch Minus Pad column)
7. Add "Watch Minus Pad" column for the Total Difference
8. Divide Total Difference by number of good lanes to get Average Difference
9. Add Average Difference to each verified Pad Time(Official Time Before Adjust column) for the Official Time
10. Finish reconciling lanes not used in malfunction calculations
 - a. For lanes needing to use Button Times, do a lane adjustment first (avg Button Times if they verify each other) write the time in Official Time Before Adjust column, then adjust using the Average Difference for the Official Time
 - b. If nothing confirms, but Watch Times verify each other, use Average Watch Time with NO adjustment for Official Time
11. Be sure to check that the OOF (Order of Finish) remains the same for confirmation
12. The Referee/AO should always be informed of a system timing error and sign off on the mathematical calculations