



RECORDER

Training Notes

Adopted or Amended	By Whom	Date
Pat Troy	Technical Committee	October 2006
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Swimming New South Wales Ltd

Recorder Training Notes

Overview

These notes cover the duties and responsibilities of the Chief Recorder and Recorders for all levels of swimming meets from club to state.

The duties and the responsibilities of the Recorder are derived from Swimming NSW (SNSW) Rules SW2.13.1 and, SW2.13.2.1 to SW2.13.2.3.

These notes expand on these Rules and procedures of SNSW, with suggestions on how the Recorders and Recording room should be organised to prepare for a meet in order to produce and publish accurate results.

It should be recognised from the start that the quantity and type of technology used prior to and during a meet could have a dramatic impact on the manner in which a Recording room operates and the work load of individual Recorders.

A fully computerised meet can utilise Meet Manager/Team Manager programs prior to a meet to prepare programs and seedings. A fully automated timing system can be utilised during a meet to produce the results from heats where the swimmers' times are downloaded into Meet Manager to produce computerised results and point scores. At the other end of the scale everything can be prepared manually, from the seeding of the heats through to compiling the results using manual stopwatch times (and Finish Judges' placings when used).

As a Recorder you need to be able to perform your duties, whatever the combination of computerised technology and manual operation is in use at a meet. The principles and logic used by the computer programs and by Recorders in a manual operation are the same.

These notes aim to equip you for both computerised and manual recording and any areas in between that you will encounter. They will explain what you will normally experience at major state run meets and what is expected of you as a Recorder.

Before a meet commences all Recorders should fully understand what equipment/program is being used to produce programs and results and if the meet is being conducted as "timed finals" or "heats & finals", or a combination of both. Additionally you need to understand the overall Rules of the meet governing eligibility for entry to finals, medal awards etc. and the basis of any point score to be maintained.

General Rules

The Recorders should arrive at the pool at least one (1) hour prior to the advertised starting time of the meet because the Recorders need to be involved with entry and program queries and other duties.

On arriving at the meet, the Recorders must report to the Referee so that they can be marked present, and receive a program. The Referee will give any special instructions applicable to the meet to the Chief Recorder.

At SNSW meets, all equipment, forms etc. needed by the Recorders are delivered to the pool by the Company. However the Chief Recorder should check with the Executive Director of the Company and the Meet Director, prior to the meet, to ensure that all equipment, office machines and forms will be at the pool at the nominated time. For other than SNSW meets the Chief Recorder should check with the organising body or club involved.

The equipment and forms required would include:

- Loose leaf copies of the program
- Original entries
- Forms – infraction reports, relay team nomination sheets, Finish Judges' sheets (if required), record application forms
- Scribble pads
- Pens and coloured highlight pens
- Means of fastening and holding papers and forms – e.g. stapler, staples, paper clips, bulldog clips, rubber bands, paperweights
- Cellotape for posting of results

and possibly

- Photocopying machine for results
- Computer and printer for results, point scores, etc. (essential if Meet Manager or a similar program is used).

The number of Recorders required for a particular meet will be three (3) or more and will vary according to the type of meet. The number must be sufficient to ensure that the meet is conducted in an efficient manner. One of the Recorders will be appointed as the *Chief Recorder*.

For State Championship heats, experience dictates that three (3) Recorders including the Chief Recorder and two (2) Computer Operators would be required. A smaller number is required for the finals and timed finals where electronic equipment is being used for recording results. For Area and club meets similar numbers may be required.

CHIEF RECORDER

The Company or the Promoting Body normally appoints the Chief Recorder but where such an appointment is not made the Referee will nominate the Chief Recorder.

The Chief Recorder:

- has the total responsibility for all the functions of the other Recorders and Computer Operators as well as duties and responsibilities specific to the Chief Recorder's position
- allocates all Recorders to their specific duties and supervises those Recorders in the performance of their duties. The Chief Recorder will advise the Referee of any Recorder who is not performing their duties to the required standard
- is responsible to the Referee and works under the Referee's delegated authority. The other Recorders are responsible to the Chief Recorder
- is responsible for any matter, which could affect the normal function of the Recording room or the prompt publication of results, and must refer, in the first instance any such matter to the Referee for action or a decision

- must have adequate liaison with other meet Officials besides the Referee. These Official or Official groups include the Check Starters, Marshals (sometimes referred to as the Clerks of the Course), Announcer, Runners, Automatic Officiating Equipment (AOE) Supervisor (or, in all cases, the AOE Operator if a Supervisor has not been appointed) and, Meet Director
- immediately report to the Referee any interference in the recording functions or with the operation of the Recorders
- receives from the Referee Rule infraction reports/cards (see Appendix 5) outlining the event, heat number and lane number of any disqualification (DQ). On receipt of infraction reports/cards, the Chief Recorder will check the details against the information received verbally or via the AOE slip from the AOE Supervisor (or AOE Operator if a Supervisor has not been appointed), confirm that the AOE slip has been marked and pass all infraction reports to the Announcer.

NOTE: Only The Referee has the power to disqualify a swimmer. At SNSW meets the Referee initially notifies the AOE Supervisor (or AOE Operator if a Supervisor has not been appointed) verbally of any disqualification giving the event, heat number and lane number. This is followed as soon as practical by delivery of the completed written infraction report to the Chief Recorder.

At other meets the Referee may advise the disqualification to the Chief Recorder, or they may advise the decision by noting the disqualification on the AOE result slip, Timekeeper sheets, time cards or the Finish Judges' result slip. Normally the lane number is circled with the note "DQ" alongside and signed by the Referee before forwarding to the Recording area.

The Chief Recorder at this type of meet should confer with the Referee before the start of the meet and determine how results and disqualification decisions will be recorded and advised to the Chief Recorder and other Officials. The Referee will also forward an infraction report (if one is being used) to the Chief Recorder to check the event heat and lane number details against other documentation and for the Announcer to announce the disqualification together with the reported infraction.

- is responsible for the publication of all results after the Recorders have completed all checking processes. The results are distributed to the notice board, the Announcer, the Presentation Officer and any other person or body nominated by the promoting body. The Chief Recorder notes the time on each copy of the results that are to be posted on the notice board
- at SNSW meets, will receive all withdrawals from semi-finals and finals and be notified of all non-starters in these events and notifies the Recorders, Computer Operators, AOE Supervisor/Operator and the Announcer regarding these non-starters

NOTE: Withdrawals are not taken for heats at SNSW meets as a swimmer who does not report in the Marshalling area is deemed to be a withdrawal. Withdrawals may be taken at other types of meets, in such circumstances withdrawals will be notified to the Chief Recorder who will take appropriate action and notify the Officials concerned.

- notifies the Announcer of the heats and lane numbers assigned to the swimmers, the finalists in an event and lanes assigned, and all results. This is usually accomplished by giving the Announcer a seeded program and copies of the start lists for all re-seeded or amalgamated events and the results printout
- will supervise an amalgamation or re-seeding of heats when requested by the Referee, and inform the Marshal of the revised heat and lane numbers of all swimmers in the event. The Referee, Announcer, Computer Operators, Check Starter and AOE Supervisor/Operator need to be given the information of the revised number of heats,

before the event starts. The Starter should also be informed especially at meets where the Starter is announcing the event and heat details to the swimmers

- at SNSW Championships where heats and finals are conducted, will compile a list of finalists and reserves who do not report to the Marshalling area by the nominated time and provide the list to the Chief Executive Officer of the Company.

Results slips are received from the:

- AOE and Semi-Automatic Timing (SAT) equipment/ or
- The SAT and /or
- Time cards from Timekeepers operating manual stop watches or
- Time cards and Finish Judges' slips (if there are fewer than three (3) Timekeepers on each lane).

The Chief Recorder will:

- initially check these results for omissions or incorrect compilation of the placings or incorrect determination of official times. This will be delegated to the other Recorders. (see later for more details)
- inform the Recorders of any disqualification advised by the Referee or AOE Supervisor/Operator. Recorders should ensure that these disqualifications are noted on the AOE slip or the Finish Judges' slips (or time cards where Finish Judges' slips are not used)
- deal with any recording queries and take appropriate decisions within the scope of the responsibilities of the position. Any queries outside the scope of the Chief Recorder's responsibilities are to be promptly referred to the Referee for their decision and action
- ensure the complete results of the meet are handed to the Promoting Body for the meet, and to any other people the Promoting Body may nominate
- be required to act in any capacity delegated by the Referee.

The Recorders may also be required to compile point scores for various awards at a particular meet (see section on "Club Championship Point Score Competitions" later in these notes)

The Rules of Swimming applicable to the Chief Recorder are described in SW2.13.1.

RECORDERS

A Recorder may be assigned to perform a specific task or a very narrow range of duties in the overall recording process. It is, however, essential that each Recorder has knowledge of the total range of duties involved in the position, including those of the Chief Recorder. This allows the Chief Recorder flexibility in the assignment of tasks and the re-assignment of Officials, when required.

Basically the recording process is divided into five functions:

- Allocation of swimmers to heats and lanes
- Determination of results
- Recording of results from heats and finals
- Preparation of finalists lists for an event
- Compilation of the full results of a meet.

Irrespective of whether electronic timing and/or computers are used Recorders may be required to carry out the following tasks:

- the seeding of swimmers into heats and lanes as governed by the seeding requirements of a particular meet
- re-seed or amalgamate events after withdrawals
- check times, results and placings
- check that information from the AOE and SAT printouts is correct and correctly used in computer-produced results
- check that disqualifications advised by the Chief Recorder are correctly noted on AOE slips, Finish Judges' slips or time cards as appropriate and in computer produced result sheets
- compile results on a copy of the program, if computers are not in use
- prepare and issue a list of finalists (or semi-finalists) for subsequent rounds
- prepare copies of the results for distribution as directed by the Promoting Body
- check for records.

(See later in these notes for details on how these tasks are performed).

Where manual systems are in use to record times and compile results the checking process and record compilation process will be more time consuming and more prone to human error. The checking processes employed for meets using manual systems will need to be more extensive. A process of at least two (2) Recorders calling results to each other and checking each other's work should be employed where possible to eliminate all possible errors in the published results.

The Rules of Swimming applicable to Recorders are described in SW2.13.2.1 to SW2.13.2.3.

SEEDING OF HEATS

Seeding of heats involves the allocation of entered swimmers into individual heats within an event and the allocation of lanes within each heat. The manner in which this is done is governed by SW3 '**Starting Positions**'. It is essential that a Recorder understands the various Rules, which determine the allocation of starting positions (or seeding).

The allocation of starting positions is determined by the format of the program. If the program is pre-seeded the starting positions are determined before the meet and published in the program. If the program is listed in entry time order, the starting positions are allocated after marshalling.

1) PRE-SEEDED PROGRAM

At SNSW and many other meets the program for the meet is presented in a pre-seeded format, the seeding into heats having been undertaken by computer or manually in accordance with SW3.

For SNSW meets a pre-seeded program is compiled using the Meet Manager program from entries submitted. These entries are submitted via an electronic file (E-File) with Summary Sheets in a format determined by the Association.

2) NON-SEEDED PROGRAM

With this format, the program is prepared and issued with all entered swimmers listed under each event in their entry time order, usually fastest to slowest. Swimmers without entry times are listed at the bottom of each event listing.

After the Marshal has notified the Chief Recorder of withdrawals and non-starters, the entry cards for swimmers who have withdrawn will be removed, marked accordingly and put aside. The remaining swimmers are then allocated to heats and lanes in accordance with SW3. Each entry card is marked with the heat and lane number, the cards are sorted into heats and forwarded to the Check Starter. The Referee, Announcer and Starter are advised of the

number of heats for each event. Where a heat sheet is produced, this should be distributed to the same Officials.

The Rules of Swimming applicable to Starting Positions are described in SW3

SEEDING EXAMPLE: Eight (8) lane pool, entrants 1-42 in numerical time order

Lane No	1	2	3	4	5	6	7	8
1st Heat			42	40	41			
2nd heat	39	37	35	33	34	36	38	
3rd Heat	31	29	27	25	26	28	30	32
4th Heat	21	15	9	3	6	12	18	24
5th Heat	20	14	8	2	5	11	17	23
6th Heat	19	13	7	1	4	10	16	22

SEEDING OF SEMI-FINALS AND FINALS (refer swimming Rule SW3.4.4)

The Rules for seeding of semi-finals and finals are also contained in SW3 but some parts are repeated here to assist with clarity:

- The fastest swimmer is to be seeded in the second semi-final heat, the next fastest in the first semi-final heat, next fastest in the second semi-final heat, next in the first semi-final heat etc. (SW3.4.4.1).
- The allocation of starting positions in finals is based on times achieved in the semi-finals where these were conducted or in the heats where there were no semi-finals. The allocation is governed by SW3.4.2.
- In the event that swimmers from the same or different heats have equal times registered to 1/100th of a second for either 8th place in a final or 16th place in a semi-final in an 8 lane pool (10th & 20th places in a 10 lane configured pool), or A and B final, the Chief Recorder must inform the Referee, as a swim-off may be required to determine which swimmer will advance to the appropriate final or semi-final. Another swim-off shall take place if equal times are again registered.

The Rules of Swimming applicable to Semi-finals and Finals are described in SW3.

AMALGAMATIONS AND RE-SEEDING

At SNSW meets and other meets, where a pre-seeded program format is used, any withdrawals and non-starters on the day of the meet may cause the Referee to require events to be re-seeded or amalgamated. Such re-seeding or amalgamation would be undertaken to maintain a level of competition and to reduce the duration of a meet by reducing the number of heats to be swum.

The Referee is the only Official with authority to amalgamate or re-seed.

Prior to the start of a meet, the Referee should give guidelines to the Marshal regarding their requirements for amalgamation and re-seeding.

The Referee is to be advised of the non-starters by the Marshal, and will then make a decision and advise the Chief Recorder of their requirements.

It should be noted that in semi-finals and finals where a swimmer scratches and is replaced by a reserve, the event (semi-final or final) **must** be re-seeded as covered in SW3.4.4.4.

Where an amalgamation or re-seeding of heats is requested by the Referee (or required by the Rules), the Chief Recorder will supervise such an amalgamation or re-seeding and inform the Marshal of the revised heat and lane numbers of all the swimmers in the event.

The Referee, Announcer, Computer Operators, Check Starter and AOE Supervisor/Operator need to be given the information of the revised number of heats, before the event starts.

The Starter should also be informed, especially at meets where the Starter is announcing the event and heat details to the swimmers.

The Referee will direct the Marshal to advise the Chief Timekeeper and the Chief Finish Judge (where utilised) of any amalgamation and heat reallocation/numbering.

The Rules of Swimming applicable to Amalgamation of Heats are described in SW3.9.

DETERMINATION OF THE RESULT

INTRODUCTION

The Referee has the responsibility to determine the result of a race when a judging device is in use i.e., AOE, SAT or video (SW2.1.8). When using Finish Judges without three (3) digital watches, the Referee shall determine placings where necessary (SW2.1.6). The Referee therefore has the responsibility for determining the result of the race, but there are many factors that must be considered depending on the type and quality of timing/judging equipment being used at the meet. The Referee may delegate part of these authorities to the AOE Supervisor and/or the Chief Recorder.

There are two (2) main activities involved in determining the result:

a) Determining the official times in each heat

For most meets, where electronic timing is used, the official times are used to determine results. The Recorders play a significant role in ensuring that these times are correctly recorded.

Where manual timing and Finish Judges are used, the Recorders play a more significant role in determining the official time for each swimmer and, again, must ensure that the official times are correctly recorded.

b) Determining the relative order for the whole event

The Recorders must determine the relative order of all swimmers in each event utilising the official times from all heats as determined in (a) above. The Referee may need to be involved, especially where there are equal placings and/or a swim-off is required.

The procedures to be applied to determine a result depend on the combination of timing and/or judging equipment used, the circumstances of a particular meet, and on the manner in which this equipment has worked and/or malfunctioned during a heat or event (see later).

DETERMINATION OF OFFICIAL TIMES AND PLACES IN MULTI-HEAT EVENTS

There are several possible combinations of timing equipment and Officials, which can include primary and backup timing systems. Although there are many different manufacturers of electronic timing equipment and the operation of each one may vary slightly, the outcomes are similar.

Timing equipment available includes:

- AOE - With this system, the timing is started by an electronic signal from the Starter and stopped by the swimmers activating touch pads at the end of the pool. When used, this is the primary system and it is normally supported by a secondary or back-up system.
- SAT - With this system, the timing is started by an electronic signal from the Starter and stopped by a Timekeeper pressing a button when the swimmer finishes the race. This may be used as the primary system at a meet or as the back-up system for AOE.
- Hand-held watches started by the Timekeeper at the starting signal from the Starter and stopped by the Timekeeper when the swimmer finishes the race. This would be the primary system at a meet without electronic timing but can be used as the back-up system for a meet using AOE or SAT.

Depending on the timing and/or judging equipment available at a meet, there are five (5) scenarios as to how official times and placings are to be determined.

Which variation is used depends on:

- Whether electronic timing equipment is available at the venue
- the Technical Officials or personnel who are used to run the meet
- the type of meet.

Regardless of the combination and type of timing/judging equipment used, the placings in the individual heat/final are determined by the **OFFICIAL TIMES** with equal times being awarded equal places except when Finish Judges are used. When Finish Judges are used, the official Finish Judges' placings will determine the result, even though there may be equal official times recorded by manual watches, or as a result of averaging. The Referee will determine placings where the Finish Judges' decision is not supported by the times recorded (see SW2.1.5 and SW2.1.6).

The relative order of finish for a multi-heat event is determined by comparing official times from all heats. All swimmers with equal times are awarded equal placings, except where placings have been determined by Finish Judges and times have been averaged. Swimmers with the same official manual times from different heats will be awarded the same placing. The exception is that swimmers with the same equal official manual times from the same heat shall be placed as per the Finish Judges' placings from the particular heat. The listing of official places will determine medalists and other placings in a "timed final" event, or which swimmers are eligible to proceed to a semi-final or final round, as applicable.

1. Full electronic timing (electronic primary and electronic back-up)

AOE is used as the "primary" system.

SAT is used as the back-up system (sometimes called the "secondary" timing). If a swimmer's time is not recorded by the AOE, or if there is an obvious malfunction of the AOE, then the times recorded by the SAT are used to determine the official time. It is preferable that three (3) Timekeepers per lane are used to operate the SAT buttons. The Meet Director/Referee should decide, at the start of the meet, in the case of only two (2) watch times being recorded, whether to use the average of the two (2) recorded times, or the slower time recorded as the official time (SW11.4.3).

The Referee or AOE Supervisor should compare the times recorded by the AOE for each race with the SAT times for any obvious discrepancies. Any discrepancy noted must be brought to the Referee's attention for a decision. If there is no AOE time, or if the Referee

believes the AOE has not operated correctly, they may insert a SAT time as the official time (SW13). Recorders should check the accuracy of this process and any obvious errors must be brought to the attention of the Referee.

Depending on the length of the race and the pool (50 metres or 25 metres), times may also be recorded during the race when the swimmers turn. Touch pads may also be installed at the turn end of a pool in addition to the finish end. All times recorded at the turns are known as "split times".

2. AOE (primary) and stopwatches (back-up)

If SAT equipment is not available, Timekeepers with digital stopwatches should be used to back-up the AOE. If a swimmer's time is not recorded by the AOE, or if there is an obvious malfunction of the AOE, the times recorded by the digital stopwatches will be used to determine the official time.

It is preferable that three (3) Timekeepers per lane are used. The Referee or Chief Recorder compares the times recorded by the AOE for each race with the manual times for any obvious discrepancies. Any discrepancy noted must be brought to the Referee's attention for a decision. If there is no AOE time or if the Referee believes the AOE has not operated correctly they may insert the official manual watch time as the official time (SW13).

3. Semi-Automatic Timing (primary)

SAT can be used by itself as the primary system. To conform to the Rules there should be three (3) Timekeepers pressing a SAT button per lane. If not, then consideration should also be given to using Finish Judges.

When SAT is used in this way, one (1) Timekeeper per lane should use a manual digital stopwatch to record the time in case of a malfunction by the SAT. In this case, the manual stopwatch time would become the official time. FINA publications endorse the case of a Timekeeper operating a manual stopwatch in addition to pressing a SAT button, and that, if there is only one (1) stopwatch, that time is the official time should the SAT fail.

The times recorded by the digital stopwatch for each race may be compared with the SAT times by the Referee or AOE Supervisor for any obvious discrepancies. Any discrepancy noted must be brought to the Referee's attention for a decision.

Recorders should check the accuracy of this process and any obvious errors must be brought to the attention of the Referee.

4. Hand-held Digital Stopwatches – Three (3) Timekeepers per Lane

With three Timekeepers per lane Finish Judges are **NOT** required. The official lane time is determined in accordance with SW11.3

5. Hand-held Digital Stopwatches – Less than Three (3) Timekeepers per Lane combined with Finish Judges

The Referee must also determine placings when the Finish Judges' decision and digital stopwatch times do not agree (SW2.1.5, SW2.1.6 and SW11.10). The times will be adjusted to agree with the placings approved by the Referee. These adjusted times are the official times. (See later section "Adjustment of times when Finish Judges are used").

The relative order of finish within a single heat (or final) where this method of time is used remains the same as determined by the Finish Judges, even though some official times may be equal before and after any averaging process to determine the official times.

As with the previous scenarios, the relative order of finish for a multi-heat event is established by comparing all official times for all swimmers.

This listing of official places will determine medalists and other placings in a “timed final” event or which swimmers are eligible to proceed to a semi-final or final round as applicable.

EQUAL PLACES

We reinforce the point that **ALL SWIMMERS** who have recorded the **SAME OFFICIAL TIME**, to 1/100th of a second, whether by electronic or manual timing (except where Finish Judges are used) shall be given equal placings.

The term “**equal placing**” should be used, not “**dead heat**”.

Note that in the event of equal placings in a final or timed final:

- The next place is not recorded for awards (e.g., if two (2) swimmers are placed equal second then no third place is awarded and the next place awarded is fourth).
- Each swimmer with equal placings receives equal points for that placing in a point score competition. The next one or more, respective places is/are deleted accordingly (GR12.1.1.4).

OFFICIAL RESULT FOR A DISQUALIFIED SWIMMER

If a swimmer is disqualified from an event, no time or place is recorded. If disqualified from a final, no medal, points or finalists ribbon are awarded (GR12.1.1.5).

ELECTRONIC TIMING FOR RECORDS

An official AOE time (as previously defined) is valid for all records including World, Commonwealth, Australian, NSW, etc. If the AOE fails on a lane, an OFFICIAL SAT time can be recognised for these records provided the equipment has been operated by three (3) Timekeepers on the particular lane and three (3) times have been recorded in the system, and on the printout of the result.

NOTE: For **NSW** records, times recorded by THREE (3) Timekeepers using DIGITAL watches are acceptable provided the other conditions for records have been met (see SW12).

ADJUSTMENT OF TIMES WHEN FINISH JUDGES ARE USED

If the times recorded do not agree with the Finish Judges’ placings, the Chief Recorder, on delegated authority from the Referee, will have the Recorders make an adjustment to the times. To make such an adjustment of times, *ALL* the individual watch times on all the lanes involved are *AVERAGED*, and the calculated time is credited to *ALL* the swimmers involved in the adjustment.

Where the calculation made is not to an even 1/100th of a second, the time is calculated to the nearest 1/100th of a second above (i.e. slower - see the times marked with * in example A below).

Example (A)

	Finish Judges' Placings	Timekeepers' Watch Times	Official Lane Times
1 st	Lane 4	1:01.63	1:01.67
2 nd	Lane 5	1:01.55	1:01.56
3 rd	Lane 3	1:01.79	1:01.79

As the time for Lane 5, placed 2nd by the Finish Judges, is faster than the time for Lane 4, placed 1st by the Finish Judges, adjustment is required on the time for Lane 4 and 5.

Total time of all watches on Lane 4	= 2:03.30	
Total time of all watches on Lane 5	= 2:03.11	
Total time of all watches on both Lanes	= 4:06.41	
Divide by total number of watches	= $\frac{4:06.41}{4}$	= 1:01.6025*

Time to nearest 1/100th of a second above = 1:01.61*

Lanes 4 and 5 are both credited with the time of 1:01.61 but Lane 4 would still be placed 1st on Finish Judges' placings.

The official result would be:

1 st - Lane 4	1:01.61A
2 nd - Lane 5	1:01.61B
3 rd - Lane 3	1:01.79

In the instance of a close finish to a race, a number of lane times may require adjustment. Where the times recorded by the Timekeepers do not agree with the Finish Judges' placings, ALL THE LANES involved would require adjustment.

Recorders should ensure that a lower placing order adjustment does not then require an adjustment of the recorded times of higher placings. The following example will illustrate the principle and procedures involved where such adjustments are necessary.

Example (B)

	Finish Judges' Placings	Timekeepers' Watch Times	Official Lane Times
1 st	Lane 5	59.44	59.44
2 nd	Lane 4	59.46	59.48
3 rd	Lane 3	59.43	59.47
4 th	Lane 6	59.40	59.46
5 th	Lane 2	59.53	59.58

As the time for Lane 6, placed 4th by the Finish Judges, is faster than the time for Lane 3, placed 3rd by the Finish Judges, adjustment is required on the times for Lanes 6 and 3.

Total time of all watches on Lane 6	=	118.86	
Total time of all watches on Lane 3	=	118.90	
Total time of all watches on both Lanes	=	237.76	
Divide by the total number of watches on both Lanes	=	$\frac{237.76}{4}$	= 59.44

Lanes 6 and 3 are *both* credited with this time.

As the adjusted time credited to Lanes 6 and 3 is now a faster time than lane 4, placed 2nd by the Finish Judges, adjustment is now required on the times for Lanes 6, 3 and 4.

Total time of all watches on Lanes 6 and 3	=	237.76 (see above)	
Total time of all watches on Lane 4	=	118.94	
Total time of all watches on Lanes 6, 3 and 4	=	356.70	
Divide by the total number of watches on all lanes	=	$\frac{356.70}{6}$	= 59.45

The official result would be:

1 st	Lane 5	0:59.44
2 nd	Lane 4	0:59.45A
3 rd	Lane 3	0:59.45B
4 th	Lane 6	0:59.45C
5 th	Lane 2	0:59.58

NOTE: Finish Judges' placings for the heat remain unchanged even though official times on lanes 4, 3 and 6 are equal after adjustment.

DETAILED PROCEDURES - SNSW MEETS

(Includes State, Metropolitan and Country Championships, Regional Meets, Speedo Sprint Finals, etc., and may also apply to many other meets run using electronic timing and Meet Manager software):

A. BEFORE THE MEET.

- 1) The Multiple Entry Cards or E-Files and Summary Sheets are received by the SNSW Office from clubs. These entry cards or E-Files are checked against summary sheets and qualifying times and entered into the Meet Manager database.
- 2) Meet Manager is used to seed the entries in accordance with SW3.4 or SW3.6, as appropriate to the competition and also to produce a seeded program.
- 3) UK Judge's Placings sheets (see Appendix 4) are printed for the Marshal and a single-sided program is printed for the Recording room at the meet.
- 4) The entry cards and club summary sheets will also be available at the meet for possible use in the Recording room. Recorders may need to check the accuracy of this pre-prepared information, by reference to the original entry cards, where a query arises as to the legitimacy of the inclusion or exclusion of a particular swimmer from an event or the correction of an error.

B. DAY OF MEET - RECORDING ROOM HEATS

- 1) The Marshal shall note on their UK Judge's Placings sheet, all swimmers who have reported to the Marshalling area by the closing time of the event. They must also note swimmers who have indicated they will not swim and all swimmers who have not reported.

- 2) Where the Referee decides on an amalgamation or re-seed, the Marshal will advise the Chief Recorder and hand over the Marshal's marked-up sheet. The Chief Recorder will instruct the Computer Operator of the details of the Referee's decision.
- 3) The Chief Recorder will supervise such an amalgamation or re-seeding and inform the Marshal of the revised heat and lane numbers of all the swimmers in the event by producing amended event/heat sheets. The Referee, Announcer, Computer Operators, Check Starter and AOE Supervisor need to be given the information, of the revised number of heats, before the event starts. The Starter should also be informed, especially at meets where the Starter is announcing the event and heat details to the swimmers.
- 4) The Marshal will inform the swimmers of the changes (for both amalgamations and re-seeds) and the Check Starter will ensure all swimmers are in the correct heat and the correct lanes.

***Clarification:** An "amalgamation" is where vacant lanes are filled by swimmers from another heat/s of the same event and will usually result in minimal change to the original heat/lane allocation. A "re-seed" is where (usually due to a large number of withdrawals) the whole event is re-seeded and will probably result in many changes to the original heat/lane allocation.

FINALS (and Semi-Finals)

- 1) A final shall be re-seeded if the non-starting finalists are from other than the two outside lanes (lanes 0 or 9 in a 10 lane pool, 1 or 8 in an 8 lane pool, etc.). Withdrawals from these two outside lanes would be replaced by reserves without re-seeding the final. It must be clear that a reserve must not be inserted into a vacant lane in the middle of the pool.

C. PROCEDURES FOR RECORDING OF RESULTS

(a) Heats

- 1) After the conclusion of each heat, the AOE and SAT slips will be passed to the Chief Recorder. **NOTE:** The Referee may delegate all or some of the process of the approval of times to the AOE Supervisor (or AOE Operator if there is no Supervisor appointed).
- 2) The Referee or AOE Supervisor/Operator will normally compare the AOE and SAT results and times for unacceptable variations (a SAT time should normally be no more than 0.30 seconds slower or faster than an AOE time). Unacceptable variations may indicate equipment malfunction and are usually brought to the attention of the Referee for their determination of the result. This determination should be noted and signed by the Referee.
- 3) Where the AOE has malfunctioned, SAT times will be inserted in the ranking of AOE times and signed by the Referee. The AOE Supervisor will normally advise the Computer Operators of the necessity of this change, but it is the duty of the Chief Recorder to check that this has been done.
- 4) The Referee will notify disqualifications to the Chief Recorder (the Referee may also advise the AOE Supervisor/Operator allowing the disqualification to appear on the AOE slip, and on the scoreboard in the heat and event summaries. In this case the disqualification should be transferred to the computer with the heat result. When using certain electronic systems the AOE Supervisor/Operator may be required to note the disqualification on the AOE slip by circling the lane number and

noting DQ with a signature (depending on the location of various personnel this may also be advised to the Computer Operator at this time).

- 5) The Chief Recorder is responsible for ensuring that the computer records accurately show a DQ in place of times for any swimmer advised as disqualified by the Referee.
- 6) Recorders should also check that there are no unacceptable variations between the AOE and SAT, which have not previously been brought to the attention of the Referee. The Chief Recorder should bring any such variation detected by the Recorders to the attention of the Referee. In particular SAT times which are “*faster*” than the AOE times must immediately be brought to the Referee’s attention as in some cases this could indicate a failure of the primary timing system.
- 7) The placings and times on the official result slip, usually the AOE slip, should be checked against the computer printout to ensure there have been no data entry errors and that any Referee’s decision has been implemented.
- 8) Swimmers with equal official times for the last place in a final or semi-final (i.e., to determine the last place and the first reserve) shall *swim-off* to determine advancement, unless the swimmers involved agree to a *draw*. The Chief Recorder must advise the Referee as soon as possible after these equal placings are determined so that the Referee can take the appropriate action to arrange the *swim-off* or *draw* under SW3.4.4.3.
- 9) Where the swimmers decide on a *swim-off*, the Referee will advise the Chief Recorder of the lanes allocated to each swimmer, and the point in the program at which the *swim-off* will take place. The Chief Recorder will advise the Computer Operator, Marshal, Check Starters, AOE Supervisor, Starter and Announcer.
- 10) If the result is determined by a *draw*, the Referee will inform the Chief Recorder of the result of the draw. The Chief Recorder will ensure that the computer records and finalists’ sheets are noted accordingly.
- 11) After the heat results have been checked (and, if necessary, adjusted for the outcome of *swim-offs* or *draws*), a list of finalists and reserves will be prepared in accordance with the provisions of SW3.10 and a copy issued for public display. The time of posting of the results shall be shown on the copy on public display. Recorders must note the time of posting on all results posted on notice boards.

The time is required so swimmers can protest a result within the required time of thirty (30) minutes of the time of advice to the swimmers (this advice is given by the publication of the result disclosing such disqualification or announcement), and can also withdraw from finals up to thirty (30) minutes after the posting of the result.

- 12) The Chief Recorder advises the Computer Operators of any withdrawals received within the allowed time.
- 13) The allocation of lanes in a final, where two (2) or more swimmers have identical times is determined by a draw conducted by Recorders (in practice this will normally be determined by the Meet Manager Program, which will allocate the lanes).
- 14) A complete set of finalists and heat results is presented to the Meet Director for the printing of the Finals Program.

(b) Finals and Semi-Finals

The same procedures for recording results, as detailed above for heats, are used for finals and semi-finals.

At the conclusion of the meet the Chief Recorder is responsible for the production, by the Computer Operator, of a complete set of results for distribution and later publication. This list is given to the Meet Director and the Association.

The Rules of Swimming applicable to Qualifiers for Finals are described in SW3.10.

The Rules of Swimming applicable to Withdrawal Procedure are described in GR9.1.2.

DETAILED PROCEDURES – MANUAL RECORDING BEFORE THE MEET

- 1) The Entry Cards and Summary Sheet are received by the Meet Committee from the participating clubs. These are checked against Summary Sheets and sorted in event order from fastest to slowest.
- 2) Where any qualifying standards have been established, entries are checked against these standards and any entry not meeting the standards is put aside for discussion with and return to the participating club.
- 3) The Meet Committee must decide if the published program will be a seeded program or simply a list of entrants for each event.
- 4) If a seeded program is to be produced, the cards are sorted into events and lanes allocated according to SW3.4. The event and lane numbers are entered on the cards and the cards are sorted into heats and events. A program is then produced and the entry cards are made available in the Recording room on the day of the meet.
- 5) If the Meet Committee has decided on an un-seeded program, the entrants for each event are listed under the event in the program from fastest to slowest entry time. The entry cards are bundled in the same order and forwarded to the Recording room at the meet with the club Summary Sheets.

DAY OF MEET RECORDING ROOM AND OTHER ACTION

In this day and age of the computer there are very few meets conducted without some type of computer assistance either by way of computer-generated results using Meet Manager or a basic computer spreadsheet. Timing can also be fully manual or one of the many combinations described earlier in these notes. It is, therefore, practically impossible to produce a set of notes to cover each possible combination. The principles of Recording, however, are the same. The differences are simply how the results are conveyed to the Recording room and then, how the results are compiled and published. The more manual systems that are employed the more detailed the various checking processes are required to minimise errors.

(a) HEATS

- 1) Where a seeded program has been used the procedures will be the same as described for SNSW meets with manual preparation of lists, etc., by Recorders where a computer production method is not available.
- 2) Where an unseeded program has been issued, the Marshals will mark withdrawals and no-shows on the program and, at the nominated time, forward the sheet to the Recorders to seed the event into heats in accordance with SW3. The heat and lane numbers will be marked on the cards.
- 3) The seeded cards will be forwarded to the Check Starters who will inform swimmers of their heat and lane. Where digital watches are being used the seeded cards will be distributed to Timekeepers by the Check Starter. The Chief Recorder will assign someone, usually a Runner, to collect these cards, together with any Judges' Result Slip, from the Timekeepers after the race.
- 4) The Chief Recorder will ensure the Referee, Starter, Announcer (and AOE Supervisor/Operator if applicable) are informed of the number of heats.
- 5) The procedure for determining the official times will depend on the combination of timing devices used:
 - a) Where AOE or SAT times are in use the official times will be recorded on the AOE or SAT slips (these days a number of clubs use semi-automatic "Dolphin" timing which produces electronic files and not slips). Where there has been an electronic timing failure, a manual time from digital watches may be inserted by the Referee.
 - b) Where the meet is run entirely on manual times with three (3) Timekeepers per lane, times will be written on the cards, or time slips, by the Timekeepers. The cards/slips will be collected after each heat and handed to the Chief Recorder. The Recorders will determine the official time and write this time on the card in the appropriate place. The Recorders will then determine placings and write this placing on each card.
 - c) Where the meet is run entirely on manual times, but there are fewer than three (3) Timekeepers per lane Finish Judges will be used. The procedure as in b) above will again be followed but, in addition, the Finish Judges' Result Slip will also be collected and handed to the Chief Recorder with the cards or time slips. The Recorders will then compare the Finish Judges' placings with the official times and if there are any discrepancies make any necessary adjustments as per the section titled "Adjustment of Times when Finish Judges are used" printed earlier in this document.
- 6) Where the Referee has disqualified swimmers, this will be noted on the AOE slip, the time slip, the entry card or the Judges' Result Slip as appropriate and the disqualification will be transferred to the result in the same manner as for a SNSW meet.
- 7) After each heat of an event has been checked the entry cards or time slips will be sorted from fastest to slowest time in descending order followed by any disqualified swimmers and then by the entry cards of any swimmers who withdrew or did not swim.
- 8) From this stack of entry cards the finalists and reserves can be drawn up and listed on finalists' sheets for both announcements and distribution. Equal times and *swim-offs* will have been handled in exactly the same manner as for a SNSW-run meet.
- 9) Timed finals are compiled in the order of the official times, from fastest to slowest.

FINALS AND RESULTS

At the conclusion of the meet the Chief Recorder is responsible for the production of a complete set of results by the Computer Operator for distribution and later publication. This list is given to the Meet Director and the Company (for non-SNSW run meets, results are uploaded to the National Results Database for SNSW to approve).

The determination of results in finals, the compilation of results and the handing to the Meet Committee after the meet are exactly the same as for a SNSW meet. Where a computer does not produce these lists, Recorders must manually prepare them in a manner and format agreed before the commencement of the meet.

The Rules of Swimming applicable to Relay Events are described in GR9.1 and SW10.

QUERIES

If a swimmer, or a person on their behalf, queries the omission or the placement of a swimmer in the program this matter is to be checked by the Chief Recorder, by referring to the original entry cards, E-Files and summary sheets submitted by the swimmer's club. If the omission or placement has been an oversight or an error at the time of preparation of the program, then the correction should be made, and the swimmer inserted in the correct place in the program. This will probably require the re-seeding of the particular event with appropriate preparation of new event sheets for distribution and notification of appropriate Officials as described earlier in these notes.

Likewise, there may be a query as to the accuracy of a result following the official posting of results. The Chief Recorder should check this as with the previous example, by referring to the official result slips or cards as appropriate. The findings should be discussed with the Referee and any error or omission detected should be corrected and, if necessary, a new result should be published and announced. Where necessary, medals will need to be recalled and re-presented. At no time should anyone outside the Recording room and the Referee be allowed access to any of the result documentation or infraction reports as applicable.

If a matter raised as a query cannot be resolved by the Chief Recorder and/or the Referee to the satisfaction of the enquirer, then that person has the option of lodging a formal protest in accordance with GR23. To conform to this rule all protests must be in writing and must be submitted to the Referee for decision and action.

ERRORS IN RESULTS

If an error is discovered after the results of an event are officially announced the Chief Recorder must notify the Referee immediately the error is recognised.

Such matters should be handled expediently with the minimum of involvement of those outside the Officials directly concerned with the incident.

If the error is discovered after the conclusion of the meet, the Chief Recorder should notify the Promoting Body. This Body shall take appropriate action under the Rules.

POINTS SCORES

At NSW Championship meets points are awarded in order of placing, the number depending on the number of lanes contested in the finals, or if timed finals, in the heats. GR12.1.1.3 lists the current points for each place. For some NSW Championship Pointscore Competitions, visiting swimmers are required to be ignored when allocating points.

Where a swimmer or team is *disqualified* or does not achieve the *qualifying time* points are *not* awarded.

Where two (2) or more individual swimmers or relay teams are accorded the same placing, the appropriate points for that placing are allocated to all those swimmers/relay teams with the same placing and the next one (1) or more respective numerical placings are deleted accordingly.

Example

Place	Points	Place	Points
1st	35	9th	8
2nd) Two equal	30	10th)	5
2nd)	30	10th) Three equal	5
3rd deleted	No points	10th)	5
4th	23		
5th	20		
6th	17		
7th) Two equal	14		
7th)	14		
8th deleted	No points		

CLUB CHAMPIONSHIP POINTSCORE COMPETITIONS

Reference should be made to GR12 for the current lists of Championship Pointscore Awards.

Recorders Appendix 1

INFORMATION FOR RECORDERS

ALLOCATION OF AWARDS IN A FINAL

1. EQUAL TIMES from ELECTRONIC or MANUAL TIMING

In the event of equal times, ALL swimmers who have the same time to 1/100th of a second shall be accorded the same placing. Where there are not three (3) Timekeepers per lane and Finish Judges and manual timing is used, and the times do not agree with the placings then adjustment of times is made, and placings marked A, B, etc. to indicate the order of finish. In this case the Finish Judges' placings, and not the times, will determine medals (the swimmer with time A may receive a gold medal, with the swimmer with time B receiving silver).

Equal medals are awarded to all swimmers with equal placings and the next place(s) in order is/are not recorded for awards.

Example 1

1st Place		Gold Medal
2nd Place	Two equal	Two Silver Medals
3rd Place	No 3rd Placing awarded	

Example 2

1st Place	Two equal	Two Gold Medals
2nd Place		No Silver Medal awarded
3rd Place	Two equal	Two Bronze Medals

2. VISITORS/VISITING SWIMMERS - MEDAL ALLOCATION at SNSW CHAMPIONSHIPS

Visitors are permitted to enter SNSW Open Championships, and there are no restrictions on the number of visitors who can compete in a final. "Visitor medals" are not awarded at these Championships. The medals awarded as per the result of the final are independent of the medallists being a NSW swimmer or a visitor.

Visitors are also permitted to enter SNSW Age Championships but no more than two (2) visitors are permitted to contest the final, unless there are insufficient NSW swimmers to fill all the lanes (refer GR5.2).

Visitors are permitted to enter Metropolitan and Country Championships with permission of the Board of Directors.

Visitor medals are awarded at these meets. The first three (3) placegetters and the first three (3) NSW swimmers, if they are not among the first three (3) placegetters, receive medals. A visitor who is *not* placed first, second or third will *not* receive a medal.

Example 1

1st Place	Visitor	Gold (Visitor Medal)
2nd Place	NSW (1 st Place NSW)	Gold (NSW Medal)
3rd Place	Visitor	Bronze (Visitor Medal)
4th Place	NSW (2 nd Place NSW)	Silver (NSW Medal)
5th Place	NSW (3 rd Place NSW)	Bronze (NSW Medal)

Example 2

1st Place	NSW	Gold (NSW Medal)
Equal	Visitor	Gold (Visitor Medal)
2nd Place	No 2 nd placing	
3rd Place	Visitor	Bronze (Visitor Medal)
4th Place	NSW (2 nd Place NSW)	Silver (NSW Medal)
5th Place	NSW (3 rd Place NSW)	Bronze (NSW Medal)

Example 3

1st Place	NSW	Gold (NSW Medal)
Equal	NSW	Gold (NSW Medal)
2nd Place	No 2 nd placing	
3rd Place	Visitor	Bronze (Visitor Medal)
4th Place	Visitor	No Medal awarded
5th Place	NSW (3 rd Place NSW)	Bronze (NSW Medal)

Recorders Appendix 2

DETERMINATION OF OFFICIAL TIMES WHEN AUTOMATIC TIMING IS USED

As discussed in the Recorder's notes, the procedures to be applied depend on the combinations of judging/timing equipment used or on the particular circumstances of a meet at which automatic equipment is used, and there are several possible combinations of equipment or Officials, which can provide primary and backup systems.

This Appendix reviews the determination of official times with various combinations of equipment or Officials providing primary and backup information and in some of the various potential circumstances that can occur during a meet, and shows how the Rules are applied in practice using the result slips obtained from AOE equipment.

References are made to SNSW General Rules (GR), and Swimming Rules (SW).

The examples of AOE and SAT print outs shown in this Appendix, show representations of the print-out ("AOE slip") from an OMEGA OSM 6 machine. In each case the print-out shown is the "Result" print-out (obtained by keying in 'PRINT RESULT') not the print-out obtained as each lane prints at the end of the race.

AOE used as primary

If AOE is used as the primary system, irrespective of the backup being used, the times recorded by the AOE must be used to determine the time applicable to each lane and all places, unless the AOE fails to accurately record the time of one (1) or more swimmers. In these circumstances, the official time (and finish order) for a swimmer not having an AOE time is the time obtained from the backup system (SAT or digital watches) (refer SW13.3.2 and SW13.4).

The times recorded by the AOE must always be compared with those recorded by the SAT for each race, checking for discrepancies between the two times which may indicate a malfunction of the AOE. This action can be done by the Referee, or by the AOE Supervisor (or Operator, if one is not appointed), using the Referee's delegated authority. In any case, the Chief Recorder should also have the AOE and backup times (whether SAT or digital watches) compared. Any suspected discrepancies noted by the AOE Supervisor or the Recorders must be drawn to the Referee's attention.

No hard and fast rule can be given for the size of the discrepancy between AOE and SAT times which definitely indicates a malfunction of the AOE, since SAT times are slightly slower than AOE times and manual stopwatch times are slightly faster than AOE times. Generally however, a discrepancy of greater than 0.30 of a second faster or slower than the AOE time should be investigated to see if there is evidence of a failure of the AOE to record the correct time. Recorders should be instructed to draw any not previously recognised discrepancy of this size to the Referee's attention.

If AOE fails and SAT is operating as backup

If the AOE (primary system) fails to record a time or place for one or more lanes, the official time for each of those lanes will be the SAT time (SW.13.3.2). A SAT time cannot be substituted for a time of a lane for which the AOE has recorded a time (SW13.1), unless there is a clear indication that there has been a failure of the AOE for that lane or that the swimmer has not activated the equipment correctly.

If the Referee has evidence that there has been a failure of the AOE to correctly record the time for one or more lanes, then the official time obtained from the backup (SAT or digital watches) is used in place of the incorrect AOE time.

Example A

```

OMEGA SWIM-O-MATIC
OSM 6
ARMING      15 SEC
:
LAPS :      02
PROG       AUTO
:
READY FOR NEW RACE

EVENT      038 HEAT : 05

P          09.07:11.45
L  L
A  A  L      10/06/06
C  N  A
E  E  P      RESULT

1  4  2  1:38.01
2  5  2  1:38.07
3  3  2  1:41.38
4  6  2  1:43.89
5  1  2  1:43.95
6  8  2  1:47.86
7  2  2  1:48.32

```

```

OMEGA SWIM-O-MATIC
OSM 6
ARMING      : 15 SEC
:
LAPS :       01
PROG       : MANUAL
:
READY FOR NEW RACE

EVENT      : 038 HEAT : 05

P          09.07:11.45
L  L
A  A  L      10/06/06
C  N  A
E  E  P      RESULT

1  4  1  1:38.11
2  5  1  1:38.16
3  3  1  1:41.49
4  7  1  1:43.38
5  6  1  1:43.98
6  1  1  1:44.06
7  8  1  1:47.99
8  2  1  1:48.47

```

The AOE has failed to record a time for Lane 7. The SAT time of 1:43.38 would be the official time

Example B

OMEGA SWIM-O-MATIC			
OSM 6			
ARMING		15 SEC	
:			
LAPS :		02	
PROG :		AUTO	
EVENT		038 HEAT : 06	
:			
READY FOR NEW RACE			
EVENT		038 HEAT : 06	
P		09.09:57.33	
L	L		
A	A	L	10/06/96
C	N	A	
E	E	P	RESULT
1	4	2	1:38.01
2	5	2	1:38.07
3	3	2	1:41.38
4	6	2	1:43.65
5	7	2	1:43.90
6	1	2	1:43.95
7	8	2	1:47.86
8	2	2	1:48.32

OMEGA SWIM-O-MATIC			
OSM 6			
ARMING	:	15 SEC	
LAPS :		01	
PROG :		MANUAL	
EVENT	:	038 HEAT : 06	
READY FOR NEW RACE			
EVENT	:	038 HEAT : 06	
P		09.09:57.33	
L	L		
A	A	L	10/06/96
C	N	A	
E	E	P	RESULT
1	4	1	1:38.11
2	5	1	1:38.16
3	3	1	1:41.49
4	7	1	1:43.38
5	6	1	1:43.98
6	1	1	1:44.06
7	8	1	1:47.99
8	2	1	1:48.47

The SAT time for Lane 7 is 0.52 sec faster than the AOE and the AOE operator reports that the

time came up well after the swimmer had finished. SAT time 1:43.38 is used as the official time.

The SAT time for Lane 6 is 0.33 sec slower than the AOE. Timekeepers reported they thought the swimmer had missed with their leading arm and touched with the other, and they had timed the second. The AOE time of 1:43.65 remains as the official time.

Example A illustrates a case where the AOE fails to record a time for a lane and a SAT time becomes the official time for that lane.

Example B illustrates a case where there is evidence that the AOE appears to have failed to record the correct time for two lanes and, on examination, a SAT time is used as the official time for one of these lanes but not for the other.

If AOE fails and digital watches are used as backup

Digital watches, reading to 1/100th of a second, may be used as a backup to the AOE. In these circumstances, the same principles apply as for SAT backup.

If the AOE (primary system) fails to record a time or place for one or more lanes in a race, the official time for each of those lanes will be the official time for that lane as determined from the three (3) digital watches in accordance with SW11.3. The Meet Director/Referee should decide, at the start of the meet, in the case of only two (2) watch times being recorded, whether to use the average of the two (2) recorded times, or the slower time recorded as the official time (SW11.4.3).

Digital watch times would be recognised for a NSW record provided separate Officials operate each of the three (3) watches, but not for World, Commonwealth or Australian records (SW11.4 and SW12.1.9.4).

SAT or digital watches as primary

SAT equipment, or digital watches reading to 1/100th of a second, may be used to establish official times if AOE is not used. In such cases, unless there are three (3) Timekeepers available for each lane, Finish Judges need to be used to determine placings.

No secondary or backup timing system need be used, except that reserve Timekeepers should be appointed where digital watches are being used. If no AOE or SAT is being used, and Finish Judges are used, the Finish Judges' and Timekeepers' decisions determine the result, subject to the Referee's decision or delegation. If necessary, actual times are adjusted to fit the official placings. The adjustment procedure is detailed in the section "Adjustment of times when Finish Judges are used" in the Recorder's notes.

Equal times

Times recorded as the same to 1/100th of a second, whether measured by AOE, SAT, or digital watches, are "equal times" (See section "Equal Places" in the Recorder's notes for procedures regarding places for equal times).

The AOE Supervisor should draw the Referee's attention to equal times in the same heat by marking the printout and the Referee should also check for equal times. The AOE printout should be marked to indicate the equal times to the Chief Recorder, but the Recorders should still check in case the AOE Supervisor has missed any equal times. When the AOE is connected directly into the computer that is recording results (in the Meet Manager program), the equal times are recorded on results. However, the Referee must still check and notate the AOE printout as part of the declaration of the result of the race (SW2.1.8). This is used by the Recorders to check the computer compilations.

Example C below shows equal times recorded on the AOE and SAT and the way in which they would be marked by the AOE Supervisor. If this is not done then the Referee should mark equal times.

Note: The AOE and SAT show the same place for lanes that have equal times and do not show the next place. In the below AOE example, lanes 4 and 5 are both shown as place 1 (1 against Lane 4 and no number against Lane 5) and the next swimmer, lane 3, is shown as place 3. Also, place 5 is shown for Lane 6 and no number for Lane 1 and the next swimmer, lane 8, is shown as place 7.

Example C

```

OMEGA SWIM-O-MATIC
OSM 6
ARMING 15 SEC
:
LAPS : 02
PROG AUTO
:
EVENT 038 HEAT : 03
:
READY FOR NEW RACE

EVENT 038 HEAT : 03

P 09.34:27.87
L L
A A L 10/06/96
C N A
E E P RESULT

1 4 2 1:38.01 ] EQ
5 2 1:38.01 ]
3 3 2 1:41.38
4 7 2 1:43.23
5 6 2 1:43.95 ] EQ
1 2 1:43.95 ]
7 8 2 1:47.86
8 2 2 1:48.02
    
```

```

OMEGA SWIM-O-MATIC
OSM 6
ARMING 15 SEC
:
LAPS : 01
PROG MANUAL
:
EVENT 038 HEAT : 03
:
READY FOR NEW RACE

EVENT 038 HEAT : 03
:

P 09.34:27.87
L L
A A L 10/06/96
C N A
E E P RESULT

1 4 1 1:38.11
2 5 1 1:38.16
3 3 1 1:41.49
4 7 1 1:43.38
5 6 1 1:43.98
6 1 1 1:44.06
7 8 1 1:48.14 ] EQ
2 1 1:48.14 ]
    
```

DETERMINATION OF OFFICIAL PLACINGS

The relative finish order of swimmers in a race and in an event (i.e., the official places) is determined by the comparison of official times (SW13.4). The action needed to establish placings in various circumstances is discussed in the following sections.

AOE fails to record a time for one or more lanes

When using AOE and SAT, the Referee must clearly communicate any decision they make on placings to the Chief Recorder on the AOE printout. An arrow is used with the lane number to indicate the official place of the lane in question. Example D illustrates this. It is not enough for the Referee to write on the printout, for example, "L6 manual" or "L6 SAT" without the indication of the place.

In Example D, the Lane 6 SAT time is inserted between Lanes 1 and 8 (i.e., in sixth place) because that is where the time fits, even though the SAT placed Lane 6 fifth.

Example D

<pre> OMEGA SWIM-O-MATIC OSM 6 ARMING 15 SEC : LAPS : 02 PROG AUTO : EVENT 038 HEAT : 09 : READY FOR NEW RACE EVENT 038 HEAT : 09 P 09.14:17.40 L L A A L 10/06/96 C N A E E P RESULT 1 4 2 1:38.01 2 5 2 1:38.07 3 3 2 1:41.38 4 7 2 1:43.23 5 1 2 1:43.95 6 8 2 1:47.86 7 2 2 1:48.32 </pre> <p>L6 SAT</p>	<p>Referee's notation</p>	<pre> OMEGA SWIM-O-MATIC OSM 6 ARMING 15 SEC : LAPS : 01 PROG MANUAL : EVENT 038 HEAT : 09 : READY FOR NEW RACE EVENT 038 HEAT : 09 : P 09.14:17.40 L L A A L 10/06/96 C N A E E P RESULT 1 4 1 1:38.11 2 5 1 1:38.16 3 3 1 1:41.49 4 7 1 1:43.38 5 6 1 1:43.98 6 1 1 1:44.06 7 8 1 1:47.99 8 2 1 1:48.47 </pre>
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The same procedure applies when using AOE and digital watches. The Recorders will compile the official lane times and make the initial comparison of these manual times with the AOE slip. The placing for any lane for which there is no AOE time would be the place in which the official manual time for that lane fits. Where Finish Judges are used, the official lane time used would be that arrived at after any adjustment necessary so that times agree with the Finish Judges' placings.

Recorders Appendix 3

HANDICAP EVENTS

The principles and procedures applicable to handicap events are given in the SNSW handicapping notes available on the SNSW website under "Officials/Volunteers – Resources – On Pool Deck". Handicap races are not swum at SNSW meets, but a Recorder may encounter handicap events as relay or individual events at Area or club meets.

The Recorders have particular responsibilities in the application of handicapping principles and procedures and it is important that all Recorders understand the Rules and their application in a handicap events competition.

HANDICAPPING

For the purpose of establishing a standard method for handicapping, clubs are required to handicap their members on the basis of the swimmers' best time achieved during the current season and recorded by the club, for the nominated stroke and distance.

In interclub handicap events the Handicapper or the Referee for the event shall have the power to alter any swimmer's handicap after each qualifying round based on the time achieved by the swimmer in the previous round.

The Referee shall disqualify a swimmer from an event if they break their handicap time by more than:

2 seconds	up to 50 metres
4 seconds	up to 100 metres
6 seconds	up to 200 metres
10 seconds	up to 400 metres
20 seconds	up to 800 metres
40 seconds	up to 1500 metres

Any person who is proved to have wilfully given incorrect information on a handicap entry form, or to have withheld information which is required by the Rules to be disclosed, shall be deemed to be guilty of misbehaviour or unfair practice in connection with swimming, and the entrant shall be disqualified from the event. Such entrant so disqualified shall be liable to suspension or disqualification in accordance with the Constitution.

Normally the Promoting Body would advance the heat winners, and whatever number of major placegetters they decide, to the succeeding rounds. Those entitled to swim in later rounds should be stated in the program or notified by public announcement.

The basic theory and the principles of handicap swimming are generally not known in the detail required by many club Officials attempting to become Recorders, mainly because the majority of clubs now have adopted graded or scratch systems of competition.

The following is an explanation of the handicap system of swimming and a clarification of the misconceptions, which are evident from questions asked during training presentations to Recorders.

A DEFINITIONS - (Authority - the New Shorter Oxford English Dictionary)

- (1) HANDICAP RACE - any race or competition in which the chances of an inferior swimmer are made more equal by some means, as by giving a head start, etc.
- (2) SCRATCH - a line or mark from which swimmers race, especially those not receiving a handicap start.
- (3) SCRATCH MAN/SCRATCH - Swimmer in handicap receiving no start.
- (4) LIMIT MAN/LIMIT - Swimmer who receives the longest start allowed in a handicap.

B HANDICAPPING PRINCIPLES

The following guidelines are in the Club Manual and are provided to ensure uniform handicapping and conduct of handicap events.

In handicap swimming, the swimmers are "equalised" by commencing their start at different time intervals based on entry times submitted for a determined style and distance.

It would be anticipated that, if each swimmer swam to their submitted time (or swam to their "handicap"), all swimmers in that race would arrive at the finishing line at the same time.

In practice the SLOWEST swimmer (also called the Limit Swimmer), based on their submitted time (or handicap), starts FIRST at the command "GO". The other swimmers leave the starting platform when their STARTING NUMBER is called, until the last swimmer (also called the Scratch Swimmer), who has the FASTEST submitted time (or handicap), has their starting number called and they commence the race.

The actual STARTING NUMBER for each swimmer is calculated as the difference between the slowest (limit) swimmer's handicap (or submitted time) and the handicap times (or submitted times) of each of the other swimmers in that particular heat.

For clarification let us consider the following example for a 50 metre event:

Lane No	Name	Handicap (Submitted Time)	Starting Number
1	A. Green	0:40.00. (Limit Swimmer)	"Go" (Slowest Time)
2	B. Blue	0:39.00	"1"
3	C. Charley	0:38.00	"2"
4	D. Dark	0:36.00	"4"
5	E. Black	0:34.00	"6"
6	F. Brown	0:33.00	"7"
7	G. Bloggs	0:31.00	"9"
8	H. Jones	0:30.00 (Scratch Swimmer)	"10" (Fastest Time)

C HANDICAPPING APPLICATION

In handicap events, *all* the Timekeepers start their watches on the command "GO" (or at the pre-arranged position of the Starter's handicap signalling device) and *each* stop their watch when any part of the body of the swimmer they are timing makes contact with the finishing wall. The total elapsed time on the Timekeeper's watch is recorded by the Timekeepers.

The Recorders, on receipt of these times, subtract the swimmer's *Starting Number* from the time recorded by the Timekeepers and this *Net Time* then becomes that swimmer's *Handicap Time* for recording purposes (e.g., from the example 50 metre event above)

Lane No	Name	Submitted time	Handicap Starting No	TK's Watch Reading	NET Handicap Time
8.	H. Jones	0:30.00	10	0:37.00	0:27.00
5.	E. Black	0:34.00	6	0:41.00	0:35.00

D DISQUALIFICATION IN HANDICAP RACES

Because the basis of success in handicap swimming is swimmer improvement, there needs to be some protection against the submission of slower times than the swimmer can achieve. Limits are set, defined on a time basis, by which a swimmer is allowed to improve (or "break") their submitted time (or handicap) and still not risk disqualification for breaking their handicap. A swimmer shall be disqualified if they "break" their handicap *by more than* the time provided for the distance of the race.

The Referee has the power to disqualify a swimmer from an event for "breaking" their handicap. However, this authority is normally delegated to the Chief Recorder, both for convenience of operation, and to alleviate continual disruption of the meet where each "break" of handicap is referred to the Referee for disqualification.

For example, if a swimmer's handicap (submitted time) is 0:35.00 seconds for 50 metres, that swimmer can record the *NET* time of 0:33.00 seconds without disqualification (ie. *not more* than 2 seconds). Note that swimmer, H. Jones, in the example above, has broken their handicap (submitted time) by 3 seconds in a 50 metre event and is therefore liable to disqualification. **NOTE:** - *Up to 50 metres* includes all intermediate distances (i.e., 25 metres and 50 metres).

Where evidence of wilfully giving incorrect information on a handicap entry form or card is obtained, the Chief Recorder would initially refer this to the Referee for action.

E QUALIFYING ROUNDS OF HANDICAP RACES

When qualifying rounds or heats and finals are conducted in handicap events, the Handicapper (or in their absence, the Referee) shall have the power to alter any swimmer's handicap for *each* qualifying round of heats (or from heats to finals).

NOTE: By using the terminology detailed above, all Officials at club level, and those seeking accreditation through attending presentations and practical assessments in the various Technical Official positions, should have a firm understanding of what is meant or required by that particular word or term.

Recorders Appendix 4

UK JUDGE'S PLACINGS SHEETS

Event 1 Girls 16 Year Olds 200 LC Metre Butterfly Prelims

Judge's Placings

Heat 1	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th

Lane	Comp#		Team	Place	Time
0	430	ECCLES, CAITLIN 16	WYN		
1					
2	1420	COLQUHOUN, BETHANY 16	WODN		
3	808	ESSEX, EMMA 16	WWORX		
4	634	HANN, KAELYN 16	BROTH		
5	1160	ROGERS, DAHLAS 16	CMBT		
6	184	SCHULTZ, ADELE 16	BUN		
7	1150	BERNARD, ALANA 16	CMBT		
8	933	GOLIGHTLY, REBECCA 16	GARDE		
9					

Event 1 Girls 16 Year Olds 200 LC Metre Butterfly Prelims


Judge's Placings

Heat 2	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th

Lane	Comp#		Team	Place	Time
0	14	FIELD, (V), SHANNON 16	NZL		
1	348	ROBERTS, NATALIE 16	MARB		
2	1313	REDMAN, SAMANTHA 16	HUNT		
3	1363	MERLINO, ALICIA 16	PICT		
4	646	SHERIDAN, MIKKAYLA 16	CHAND		
5	247	NIERE, EMMA 16	FAS		
6					
7	580	HERITAGE, MELANIE 16	PBAP		
8	1330	BORROW, CARISSA 16	NOVO		
9	562	LINN, SOPHIE 16	NWD		

Recorders Appendix 5

SNSW RULE INFRACTION CARD

 swimming new south wales						
INFRACTION REPORT						
Event No		Heat		Men		Women
	m.	Free	Back	Breast	Fly	Medley
Announcement Time						
LANE		INFRACTION				
0						
1						
2						
3						
4						
5						
6						
7						
8						
9						
STARTER						
INSPECTOR OF TURNS						
JUDGE OF STROKES						
REFEREE						