



Timekeepers Manual

Australian Flyball Association Inc.

April 2012

Table of Contents

Timekeepers Manual	2
Timekeepers Responsibilities (under review).....	2
Timesheets	3
Seed Times and Breakouts.....	4
How to complete a Timesheet.....	5
Entering Cards	6
Signature System Console Operation	8
Basic	8
Handicaps.....	9
Race Number.....	9
Battery Status.....	10
False Starts	10
Recalling missed times	10
Recall a past split time	10
Recall a past heat time	10
Appendix A - Signature System Console Flowchart (abbreviated)	12
Appendix B - Signature System Console Set-up Flowchart.....	13
Appendix C - The Signature Electronic Timing System - Unpacking and assembly instructions	14
Appendix D - Testing the Signature System Set-up	18
Appendix E - Dismantling the System	18
Timekeepers – Questionnaire	19

Timekeepers Manual

This manual is to be read in conjunction with the current Rules and Policies of the Australian Flyball Association Inc.

Timekeepers are required to operate the timing system console and legibly record heat results, heat fouls and penalties on AFA Time Sheet (AFA Form C-2 - Time Sheet), therefore it is essential to have an understanding of flyball rules.

The timekeepers table is positioned on one side of the racing lane approximately in line with the start/finish line.

There is one timekeeper responsible for each racing lane. Timekeepers cannot be responsible for both racing lanes.

Timekeepers shall be friendly and courteous, even sympathetic, but above all impartial and firm. A timekeeper is not to engage in conversation with a disgruntled exhibitor. Direct them to the Judge or AFA Representative before the start of the next heat.

Timekeepers shall remain stationary during each heat, dogs may go around stewards, timekeepers and balls bouncing off a judge or steward shall be deemed in play. Timekeepers must not offer verbal encouragement to teams. It is acceptable for team statisticians to stand behind the timing table to video record timesheets, and Console data for an Australian race record. They may need to pick up the console so their camera can record the time on the display.

A timekeeper must not assist teams during warm up or racing.

Timekeepers Responsibilities (under review)

Section 10.3 Judges, Timekeepers and Stewards Duties

(d) Timekeepers shall:

- (i) Record which dogs participate in every heat using the AFA Time Sheet (AFA Form C-2 - Time Sheet);
- (ii) Operate the console of the electronic timing system (Signature System) for the duration of each heat, including entering breakout and handicap times where appropriate
- (iii) Record any violations on the team's timesheets as per the Judge's instructions.
- (iv) Record the time for each heat on the time sheet, to 3 decimal places for a Timing System time, or 2 decimal places for a Manual time
- (v) Mark when a manual time has been used due to timing system failure.
- (vi) Check for breakouts and notify the Judge if a team has run a breakout time.
- (vii) When manual timing is used the timekeepers will become the backup to the Line Stewards in advising the Judge of the race result.

Timekeepers who observe that a team is running a height different to the height indicated by the team's timesheet shall bring it to the Judge's attention as soon as possible.

However, it is the team captain's responsibility to ensure the jump heights are correct.

The timesheets are used to record heat and race results and other information relevant to racing. Additional information in relation to any other matter is not to be written on timesheets.

Timesheets

AFA Requirements for Timesheets and their control.

The timesheets are used to record heat and race results and other information relevant to racing. Additional information in relation to any other matter is not to be written on timesheets.

The AFA has determined that a system of having an original (Timing Table Copy) and a copy (Team Copy) of each team's timesheet shall be used at all Sanctioned Competitions. The original being the office copy shall not be removed from the timing table except by the Judge or the AFA Representative or, in the case of a multi-ring competition with a central Race Caller, by an appointed runner.

Team Captains shall enter details of the dogs running in heats on their copy of the timesheet and hand that in to the timing table or race Caller's table before the start of the heat.

Timesheets detail, competition data, officials, and team data are entered by the competition organiser prior to the commencement of an AFA sanctioned competition. Timekeepers legibly record heat results, heat fouls, penalties and other relevant data.

It is a team's responsibility to let you know which dogs are running in each heat. During a race, team captains may change the dogs racing before the next heat. Timekeepers are required to change dogs in a team between heats as advised by the team captain.

At the end of each heat you will need to circle

- 'W' if the team won the heat
- 'L' if the team lost the heat
- 'T' if it was a tied heat and you will be instructed to do this by the Judge. A Tie is not a win. It is when two team run a time that is within three (3) 1000ths of a second ie; 21.998 and 21.995 would be a tie.
- '4' if four dogs completed the heat "cleanly" (no dogs had to rerun)
- 'M' if the time was a manual time

How you will fill out the timesheet will depend on what racing format is to be used and how many heats are to be run in each race, ie whether a "Best Of" format or not.

If double and single elimination is the format they will only run till a winner of the race is found. Eg: best 2 of 3 heats if one team wins 2 heats in a row.

It is the responsibility of the judge to ensure heat results are recorded correctly on the timesheets.

It is the responsibility of the judge to ensure breakouts are recorded correctly on the timesheets.

It is the responsibility of the judge to ensure fouls are recorded correctly on the timesheets.

Timekeepers are required to record incidents of Signal Cards issued as instructed by the Judge.

Do not write in the greyed areas of the timesheets. Use the "Any Use" column for other notes.

Seed Times and Breakouts

Seed Times

Teams have a seed time based on their racing statistics, or a declared time. The breakout time (except Division 1 teams) is based on this time. The competition organiser completes this data on the timesheet for every team in the competition. Timekeepers are required to enter the breakout time in the Electronic Timing system Console.

Breakout time is one (1) second faster than the fastest seedtime for each division (except Division 1) for seed times displayed on the AFA web page. Where a team declares a Seed time their breakout time becomes one (1) second less than their declared time.

When manual judging is used (in the absence or failure of the Electronic Timing System), the Breakout time will be two (2) seconds faster than the fastest seed time or declared time for each division (except Division 1).

Break Outs

It is the judges' responsibility to ensure that breakouts are recorded correctly by the timekeepers.

When a single breakout occurs, a loss is recorded on the timesheet as well as the time for that heat. The heat is forfeited and won by the team that did not breakout if they finish the heat.

This is the same for the next two breakouts by the same team.

After the third breakout the team has forfeited the right to win any more heats or to a place in the competition but has not forfeited the right to gain Title Points up to one per heat.

A team that has broken out three times in a preceding round robin format cannot race in either single or double elimination racing to decide the placing of the competition.

If a team breaks out in an elimination racing format prior to the round robin format starting they would be excused from any more elimination races, but may participate in the round robin format of the competition.

How to complete a Timesheet

Timekeepers completing a timesheet are required to

- circle dogs racing in each heat as advised by the team captain
- record heat time
- record the heat result
- record fault/incident/break out when advised by the judge for the relevant heat

If a timesheet error is brought to the attention of a timekeeper, consult with the Judge and/or AFA Representative to correct the timesheet. Signing the timesheet by the Judge and Team Captain at the end of the day indicates to the AFA that everything on the timesheet is true and correct and it has been filled out correctly.

The greyed columns on the timesheet are for use by the competition organiser to record AFA title points.

Circling Dogs

Team captains advise which four dogs will race in each heat. When there are four dogs in the racing team, the team captain is required to advise the timekeeper that these four dogs are racing each heat.

Recording Time

The Timing System Console and the Displays will display the time for each heat. When manual timing is used circle 'M' for the relevant heat. Times are not required for AFA title points.

- In order to determine a heat winner the Judge may need to consult with the Line Stewards. If there is difficulty in determining a winner, the judge may award a tie. Circle 'T' for the relevant heat. When stop watches are used for Manual timing, the stop watch times are not taken into account when determining the heat winner. If there is no time, write 'no time' or a dash (-) on the timesheet .

Recording Heat Result

The judge will advise the winner and when a team completes the heat with 4 dogs. The timekeeper for each lane is required to record each heat result as advised by the judge.

The '4' is circled when a team completes a heat with four dogs.

The 'W' is circled when the team wins the heat.

The 'L' is circled when the team loses the heat.

The 'T' is circled when the team has tied with the other team. A Tie is not a win. It is when two teams run times that are within three (3) 1000ths of a second ie; 21.998 and 21.995 would be a tie.

Recording Heat Reason for DNF, FORF, INT, CR, B/O

When to circle on the timesheet next to the heat:

DNF - (Did Not Finish.) The judge will advise that a team did not complete the heat. Circle 'DNF', and circle 'L'.

FORF - (Forfeit.) The judge will advise if a team has breached a rule that forfeits the heat. Circle 'FORF'. Recording the reason on the timesheet is optional.

- If a team forfeits their placing in a competition due to running three breakout heats, that team still runs as a competitive team in the competition but they cannot win any further heats and will fail to place at the end of the competition.

INT - (Interference.) The judge will advise which dog has caused the interference. The timesheet for both lanes records which dog caused the interference. The timesheet for the offending dog's team has the dog's CRN written against the relevant heat in the Any Use column. Circle 'INT' against the relevant heat on the timesheet. The judge will advise the penalty card, (refer to Entering Cards below). The timesheet for the non-offending team has the dog's CRN written in brackets (#\$*B) against the relevant heat in the Any Use column.

CR - (Crossing.) The judge will advise which dog has crossed. The timesheet for both lanes records which dog crossed. The timesheet for the offending dog's team has the dog's CRN written against the relevant heat in the Any Use column. Circle 'CR' against the relevant heat on the timesheet. The judge will advise the penalty card, (refer to Entering Cards below). The timesheet for the non-offending team has the dog's CRN written in bracket (#\$*A) against the relevant heat in the Any Use column.

B/O - (Breakout.) Record the breakout on the timesheet by circling 'B/O' and 'L' against the relevant heat (also enter the actual time). Circle '4' where B/O team runs clean; they are entitled to 1 title point. A third breakout precludes the team from a placing at the competition. The team continues to compete and accrues title points. Timekeepers shall make the judge aware of any previous breakout occurrences.

Entering Cards

Yellow, red or black cards will be used by judges to indicate particular offences, by a dog or a handler.

For a dog, the offending team's timesheet records details of the card issued by the judge in the top section of their timesheet (as well as recording the offence as described above for interference and crossing). The timekeeper enters 'D' or 'H' in the relevant column.

Column headings are Y = yellow card, R = Red card and B = Black card.

D indicates the card was issued for the dog .

H indicates the card was issued for the handler.

Competition:		Judge:	Breakout time
Date:		Division:	
Team:		Seed Time:	
Captain:		Break Out Time:	

	Dog's Name	CRN	Jump Height	Handler Name	Breed	Y D/H	R D/H	B D/H	Total Points
1									
2									
3									
4									
5									
6									

Record Card type issued for Dog or Handler

Please indicate four dogs for each heat -- incorrect indication could result in no points being awarded

- PLEASE DO NOT WRITE IN THE TITLE POINTS - this is to be used by the Competition Organiser only
- PLEASE DO NOT WRITE IN THE COMP POINTS AREA - this area is to be used by the Judge only

Heat	Dog (circle 4 dogs)	Time	M	4	Result (circle one)	Reason (circle if applicable)	Any Use	Title Points	Comp Points
Race #: Lane: Versus:									
1 of 5	1 2 3 4 5 6		M	4	W L T	DNF FORF INT CR B/O			
2 of 5	1 2 3 4 5 6		M	4	W L T	DNF FORF INT CR B/O			
3 of 5	1 2 3 4 5 6		M	4	W L T	DNF FORF INT CR B/O			
4 of 5	1 2 3 4 5 6		M	4	W L T	DNF FORF INT CR B/O			
5 of 5	1 2 3 4 5 6		M	4	W L T	DNF FORF INT CR B/O			
Race #: Lane: Versus:									
1 of 5	1 2 3 4 5 6		M	4	W L T	DNF FORF INT CR B/O			
2 of 5	1 2 3 4 5 6		M	4	W L T	DNF FORF INT CR B/O			
3 of 5	1 2 3 4 5 6		M	4	W L T	DNF FORF INT CR B/O			
4 of 5	1 2 3 4 5 6		M	4	W L T	DNF FORF INT CR B/O			
5 of 5	1 2 3 4 5 6		M	4	W L T	DNF FORF INT CR B/O			
Race #: Lane: Versus:									
1 of 5	1 2 3 4 5 6		M	4	W L T	DNF FORF INT CR B/O			
2 of 5	1 2 3 4 5 6		M	4	W L T	DNF FORF INT CR B/O			
3 of 5	1 2 3 4 5 6		M	4	W L T	DNF FORF INT CR B/O			
4 of 5	1 2 3 4 5 6		M	4	W L T	DNF FORF INT CR B/O			
5 of 5	1 2 3 4 5 6		M	4	W L T	DNF FORF INT CR B/O			
Race #: Lane: Versus:									
1 of 5	1 2 3 4 5 6		M	4	W L T	DNF FORF INT CR B/O			
2 of 5	1 2 3 4 5 6		M	4	W L T	DNF FORF INT CR B/O			
3 of 5	1 2 3 4 5 6		M	4	W L T	DNF FORF INT CR B/O			
4 of 5	1 2 3 4 5 6		M	4	W L T	DNF FORF INT CR B/O			
5 of 5	1 2 3 4 5 6		M	4	W L T	DNF FORF INT CR B/O			
Race #: Lane: Versus:									
1 of 5	1 2 3 4 5 6		M	4	W L T	DNF FORF INT CR B/O			
2 of 5	1 2 3 4 5 6		M	4	W L T	DNF FORF INT CR B/O			
3 of 5	1 2 3 4 5 6		M	4	W L T	DNF FORF INT CR B/O			
4 of 5	1 2 3 4 5 6		M	4	W L T	DNF FORF INT CR B/O			
5 of 5	1 2 3 4 5 6		M	4	W L T	DNF FORF INT CR B/O			

Total Competition Points

Place:	1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	8 th	Judge:	
No Placing:	Non-competitive				Breakout				AFA Rep:	
Best Time:					seconds				Team Captain:	

Signature System Console Operation

The Signature Electronic Timing system has a network interface capability. Whilst these facilities are not used at an AFA sanctioned competition, the information is included below.

Basic

- Power on the Console.
- Enter breakout time(s) if applicable. The Signature System has the ability to consider breakout time(s). The breakout time is entered prior to the commencement of each race. Each lane's breakout time can be set independently, but will default to be identical.

To set the breakout time, press Setup and then press ENTER. Use the numeric keys to enter the breakout time for the left lane (including the decimal point). Breakouts can be set to a maximum of two decimal points. Press ENTER to store the breakout time. The breakout for the right lane will be shown (set identically to what was just entered) – press ENTER to accept the default or key a different breakout time for the right lane and press ENTER. A breakout time of 0 indicates no breakout for that lane, Division 1 only.

Breakout times carry over from race to race and remain in place until reset. This makes it easy when several races of the same division are grouped together. It can also have unwanted results if the timing table forgets to reset the breakout time before the start of the next race. If a breakout time hasn't been entered the timekeeper needs to make the judge aware if a team has broken out. This needs to be done before the start of the next heat.

Setting the breakout time to 0.00 for both lanes disables the breakout functionality of the timing system.

- Enter Handicap Time if applicable. Only used for Handicap format. (See explanation below.)
- Press Clear Time - indicates the next heat is ready to race.
The Status Window should read L Ready SP , R Ready SP. If an X is displayed in place of any P or S, it means a pole is not ready. Use the horn to alert the judge.

The heat can be started by either the judge pressing the remote or by the timing table pressing the black Start/Stop button. The light trees will light all their lights going up and then count down in the normal start sequence.

If a false start occurs, do not touch the Console. (Pressing Clear Time after a false start clears the false start). The system handles the normal false start fouls without intervention, and automatically resets for the restart of the heat with the false start pending in the offending lane(s).

At the completion of a heat, the judge will press the remote to freeze the times, or the timekeeper presses the Start/Stop button on the Console. The heat is complete and the light trees will indicate the winner. The system can pick bad crosses or handlers breaking the beam but can't see dropped balls or dogs missing jumps. The judge will consult with the line stewards, then award the heat winner. The time for each lane is shown in the status display window of the Console for writing on the time sheet as well as on the main displays.

After the heat results are recorded on the timesheets, press Clear Time to ready the system for the next heat. The two small green LED lights on each light tree indicate to the judge that the system is ready for the next heat.

The horn button can be used for any matter that requires the judge's attention before the commencement of the next heat.

Handicaps

The timing system is capable of supporting handicapped racing. Handicapped racing can allow two teams of differing abilities to race each other head to head. It works by delaying the start of one lane in relation to the other. Large handicap differences can also introduce concerns with false starts as one team may have released a second dog before the delayed team incurs a false start.

During handicap racing, false starts are NOT in operation and start beeps are NOT used.

To set the handicap for a lane, press Setup, press Next Choice once to advance to Set Handicap and press ENTER. Key in the time that the Left lane is to be delayed vs. the other lane (0.00 if they are the slower team) and press enter. Now key in the time that the Right lane is to be delayed (again 0.00 if they are the slower team). In any given heat, one lane should have a handicap of 0.00 and the other should have a number – both lanes should not have a handicap time.

To disable the handicap function, set the handicap for both lanes to 0.00.

Race Number

Use of the race number is optional and the timing system will continue to operate normally if the race and heat number are just allowed to increment without regard to their relation to actual races and heats.

The race and heat numbers are used to tag the various recorded times to whichever race and heat they apply. This is useful when scrolling back through past times to find a missed time and also when a computer interface is used to ensure that recorded times are credited to the correct races and teams.

Normally, the race number is incremented by pressing the Race/Go button before the start of the first race in each heat to set the race number. Occasionally, it may be necessary to manually set the race/heat number. This may occur when a heat is rerun, when races are run out of order or when the race number is inadvertently incremented too far.

To set the race/heat number manually, press Setup, then press Next Choice twice and then press ENTER. Enter the race/heat number in the form rrRH where rrR is the Race number and H is the heat. So to enter Race 12, Heat 3 – enter 123 and to enter Race 105 Heat 1 enter 1051. Press ENTER and the race/heat number will now be reflected correctly in the upper Display window.

Battery Status

The status of the battery in the timing console can be checked by pressing Setup followed by Next Choice three times and then ENTER. *Note: The battery status is not accurate for the first 20 minutes or so after the console is powered on.* Press Setup to exit the battery status display.

False Starts

The timing system automatically tracks false starts for each lane and resets the system on the first false start in each lane. It indicates a pending false start by leaving the top red light on in that lane.

Occasionally, it may be necessary to manually set or clear a pending false start due to the restarting of a heat or to the timing table inadvertently pressing Clear Time after a false start occurs. False starts can be set two ways: First, the judge may elect to simply sequence the lights (while asking the teams to hold their dogs) to either clear or set the desired false start status. This may require you to manually reset the race/heat number if you are using this function. Second, the false start status can be set from the Console. Press Setup, followed by Prev Choice three times to display the Advanced Setup prompt, press ENTER to go into advanced setup and ENTER again to go into Start Faults. Select the option you need by using Next Choice/Prev Choice and press ENTER. Press Clear Time once to make the system ready to race.

Recalling missed times

Once in a while, you may need to recall a past time from the timing system. The timing system records dog splits for the immediate previous heat and final times for up to 100 past heats.

Recall a past split time

Occasionally things happen where a dog or person inadvertently crosses the start/finish line of a team that has completed its heat prior to the judge stopping the timing system. This causes the wrong final time to be displayed for that team. This kind of retrieval must be accomplished before the next heat is run since the system only stores this dog level information for the immediate preceding heat.

Pressing the Prev Choice key will step backwards through the dog crosses showing the split and total elapsed time as each dog crossed. The first number is the total number of dogs that have run up to this split in each lane. The next number is the split for that dog and finally the elapsed time at that point in the heat (you're probably looking for this final number – the elapsed time). For example, the right lane completes their run in four dogs and the left lane has to rerun their fourth dog. The dog bobbles its ball on the rerun and ends up coming back down the other teams lane – incrementing their final time. The judge stops the timing system and awards a No Finish (DNF) to the left lane but you now need an accurate time for the right lane. Press Prev Choice until you see the 4 dog total for the right lane and record the elapsed time for four dogs as their final time. Prev and Next Choice will scroll forward and backward through the times. The Console will revert to normal operation a few seconds after no keys have been pressed.

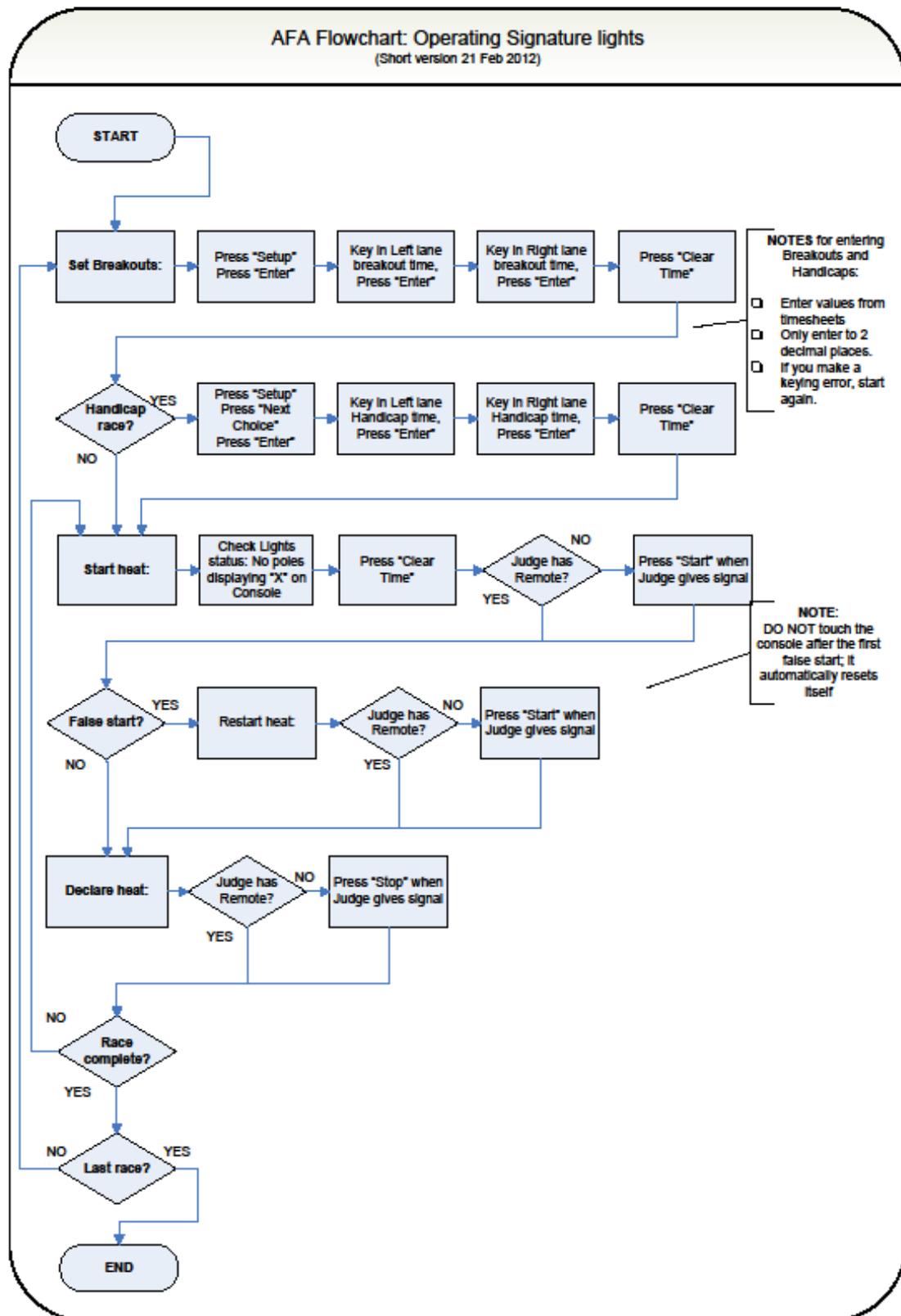
Recall a past heat time

The system also allows you to recall the total time of a past heat. This must be done before the Console is powered off as all past heat times are discarded at that time.

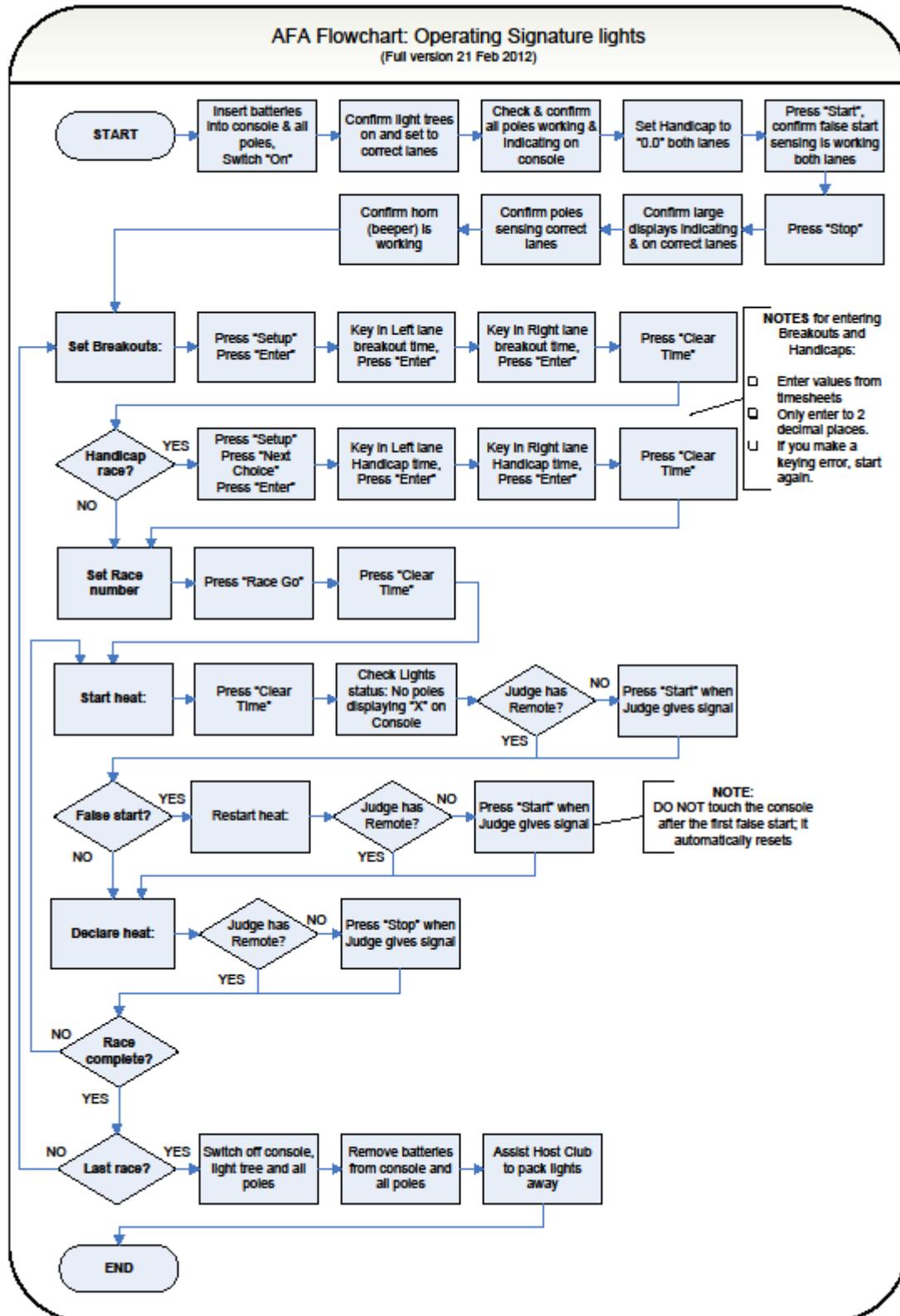
By repeatedly pressing the Prev Choice key, you can scroll back through past times. At first, the dog splits for the immediately previous heat will be shown followed by the total time for each preceding heat. If you are using the race/heat number functions, you can identify a past time by its race/heat number. Otherwise you can find a past time if you know how many heats have occurred in the meantime or preferably, you know the time of the other lane or the times of the preceding and following heat – to bracket the time you’re searching for.

Prev Choice and Next Choice will scroll forward and backward through the times. Once you’ve found and recorded the time you’re looking for, simply leaving the console alone for a few seconds will cause it to revert to normal operation.

Appendix A - Signature System Console Flowchart (abbreviated)



Appendix B - Signature System Console Set-up Flowchart



Appendix C - The Signature Electronic Timing System - Unpacking and assembly instructions

Required components (including content description for each case)

1. Qty 2 Black rigid cases with one handle and two twist latches. These cases hold the large displays.
2. Qty 2 Black rigid cases with tandem handles and three twist latches. These cases hold the poles, main timing console, wireless receivers for the large displays, battery clips, pole spacers and light tree assemblies and chargers for each lane.
3. Qty 2 Nylon tripod cases. These two cases hold a total of three tripod bases, one for each large display and one for the trees.
4. Qty 1 Nylon upright base bag. This bag holds the metal bases for the poles that will be placed at the start finish line.
5. Qty 1 Nylon audio bag. This case holds the amplifier/speaker and cable for the audio function of the Signature system.
6. Wireless Microphone system. This case contains the receiver and the portable headset and belt clip transmitter unit.
7. The Surge Protection unit, electrical extension cords, weatherproof covers for extension cord plugs & sockets, and weatherproof covers for displays and light trees may be transported in a separate bag or in with other equipment (depending on State set ups).

You will also need

1. 40 fresh quality AA batteries, which will last a two-day competition, and one 9-volt battery (two if both the Judge's wireless microphone and remote handswitch are used). Do not use lower grade batteries, which can be unreliable, or rechargeable batteries as they will not reliably operate the Signature timing system due to slight voltage differences.
2. A 240 Volt power supply. Mains supply is preferred, but portable generators may be used under some circumstances. The provided mains surge diverter MUST be used.
3. Additional mains extension cords if required for a remote mains supply.

Assembly

Step 1 . Inventory what you have received

- Remove a copy of the EJS evaluation form from one of the longer black cases. If none are present, one can be printed from the web by going to <http://www.flyball.org/ejseval.htm>.
- Check that you have received all the cases listed here and that the set designations on the cases all match (all the cases you have belong to the same set).
- Open each case and verify that the components in each case also match the set designation. Note any discrepancies on the form and also email flyball@flyball.org with any discrepancies and/or missing or damaged items.

Step 2. Assemble large displays

- Remove the three tripods from the tripod cases. Extend the legs on each to form a sturdy tripod and gently tighten the thumbscrew to secure the legs. Do not extend the tripods above their collapsed heights until assembly is complete and they have been moved to their final location for your event.
- Loosen the top thumbscrew on each tripod enough to slide the crossbar assembly into the opening. Gently tighten the thumbscrew to snug the crossbar assembly onto the tripod. Two

of the cross bar assemblies will have silver standoffs on the end and the other will have two upright studs. Set the tripod with the upright studs aside to be used as part of the tree assembly.

- Open a large display case (one handle, two twist lock latches). Before removing the large display, open the silver links hanging from each end of the tripod crossbar by twisting the fitting to create an opening in each link. Remove the large display and hang it from the two links. Ensure that the Plexiglas side of the display is facing away from the tripod. Close the two links by twisting the fittings. Turn the large display until it is hanging directly above one of the tripod legs (for improved stability). The power cord should be hanging freely from the display.
- Repeat the above procedure for the second display. Set the displays aside as one more component will be added to each display in the next step.

Step 3. Assemble uprights and tree

- Open the upright base bag and remove the four metal bases. Separate the bases into two sets with each set containing one single pole base and one double pole base.
- Open an upright case (tandem handles, three twist lock latches). Remove two white poles with green caps and one white pole with a black cap. Leave the one pole marked "spare" (may have a green or black cap) in the case. Remove a battery holder from the case and install 6 AA batteries into the holder as shown on the holder. The negative end of each cell (with no button) always goes toward the spring in the connector. Repeat until three holders have been loaded with batteries.
- Unscrew the dark grey cap from the bottom end of each white pole and insert a battery holder into each pole. To orient the battery holder, find the green dot on the pole and align it with the green dot on the battery holder. The battery holder goes into the pole green dot end first. If the green dot is missing, locate the contacts inside the pole and align the contacts on the battery clip with the contacts inside the pole before inserting the clip. Screw the grey cap back onto the pole but do not over tighten. Ensure proper operation by rotating the black ring on the pole to the on position. Observe that the LED at the top of the pole lights and then return the switch to the off position. Repeat for the two other poles.
- Place the pole with the black cap into the single upright base (you may need to loosen the wing nut in the base to allow the pole to slide completely in). Align the lenses with the leg with the arrows attached. Insert the green capped poles into the double base. Ensure that each alignment stud has seated into the slot in the base and that the pole is fully inserted in the base. For the left lane (poles marked LP and LS), LS should be to the left of LP when facing the lenses on the front of the poles. For the right lane (poles marked RP and RS), RS should be to the right of RP when facing the lenses. (DIAGRAM HERE WILL BE ADDED).
- Gently snug the wing nut to secure each pole. **Do not over tighten** the wing nuts as damage to the poles can occur. Once both green tipped poles have been placed in the double base, remove a green alignment connector from the case and snap it into the slot near the top of each green pole. The poles can be gently twisted once the alignment connector is in place to ensure they are parallel.
- Remove the light tree assembly from the case by grasping the U-shaped portion of the black shroud. Do not handle the tree by the thin shroud and do not stand the light tree on end. The light tree should be laid down on a dry surface at any time it is not in the case or mounted on the tripod.
- Place the U-shaped portion of the shroud over the stud in the crossbar of the tree tripod and secure with a bolt and wing nut. Ensure that the labels on both trees face the same direction. Ensure that when facing the trees such that the labels are visible, the middle switch on the bottom of the tree is set correctly (left tree is left lane and right tree is right lane). The tree can be tested by depressing the power switch. The tree should cycle through each of its lights and then go dark. Depress the power switch again to turn the tree off. NOTE: The charger should be used each evening to recharge the internal batteries in each tree. The charger plugs into

the jack on the bottom face of the tree. Each tree can be charged for up to 15 hours. Do not overcharge by leaving plugged in for more than 15 hours. The trees may be operated with the chargers plugged in, in case the batteries were not recharged. Place the chargers back in the cases when not being used to avoid their being misplaced.

- Remove the receiver for a large display from the case. Attach to the crossbar of one of the large display tripods using the thumbscrew on the crossbar. Attach the connector at the end of the wire to the db-9 connector located at the end of the large display. Note the lane designation on the receiver as this will determine which large display will support each lane. You may wish to move the large display to the appropriate lane at this time to avoid later confusion.
- Remove the timing console from the case (only present in one of the two upright cases); install four AA batteries as shown in compartment (battery cover slides off bottom). Ensure proper operation by switching it on, watch for the start-up message on the display and then turn off again. Place the timing console on the timing table.
- Remove the judges hand switch from the case (only present in one of the two upright cases) and install one 9v battery as shown in compartment (battery cover slides off, may be partially obstructed by the belt clip). Ensure proper operation by pressing the power switch and watching for the red LED next to the switch. Press the power switch again to turn it off. Hang the judge's switch by its lanyard from a thumbscrew on the tripod for the tree.
- Repeat entire procedure for the other lane with the remaining black case.
- Each large display shall be located on its side of the centreline, behind the lane backing boards and approximately three feet from the centreline, facing toward the Judge and set to a height of approximately 5 feet. Each tripod shall be securely fastened to a star picket using cable ties.
- The light tree shall be located on the ring centreline in line with the first jump, again facing towards the Judge and set to a height of approximately 5 feet. The tripod shall be securely fastened to a star picket using cable ties.

Step 4. Audio set-up

- Remove the speaker/amplifier and place it on the timing table. Connect the speaker/amplifier to the timing console using the supplied cable. The cable should go in "Line 1" on the speaker/amplifier @@INSERT COLOR HERE and "audio" on the timing console. Plug in the speaker/amplifier and turn on with the rocker switch located on the back panel. The volume can be adjusted by turning on the timing console, waiting for the start-up to complete and then pressing the "horn" button. The sound should be audible to the judge but not loud enough to startle a dog (in practice, it is usually full volume). You should point the speaker/amplifier at the approximate position where the judge stands during a heat in progress.

Step 5. Place the system in the ring

- Place the base with the two left poles to the left (outside) of the left lane. The poles should be approximately 3 feet from the centre of the lane. Place the base with the two right poles to the right (outside) of the right lane. Again the poles should be approximately 3 feet from the centre of the lane. The lenses in the LS pole should face towards the centre of the ring and align with the start/finish line and the LP pole should be on the box side of the start/finish line (you may need to swap the LS and LP poles in the base if they were assembled incorrectly). The lenses in the RS pole should also face the centre of the ring and align with the start/finish line and the RP pole should be on the box side of the start/finish line (you may need to swap the RS and RP poles in the base if they were assembled incorrectly). The LS and RS poles should face each other on the left and right sides of the start/finish line respectively.
- Place one single pole base approximately 3 feet from the centre of the lane, facing outward from the centre of the ring. Ensure that the legs with arrows are pointing directly at the start pole (LS or RS) in the opposing double upright stand. The arrow should align with the

start/finish line. Ensure that all four bases rest firmly on one surface (e.g. not spanning matting and floor). The bases should be adjusted for uneven surfaces such as grass using the three screw-in feet on each base. Ensure the feet are not screwed out so far that they fall out when the base is moved – should be at least one turn in.

- Power on all six poles by rotating the black power ring at the base of each pole to “ON”. The LED at the top of the black capped poles should glow red and the LED at the top of the green capped poles should glow green (after briefly flashing red during power on). Constant red LEDs on the green capped poles indicate lack of alignment. If this happens, power off the poles, repeat alignment in that lane and then power on again. Aligning the poles with the power already on may result in a weaker and less reliable alignment. Assure that all six poles are powered on and aligned before leaving this step.
- Power on the timing console, audio speaker/amplifier and judge’s switch.
- Power on both trees by depressing the power switch on the bottom of the tree.
- Plug in the two large displays (they will show a dash (-) when first powered up.

Step 6. Testing the system

- Walk through the start/finish line in both the right and left lane. The large displays should now show numbers and you may see a red light on the tree for the corresponding lane. Go to the timing console where the bottom window should show S P and Not Run or Not Ready for each lane. If you see an X rather than an S or a P, check the alignment in that lane and then walk through the start finish line for that lane again.
- Press the clear time button to make the system ready for a heat. The display should indicate ready for both lanes and a green LED should illuminate at the base of each tree. Depress the judge’s hand switch or the large black button on the timing console to start a heat. The tree will sequence rapidly up to test its lights and then begin the start cadence. The speaker may also beep if that option is enabled. Break the left lane beams before the green light comes on and the system will indicate a false start in the left lane and reset. A negative time will be shown on the left large display and the top red light on the left tree will come on and stay on. Depress the judge’s hand switch or the large black button again to restart the heat. The tree will sequence again. Break the right lane beams before the green light comes on and the system will indicate a false start in the left lane and reset. A negative time will be shown on the right large display and both top red lights on the trees will come on and stay on. Depress the judge’s hand switch or the large black button one more time to restart the heat. The tree will sequence again. Simulate several dogs running and observe the split times and bad pass indications. Depress the judge’s hand switch or the black button to signal the end of the heat. The final time will display on the large displays and console and a winner may be indicated by a blinking light on the tree if four “good dogs” ran in either lane. Press clear time to ready the system for another heat.
- Once you are satisfied that the system is operating correctly, power off all six poles, the judges hand switch, the timing console and both trees to conserve batteries. The large displays should be unplugged when not in use for extended periods (overnight) and the audio speaker/amplifier should be switched off. Both trees should be plugged in to charge if leaving the system overnight. The whole tripod with the trees can be moved to a convenient location where AC power is available - often near the timing table or large displays works well. After a brief delay after plugging in, the green lights on the front of the trees will flash while charging.
- NOTE: Some poles will not switch off when the switch is turned to OFF, ie the lights on the pole will stay on. This is due to a “sticky” internal switch. When this happens, sharply rap the base of the pole with your knuckle or gently tap it with a screwdriver handle or similar item. DO NOT hit it hard with a heavy and/or sharp implement.

Appendix D - Testing the Signature System Set-up

A judge may request your assistance to check the Signature system is working correctly before or during a competition.

1. Walk through the start/finish line in both the right and left lane. The large displays should now show numbers and you may see a red light on the tree for the corresponding lane.
2. Go to the timing console – the bottom window should show SP and Not Run or Not Ready for each lane. If you see an X rather than an S or a P, check the alignment in that lane and then walk through the start finish line for that lane again.
3. Press the clear time button to make the system ready for a heat. The display should indicate ready for both lanes and a green LED should illuminate at the base of each tree.
4. Depress the judge's hand switch or the large black button on the timing console to start a heat. The tree will sequence rapidly up to test its lights and then begin the start cadence. The speaker may also beep if that option is enabled.
5. Break the left lane beams before the green light comes on and the system will indicate a false start in the left lane and reset. A negative time will be shown on the left large display and the top red light on the left tree will come on and stay on.
6. Depress the judge's hand switch or the large black button again to restart the heat. The tree will sequence again.
7. Break the right lane beams before the green light comes on and the system will indicate a false start in the left lane and reset. A negative time will be shown on the right large display and both top red lights on the trees will come on and stay on.
8. Depress the judge's hand switch or the large black button one more time to restart the heat. The tree will sequence again.
9. Simulate several dogs running and observe the split times and bad pass indications.
10. Depress the judge's hand switch or the black button to signal the end of the heat. The final time will display on the large displays and console and a winner may be indicated by a blinking light on the tree if four 'good dogs' ran in either lane.
11. Press clear time to ready the system for another heat.

Once you are satisfied that the system is operating correctly, power off all six poles, the judges hand switch, the timing console and both trees to conserve batteries. The large displays should be unplugged when not in use for extended periods (overnight) and the audio speaker/amplifier should be switched off. Both trees should be plugged in to charge if leaving the system overnight. The whole tripod with the trees can be moved to a convenient location where AC power is available – often near the timing table or large displays works well. After a brief delay, the green lights on the front of the trees will flash while charging.

Appendix E - Dismantling the System.

Dismantling and storing the system is the opposite of setting it up. One thing to keep in mind is the failure of some poles to switch off. Because of this, it is essential that the battery clips be removed from the poles after each day of competition, even if only for overnight.

Timekeepers – Questionnaire

Successful participants (those with over 80%) will be awarded their Stewards/Timekeepers Ticket by the Australian Flyball Association Inc.

Note: you must have a Stewards Ticket before you can continue to the Timekeepers Questionnaire

The Timekeepers Questionnaire is under review.