

# Minutes of UKA Course Measurement Working Party – 14 Nov 2009.

Held at London Marathon HQ, London

Present: Hugh Jones (CMWP chairman), Area Measurement Secretaries: Phil Holland (Midlands), Alan Ritchie (North), Mike Sandford (South), Kym Wheeler (Midlands Measurement Secretary - designate)

RunBritain Observer: Bill Reynolds

Apologies: Paul Hodgson, Alan Young (Scotland)

Absent: Tim Gasser (Wales), John Glover (NI)

Mike Sandford was appointed by the meeting to draft the minutes for approval by members.

## 1. Review of Actions recorded in Minutes of meeting of 29 November 2008

*ACTION – Phil Holland and Mike Sandford to get quote for at least 20 high visibility bibs with COURSE MEASURER on the back. UKA to pay. – Stock purchased and held by Mike Sandford.*

*ACTION – Mike Sandford to purchase some signs and trial their use. – No longer planning to do this.*

*ACTION – Phil Holland - investigate possible constitutions based on charitable organisations and similar to which he has access. – Done see agenda item 6.*

*ACTION – Hugh Jones - discuss CMWP affiliation with RRC Officers. Target time – 1 to 2 weeks. – Done*

*ACTION – Hugh Jones - to discuss CMWP affiliation with Bill Reynolds of BARR. Target time – 1 to 2 weeks. – Done*

*ACTION – Phil Holland - to produce first draft of response to consultation paper and circulate to CMWP for detailed comment Target time – 1 to 2 weeks. – Done*

*ACTION – Mike Sandford - Make clickable map of all English measurers also available on UKA website. – In progress see agenda item 10a.*

*ACTION – Phil Holland - circulate a report on GPS work when complete. – see report in agenda item 9b.*

## 2. Reports from Area Measurement Secretaries

**SCOTTISH AREA REPORT - By Alan Young**

### Measurements

Still only 2 “active” measurers. Vast majority measured by the Scottish Area Secretary.

Details in Table below:

Scotland :	
Marathon	2
Half Marathon	5
10k	8
10 mile	1
Circuit for 100k/24hr	1
Total	18

Overseas:	
Marathon	1
Half Marathon	1
5 k	2
Circuit for 100k	1
Circuit for 50k	1
Total	6

## Certificates

Traditionally none issued, but copy of the Measurement Report provided to Race Director. Draft prepared but still none issued.

## Role with Scottish Athletics

From 1st January 2009 Scottish Athletics reverted to the practice of Race Directors having to meet the measurement costs.

## ARC

Still no approach from them in Scotland.

## Training

No new measurers have been trained, but Scottish Athletics have indicated that they are still very supportive if sufficient numbers were to come forward.

*ACTION – Mike Sandford to invite Alan Young to provide a list of Scottish courses for the website.*

## NORTH OF ENGLAND REPORT

*By Alan Ritchie*

Two years ago I announced my intention to retire from CM Secretary duties. Brian Porter from Preston in Lancashire has agreed to be my replacement, but cannot until the end of 2010 due to his Masters Degree studies. Brian is competent, enthusiastic, and will be able to employ his computer skills to the future on-line administration system.

In 2009, a total of 66 courses have been measured and certified.

49 new and 17 re-measured, including 3 one-off Championship races and also 6 ARC events. Off road / Trail races are not measured. Certificates are issued only to new and re-measured courses, however, replacements are available on request.

I have 6 Jones counters in stock, which belong to Northern Athletics.

In the past year four measurers have retired, however two have returned and we have one new recruit, producing a total of 33 measurers. Comprising 21 Grade 2, and 12 Grade 1 (including 4 registered IAAF) Many Grade 2 are overdue to be up-graded, but unfortunately this year there was no time to organise a course, mainly because of the Commonwealth Ultra Championships held in Keswick. I intend to hold a training/up-grading day in Spring 2010 in Yorkshire.

## **MIDLANDS REPORT**

*By Phil Holland*

### **Statistics**

I've issued 147 certificates so far for 2009 and 12 for 2010. Of the 147, 15 are for ARC races and 9 for off-road races. 25 certificates are for races new this year (includes World Half Marathon). We have measured 54 courses this year.

### **Measurers**

I have gained 2 measurers this year and also lost a couple. I have 5 Grade 1 and 9 Grade 2 measurers, and call occasionally on a number of measurers from the South. I would still like another measurer in Avon.

### **Handover**

You will know that I have had a number of health problems this year. I've been unable to cycle since March, and will be out again for a knee operation in December. I've been able to keep up with the administrative work, but I've decided that it would be better to hand over the duties sooner rather than later. The timing fits nicely with the migration to on-line administration. Treat this as my notice of intention to retire. Kym Wheeler (Grade 1 Measurer from Corby) has agreed to take over from me, and we have had one meeting to familiarise her with the system. Kym is involved in the discussions with Mike Sandford, and we will be meeting Mike in London before the CMWP meeting. This will be a gradual handover - I will continue to operate the system until it goes on-line, when Kym will take over. I expect the change to go smoothly - I intend to transfer the email address to Kym at handover.

### **Problem Races**

I have one problem club which organises 13 races claiming a distance, 9 of which have been measured in the past. Only 5 of these have measurements which are currently valid, and earlier this year I made a determined effort to rectify the situation. I thought I was having some success, but things have now fallen apart. I understand that the problem is more than just measurement, and it appears that while there are 6 races being held with a license but no certificate there are 6 with neither license or certificate. Only 1 race has both licence and certificate.

*ACTION – Phil Holland - Communicate to Athletics Services for action, the information he reported about open road races being held with out licence and/or certificate of course accuracy by an affiliated club in Gloucestershire.*

## **SOUTH REPORT**

*By Mike Sandford*

In the last 12 months 115 new courses have been certified (Compared with 121 reported at last meeting for 2007-8). These figures include modifications to part of course which may not involve a complete remeasurement. All modifications require a new certification for a course.

There were 257 renewals of previous certificates (compared to 265 reported at the last meeting.) This remains a disappointing figure, very substantially less than the number which should have been issued if all road races claiming a distance had applied for renewals. There is a need to monitor race directors to check that they comply with the UKA rule that all road races claiming a distance must hold a current certificate of course accuracy. We have repeatedly brought this to the attention of Athletics Services who issue the licences and it was raised with Run Britain a year ago, and this was repeated in July 2009. I have not been informed of any positive action being taken by these authorities and presumably this is why so many race directors do not comply with the rules. Those that do comply generally find that the on-line renewal service is efficient and timely. Occasionally people have difficulty with finding the right paper work to fill in the details for the on-line renewal application, but that is partly what the renewal process ensures – that the race director has all the necessary documentation with which to lay out the course again as measured.

Just as disturbing as the unrenewed certificates, I have recently spotted a multi-terrain race claiming in their publicity to runners to have a certificate of course accuracy after an uncertified measurement by a course measurer. This occurred despite the measurer making clear that multi-terrain measurements can not be certified since they can not be guaranteed to reach the 0.1% accuracy required for a road race certificate.

The 115 measurements since the last meeting were made by 35 different measurers. I list 43 as available for measuring. Although a few may be temporarily unavailable due to family, work or health reasons, I keep them on the list if they may at some future time be available for new measurements. Sometimes a retiree can be persuaded to turn out and adjust a course previously measured by himself or do a bit more work for his local club, and this always welcome even if he is no longer on the list of active measurers.

During the year 2 new trainees, one Midlands and one South, completed the on-line theory courses and the practical, and are now accredited as graded 2 measurers. The practical was held at Abingdon tutored jointly by Phil Holland and Mike Sandford.

Although we have a working coverage of the South, I hope new trainees will continue to come forward, to help where the load is high (eg London), and to be ready to pick up work as people retire.

## **Deputy Area Measurement Secretary Job Spec**

In order to provide backup and potential route for eventual succession, it would be useful to be able to appoint a deputy Area Measurement Secretary for the South. When we have a single on-line administration system, it will of course be possible for area secretaries to provide back up for one another. Equally it will also become possible to appoint deputies and train them in the following duties:

Provide general back up for the Area Measurement Sec whose duties are listed in the draft constitution.

In particular, during absences of the Area Measurement Secretary the deputy will be responsible for ensuring continuity in

- Processing of measurement reports
- Issue certificates for new courses and renewals
- Attend CMWP

Knowledge/Experience required:

- Grade 1 Course measuring

- Creating .pdf files
- Using dynamic websites

*ACTION – Mike Sandford - Invite volunteers from South for the new post of Deputy Area measurement Secretary.*

### **3. Planning of Training Seminars, Measurer's Meetings**

Alan Ritchie intends to hold a training/up-grading day in Spring 2010 in Yorkshire. He will seek help from several Grade1 measurers so that all who wish to attend can be accommodated. Mike Sandford offered to travel North to help and to meet North measurers.

Midlands and South will hold training days when there is a need. Abingdon is often convenient to use for practicals.

It was suggested by Mike Sandford that a general opportunity for measurers to get together would be useful, particularly for those measurers who may have been isolated since qualifying without measuring contacts in their own area. A practical session is always instructive enabling measurers to compare their accuracy.

Hugh Jones said he had talked about course measurement at a general get together organised by the UKA. he suggested that RunBritain should be approached to see if something could be organised in conjunction with any more general meetings they may plan for race and race officials. By having measuring activities going in conjunction with a general RunBritain meeting, there would be the opportunity for race directors and officials to learn a little about measuring, and perhaps even have an opportunity to try it out, and decide if they wanted to embark on the training course.

*ACTION – Mike Sandford to ask the RunBritain manager if there are opportunities for course measurement to be included in any planned meetings with race organisers and officials.*

### **4. Update on Relevant International Measurement Matters**

Hugh Jones that as one of the four IAAF measurement coordinators he was responsible for proposing new IAAF measurers. The procedure involved:

- An assessment of practical measuring skills. He or another IAAF measurer would measure with a candidate.
- An inspection of a number of measurement reports to ensure they were of a high standard
- On his recommendation to the IAAF for an appointment, it can take many months until approved by the IAAF council.

He was in the process of getting UK area secretaries appointed as IAAF measurers. Other experienced UK accredited measurers who might wish to help with IAAF measurements should make contact with him.

### **5. Report from RunBritain Representative on Matters of Interest to Measurers**

Bill Reynolds began by giving a comparison between constitution of BARR and the CMWP and the advantages of having a set of procedures for the administration of the group, stating that he thought the decisions to be made on a constitution for course measurers were important.

He reviewed the relationship between BARR and RunBritain and its predecessors, going back to 1996 when BARR first raised the issue of race standards with BAF, the governing body at that time.

The main discussion was on the content of the RunBritain proposal (see also next item) and it was generally agreed that the content, with just a few minor textual changes to take account of CMWP set-up would be acceptable.

Bill also highlighted the possible change of name. It was agreed that the current organisational title,

CMWP, would need to be changed, possibly to "Association of Course Measurers", subject to the decision of the CMWP.

## **6. Adoption of CMWP Constitution**

Mike Sandford said a meeting with Run Britain representatives had been held in July to discuss their 18 Nov 2008 paper on Course Measuring and the response which had been sent by the CMWP (12 Dec 2008). He tabled his report on the meeting ([see appendix](#)). The principal agreement had been that a constitution for the body which manages Course Measurement in the UK should be drafted.

Phil Holland said that in July he had circulated a draft Constitution of the UKA Course Measurement Working Party. A response had been received from Run Britain on 3 November 2009, which suggested that an Association should be formed for course measurers, and suggested amendments based on the constitution of BARR. In particular it suggested that the membership of the Association should be open to all measurers and other interested parties with provision for annual subscriptions, and a managing committee, with a composition of the present CMWP, should be elected annually at AGM of the association.

The present members of the CMWP, who wished to concentrate on the tasks directly related to the certification of courses and the training of measurers, were keen to minimise as far as possible the additional administrative work in running an association. Phil Holland offered to stand for the new post of Association Secretary, and this was welcomed.

The following points were made:

- The present CMWP should be the management committee of the Association, and for historical reasons should continue to be known as the CMWP. The membership needed to be broadened to include a secretary for the association, and provision for a treasurer in the event of association deciding in the future to handle money. Elections for the CMWP would be held at an AGM which would follow the annual business meeting of the CMWP. Area Measurement Secretaries should be elected for a term of several years, since these officers need to make a considerable investment of time to take the work on.
- Membership of the association should be restricted to measurers who would be automatically be elected by the Committee, on completion of their training and becoming a qualified measurer.
- There is no need at present for a membership fee for measurers. The modest expenses incurred by the area Measurement Secretaries and other members of the CMWP are reimbursed by the UKA directly to the individual on submission of claims. This arrangement works well and if it continues it will not be necessary for the Association to have annual accounts.

*ACTION – Phil Holland - Draft a constitution for the Association of UK Course Measurers. and circulate to CMWP then all measurers for comment.*

## **7. Handling of Multi-terrain Measurements**

Phil Holland said he had wanted to discuss this topic since the procedures for handling reports from course measurers of measurements of multi-terrain courses was different in the various regions. He thought that all areas were applying the same rules to determine the amount of off-road allowed in a road race (ie 10% for courses less than 10k, and for courses over 10k: 1km + 5% of the course distance in excess of 10k), and that rule, based on the measurement accuracy that can be readily achieved off-road, did not need revisiting.

In the Midlands multi-terrain reports are registered and filed by the Measurement Secretary, and a suitably worded "Record of Measurement" which is designed not to be confused with a

"Certificate of Course Accuracy" issued for a road race. In the South and North measurement reports for multi-terrain events are not recorded in the system and nothing is issued by The measurement secretary so all the race director will have is whatever report has been supplied to him directly by the measurer.

An enquiry had recently received from Tim Grose who asked about the certification of certain multi-terrain events which he had been including in the ranking tables for the UKA's Power of Ten website.

After discussion it was concluded that:

- The accuracy standard for road races is well established nationally and internationally after much work originating from the studies done by John Jewell of the Road Runners Club in 1961, when the present measurement method using a calibrated bicycle wheel was established.
- Such work as has been reported for off road surfaces has established a basis for determining the maximum amount that can be included in a road race consistent with the existing accuracy standard of 0.1% and the procedure of adding the Short Course Prevention Factor of 1m for every km, which enables a road race course so be certified as being "not less than the advertised distance". It was important to maintain the accuracy standard of the certificate of course accuracy for road races, and avoid confusion for runners with the lower accuracy with which multi-terrain courses can be measured using the standard technique.
- Because of the variability of off-road surfaces a different, lower, standard of accuracy would be required. It would require extensive work to determine the appropriate accuracy and then produce a workable procedure for certifying multi-terrain races to this lower accuracy. Before embarking on such an exercise there would need to be a clear demand from runners, race directors and those carrying out rankings.
- In developing the new unified on-line database of course measurements for all areas of the UK, Mike Sandford said he probably could include a method of registering reports and generating records of (uncertified) measurements of multi-terrain courses. Measurement Secretaries could use it if they wished. It would be up to future CMWP meetings to determine if a uniform national policy was required.
- As far as measurers are concerned, it is up to them the amount of work they do once a course they have been asked to measure is found to be multi-terrain. After explaining the position to the race director, they may agree to continue to make a best efforts measurement which will not be certified. Since the race is not to be certified there is no prescribed standard for the documentation they supply to the race director, e.g. in general there would be little point in spending a large amount of time and effort in documenting such things as course boundaries if it is going to be impractical for the race organisation to ensure runners keep within the boundaries. If a measurement secretary offers the facilities a measurer may send his report in for filing and issue of a "Record on Measurement" to the race director.

**ACTION** – *Mike Sandford* - Communicate the CMWP's discussion of multi-terrain certification to Tim Grose.

## **8. Updating UKA Rules**

### **a) Quoted Basic Accuracy**

UKA Rule 205.4 (II) needs rewording to say that courses shall be not less than the stated distance and not more than 0.2% longer.

**ACTION** – *Phil Holland* - Confirm new wording of Rule 205.4 (ii) to John Temperton.

## **b) Verification by Race Referee of Start/finish and Turn Locations against the Measurement Report.**

Unlike the procedures sometimes used for major international events, it is not practical to require the course measurer to attend each running of all races in the UK in order to verify the correct postponing of the start, finish and any turning points. It is noted that some UK race referees do in fact carry out such checks, Bill Reynolds said that the duties of race referees were under review by RunBritain and this could be added to their duties.

*ACTION – Bill Reynolds* - Introduce course checks by race referees into Runbritain's consideration of referees' duties.

## **9. Alternative Measurement Techniques**

### **a) Electronic Counters**

Hugh Jones and Mike Sandford reported they had participated in a discussion held by american measurers on whether measurement with a bicycle electronic revolution counter as a replacement for the geared Jones counter would be acceptable for certification purposes. This debate followed several years of development in the USA of techniques by Neville Wood.

The general conclusion of the debate was that the necessary procedures to correctly record a fraction of a wheel revolution were more complicated with the electronic counter and there was a greater risk of making mistakes. Also it was more difficult for a certifier to check from the measurer's report that every detail of these procedures had been correctly carried out. Accordingly the USA measurement organisation decided not in general to accept for certification measurements using only an electronic counter.

Hugh said his own experience of using an electronic counter in an emergency when no Jones counter was available, had convinced him that there was no doubt that Jones counter should continue to be the standard device acceptable for certifications in the UK.

Consideration of electronic counters could arise again if it became impossible to obtain geared Jones counters. Fortunately the US manufacturer has invested in a large supply of specially manufactured parts for the new model JR counter so there should be no problem in the supply of these Jones counters for many years. The model JR counters are also found to be resistant to wear when tested over high mileages, so their life is expected to be very long when used only for measuring.

### **b) GPS**

Mike Sandford said that there had been a number of evaluations of GPS performance during the year. He was in the process of organising the web pages at [coursemeasurement.org.uk/GPS/](http://coursemeasurement.org.uk/GPS/) to collect accounts of these.

Phil Holland had recorded the results from 30 runners' GPS units which averaged 0.6% longer than the course length. Kym Wheeler said she had got similar results at another race. these results were much better than that found by Mike Sandford for the Run-to-the-Beat Half Marathon in 2008. but still fell far short on the standards required for course certification.

Mike Sandford reviewed some material he had placed on the website from his own experiments with a GPS mounted on a bike. By optimising the techniques he found he was able to obtain results that averaged to the true course distance with almost no bias and had a small scatter of about 0.15% (standard deviation). This was on his Abingdon 4.5k loop where there was a good view of the sky, and it is possible to ride consistently along the exact shortest possible route. He saw no prospect of

the present generation of the GPS system replacing the Jones counter method for course certification.

It was agreed that GPS does have some useful applications such as generating route maps and recording locations of hard to identify street furniture objects used as measurement reference points. It may also be of some value in determining the approximate route run after an event as was found to be the case for the Bourton 10k which was suspected of being short. Inspection of GPS tracks recorded by runners during the race suggested the turnaround had been incorrectly positioned. This was confirmed in a re-measurement of the course which located the faded paint marking the correct turn point. This demonstrated the use of GPS in picking up gross course errors.

*ACTION – Mike Sandford - Organise GPS section of web site.*

## **10. Communication**

### **a) Website, including Progress with UK-wide Measurement database - by Mike Sandford**

#### **Updating**

The website has been kept up-to date during the year. The situation by area is as follows:

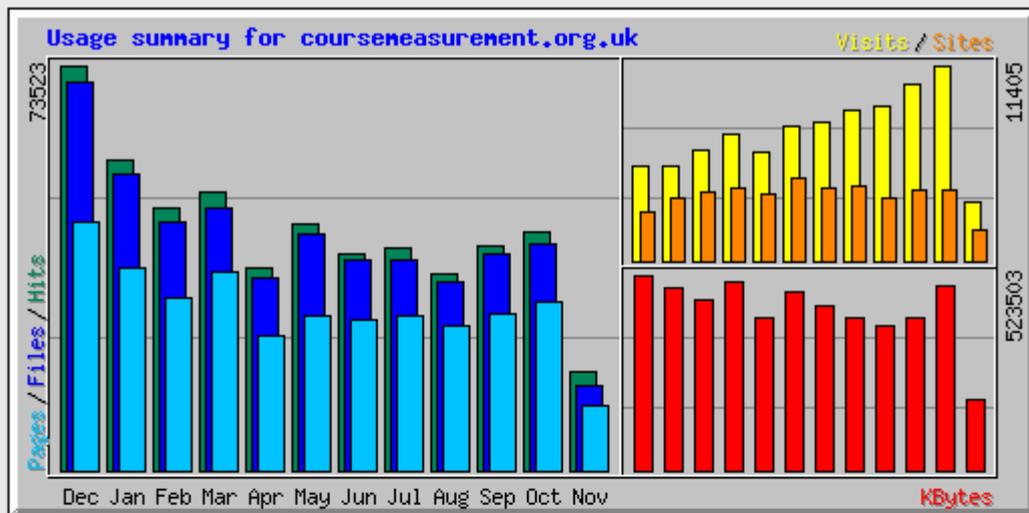
For the South courses updates happen automatically without any delay when new courses are certified and as certificates are renewed, because the database for the south courses is held on the web server. The North's course list is in the form of a single .pdf file (17 pages) which updated manually at intervals whenever a new versions is available. The latest Welsh .pdf list is of 2006 vintage. Course lists from other areas have not been incorporated in the website so far.

Updating of measurers contact details in the South has had to be done manually. Measurers lists from the North and the Midlands have been available as manually updated .pdf files. For Northern Ireland, Scotland, and Wales, only the area measurement secretaries' details are available, as a point of contact for race seeking a measurement.

Some new technical material has been added about the performance of GPS.

#### **Statistics**

The website continues to receive a large number of visits, an average of 261 per day, which is slightly down on last year, 308 per day, but there are considerable fluctuations so this can not be said to provide any indication of a significant downward trend.



Summary by Month										
Month	Daily Avg				Monthly Totals					
	Hits	Files	Pages	Visits	Sites	KBytes	Visits	Pages	Files	Hits
<a href="#">Nov 2009</a>	1620	1396	1084	311	1784	189789	3425	11932	15366	17825
<a href="#">Oct 2009</a>	1395	1320	982	367	4175	494258	11405	30449	40945	43253
<a href="#">Sep 2009</a>	1356	1312	943	342	4140	408850	10288	28313	39364	40697
<a href="#">Aug 2009</a>	1147	1104	849	289	3701	387321	8984	26336	34242	35568
<a href="#">Jul 2009</a>	1301	1232	901	284	4331	408952	8828	27933	38221	40335
<a href="#">Jun 2009</a>	1314	1271	914	269	4219	441374	8070	27423	38151	39430
<a href="#">May 2009</a>	1441	1382	906	252	4850	480075	7832	28101	42867	44682
<a href="#">Apr 2009</a>	1228	1163	813	211	3864	409405	6341	24391	34903	36855
<a href="#">Mar 2009</a>	1630	1538	1163	237	4275	504813	7361	36076	47684	50550
<a href="#">Feb 2009</a>	1707	1611	1124	229	3959	457594	6431	31481	45131	47805
<a href="#">Jan 2009</a>	1812	1735	1182	179	3675	490718	5556	36665	53802	56200
<a href="#">Dec 2008</a>	2371	2272	1459	178	2805	523503	5539	45250	70435	73523
<b>Totals</b>						<b>5196652</b>	<b>90060</b>	<b>354350</b>	<b>501111</b>	<b>526723</b>

Note November 2009 is only for the first 10 days.

What continues to be encouraging is the significant number of visitors (about 800 in the year) who arrive from a google search for a race name in the South. They usually land on the race details page and if the race director has supplied his own website address they will find a link which takes them straight to that address for other details from the race organisation. Of the 400 different search phrases used during the year the most frequent were:

- cheddar half marathon - 33 times
- bexhill half marathon - 30 times
- tavy 7 - 28 times
- crowborough 10k – 13 times
- silverstone half marathon course – 11 times

## Development

Development plans were mentioned last year. For a variety of reasons people have had limited

availability to progress these plans.

Nevertheless, important ground work has been done and we have tested a new set of pages displaying the locations of all measurers in England (Midlands, North & South) on a series of maps. The underlying database of measurers will become the master record of measurers details and be updated directly by area secretaries. Wales, Northern Ireland and Scotland can be added. This is ready to go live on approval by the CMWP.

The above step was a necessary first step to organise the display of courses in all regions to bring them into line with what has been available in the South for over 3 years. New code has been written to display a basic list of courses ( by county or by measurer) from the Midlands database. At present it is a static arrangement in that the Midlands database of measurements is held on the area secretary's computer and has to be exported manually in order that the online course lists can be updated. For the North which at present provides course lists in a single .pdf file. This file has been manually split up and linked to the map of counties giving a quicker means of access if the county of interest is known. Both these developments are ready to go live on approval by the CMWP.

The major long term goal has been an on-line system which can be used by any area measurement secretary both to process and record certificates and also to publish them to the running community. The experience we have had in importing and displaying Midlands courses has enabled plans for this to be elaborated. We intend to make a verbal report from the pre-meeting to be held on this topic before the start of the CMWP.

The new system, which is now foreseen, will need to be more or less completely coded from scratch. We intend to take advantage of this opportunity to make the code easier to maintain over the long term. In this connection it would be useful to find a measurer who would like to join the development team, possibly in the capacity of deputy system administrator for the website. Only basic web page authoring experience would be needed (html & css). It would be hoped that such a deputy would pick up some basic knowledge in working with php and mysql sufficient to be able to help deal with maintenance issues over the longer term. This is important since, if all areas eventually move to this single on-line system, we will need long term back up to for the present system administrator, and eventually to provide for succession.

*ACTION – Mike Sandford - implement the website home page linking to map display of measurers in Midlands, North, and South and display of county lists. continue with the development of the common on-line certification for South and Midlands. Discuss with Brian Porter his requirements for when he takes over as measurement secretary for the North.*

## **b) Other publications in last year and plans**

Mike Sandford said he intended to place copies of articles for the general runner and race organiser relating to course measuring on the website. Hugh Jones had written an article on GPS which had appeared in Distance Running, which would be suitable. He welcomed other contributions.

Kym Wheeler had published in the RRC magazine an account of course measuring, and said she could provide a copy.

*ACTION – ALL - Provide a copy for the website of any general interest articles on course measuring.*

## **11. Any Other business**

None

## 12. List of Actions

**ACTIONS OUSTANDING from last meeting: Nil**

### NEW ACTIONS

*ACTION – Mike Sandford to invite Alan Young to provide a list of Scottish courses for the website.*

*ACTION – Phil Holland - Communicate to Athletics Services for action, the information he reported about open road races being held with out licence and/or certificate of course accuracy by an affiliated club in Gloucestershire.*

*ACTION – Mike Sandford - Invite volunteers from South for the new post of Deputy Area measurement Secretary.*

*ACTION – Mike Sandford - Ask the RunBritain manager if there are opportunities for course measurement to be included in any planned meetings with race organisers and officials.*

*ACTION – Phil Holland - Draft a constitution for the Association of UK Course Measurers. and circulate to CMWP then all measurers for comment*

*ACTION – Mike Sandford - Communicate the CMWP's discussion of multi-terrain certification to Tim Grose.*

*ACTION – Phil Holland - Confirm new wording of Rule 205.4 (ii) to John Temperton.*

*ACTION – Bill Reynolds - Introduce course checks by race referees into Runbritain's consideration of referees' duties.*

*ACTION – Mike Sandford - Organise GPS section of web site.*

*ACTION – Mike Sandford - implement the website home page linking to map display of measurers in Midlands, North, and South and display of county lists. continue with the development of the common on-line certification for South and Midlands. Discuss with Brian Porter his requirements for when he takes over as measurement secretary for the North.*

*ACTION – ALL - Provide a copy for the website of any general interest articles on course measuring.*

## Appendix

A report on a meeting with RunBritain held on 1 July 2009 is available on the Course measurers' private pages [here](#) (log in required)