



WELSH ATHLETICS
ATHLETAU CYMRU

Race Director Fact Sheet: Number 12

Course Measurement.

The first thing that most runners consider is how long a race is. Then, most want to know if it has been accurately measured so that they can evaluate their performance, especially if they hope to achieve a personal best.

All road races that advertise a set distance should be officially measured by an accredited UK course measurer. The Association of UK Course Measurers (AUKCM) accredits measurers in the UK and the points in this Fact Sheet refer to the relationship with that organisation. Measured courses are issued with a UKA Certificate of Course Accuracy by AUKCM. (Some measurers are also accredited to measure races in the IAAF/AIMS calendar.)



Once a race has its measurement certificate it can use the "Certified Accurate" logo in its publicity material. This is instantly recognised by officials and most runners as a guarantee of measurement accuracy. The Power of 10 Rankings only recognises performances on courses licensed by UKA and which have a Certificate of Course Accuracy.

The only runbritain/UKA races that do not need a course measurement certificate are those which do not advertise a distance, or those which are multi-terrain (MT) and therefore cannot be guaranteed to be accurate. See guidelines on MT races at the bottom of this Fact Sheet.

Relationship between the Race Organiser and Course Measurer

Measurers work for the race director as independent agents and are selected and engaged by the race director. They submit their measurement reports to the race director with a copy to the Area Course Measurement Secretary for certification.

The race organiser should contact a course measurer to arrange an official course measurement. Contact details for currently active measurers are available on the UK Course Measurement website <http://coursemeasurement.org.uk> If there is a problem locating an available measurer, the Area Course Measurement Secretary (ACMS) will assist. ACMS contact details are also on the website. Ideally, contact should be made 6 months before the race. The race organiser should ensure that any necessary approvals for the proposed course are obtained before the measurement is carried out.

On receipt of the measurer's report, the ACMS will issue the course measurement certificate. The Race Measurement Prior to the official course measurement, the race organiser should provide a map of the proposed course. The race organiser should also have in mind where it may be possible to extend the course in the event of the intended course being found short. Is it possible to adjust the start/finish? Is there a turn point which can be used to make a final adjustment? The course measurer will measure the shortest possible route within the boundaries of the course and the race organiser must be able to clearly identify these boundaries.

The measurer will ride a bicycle along the course using a special counter called the Jones Counter which records the revolutions of the front wheel. To get an accurate length the bicycle used in the

measurement has to be calibrated by riding along a short calibration course which has been accurately surveyed with a steel tape or an Electronic Distance Measuring machine.

The overall accuracy of measurement is normally a little better than 1 part in 1000, which is equivalent to 10 metres in a 10K or 42 metres in a marathon. IAAF and UKA rules require the course to be at least the advertised distance. To ensure this, the measurer uses a short course prevention factor when determining the official distance. For example, they will set out a 10,000-metre course as 10,010 metres. The official distance which appears on the certificate will be 10,000 metres, because the measurement has established that the course is definitely not less than 10,000 metres.

Depending on the length of the course and local conditions, the course measurement may be completed in several hours in one day or more than one measurement visit may be required. It may be necessary for the measurer to carry out the measurement in the early hours of the morning to avoid heavy traffic and the race organiser may have to liaise with the Local Authority to arrange Traffic Management measures to ensure the safety of the course measurer, other road users and pedestrians. The course measurer will, if the race organiser requests it, provide details of the location of split mile/Km points.

Course Measurement Certificate

A measurement remains valid for 10 years providing the course remains the same. **However, the Course Measurement Certificate is only valid for one year and needs to be renewed annually.** This can be done through the UK Course Measurement website using the 5-digit renewal code on page 2 of the previous Course Measurement Certificate. This confirms the new date and that the course is the same as that for which the course measurement certificate was issued. **The course measurement certificate has two pages. The race organiser must keep both pages and pass them on to their successor.**

Verification of Course Measurement Certificate

On race day, as part of the UKA Licence Standards for Road Races, the Event Adjudicator will verify that the certificate is current and record this on their checklist which is submitted to runbritain. The Event Adjudicator will also seek confirmation from the Race Organiser that the course run is the same as that measured. If the course measured is not run, due to unforeseen circumstances on event day the race organiser should inform the participants, Power of 10 and the Event Adjudicator immediately.

Short Courses

Courses are sometimes suspected of being short (or less often, long). This could be because of an unusually high number of fast finishing times for that particular race, or because the GPS tracking devices of runners in a race indicate that it was not the correct distance or because a runner or official believed that the course was not set out on race day as officially measured. The first step in such cases is to verify the course actually run on the day. If there is no full video of the race, this can be done by examining a number of GPS traces from runners. AUKCM will carry out this check if sufficient traces are available – a handful in good agreement is usually sufficient. If this check shows that the course was run as measured and that the GPS traces indicate a possible error in course

length, AUKCM will arrange a verification measurement of the course. There will be no charge for this. In other circumstances, AUKCM will report their findings, informing the race organiser, runbritain and Power of 10.

The race organiser may at any time request a repeat measurement by a different measurer. In this case the measurer will want evidence of the course run on the day and normal charges will apply.

The result of any check or re-measurement should be communicated appropriately either confirming that the course distance was as advertised or that it indeed was short. If the course is found to be short, then runners should be informed as soon as possible with a suitable apology and if possible, the reason for the shortfall. Steps may have to be introduced to manage communication with runners and the media in dealing with what could be a difficult situation.

Power of 10 should be informed as they will adjust results for the race in question to show "SHORT" such as "SHORTMar", "SHORT10K" and so on. This means that times from the race cannot be used for ranking purposes but can still be used within the runners' personal profiles on Power of 10 and in their runbritain handicaps.

runbritain should also be informed as it will be contacted by runners and the media and will be able to assist the race organiser in managing the situation.