

COURSE MEASUREMENT DATA SHEET

Name of event: **1. HELSINKI ULTRA RUN 6 h & 12 h**

Date of event: 17.9.2016

Name of measurer: Jari Tomppo

Dates of measurement: 5.5.2016

Start time: 13:00 Temperature: +20°C

Finish time: 17:00 Temperature: +20°C

Constant for the Day: 11969,4575 counts/km

MEASUREMENT DATA

Basic loop

| Measured point | Counter Reading | Counts | Distance in meters |
|----------------|-----------------|--------|--------------------|
|----------------|-----------------|--------|--------------------|

Measure 1

Start point: Parking place 715569

Finish point: Same as

Start point 739293 23724 **1982,04**

Measure 2

Start point: Parking place 739293

Finish point: Same as S/P 763022 23729 1982,46

The course was measured by riding two times with bicycle equipped with calibrated Jones-counter. The measurement was done on running direction (counterclockwise) according to shortest possible route in order to verify that no runner can run shorter distance than measured.

The difference between rides was 42 centimeters and shorter distance – **1982,04 meters** - was selected.

Short loop which will be used during last 30 minutes of the race

Short loop was measured using calibrated steel tape. Short course prevention factor was included for measurement.

Measuring points are aligned according to fixed constructions on parking place and soccer field (traffic signs, lamps, fences).

The length of a short loop is **453,20 meters**. Also this loop will be run counterclockwise.

Description of an event

Helsinki Ultra Run is an ultrarunning competition which will be run 17.09.2016. There are two events: 12 hours run starting at 9.00 and 6 hours run starting on 15.00. Both events finish at the same time: 21.00.

The course consists of one long loop (1 982,04 m) and one short loop (453,20 m). Most of the races will be run on long loop. After the race time reaches 11 h 30 min for 12 h race and 5 h 30 min for 6 h race runners will be guided from the timing line to the short loop which will be used during last 30 minutes of both events. After the finishing signal has been given also the unfinished lap will be measured using a steel tape.

The lap counting and timing will be done using an electronic chip-timing provided by Championchip Estonia.

Final distance for every runner will be number of long loops plus number of short loops plus distance from unfinished last lap. In case some runner retires before last 30 minutes the result will be number of long loops. If some runner is on long loop when finishing signal is given the result will be number of long loops.

More information about the event: <http://helsinkiultrarun.fi/eng/>



Kuva 1 Location of start and timing line on parking place

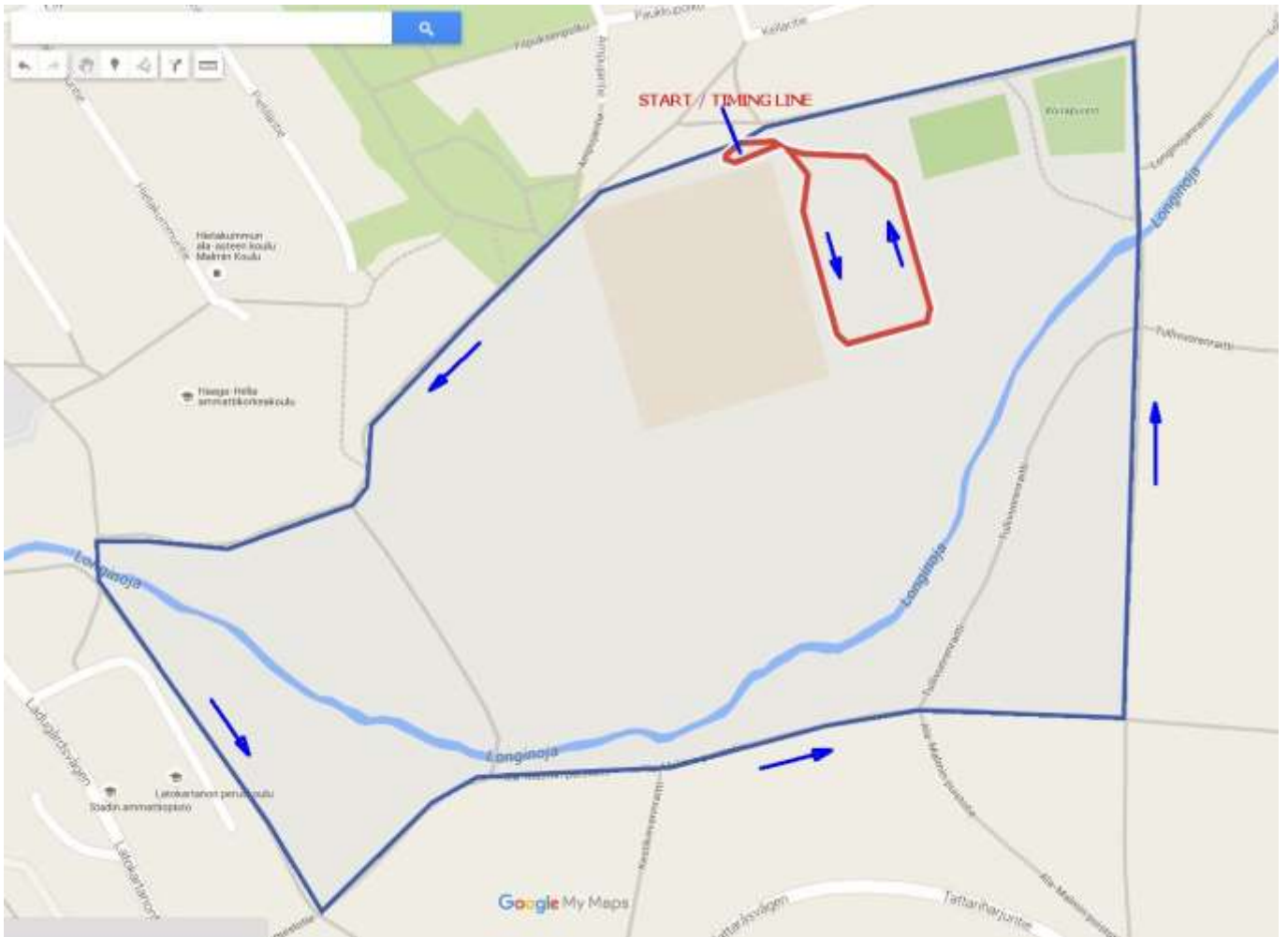
Course Maps



Kuva 2 Short loop and measuring points

Measuring point descriptions

- M0: Start and timing line is aligned according to traffic sign indicating Parking place
- M1, M2, M4 and M16 are marked with blue paint markings on tarmac. Cones will be located over painted markings.
- M4: Entrance to soccer field
- M5: Chalk line on corner of grass field
- M6, M7, M8, M11, M12, M13: 6,00 meters (on 90 degree angle) from lamp. Cones will be located 30 cm from measured line towards center of field.
- M9, M10: 6,00 meters from ends of fence. Cones will be located 30 cm from measured line towards center of field.
- M14: End of fence, next to trash can
- M15: Exit from soccer field. Same gate as used for entrance.



Kuva 3: Basic loop (blue line) 1 982,04 meters and short loop (red line) 453,20 meters with arrows showing running direction

Attachment 1: Jones-counter Calibration data

| JONES-COUNTER CALIBRATION DATA | | | |
|---------------------------------------|--|-------------------------------------|-------------------|
| Event | Helsinki Ultra Run 6h and 12h - 17.09.2016 | | |
| Measuring date | 5.5.2016 | | |
| Measurer | Jari Tomppo | Assistant | Juha Palenius |
| Length of calibr. Course | 300,00 m | Measuring method of calibr. Course | Steel tape |
| PRE-CALIBRATION | | | |
| Time | 13:30 | Temperature | +20°C |
| Ride | Start count | Finish count | Difference |
| 1 | 697000 | 700584 | 3584 |
| 2 | 701000 | 704589 | 3589 |
| 3 | 705000 | 708588 | 3588 |
| 4 | 708589 | 712177 | 3588 |
| Average | 3587,25 | (D12:D15)/4 | |
| counts per km | 11957,500 | Average/(1000*B6) | |
| Working constant | 11969,458 | (counts/km)*1,001 | |
| POST-CALIBRATION | | | |
| Time | 16:50 | Temperature | +20°C |
| Ride | Start count | Finish count | Difference |
| 1 | 766658 | 770244 | 3586 |
| 2 | 770244 | 773833 | 3589 |
| 3 | 773833 | 777419 | 3586 |
| 4 | 777419 | 781007 | 3588 |
| Average | 3587,25 | (D25:D28)/4 | |
| counts per km | 11957,500 | Average/(1000*B6) | |
| End constant | 11969,458 | (counts/km)*1,001 | |
| CONSTANT FOR THE DAY | 11969,4575 | (Working constant + End constant)/2 | |

Attachment 2: Measure data, Basic loop

| | <i>Constant of the day</i> | 11969,4575 | | | |
|----|--|------------------------|---------------|----------------|--|
| | | Counter reading | Counts | meters | |
| M0 | Measure 1 Parking place Start line | 715569 | | | |
| M1 | Measure 1 Parking place Start line | 739293 | 23724 | 1982,04 | |
| M2 | Measure 2 Parking place Start line | 739293 | | | |
| M3 | Measure 2 Parking place Start line | 763022 | 23729 | 1982,46 | |

Attachment 3: Measure data, short loop

| | <i>Measured with a steel tape</i> | | |
|-----|---------------------------------------|---------------|----------------------|
| | Helsinki Ultra Run | meters | with SCPF |
| M0 | Start / Timing line | 0,00 | |
| M1 | Point 1 Parking place | 15,75 | 15,73 |
| M2 | Point 2 Parking place | 3,75 | 3,75 |
| M3 | Point 3 Parking place | 3,95 | 3,95 |
| M4 | Entrance of soccer field gate | 39,70 | 39,66 |
| M5 | Line on grass / gravel edge | 19,70 | 19,68 |
| M6 | Right lamp 1 6 m towards field | 22,25 | 22,23 |
| M7 | Right lamp 2 6 m towards field | 43,09 | 43,05 |
| M8 | Right lamp 3 6 m towards field | 43,60 | 43,56 |
| M9 | Fence, right end 6 m towards field | 6,96 | 6,95 |
| M10 | Fence, left end 6 m towards field | 55,90 | 55,84 |
| M11 | Left lamp 3 6 m towards field | 4,81 | 4,81 |
| M12 | Left lamp 2 6 m towards field | 43,50 | 43,46 |
| M13 | Left lamp 1 6 m towards field | 43,17 | 43,13 |
| M14 | Fence end, next to trash can | 29,18 | 29,15 |
| M15 | Exit from soccer field, gate | 49,19 | 49,14 |
| M16 | Point on tarmac of Parking place | 12,65 | 12,64 |
| M0 | Start / Timing line | 16,50 | 16,48 |
| | Total length | 453,65 | 453,20 |