

Measurement News



March 1999

Issue #94



Photo: Jim Lawakas/Anchorage Daily News

Alaska Certifier Ric Wilson on the way to victory in the men's snowshoe competition of the 1994 Alaska State Biathlon Championships. Story inside.

MEASUREMENT NEWS

#94 - March 1999

HUGH JONES APPOINTED FINAL SIGNATORY

Over the last several years, Hugh Jones has been measuring courses in the Caribbean and sending me applications for USATF certification. Because these applications are virtually flawless, I have appointed Hugh as USATF/RRTC Final Signatory for such courses as he may measure for USATF certification.

THERE IS MORE THAN ONE WAY TO SKIN A CAT

For many years we have used as our ideal "standard" map a sketch showing the width of the road, with the measured line shown on the depicted roadway. This style was pioneered by Bob Letson, and is used by most measurers today.

However, it is not in universal use, as, especially in long and/or complicated courses, the map can be difficult to draw, and even when drawn can be less informative than a map using an alternate approach.

In this issue you will see some examples of alternative styles of map making.

The criteria for a good map are (answers should all be "yes.")

- 1) Is the map clear and legible?
- 2) Could a stranger to the course locate the course and follow the measured path accurately?
- 3) Does the information fit on one piece of paper, using both sides?

The first example of a "nonstandard" map came to me when I did not have much experience at certifying. My friend and mentor Ben Buckner, surveying professor at Ohio State, measured the course of the Licking County Heart-a-Thon in 1985. When I mentioned that his map did not show the measured path on the road, he objected strongly, and asked me to take a good look. I did, and I found that his map, in every way, satisfied the criteria.

Since that time I have strived to use "standard" maps wherever possible. However, there are times when I find it extremely difficult to produce a map that is much better than a crude cartoon. In these cases I fall back on a single-line map.

When the "standard" format is not used, it is necessary to add text to explain whether the course is measured using the whole road, or whether restrictions are present. Also, it is desirable to include the splits as part of the finished certificate. Things can get crowded, and care must be taken. I used this approach in preparing the certificate for the Cincinnati Flying Pig Marathon, a copy of which certificate may be seen in this issue.

Readers are invited to examine these maps and comment on them.

LICKING COUNTY HEART-A-THON NEWARK, OHIO 10 KILOMETERS



Course was measured along shortest route, staying on pavement. Measured for certification by BEN BUCKNER, April 20, 1985.

START is on Main St., in line with the east edge of the Sparta Restaurant bldg., said building edge being the west side of the north-south alley running midway between and parallel with 3rd and 4th Streets.

FINISH is on 3rd St., just south of Church St., being a line 9.5 feet south of the north face of the building on the southwest corner.

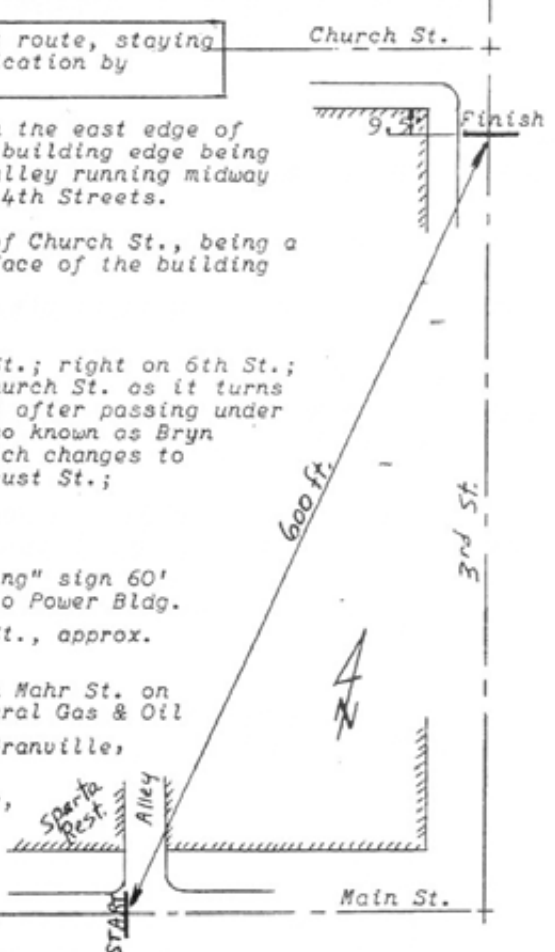
THE ROUTE

From START, go west on Main St.; right on 6th St.; left on Church St.; continue on Church St. as it turns right under the freeway; then left after passing under the freeway; right on Swansea (also known as Bryn Mawr); right on Granville Rd. (which changes to Granville St.), half-left onto Locust St.; right on 3rd St. to FINISH.

MILE POINTS

- 1 on Church St. next to "No Parking" sign 60' east of a drive east of old Ohio Power Bldg.
- 2 sidewalk entering 1014 Church St., approx. 40 feet west of 29th St.
- 3 130 ft. east of centerline Bryn Mahr St. on Granville Rd., across from Natural Gas & Oil
- 4 pole west of entrance to 1001 Granville, across from Baptist Church.
- 5 driveway entering 457 Granville, 2 houses west of King Ave.
- 6 on Locust, east of "Eatery"

TAC Certified Course
OH 85001 BU





Road Running Technical Council
USA Track & Field



Measurement Certificate

Name of the course: Cincinnati Flying Pig Marathon Distance: 42.195 km
 Location (state): Ohio (city): Cincinnati
 Type of course: road race triathlon track Configuration: Loop
 Type of surface: paved 100 % dirt 0 % gravel 0 % grass 0 % track 0 %
 Altitude (wettest/driest above sea level) Start: 550 ft Finish: 500 ft Highest: 820 ft Lowest: 480 ft
 Straight line distance between start & finish 2.14 km Drop 0.36 m/km Separation 5.1 %
 Measured by (name, address, & phone): Pete Riegel & Mike Wickizer (Riegel below)
 Race contact (name, address, & phone): Rich Williams - Cincinnati Flying Pig Marathon -
664 Linn St. Suite 815 - Cincinnati, OH 45203 513-721-7447
 Measuring methods: bicycle steel tape electronic distance meter
 Number of measurements of entire course: 2 Date(s) when course measured: Dec 12, 1998, Jan 24, 1999
 Race date: May 9, 1999 Course paperwork postmark date: N/A
 Difference between two best measurements of the course: 30 cm Certification code: OH 99007 PR
 Reflector: n/a (if applicable)

Notice to Race Director
 Use this Certification Code in all public
 announcements relating to your race.

Be It Officially Noted That

Based on examination of data provided by the above named measurer, the course described above and in the map attached is hereby certified as reasonably accurate in measurement according to the standards adopted by the Road Running Technical Council. If any changes are made to the course, this certification becomes void, and the course must then be re-certified.

Validation of Course - In the event a National Open Record is set on this course, or at the discretion of USA Track & Field, a validation measurement may be required to be performed by a member of the Road Running Technical Council. If such a re-measurement shows the course to be short, then all pending records will be rejected and the course certification will be cancelled.

Automatic Expire - This certification automatically expires ten years after date of issue, although it may be renewed for additional ten-year periods upon testimony to RRTC that the course is still as described on the attached map can still be located precisely.

AS NATIONALLY CERTIFIED BY:

Pete Riegel

Pete Riegel - Chairman, Road Running Technical Council - 3334 Kellen Road - Columbus, OH 43221-1348
 Phone: 614-451-5617 Fax: 614-451-5610 email: Riegelpete@aol.com

Date: January 27, 1999

Cincinnati Flying Pig Marathon - Description of route and course restrictions

START - Walnut - Central Parkway (LSO) - Ezzard Charles - Linn (LSO to 6th, then RSO) - Gest 3rd (RSO) - Clay Wade Bailey Bridge - Main - 5th - Saratoga - 4th - York - Taylor Southgate Bridge - Pete Rose Way (RSO) - Eggleston (RSO) - Broadway - Reading (RSO) - Ebenezer (use shortcut lane to Gilbert) - Gilbert - Eden Park Drive - Lake (overlook drive) - Eden Park Drive - Victory (RSO) - McMillan - Woodburn - Madison (RSO) - Observatory (RSO to Eastside, then whole road to Edwards) - Edwards - Erie (RSO) - Red Bank (RSO) - Wooster (RSO) - Benchmark Circle (RSO) - Wilmer Ct - Wilmer Ave (RSO) - Kellogg (RSO) - Eastern (RSO) - Eggleston (RSO) - Central Parkway (LSO) - Ezzard Charles (LSO) - Entrance drive to Union Terminal (LSO) - FINISH.

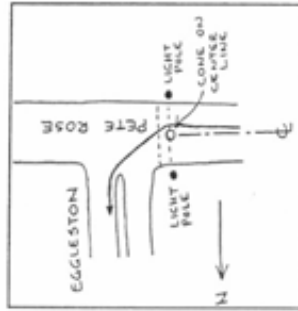
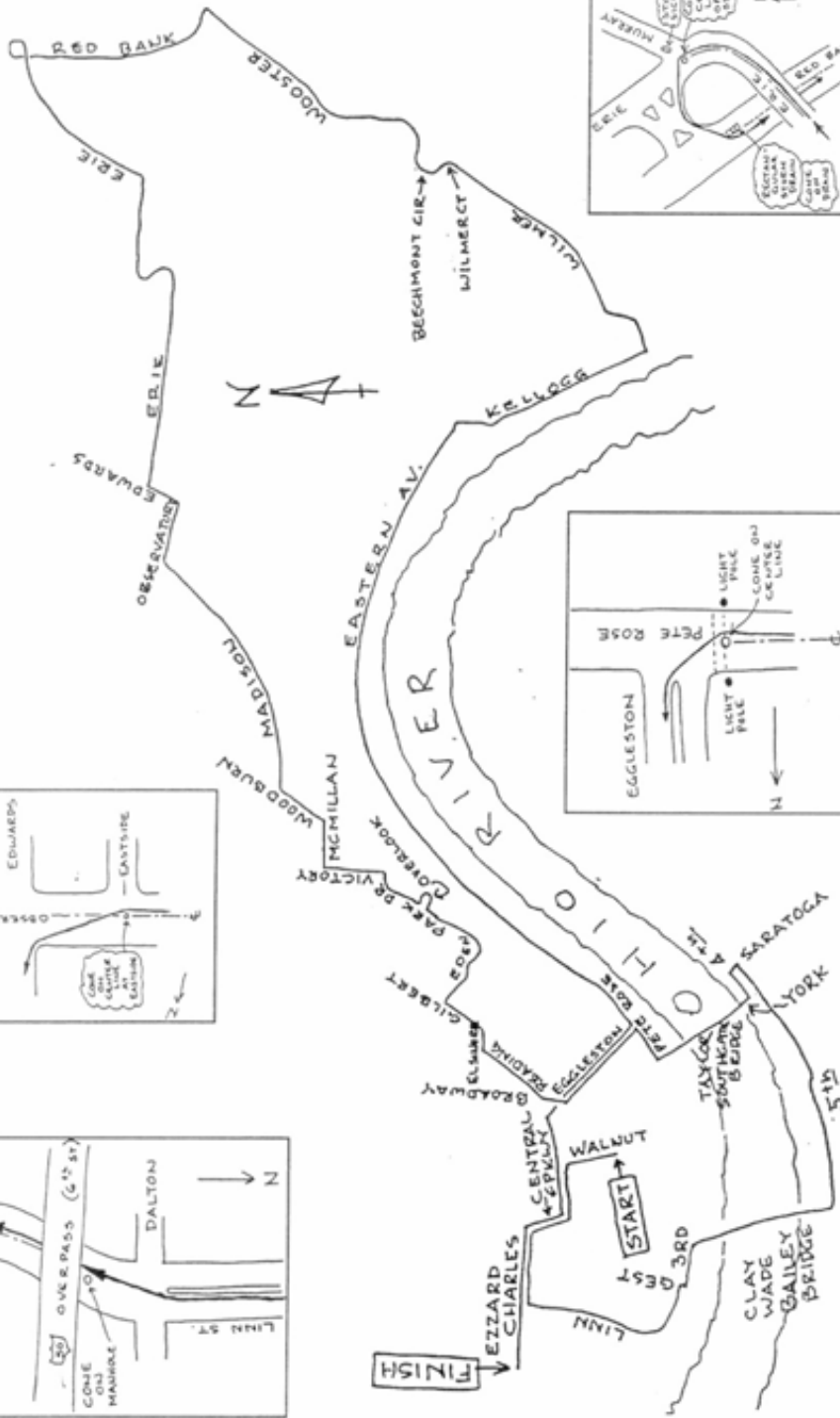
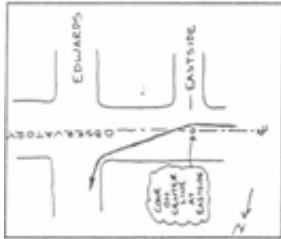
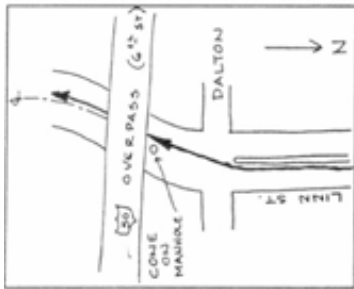
RSO = right side of center. LSO = Left side of center. No note = whole road available.

CINCINNATI FLYING PIG MARATHON

- Start - On Walnut, 2 feet north of the south edge of the southern brick column of the Jarson-Kaplan Theater (Acrofl Center). Also 114 feet north of the north curbline of Sixth Street. Marked with PK nail on west side.
- 1 Mile - On Ezzard Charles, at the west curbline of Sixth Street. Marked with PK nail on west side.
- 2 Mile - On Linn, 60 feet south of the south curbline of 5th St. W.
- 3 Mile - On Clay Wade Bailey Bridge, 15 feet north of the 5th vertical I-column from the south end of the steel portion of the bridge.
- 5 km - On Clay Wade Bailey Bridge, 3 feet south of lightpole. Lightpole is the 1st one on the west side north of the second overhead lane information sign, counting from the south.
- 4 Mile - On Garrard, opposite the front door of #405.
- 5 Mile - On 4th, between Monmouth and York. It is 3 feet west of the lightpole in the parking lot of Goodyear Service Center.
- 6 Mile - On Eggleston, 4 feet south of the south edge of a double-grate storm drain. Drain is the first double-grate drain north of Pete Rose.
- 10 km - On Eggleston, 35 feet south of the south curbline of E 6th St.
- 7 Mile - On Reading, at the north edge of Staples (located at northeast corner Reading/E. Liberty).
- 8 Mile - On Eden Park Dr, on a left-hand curve overlooking a large brick building with a tall brick chimney. Mark is about 50 feet east of the chimney.
- 9 Mile - On Victory, at the north edge of the south driveway entrance to Park Place, #2330 (Victory Tower).
- 15 km - At the apex of the turn from McMillan onto Woodburn. In front of "Palette Studios" window.
- 11 Mile - On Madison after Dexter. Mark is at north side of #1839.
- 12 Mile - On Madison after Vista. Mark is 5 feet west of the west end of the concrete retaining wall in front of Madison Towers, #2365.
- 12 Mile - On Erie past Shaw. At pole between #2809 & 2811.
- 20 km - On Erie, 10 feet east of the east curbline of Grace.
- 13 Mile - On Erie, on the curve after Tarpis Ave. At the telephone pole in front of the Police building, #3295.
- Half Marathon - On Erie before Marburg. Opposite "Matt Bradley" sign on #3340.
- 14 Mile - On Erie before Broadway, at third free-standing stonework column west of gate to "Stone Cliff."
- 15 Mile - On Red Bank, 70 feet before RR tracks, at center of three silver cylindrical tanks.
- 25 km - On Red Bank, 30 feet past the first telephone pole past the RR overhead.
- 16 Mile - On Wooster, at the hydrant in front of Cincinnati Paperboard Corporation.
- 17 Mile - On Wooster, 10 feet south of the north end of a steel guardrail leading to a bridge, just past a big brown building on the left, with a flagpole.
- 18 Mile - On Wilmer, 10 feet north of the hydrant in front of #621 (Thomas Dyer Co. Grote Enterprises).
- 30 km - On Wilmer, 30 feet south of telephone pole. Pole is the first one south of the entrance drive to H. Denner Distributing, 351 Wilmer. Pole is also at south edge of Midwest Jet Center Executive Terminal.
- 19 Mile - On Wilmer, 80 feet north of the north curbline of Kellogg. Opposite lightpole in UDF store.
- 20 Mile - On Kellogg, just before Delta, 40 feet past (west) of the west end of the chain link fence at the swimming pool complex.
- 21 Mile - On Eastern, at the first hydrant east of Foster.
- 35 km - On Eastern, past Collins Ave, 15 feet west of pole. Pole is at the west edge of #2320. Mark is at driveway of Bee Line Frame & Axle.
- 22 Mile - On Eastern, past Vance, at front door of #2137 and #2134.
- 23 Mile - On Eastern, past Kemper. Mark is 6 feet west of the east end of a steel guardrail on the south side, the first guardrail west of Kemper.
- 24 Mile - On Eastern, just before Eggleston. At west edge of the eastern (northbound) overhead highway bridge.
- 40 km - On Central Parkway, 5 feet east of the first parking meter east of Bowen Alley. West of Main St.
- 25 Mile - On Central Parkway, 15 feet west of the second parking meter east of Walnut St.
- 26 Mile - On Ezzard Charles, just east of Winchell. Point is 20 feet east of the entrance to #879, at the third tree (south side) east of Winchell.
- Finish - On south lane of Winchell.
- Finch - On south lane of entrance drive to Union Terminal grounds, at the second lightpole east of the entrance to the south parking lot. Marked with PK nail on south side.

Measured by Pete Riegel and Mike Wickizer

USATF Certified Course OH 99007 PR



Start - On Walnut, 2 feet north of the south edge of the southern brick column of the Jarson-Kaplan Theater (Aronof Center). Also 114 feet north of the north curbline of Sixth Street. Marked with PK nail on west side.

Finish - On south lane of entrance drive to Union Terminal grounds, at the second lightpole east of the entrance to the south parking lot. Marked with PK nail on south side.

CINCINNATI FLYING PIG MARATHON
OH 99007 PR

UPCOMING MEASUREMENT SEMINARS

Two course measurement seminars are scheduled for April 30 - May 1.

The first seminar is a three-hour introduction to course measurement, at the annual RRCA convention, held in Spokane, Washington. The session is on Friday, April 30, from 10:00 AM to 1:00 PM. This seminar will be conducted by Mike Renner, USATF/RRTC Certifier for the State of Washington.

Bill Grass (WI Certifier) and Alan Jones will be at the RRCA convention. Interested people, measurers and certifiers will be welcome.

Those wishing to attend should contact: (ask for RRCA Convention information and registration form)

RRCA
1150 S. Washington Street
Suite 250
Alexandria, VA 22314-4493
Phone: 703-836-0558
Fax: 703-836-4430
email: RRCAmoira@aol.com

The second seminar is a two-day seminar, sponsored by AIMS/IAAF in conjunction with the Vancouver International Marathon. The seminar will be held on Friday and Saturday, April 30 - May 1, just before the Vancouver International Marathon (May 2). Pete Riegel will be the instructor.

Cost will be \$100 (Canadian) which will include 2 lunches, classroom and use of a bicycle.

Those wishing to attend should contact:

Gordon Rogers - AIMS Technical Director
PO Box 2931, Vancouver, B.C., CANADA V6B 3X4
Tel: 604-733-6224 Fax: 604-733-6221
email: grogers@intergate.bc.ca

or:

Jerry Tighe - BC Athletics
206-1367 West Broadway, Vancouver, B.C., CANADA V6H 4A9
Tel: 604-737-3174 Fax: 604-737-3171
email: jerry.tighe@bcathletics.org

From Anchorage Daily News, sometime in 1994:

In the men's snowshoe competition, 44-year-old Ric Wilson of Anchorage shuffled to a winning time of 39:44 (ed note: the course was 7.5 km) though he, too, couldn't hit the broad side of a barn with his rifle. Wilson was guilty of seven missed shots. "Snowshoe biathlon is a slightly different event in the sense that when skiers reach the shooting range they can coast in and lower their heart rate" - thereby improving their marksmanship - "while snowshoers generally don't coast in. The effort level is significantly higher when snowshoeing."

Wilson estimated his heart rate reached 175 while he was running and lowered to perhaps 100 or 120 while shooting. "I tried to get my heart rate down, but I wasn't terribly successful at it," he said.

Pete Riegel to Ric Wilson:

Dear Ric,

Wayne Nicoll sent me some newspaper clippings from 1994 showing you, looking concentrated and studly, on your way to winning the snowshoe portion of the Alaska State Biathlon Championship. He said:

"Here is the article with the neat picture of Ric Wilson. He wrote to me when he learned I was both snowshoe racing and running/shooting in Summer Biathlon. The picture of him snowshoeing and shooting in the same event really excited me. So far, I have not stirred any interest in the Northeast.

You will find a paragraph about him winning the snowshoe event. Note he is wearing original Alaskan mukluks with the traditional wooden snowshoe."

I'd like to put it in Measurement News, but Wayne's final comment brought me up short, as it should have: "Do you need his permission to print it?"

I conclude no, but I will print it unless you tell me I shouldn't. Then I won't. Nice picture, though. I'd hate to miss it.

Reminded me of my time at Ladd AFB in Fairbanks, where I spent 17 months of my Army service in 1954-1956. Spent a lot of time cross-country skiing and maintaining dog teams (which the sergeants drove). At the time I was a raw youth and didn't take full advantage of the situation. Still, it's a good memory.

I remember vividly the time our platoon was skiing up the middle of the Tanana River, and way in the distance we saw a bison. The sergeant (fresh from combat in Korea) said to the unblooded lieutenant "Lieutenant, you don't have a hair on your ass if we don't chase that buffalo." So we did. When we got halfway to the thing it charged us. It looked like a railroad snowplow, throwing waves of snow to either

side. Everybody panicked, skiing to the woods at the side of the river. Guys were falling down and screaming. The bison was faster than us, and it got close, then veered, ran a big circle around us, and scampered off. Then, on return to base, those of us who remained unsoiled had fun teasing those whose bowels had loosened. But all had been heartily terrified. That bison was power personified. Sergeant Robisciotti never even drew the fancy .357 he liked to carry.

Best regards, Pete

Ric to Pete

Pete,

I hate to say it but that photo is copyrighted by our newspaper. So, truth be told, it can't be used with out permission. I've contacted the newspaper to seek permission and was told I'd have to call back on Monday but the guy I talked to in the photo department did not think it would be any problem to get permission.

I've been a bad boy anyway and I'm not sure you'd want me on the cover except to be made an example of. I have a number of certificates that I must get to Tom and on to you. Everytime I get a chance to work on them, something else goes haywire or a map needs redrawing. I have a bad practice of wanting to send all the certs at once, rather than as they are finished, getting them out (They came in during the summer just as my travel frenzy started -- 50,000 miles alone between August 1 and Nov. 1 -- virtually all in the U.S. too).

I feel really bad about this and though I have spent many an evening working on maps and paperwork you see little effect of that. Your e-mail throws me back in gear -- these things wake me at 2 in the morning with the realization that I have something else to do. I'm not sure what it is but it seems everything is conspiring to keep me exhausted and though a lot is happening, I don't feel real productive. I have resigned from most of my volunteer positions in the running community, trying to avoid

burn-out -- I've continued to work on measuring (I know it isn't readily apparent) because we just don't have anyone else here, and in truth, it is something I enjoy. Anyway, I know you are disappointed in me, as I am in myself, but hopefully, I can get this back on track.

I've even retired from biathlon last year -- I won the State Championship every year I entered and got tired of the lack of competition (usually non-athlete shooters who couldn't ski). However, I have continued to train on snowshoes - the traditional type, which I prefer. With mukluks, they are much lighter and I feel more comfortable that the new high-tech stuff. Plus, I'm a bit of a luddite.

I started doing all of this because of the Arctic Winter Games, a bi-annual Northern Olympics, requires traditional gear. The competition is among teams from around the Arctic, representing Greenland, the Yukon and Northwest Territory of Canada, Alaska, and a number of Russian Provinces. In the 1988 and 1998 games I represented Alaska in Snowshoeing, and in the 1990, 1992, 1994 Games, Snowshoe Biathlon. (In 1996, Alaska hosted the games and I was sport coordinator for snowshoeing.)

I've won multiple medals, including the Gold in the 16 km race in the Yellowknife, Northwest Territories last March (I was the games oldest medalist and got lots of CBC coverage).

Your story about the buffalo sounds just like the kind of thing that people really do here - I remember a similar encounter with a moose while skiing to work with some co-workers one day. One was visiting from Colorado and afterward, swore he'd never return to Alaska!

Another time, we told a guy who had joined our winter Saturday morning running group that there were things he had to do to be allowed to write the run in his logbook. Simple things such as touch the totem pole at the turn around. Well,... he seemed gullible so some one said that if there was a moose on the path, being new, he had to run ahead, hit it on the rump and tell it to shoo. Well, there was a moose that day and believe it or not, he did do just as we had said. The moose was shocked and with a quizzical look, watched him run by and then came after us! We decided no more moose-based pranks after that.

Gosh, I'm running off at the mouth here. Sorry about the photo -- it would have been a "different" cover and I could tell an interesting story about how we "measured" and put in the snowshoe trails for Arctic Winter Games to go with it. If you wish I could try to find another photo. But most importantly, I'm going to get to work on the certs I owe. (At least most of them were never paid for so that guilt trip isn't underway.) Thanks for the tickler, that worked better than probably than a direct message! Ric

A final followup from Ric to Pete:

Pete,

I contacted the right folks at the Anchorage Daily News and they were in a good mood and said, sure, use the picture, just be sure to credit the Anchorage Daily News. And I will put something together on the Arctic Winter Games course layout. But not before I get at least some of the certs in the mail.

Cheers,

Ric

MEASURING WITH AND WITHOUT A LINE TO FOLLOW

This is another look at some ancient data. In November 1982 I set up an experiment using a Rolatape MeasureMaster wheel, which read in feet and inches, with a wheel circumference of one foot. The wheel was operated by ten Battelle engineers. The exercise was reported in Measurement News #15, February 1986.

The measured venue consisted of smooth floor one-foot-square tiles in a hallway, 34 tiles long and three tiles wide. The 34 foot dimension was steel-taped at 407.625 inches. The three foot dimension was steel-taped at 35.938 inches.

Repeated measurements of the two long sides of the rectangle were made. Also measured were the diagonals. The short sides were not wheel-measured. Following are the data obtained during the measurements.

RAW DATA - MEASUREMENTS IN INCHES

Measurer	Long Side	Long Side	Diagonal #1	Diagonal #2
DE	408.75	408	409.5	410
DH	407.75	408	409.25	410
DR	407.75	407	409	409
HW	409	408	412	412
JH	408.75	408	410.5	410
PR	408	407.75	409	409.5
RG	407.5	408	410.25	409.5
RW	407	407.5	411.25	410.25
TP	408.5	408.5	411.75	410.5
WA	407.5	407.5	409.5	409.5

In the calculations below, the long side was used as a "calibration course" to measure the length of the diagonal.

Measurer	Long Side	Long Side	Constant	Measured Diagonal #1	#1 Error Inches	Measured Diagonal #2	#2 Error Inches
DE	408.75	408	0.998163	410.253	1.047	410.754	1.548
DH	407.75	408	0.999387	409.501	0.295	410.251	1.045
DR	407.75	407	1.000614	408.749	-0.457	408.749	-0.457
HW	409	408	0.997858	412.884	3.678	412.884	3.678
JH	408.75	408	0.998163	411.255	2.049	410.754	1.548
PR	408	407.75	0.999387	409.251	0.045	409.751	0.545
RG	407.5	408	0.999693	410.376	1.170	409.626	0.419
RW	407	407.5	1.000921	410.872	1.666	409.873	0.666
TP	408.5	408.5	0.997858	412.634	3.428	411.381	2.175
WA	407.5	407.5	1.000307	409.374	0.168	409.374	0.168

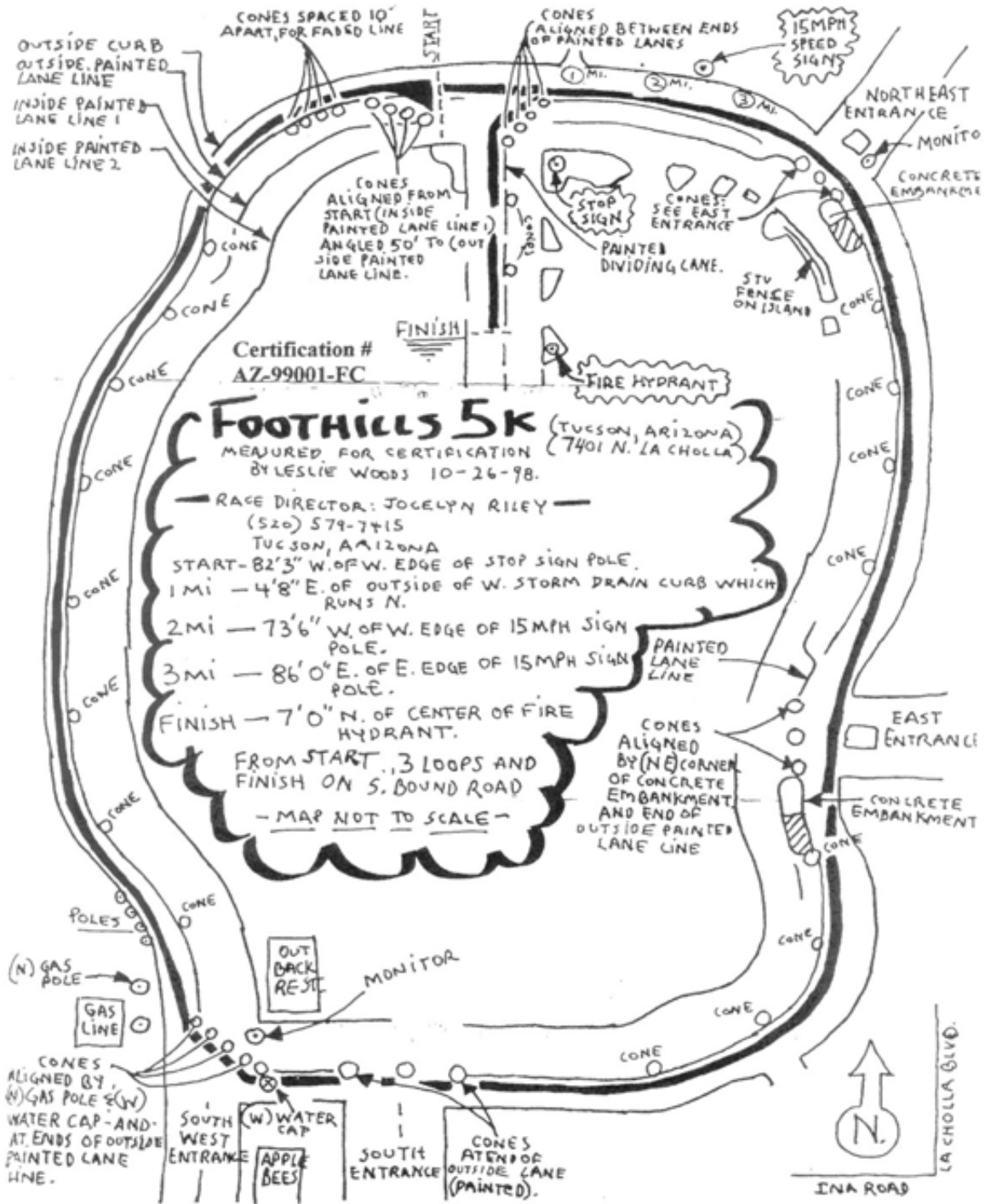
Average Measured Diagonal	410.515	410.340
True Diagonal	409.206	409.206

MEASUREMENT ERROR, M/KM

Measurer	Measured Diagonal #1	Measured Diagonal #2	Average Error m/km
WA	0.41	0.41	0.41
PR	0.11	1.34	0.72
DR	-1.12	-1.12	-1.12
DH	0.72	2.56	1.64
RG	2.87	1.03	1.95
RW	4.09	1.63	2.86
DE	2.57	3.80	3.18
JH	5.03	3.80	4.41
TP	8.41	5.34	6.87
HW	9.02	9.02	9.02

These results support the commonly-held belief that one can ride straighter if one has a guideline to follow. It's also plausible support for the idea that very few can measure as accurately as they calibrate.

MAP OF THE MONTH
 Leslie Woods is a first-timer!



REPORT of the Ljubljanski Maraton course measurement, made by Tadeusz Dziekonski (Poland) on July 18-19,1998

Saturday morning I reviewed the course by a car and put all details on a map. The course consists of two loops situated in Ljubljana. Four streets (Večna pot, Cesta 27 Aprila, Edavceva cesta and Kongresni trg) are divided into two directions.

Midday I measured the calibration course around 3 km from the start/finish area. Next we spent a few time to find a suitable bicycle. Afternoon, during a tentative ride I had a big problem with this bicycle and after a 9 km point it was not possible to ride steady. From this point to the end of the loop I rode using one revolution of pedals forward and two revolutions back. Next we found a service works where the bicycle was repaired.

After this ride I found out that the loop is around 20 km 940 ms long but I rode without a police protection (using not the shortest possible route).

Sunday morning I measured a full distance with the best police protection I had ever. After this measurement I was asked to move the finish line back. Finally I moved this line 99,31 ms back (the start line too).

At Gospodska str. and Mestni pi. it was very difficult to ride due to a parked cars and a provisional bar on Mestni pi. Early morning of the next day I checked this distance (around 500 ms) and found out a difference of 1,09 in (less). Due to this fact I did not make any adjustment after the measurement (full distance using a constant of the day 42.196,98 ms).

At the same time I changed 20 km,40 km and half-way points (99,31 ms back). Before my departure I changed a remaining 5 km splits (with a steel tape).



Ljubljanski Marathon course measurement - Ljubljana, Slovenia - July 19, 1998 - L to r: Anton Majcen, Tadeusz Dziekonski, Andrej Razdrim

 TADEUSZ DZIEKONSKI
ul. Chrobrego 4 m. 8
(skrytka pocztowa 14)
15-057 Białystok
POLAND

WOMEN-ONLY FASTEST?

At a press conference before Christmas the Flora London Marathon organisers announced a special bonus of \$125,000 for any woman in their event on 18 April who breaks the fastest time yet run in a women-only race.

But what time is that? Not the time set under controversial circumstances by Tegla Loroupe in Rotterdam last year (2:20:47); Not the existing London course record of 2:21:06 set by Ingrid Kristiansen in 1985 and an unofficial 'world best' until Tegla's run (the London Marathon was a mixed race then); Not the brilliant 2:21:47 Asian Games performance by Naoko Takahashi in the heat and humidity of Bangkok only days before the press conference announcement.

No. The time to beat is Lisa Ondieki's 2:23:51 run in Osaka in 1988.

Why? Because not only was it set in a women-only race, but the course offers no assistance to the runner. The Council of the IAAF once accepted recommendations concerning 'assisted' courses, on which proposed road race 'records' could or could not be set. These recommendations, and the whole concept of road race records, was never passed by the IAAF Assembly but the recommendations live on: Note to IAAF Rule 165.2: *"It is recommended that, for road races staged over standard distances, the start and finish points measured along a straight line between them should not be further apart than 30% of the race distance."* And Note 4 to Rule 165.3: *"It is recommended that for road races staged over standard distances, the decrease in elevation between the start and finish should not exceed one in a thousand, i. e. 1 m per km."*

These are the conditions, less than 0.1 % drop and 30% separation (to prevent consideration of wind-assisted performances), which rule out Naoko Takahashi's time, where there was an estimated 25 km separation between start and finish and a strong tailwind at the time of the race.

The London bonus, on a course which falls within the limits described above, is probably the easiest \$125,000 on offer in athletics at the moment. But only one woman can win it. Defending champion Catherina McKiernan must be the favourite after her 2:22:23 in Amsterdam on November 1.

Above from Hugh Jones, in AIMS Newsletter No. 156, January 1999

Editor's note: After the above was published, Lidia Simon ran 2:23:24 (on January 31, 1999), also at Osaka, eclipsing Ondieki's women-only mark. This raises the bar a bit.

TIDBITS FROM MNFORUM

Measurement War Stories

Many years ago, in the 1970s, the local town wanted to put on a race. The head of the parts department contacted me and I gave him the information he needed including the location of our calibrated 880 yard (pre-metric) course. No, that wasn't good enough and it was across the river in a neighboring town. No, he would lay out his own calibrated course. I ran the race, a 10 km, and as I crossed the finish line and looked at my time, I knew the course was short. I went up and announced this to the measurer. Of course, he claimed to have done everything right. I asked him where the calibration course was. I went out to remeasure it but when I got there I didn't have to. The 100 foot marks were still on the pavement and I counted them. Instead of 52 plus 80 feet, there were 51 plus 80 feet. So, his calibration course was 100 feet short or 1.89% or, for a 10 km, 189 m short.

Hope this helps.

Alan
AlanLJones@aol.com

While talking with David Katz back in the Cretaceous era (early 1980's) he related a story of a measurement he did in Puerto Rico (I think). I don't remember the details, but he said that at some point he was aware that he was being pursued by a pack of wild dogs, and had to ride like mad to outdistance them.

At about the same time Bob Letson related a similar story about his canine chase on the US-Mexico border.

My own story is a bit less exciting, but it's fun to stroll down Memory Lane. The first marathon I ran was in 1974. It was the Athens Marathon, held on a rural out-back course in Athens, Ohio, on a beautiful county road. That year the course was about 1 1/4 miles too long (as best I could tell from topo maps). I ran it several times in succeeding years, and in 1984 finally measured it for certification. During the measurement ride I was followed by the race director and a helper in a van.

Approaching mile 8 I was riding along through the pretty countryside, passing by farms on the right and the Hocking River on the left. Suddenly three medium-sized (about the size of a medium-sized Collie) mean-looking farm dogs came roaring out into the roadway. They positioned themselves in front of me, too fast for me to do much more than brace myself for the crash. At the last minute one darted away to each side, but the one in the middle looked each way and could not make up his mind. By that time I had got myself up on the pedals and was ready for the collision.

I don't remember clearly what happened. All I can recall is sort of a snapshot. I am looking down past the handlebars at the front wheel, which is sitting on the dog's belly at an angle of about 45 degrees. I remember a BUMP! BUMP! And then I was past the dog, and had not gone down. I was mightily relieved, and rode on to make the mark for Mile 8.

The van pulled up, and the race director and the helper were practically crying with laughter. Wondering what they had found so humorous, I asked - was the dog hurt or dead? I was more curious than concerned for the dog's welfare. Served the sonofabitch right as far as I was concerned. I was pretty hot at the time, and had not recovered my normal benign state. They told me when last seen he was still in the road, howling and licking his favorite part.

Thereafter on the ride I was worried about two things: Would those three demons from hell make another try for me on the return ride? Was the dog dead or badly injured, and would an irate farmer be waiting for me with a shotgun? As it turned out, neither happened, to my relief.

The race director did inquire whether I would be making an appropriate course adjustment for the extra distance ridden while passing over the dog.

Pete Riegel
riegelpete@aol.com

World "Record" ? (Another War Story)

How does one claim a world record? In this case the word "best" is inappropriate.

It has been set on an extremely flat, out and back course with excellent road surface, and a gentle tailwind on the return to the finish.

The attached report will explain all -- and may be considered as a 'record' --- UNLESS YOU KNOW DIFFERENTLY!!!

By the time you read this the ASA Marathon Championships will have passed and I suspect that some personal bests will have been set. The course is an extremely fast flat one, from the lush Cape Town suburb of Pinelands out in a Southerly direction to Strandfontein beach, and the turn round point. The return is on the same route. The only 'hills' - can we truly call them that? - are the bridges over the N2 and the railway, both come together less than 2kms into the race and between the 39 and 40km marks on the return. Yes I will be surprised if many of the championship racers fail to improve their PB's.

There are arguably only two things that prevent this: a) that South African runners are so unused to such flat courses that they are unprepared for the need to work the whole way during this event. The normally hilly events in South Africa providing a change of muscle use and an opportunity to recover on the downs. B) that there is a head wind on either the outward run or worse, the return.

With regard to the latter, at this time of year the predominate wind is likely to be from the turn round point as a tail wind to the finish! And the early start of 5:30 should have ensured a virtually windless first half.

The one question that must surely be hanging on the lips of everyone who has been in the sport for the past decades: Why has this course not been used for championships before? When one considers the athletes we have had in the past and the courses they have run on, why hasn't this one been put forward before?

That aside the ASA marathon course, even before it was run, had acclaimed a world 'record' -- not a World Best, but a World Worst!

The last weekend in January saw the official international measurement of the course. A group of four met at the start at 05:30 to commence the procedure. The 4 Calibration rides were undertaken over a 500m distance in Forest Drive. That done the IAAF 'A' grade measurer, Norrie Williamson, commenced to measure using a clane Jones on his front wheel, supported by the other in a minibus. Not even 2kms into the event, the front and back tyres went flat from a mass of 'devil thorns'.

The support crew returned to the start to collect the repair kit. However, there were so many punctures in each tyre that it was felt best to collect Chet Sainsbury's solid tyre. A trip to his house and back and a recalibration accounted for another 30-40minutes. Out on the road again, and safely past the site of the first puncture another km saw another puncture in the rear tyre.

The solid front tyre allowing the measurement to proceed the support crew commenced to repair the rear tube, --- BUT ran out of patches. Chet off again now in search of more repair patches and glue at 07:30. Eventually back on the road and cycling the rear tyre had a slow flat which required pumping every 2-3kms. As the van stopped, turns would be taken to jump out and pump up the tyre, for another 3kms to be completed. At the turn round another attempt to provide a stable back tyre, saw a swap of the inner tube. Less than a kilometre later, a blow out! Another change. So it continued, pumping, repairing and changing. -- a crew that would put any formula one team to shame. The measurement eventually completed by 10:30 -- 5 hours - much longer than anyone in the championship would take to complete the course -- but then the measurers used a bicycle!! A total of 8 punctures - with 3 inner tubes and multiple intermediate tyre inflations!

This complete the next item was to do the calculations and report - another 4 hours - and just to round it off, less than a week later a possibility of running the course in the reverse direction, which would mean altering the report and details.

Yes the ASA Marathon could produce the fastest running times in South Africa - (providing you don't puncture your air or gel soles!) - but it has produced the World's Worst Measurement course for punctures!

Norrie Williamson

"Certification Pending"

This is a report from a marathon in Washington. The object seems to have been to set up a qualifying performance for the Olympic Trials Marathon. Does anyone have comments on the validity of establishing a qualification on a course which has not been pre-certified?

This is a very dangerous thing to do if you are looking at qualification by time. If the distance is longer or shorter than the "marathon" distance then times are affected. If qualification is only for the first three runners regardless of time then pre-certification is less crucial but, in my mind, still important. Runners have a pace that they try to maintain to some particular point in their race and they usually have planned to start hammering at a certain distance from the finish. If the distance is not accurate this may cause their plan to fail. Without certification, chances of error are more likely. Without the certification ride of the marathon course for the Olympics in Atlanta the runners would certainly have found out the error in the course by their splits which would have been embarrassing to the Olympic Committee and a source of grievance by the athletes.

In the past, the Olympic Trials Marathon measurement and certification by a number of measurers provided a chance for experts and new measurers to ride together and hone their skills and learn from each other. When I helped with the Olympic Trials Marathon in Columbus I learned a lot and met many whom I now consider to be friends. The same was true with the measurement in Atlanta. I was quite disappointed when I was unable to help with the last U.S. Olympic Trials Marathon because it was held on a date which, because of my work schedule did not allow me sufficient time to travel. I know I will not have earned enough air miles to get me to Australia to help measure the marathon and

race walks for the next Olympics for which I am also disappointed.

Bernie Conway
measurer@ican.net

Reply to Bernie

According to Tom Cotner who measured the course before the event, the paperwork for this course is in the pipeline. At present, Matt Messner's 2:19:39 is a pending 2000 U.S. Olympic Marathon Trials qualifier until the course properly passes muster.

Ryan Lamppa
USATF RRIC
www.usaldr.org
RLamppa514

Reply from Tom Cotner, Race Director:

The Always Running Winter Qualifier course was measured according to standard measurement criteria in mid-December and the paperwork was submitted before Christmas. There was a delay in certification because of some of the intermediate miles were not located with respect to "permanent" landmarks. I believe everything was in order. The marathon drops about 520 feet, making the drop on the order of 50 feet more than Boston, but significantly less than St. George, Tuscon, Las Vegas, etc. The drop is so gentle that you can only notice about 3 downhill grades.

As to Ed's concern that this race was for the sole purpose of getting runners qualified for the Olympic Trials, first let me state that there is nothing illegal or sinister about our marathon. Winter conditions forced us to postpone our race a week and the holidays took their toll on the field that we had assembled. Nevertheless, we felt obligated to run the race even though the entrants had dwindled down to less than 10. Three of the four runners who started the race were very experienced and talented runners, three of whom ran in the 1996 Olympic Trials. We are putting on the 1999 race in late February and the field will include a broad spectrum of runners--many of whom have never even run a marathon.

Second, the larger issue is the legality. Races and field events are set up in every single Olympic event to provide competitive opportunities for emerging elite athletes. I could name at least 10 events that I have been witness to that were set up for the sole purpose of being "last chance" attempts to meet the Olympic qualifying standard. In an Olympic year, I would hazard that a fair percentage of elite 10K events are set up for this purpose, complete with pacers, etc.

Finally, the real purpose behind our marathon was to get back to the situation of the late 70s and early 80s when it was more common for runners to train together and race together. Many of the runners in our event are local and are training together. The marathon is there to encourage them and to focus them, maybe even blind them, to the true sinister purpose--getting them to train and work together.

I look forward to hearing your comments.

Respectfully,

Tom Cotner
tcotner@u.washington.edu

Direct Inquiry from Tom Cotner to Pete Riegel

Pete,

I would like a clarification of whether or not the certification of the Always Running Winter Marathon applies to Matt Messner's performance. We initially measured the course on Dec. 12th and made the final measurements on Dec. 19th. I sent in the paperwork on Dec. 24th. The race was run on the 26th. Before certifying it, our state certifier, Mike Renner, initially sent back the paperwork because I had not fixed the position all of the mile markers with respect to permanent landmarks (most of it is on country roads and I was only able to find telephone poles and power line poles). There was no change in the course since the original submission.

I looked at the Course Measurement Handbook but was not enlightened. I have spoken to two measurers in Washington and they indicated that as long as the paperwork is sent before the race and there were no changes/ modification/questions arising, that the certification should cover the times raced on that course (apparently there may be an exception for record performances). What is your ruling on this issue? I am in the habit of sending in the measurements 1-7 days in advance of races and it has never been an issue until, apparently, now. If this were a 10K, then Matt would have no problem doing it again, but no one wants to have to do a marathon again.

Thanks for your opinion.

Tom Cotner

Pete's Reply to Tom Cotner

Dear Tom,

As long as everything needed to certify the overall distance is in the mail by race day, things are OK. This includes firm locations for start, finish and turnaround (if any). The rest of the splits are less important, as they are not certified. Thus I'd support the course as valid for Messner's performance. We want to find reasons to support recognition of excellence, not deny it.

Best regards, Pete Riegel

A Clarification From Pete Riegel to Jim Gerweck:

Dear Jim,

The certification was legit. The key elements were in the mailed submission before race day, but the certifier held things up for improvement of detail. There is nothing fishy about the certification.

As for the philosophy of qualifying for the Olympic Trials on a downhill course, that's up to the LDR committees to decide. I have no problem with it myself. It benefits mostly the marginal people and has little effect on the ultimate outcome of the Trials race. And it fattens up the field a bit, making the Trials race a bit bigger. I approve of LDR's approach to things on the Trials. Keep it simple.

The Winter Marathon Qualifier (WA 99002 MR) has a total drop just a hair more than Boston's, only 159 meters. Anyone really serious about getting folks qualified ought to revive the Pines to Palms Marathon (CA 95053 PR), which goes from Pine Meadow (4640 feet elevation) to Palm Desert (270 feet elevation, for a whopping total drop of 4370 feet (1332 m), or 31.6 m/km. Almost a mile of vertical drop. You climb 320 feet in the first 3.5 miles, then plunge 4690 feet in an almost uninterrupted drop to the finish.

Bob Letson set this course up for some friends who wanted to try to qualify for the Trials back in early 1996. I understand about a half-dozen people held a "race" on the course. I am not sure whether anyone actually qualified on it.

Best regards, Pete Riegel

Wheel vs. Jones Counter?

The following just came through on the ULTRA internet discussion list. I was going to send a rebuttal, but thought I should check. I'm down with the flu and don't trust my brain past getting in and out of bed at present. Am I wrong, or is this guy's experience exactly the opposite of typical RRTC experience (i.e., he says a wheel gives a longer course than Jones counter, when in reality it is the opposite)?

>>I certify courses with a Jones counter and I use a wheel on trail courses. I find that courses measured with a wheel will always be long. I have been through three wheels and usually on pavement (bounce factor) when you measure off a mile the mile will be about 24 feet long. When you get on a trail then you will get much more bounce and I would say a mile will be about 100 feet long. That would be almost 2 miles for a 100 mile course. Each course is unique. My Laurel Valley was wheel measured at 31 miles but I put it down as 34.7 miles and all that run it say it is much longer than that since no one has ever broken 5 hours. 8 hours is the average finish. But with over 6,000 steps at 18 inches apart that is over a mile up stairs. Makes the Empire State Building stair climb a walk in the park.
Claude Sinclair<<

-Dan Brannen
dbrunnr@idt.net

Dear Dan,

I am uncomfortable with doubting somebody's actual field experience, and do not have any intention of attempting to rebut it, but I'd want to know:

- 1) Was the measuring wheel calibrated on the same surface as it was operated on?
- 2) Was it operated in the same way it was calibrated?

Sinclair makes no mention of calibration, and I assume none was done.

Also, Sinclair mentions a "bounce factor" on pavement, which indicates that the wheel is not being operated properly. A measuring wheel cannot conform to pebbles like a bike tire, so it bounces. It must be operated on a smooth surface at a slow speed.

Trail measurement will always be less accurate than road measurement because of the surface variation and the difficulty of defining the exact route taken.

Best regards, Pete

Measurement by Wheel

There are some of us who are terrible cyclists but motivated to measure short, race walk-sized loops (1K-2.5K). Is there a satisfactory pedestrian-powered wheel that can be used on pavement as an alternative to riding a bike? Bev LaVeck

Measurement of Steps in a Trail Race

The mind boggles at a road race 'certifier' expecting to get reasonable results when pushing a hand wheel of undisclosed diameter (surely a critical parameter) over 12 inch high steps at 18 inch intervals. A little simple geometry will show this to be a futile exercise unless the wheel is very large, unless the steps are sufficiently regular to enable a correction or calibration to be made. The trails I have seen are characterised by irregular steps, just as everything else is irregular. I am convinced that accurate mapping of the trail is in general the best answer, and with a good map it is possible to get to 1 to 2% accuracy. Short bits which are not on the map can be filled in with a wheel or even a pacing estimate.

I once ran an 80 mile trail race and was well pleased with my time although it would not impress anyone else. I eventually measured on a 1:50000 scale map and it came out to about 72 miles (10% short). Later I went to a road race course measurement seminar and learnt that a measurer had spent several days and measured it with a Jones counter. He had himself on his bike hauled up very steep hills by a gang with a rope. His result was 72 or 73 miles as far as I remember. Nice agreement with my map result obtained in a hour or so of careful work. The organiser declined to change his advertised distance since the event had a big following and so many believed they were running 80. When I stepped up to some 100 mile events, these did feel a much bigger jump up than I would expect thus confirming the 80 was short, but that is a rather subjective statement since I was completely shot at the end of the longer races.

Mike Sandford
m.sandford@lineone.net

Pedestrian Powered Wheel

Bev LaVeck is interested in a "pedestrian powered wheel". Many years ago I saw Wayne Nicoll's creation a bicycle front wheel complete with fork and handlebars and a Jones counter. Calibrate it like a bicycle wobble is probably greater than a bicycle but calibration on the surface to be measured should lead to adequate accuracy.

Brian Smith
bnewbatt@awod.com

I recall many years ago a rather eccentric character on the local running scene used to measure XC courses with a similar device. It consisted of a bike wheel mounted between one of those "sissy bar" seat mounts from the old Sting Ray bicycles. Lacking a Jones counter, he put a piece of tape around the bike wheel and would mentally count the number of revolutions on a given course. We would take great delight in engagin him in conversation mid-measurement, which would cause him to lose count and have to start all over again.

Jim Gerweck
Zgerweck@aol.com

Measuring Wheels

Bev LaVeck asked whether there were any measuring wheels suited to measuring racewalk courses.

I own a Rolatape model 400. It has a 4 foot circumference wheel and a resettable counter. Metric models are also available. My wheel cost about \$120 as I recall. Rolatape produces a wide

variety of measuring wheels, details of which may be found at:

<http://www.rolatape.com/index2.html>

In 1985 Al Phillips measured a racewalk loop (Levagoood Park, MI) using a measuring wheel. It later survived validation by Mike Wickiser on a calibrated bicycle. Al was meticulous in the use of the wheel, calibrating it carefully and having an assistant preceding him with a broom to sweep pebbles away from the measured path, so the wheel could roll smoothly at Al's deliberate walking pace. If there are pebbles or rough pavement present, the wheel is likely to be inaccurate.

Most people just use the wheel's counter when calibrating it. This is not good enough. To get decent accuracy, it's necessary to use either the printed scale on the periphery of the wheel, or count spokes. In this way, the wheel can be calibrated to the nearest 1/10 foot. Rolatape has conveniently placed 5 spokes per foot on their Model 400.

Pete Riegel
riegelpete@aol.com

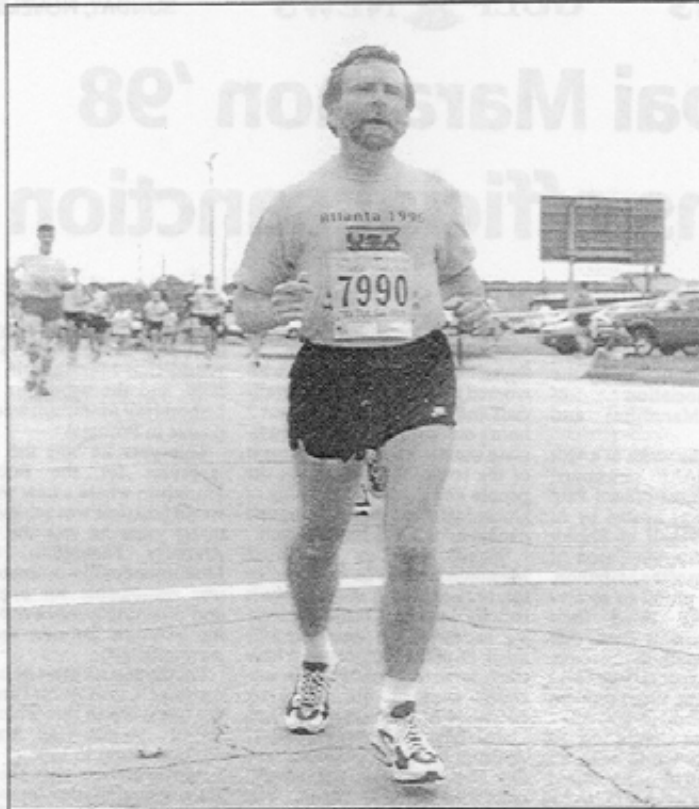
Pedestrian-powered wheels

Why not just push the bike instead of ride it? I have to do some measurements like this because the Royal Parks authorities in London are sometimes sniffy about consenting to any bike riding within the park. It's a dead bore doing the calibrations but walking the bike around the race lap is no real hardship. Also, where I live, very good secondhand bikes are about half the price of dedicated measuring wheels.

I went to Budapest to measure the European Championships marathon course last summer. They had laid it out with an uncalibrated surveyor's wheel. While they did not tell me where they thought the turnaround point in the lap should be I had the definite impression that my lap was bigger than theirs would have been (10,000m lap).

I laid out a 500m calibration course with a 100m steel tape of German manufacture. Trundling the surveyors wheel over it in both directions yielded 1005m. This was under circumstances where it is easier to stick to the SPR than on a typical course itself. I would always expect surveyors wheels to give short courses.

Hugh Jones
aimssec@aol.com

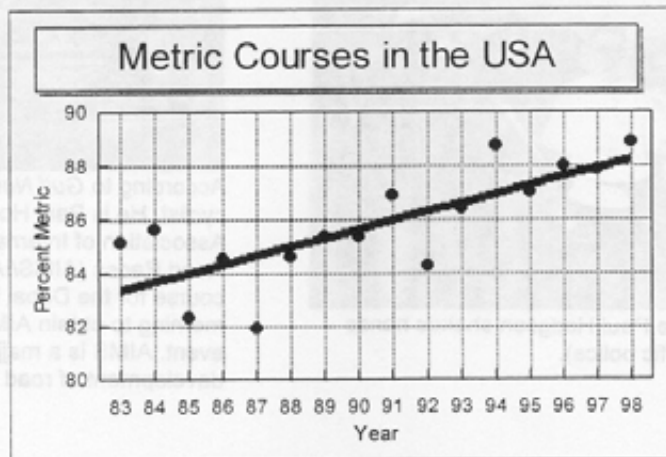


Bob Baumel at the 1998 Tulsa Run, October 31, 1998. Bob has long been a proponent of using the metric system in the USA. Perhaps his efforts in achieving this goal in course certification are bearing fruit. See below.

Pete,

If you can make any use of this photo, you're welcome to it. True, I'm running, not measuring, but it does have two measuring connections: First, obviously, I'm wearing my Atlanta Measuring Team T-Shirt; Second, I'm running the Tulsa Run 15 km which may be the only big race in the United States (i.e., race that consistently appears in lists of the top 100 races in the country) that marks its course entirely in kilometer splits.

Bob



Dubai Marathon '98 gains official sanction

Event receives the AIMS/IAAF certificate in its inaugural year

Dubai The Dubai Marathon '98 has earned official sanction by the AIMS Association of International Marathons and Road Races.

This came in the wake of a visit by an AIMS/IAAF sanctioned course measurement official Paul Hodgson who was invited by Al Wasl Club on behalf of Sheikh Ahmed bin Rashid bin Saeed Al Maktoum, patron of the Marathon.

"We are very proud to receive the AIMS/IAAF Road Race Course Measurement Certificate for the Dubai Marathon run route, this being our inaugural year" said Mr. Khamis Salem, Vice President of the Al Wasl Club.

"Dubai is now among just 30 countries in the world with an approved course, measured according to AIMS/IAAF approved standards. Should a new time for the Marathon be set in Dubai, that record will be accepted, subject to validation as the new world best" said Ronnie Ravindran, Race Director of the Dubai Marathon.

"We thank the Dubai Police and particularly Major Ahmed Al Sayegh, and his team of men who worked alongside the Course officials and Paul Hodgson for over 7 hours on Friday in order to complete the successful measurement of the route. We also thank the people and drivers in the City of Dubai for their understanding and patience," added Khamis Salem.

"Events such as the Dubai Marathon have to be sustained by sponsors and such sponsorship is beneficial to local Companies seeking exposure. We must specially thank all of the sponsors who have come forward to make this a successful event. I wish to thank AFTRON-Al Futaim (Pvt) Ltd, Dubai FM92 and Dubai TV, Hilfiger Athletics, Gatomade, GoDubai.com, Sky Net Worldwide and others," concluded Khamis Salem, Vice President, Al Wasl Club.

Paul Hodgson has been an International Course Measurer for the past 12 years with his first assignment being the Casablanca Marathon, Morocco in January 1987. Since then he has had

numerous overseas assignment including the prestigious IAAF World Cup Marathon in Milan, Italy, and the validation of the Lisbon Half Marathon world best course in Portugal.

This year he was the official measurer for the Rotterdam Marathon where a new women's world best time was achieved. For many years he was the British Athletics Federation, Course Measurement Co-ordinator, and was responsible for organizing and directing a number of training seminars for new measurement officials.

For the past six years he has been assistant to the Course Director of the Great North Run which is the World's biggest Half Marathon (40,000 entries in 1998).

AIMS has become the major force behind the development and progress of road running throughout the world. From 28 members in 1982 it has grown to over 120 members in more than 50 countries, including nearly all the world's premier marathons and many major road races at other distances.



The Dubai measuring team. Here Paul Hodgson shakes hands with Major Ahmed Al Sayegh (traffic police).



According to *Gulf News*, "This is not an ordinary cyclist. He is Paul Hodgson, an official of the Association of International Marathons and Road Races (AIMS/IAAF) who measured the course for the Dubai Marathon '98 on Friday morning to obtain AIMS/IAAF recognition for the event. AIMS is a major force behind the development of road running worldwide."