



MEASUREMENT NEWS



November

1988

Issue #32



James Bowman

Bill Noel (above) is Executive Director of the New York Road Runners Club, responsible for directing hundreds of races over the years. He's also an RRTC Final Signatory, and until recently was the person who ran NYRRC's Jones Counter manufacturing and distribution operation. Read more about Bill inside.

COURSE LIST
OFFER
SEE PAGE 39

MEASUREMENT NEWS

#32 - November 1988

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FUTURE SHOCK

A step into the future for RRTC was suggested by Frank Greenberg last summer one Sunday afternoon in Columbus, OH. Frank, Chairman of the Law & Legislation Committee of TAC, was in town as TAC's representative to the Junior Summer Games, an international track & field meet preparing our Junior World Championship team for Sudbury.

We talked of possible future work for RRTC in advising TAC in all areas of measurement, such as triangulation of field event competition, new elements in automatic timing, and other emerging technology which develops in all areas of our sport.

Frank is running for President of TAC, so who knows, if he becomes President, RRTC might just expand into TAC's chief scientific consultant! We'll see.

RRTC AGENDA FOR THE TAC CONVENTION

The following is a list of subjects that will be discussed when we meet at the convention. It's not intended to be complete, and more subjects are bound to crop up. If you think something needs to be thrashed out, let me know.

- 1) The role of officials in road racing and where RRTC fits in.
- 2) US runners setting records on foreign courses - what to do?
- 3) Interfacing better with the racewalk community.
- 4) Pre-validation (checking the course before the race and observing the race's conduct) - how should this be handled?
- 5) Revisions to Course Measurement Procedures.
- 6) What to do about obsolete courses - how to identify them and keep the course list from getting filled with deadwood.
- 7) Just when is a course considered as certified?
- 8) Can courses be too long? Should experts be allowed to use the average constant, rather than the larger one?
- 9) Defining the SPR - how to handle curb aprons, drain gratings etc.

LAST MONTH'S PUZZLE

Alan Jones was first with the correct answer. In fact he was so fast that his letter was dated June 26, before the last MN even came out! A clear case of extrasensory perception! I didn't actually receive the letter until just after MN was published. It was probably delayed at the post office. Actually June 26 was the date of the last previous letter Alan sent to me - I think his computer forgot to change the date. Bob Edwards was a close second. See his letter. Helge Ibert even sent a course map! Bob Baume got the answer next.

Not all the solutions came up with the fact that there are really infinite courses of the type described, depending on how many laps are taken around the pole, but let's not be picky.

NEW APPOINTMENTS

Lee Barrett has joined us as reviewer for Oregon. Welcome, Lee!

MEASUREMENT CONTEST AT CONVENTION!

Those of you who missed the Great Ana Honua (Measure the Surface of the Earth with Your Feet, loosely translated) measurement contest in Honolulu, take heart. Felix Cichocki is organizing a similar one for the TAC Convention this year in Phoenix. Details not available at this time, but be ready to test yourself. Enjoy the heady experience of bettering your compatriots. This will be your chance to win and really rub it in! Don't bother bringing your bike. The contest will not require anything but your wits and your body. Equipment, if needed, will be provided.

IT PAYS TO ADVERTISE

About a year ago I wrote a short article about how certification works. I sent it to Ohio Runner, and they published it along with a list of Ohio certified courses. Mike Wickiser saw it and asked me for a copy. I couldn't find the copy of Ohio Runner, but I dug out my computer file and changed the wording so that it referred to Mike as Indiana certifier. He sent it to Indiana Runner, and they published it along with the list of Indiana certified courses.

Running magazines are glad to get good copy. If you want a copy of the article, changed to reflect your own area, just mark up the copy you see in this MN and send it to me. I will send you back a nice clean copy, changed per your instructions, all set for you to send to your own local publication. If you need a state list, ask for one at the same time. Some people think that the "drop" and "separation" data are pretty incomprehensible to the ordinary reader. If you want those columns deleted in your copy, say so.

If you don't like the article, write your own and send it to the running publications in your area. Send me a copy too - I am always looking for better ways to say what we do.

COURSE MEASUREMENT AND CERTIFICATION

TAC conducts a program of course certification. This is done to give a "seal of approval" to courses that meet TAC's standards for course layout. While any course may (or may not) be accurate, only TAC certified courses have been approved as accurate by the Road Running Technical Committee of TAC.

Many runners prefer to run only on certified courses, since in this way they can be sure that their performances are true ones - they don't get false confidence generated by a PR on a short course, but instead know that their effort is measured to an accurate standard.

How can you tell if a course is certified? Each certified course has a unique course ID number. TAC is encouraging race directors to use this number in their race advertising material. Unfortunately, many race directors believe that if their courses are "accurate" to their standards, they are then "certified". TAC has no copyright on the word "certified" but "TAC Certified" means something very specific. It means the race director took the time and trouble to comply with the rigorous standards required to obtain TAC certification for his course.

TAC is not likely to sue anyone for abuse of the word "certified". But every runner knows what the word really means. When someone says the course is "certified" he is implying it's TAC Certified. If you are truly concerned as to the certification status of the course, ask the race director to show you a copy of his TAC Measurement Certificate. Ask for the course ID number. If they can't come up with it, suspect their course and ask some hard questions.

Do not confuse "TAC Sanctioned" with "TAC Certified". Sanctioning relates to the conduct of the race and has nothing to do with course accuracy. Some race directors believe that if they obtain a TAC sanction, this means their course is TAC Certified. Not so. Look for the course ID number!

False advertising of TAC Certification status is not uncommon. In many cases the person is unaware of what he's doing, and may just be copying a race entry form from years back. In other cases it's deliberate, because race directors know that runners like certified courses, and some are not above lying to bring in a few more runners. Unfortunately it's the runners who are cheated. Record performances have been lost because of lies about certification.

TAC has no quarrel with races that have non-certified courses. There are plenty of good races around that are run on uncertified courses. Runners in these races know it's their relative performance that counts in these races, or the uplift they may get from running on an unusually pretty course. It's false claims that get TAC mad.

Race directors who have taken the time and trouble to certify their courses deserve the thanks of the runners. Those directors who lie about certification will ultimately be seen for what they are - thieves of the runners' time and effort. Give a runner an honest course and he can use his own watch to time himself. If the course is of unknown accuracy, so is the performance.

Indiana Runner will periodically publish a list of Indiana TAC Certified courses. Another source of certified course lists is Measurement News (see below). Measurement News maintains a complete list of all courses currently certified in the United States. Up to date lists are available for a small charge depending on the extent of the list desired.

How does a course get certified? The measurer reads how it is done in the book Course Measurement Procedures. He then follows the instructions, fills in the paperwork, and sends the information (and \$25 reviewing fee) off to his regional certifier. If he has done everything right, the certifier will approve the course, and it will then be "TAC Certified". If he has made a mistake, the certifier will tell him how to fix it.

The measurement book is available from:

TAC-USA Order Dept.
P.O. Box 120
Indianapolis, IN 46206 \$4.00, postpaid

* * * * *

Mike Wickiser - 2939 Vincent Rd - Silver Lake, OH

is the regional certifier for Indiana. He will help new measurers with advice, and may help you to locate an experienced professional measurer should you choose to hire it done.

* * * * *

A race course is measured using a bicycle equipped with a special device called a "Jones Counter" after its inventor, Alan Jones. A Jones counter may be obtained for \$30, postpaid (foreign orders \$35), from:

NYRRC - Att. Jones Device
9 E. 89th St.
New York, NY 10128-0602

The Jones Counter is the only presently acceptable device used with a bicycle. Electronic odometers are not precise enough for the job. Those interested in keeping abreast of certification, measurement techniques, and the doings of the Road Running Technical Committee of TAC may wish to subscribe to "Measurement News", published bimonthly by:

Pete Riegel (address below) - \$15 per year

Readers having further questions concerning certification should contact the Chairman of TAC Road Running Technical Committee:

Pete Riegel
3354 Kirkham Road
Columbus, OH 43221 614-451-5617 (H) 424-4009 (W)

September 7, 1988

Pete Riegel
3354 Kirkham Rd
Columbus, Oh 43221

Dear Pete,

I'm surprised to see a puzzle with so many answers as this months' challenge.

To start, I had to make a few assumptions. First, I took the Earth to be a perfect sphere. Next, I assumed that the directions given are relative to true north -- not magnetic north. If magnetic north were used it would give another huge number of possibilities. I used 40000 KM as the circumference of the Earth according to the previous puzzle since no new numbers were given this month.

In general, this course has to be located in a location where the eastern 10K measurement travels the full 360 deg. around the latitude line. The course has to be near the north pole so the first measurement heads straight toward the pole, the next travels 360 deg. around the pole, and the last retraces the first. This opens up an infinite number of starting points, but I will assume that the starting latitude is one solution regardless of the longitude. However, 2 times around the latitude line also meets the requirements of the puzzle, as well as 3 times, 4 times, etc. This moves the starting line closer and closer to the north pole. We therefore have a series of solutions given by:

$$\text{northern latitude} = \arccos [1/(4000 \times n)] - 0.09$$

where n is a whole number of revolutions around the pole.

For example, for 1 revolution the northern latitude is 89.895676
for 2 revolutions the northern latitude is 89.902838
etc.

Note that if we were to use the 1.001 safety factor the 4000 in the formula above would change to 3996.004, and the .09 would change to .09009. The result would be to move the starting line down slightly in latitude. For the case of 1 revolution the new northern latitude would be 89.895572 for the starting line.

I don't think there is any land in this area so the course must be on ice.

I have included my calculations on an attached sheet if you are interested.

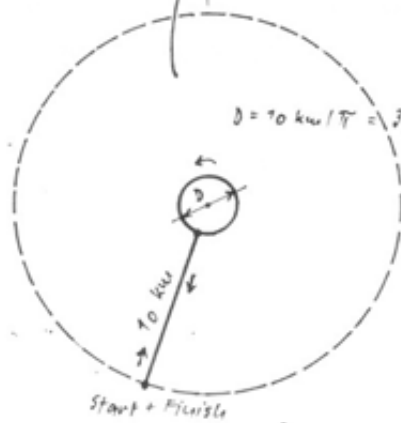
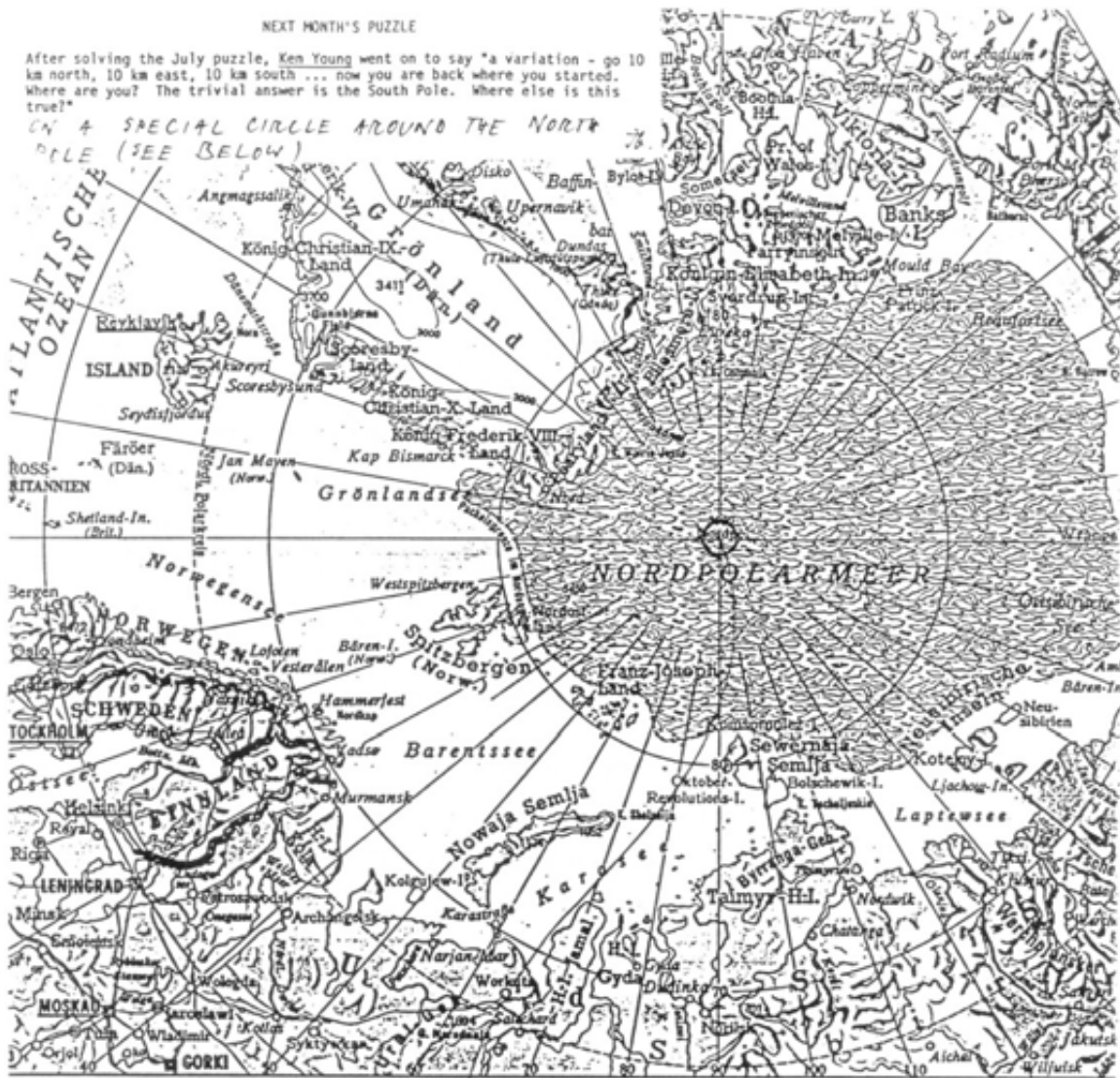
Bob Edwards

Bob Edwards

NEXT MONTH'S PUZZLE

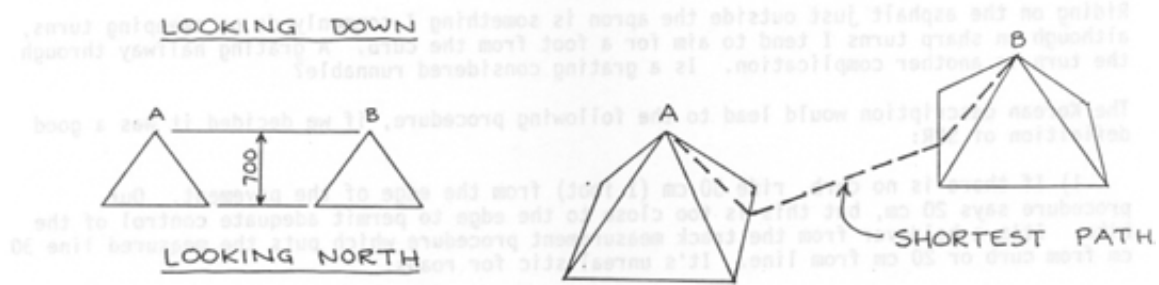
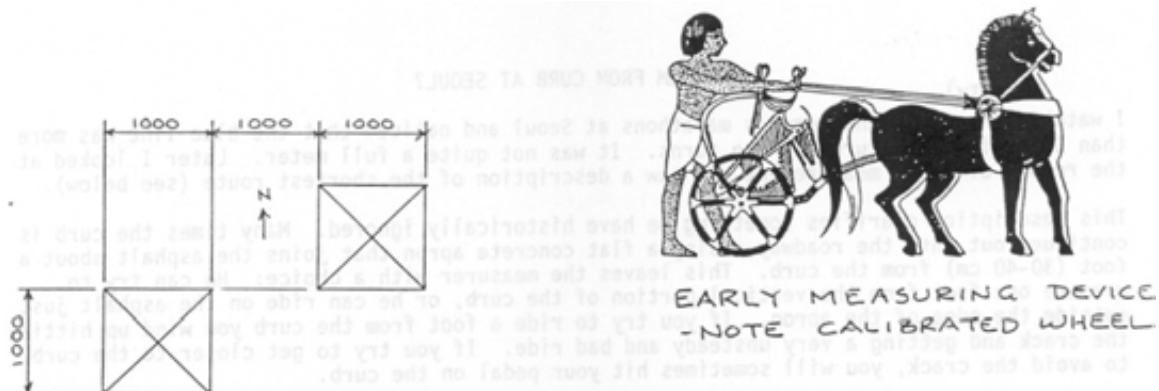
After solving the July puzzle, Ken Young went on to say "a variation - go 10 km north, 10 km east, 10 km south ... now you are back where you started. Where are you? The trivial answer is the South Pole. Where else is this true?"

ON A SPECIAL CIRCLE AROUND THE NORTH POLE (SEE BELOW)



$$D = 10 \text{ km} / \pi = 3,183 \dots \text{ km}$$

IBERT'S SOLUTION & COURSE MAP



THE PHARAOH'S PUZZLE

An article in a recently-published journal of Egyptology reveals little-known facts about early measurement techniques. A newly-unearthed scroll tells the tale. An early Pharaoh tired of his life of ease and decided that he wished to take up running to prepare for a hilly footrace in one of his far dominions.

His desire was thwarted by lack of hills near the palace. He therefore instructed his master builder to construct two pyramids, so that he could practice his hill training. When the pyramids were done he instructed his master measurer to find the shortest path from the top of one pyramid to the top of the other.

"So let it be written, so let it be done!" spoke the measurer, and set out to do the measurement.

At this point the papyrus was undecipherable, and history does not record the answer. The aforementioned journal would like to know it. Can anyone help?

- 1) What is the shortest path from A to B? Ignore earth curvature. The Pharaoh had the pyramids built on a plane surface. Dimensions shown are in ancient Egyptian units, call them "Phars." The Pharaoh liked this name.
- 2) Why would this distance be difficult to directly measure using a wheel or steel tape, without knowledge of the pyramid dimensions and separation?

30 CM FROM CURB AT SEOUL?

(ON TV)

I watched the men's and women's marathons at Seoul and noticed that the blue line was more than 30 cm from the curbs at the turns. It was not quite a full meter. Later I looked at the report of their measurement and saw a description of the shortest route (see below).

This description clarifies something we have historically ignored. Many times the curb is continued out into the roadway, using a flat concrete apron that joins the asphalt about a foot (30-40 cm) from the curb. This leaves the measurer with a choice: He can try to measure one foot from the vertical portion of the curb, or he can ride on the asphalt just outside the edge of the apron. If you try to ride a foot from the curb you wind up hitting the crack and getting a very unsteady and bad ride. If you try to get closer to the curb, to avoid the crack, you will sometimes hit your pedal on the curb.

Riding on the asphalt just outside the apron is something I commonly do on sweeping turns, although on sharp turns I tend to aim for a foot from the curb. A grating halfway through the turn is another complication. Is a grating considered runnable?

The Korean description would lead to the following procedure, if we decided it was a good definition of SPR:

1) If there is no curb, ride 30 cm (1 foot) from the edge of the pavement. Our procedure says 20 cm, but this is too close to the edge to permit adequate control of the bike. It's a holdover from the track measurement procedure which puts the measured line 30 cm from curb or 20 cm from line. It's unrealistic for roads.

2) If there is no curb apron, ride 30 cm (1 foot) from the curb.

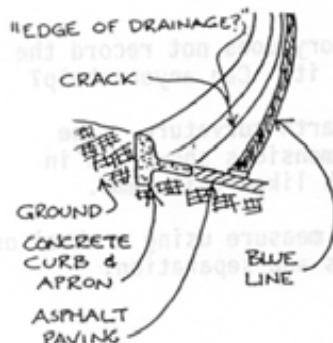
3) If there is a curb apron 30 to 60 cm wide, ride 30 cm out from the crack where the apron joins the roadway. If the apron is wider, ride 30 cm from the curb.

4) If there is a drain grating, ride a foot outside it.

5) If there is something like a building corner or a telephone pole or a fence defining the corner, ride 61 cm (2 feet) from it. This corresponds to what we can do on a bike.

I rather like the above, because it matches the reality of what can be done on a bike. Riding along a crack in the road is bad. Hitting one's pedal on the curb is bad. Riding a foot from a telephone pole or a fence is nigh impossible. Runners avoid gratings and we should too. "SPR" is modified to "SPRR", or "shortest possible runnable route." I don't propose we change our language, but we should not be fanatical about measuring what cannot be run.

Although Seoul had a blue line, I am not sure that it represented the actual measured line. It may have been just a guide to the runners, and it may have been the same as the measured line. It looked like a mighty good painting job to me. I am throwing this subject open for discussion. We will talk about it at the TAC Convention. Opinions solicited!



The shortest course must be measured 30 CM from curbs or the edge of curbless roads or lines, or from the edge of drainage along the curbs. In cases of roads with such structures as concrete walls along the edge, the shortest course must be 61 CM from those edges.

FROM KOREA'S REPORT
OF OLYMPIC MARATHON
MEASUREMENT

THE ATHLETICS CONGRESS
OF THE USA

Road Running Technical Committee
Peter S. Riegel, Chairman

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October 6, 1988

E. T. McBrayer - 7733 Moline - Houston, TX 77087

Dear Tom,

Thanks for the first issue of Measure Up. You're the first to start a state measurement newsletter that I know of. I will be looking forward to receiving it on a regular basis. If you are as lucky as I am, your measurers will write to you, thus relieving you of the chore of writing the entire thing yourself.

I just got my copy of Ohio Runner and saw an article and a letter, each written by a stranger to me, taking pretty firm positions in favor of certified courses. I'm glad to see the runners starting to put on the pressure. We can try, but until certification becomes something that the runners want, our voices are few. When enough runners want it, race directors will give it to them.

Only a few races seem to use the course ID in their advertising around here, but the number is growing slowly.

I would dearly love to see us in the US decide which measurement standard we want, and stick to it. The mixture of metric and mile splits in most races I find unsatisfying. I ran a marathon once in which the splits were totally metric - every kilometer - plus the halfway point. Since I knew it ahead of time it was not hard to figure out what my pace ought to be. Maintaining it became a problem, but that wasn't the fault of the splits.

I may try to convince some 10k director to put down just the kilometers some time, just to see how it works out.

Onward and upward.

Best regards, and thanks again.



Measure

Up



October 1988 Vol 1 No 1

You're reading the inaugural issue of a very informal newsletter intended for course measurers in Texas. Since contact with you will probably be only when you submit a course for certification, a newsletter on a regular (OK, semi-regular) basis would allow communication as it was intended, two-way.

The newsletter will be brief, timely and not too technical. It will contain some material from the Road Running Technical Committee's (RRTC) bi-monthly publication, Measurement News, perhaps in abbreviated form, my comments, and, hopefully, your input.

OK, let's calibrate and head for the start line.

OPENING SALVO

In the four months that I've been Texas State Certifier, several things have become apparent.

- There is a network of measurers throughout the state that can do the job - a big plus and a basis for growth.

- Most measurers are runners and have a good concept of what we are trying to do. They realize the importance of an accurately measured race course, one that can be reproduced on race day and next year as well. Another plus.

Some negatives:

- The weakest link in the chain is the map. It needs to be black and white, sharp and reproducible. No pencil and no colors. If start/finish detail is necessary, it must be shown on the same 8 1/2 x 11" sheet as the course map. The best guide for maps is on page 52 of Course Measurement Procedures. There are excellent examples of what is expected and what needs to be included. And, as with most things, practice certainly helps.

- Many of you are measuring metric courses as if they were English distances. (A 5Km really is 5000 meters, not 3.106856 miles.) THINK METRIC! It's actually easier once you get the hang of it. All the Gulf Association Championship road runs - 5, 10, 15, 20, 25, 30K and Marathon - have 5Km splits. And, guess what? The runners are starting to look for them and expect them.

So much for high points. We'll get into more intimate detail in later issues.

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It may be social chatter or a legitimate inquiry from your running club. But you've probably been put on the spot more than once by having to answer the question, "Can you please explain what you do on your bicycle?" The March issue of

E. T. (Tom) McBrayer, Texas State Certifier
7733 Moline
Houston, Texas 77067
(713) 649-6932

I'LL KEEP YOU
ON THE MAILING
LIST
TMC

THANKS
PETE

Measurement News printed this explanation of measuring a race course. Pete Riegel, the RRTC's National Chairman, wrote the article and it is reproduced here in full.

MEASURING A RACE COURSE WITH A BICYCLE

Almost all modern road racing courses are measured using calibrated bicycles. The bicycle is used because it is fast, and it's accurate enough to do the job. It can be looked at as a human-powered, fast-moving measuring wheel.

Where does calibration come in? Simple. In order to use a wheel to measure, you have to know how far you go each time it turns. This is done by riding the bicycle along an accurate known distance, counting the wheel revolutions, and using arithmetic to figure out the distance covered in each revolution.

Although the basic concept is simple, the procedure is somewhat more complicated. The hardest part - keeping track of revolutions - is solved by mounting a "Jones Counter" (named after inventor Alan Jones) on the front bike wheel. The counter records 20 "counts" each time the wheel revolves one revolution. Thus one count - for a standard size bike - is about 1/15000 mile or 1/10 meter or 4 inches.

To calibrate, the rider uses a steel tape to lay out a calibration course - some straight distance greater than 1000 feet or 300 meters.

The bike is ridden on the calibration course and the number of "counts" required to cover the distance is noted. Then, arithmetic is used to calculate how many counts are required to cover one kilometer or mile. This number is called the "constant."

With the constant known, the measurer

starts at one end of the race course and rides until he has covered enough counts to make up the full distance. He then adds a safety factor to assure that the course isn't short. For a numerical example:

- 1) The measurer lays out a 500 meter calibration course with a steel tape.
- 2) He rides the bike over the calibration course and gets 4800 counts for 500 meters.
- 3) He calculates his constant at $2 \times 4800 = 9600$ counts per kilometer.
- 4) Since he wants a 10 kilometer race course, he rides his bike until he has covered 96000 counts, at which point he has covered 10 kilometers.
- 5) He adds 10 more meters to the course as a short-course prevention.

The above is greatly simplified, and the exact procedure is spelled out in a book, *Course Measurement Procedures*, which is available from TAC/USA - Book Order Dept - PO Box 120 - Indianapolis, IN 46206. Price of the book is \$4.00 (US) postpaid.

The TAC procedures have been substantially adopted by AIMS (American Association of International Marathons) and are very likely to be adopted as well by IAAF (International Amateur Athletic Federation).

When you have questions, please don't hesitate to call. Day or evening, the number is the same. We'll (Mary Anne and I) appreciate hearing your comments and we'll be happy to answer questions of general interest in this newsletter.

—Tom McBrayer

67 Southwood Cres.,
London, Ontario,
N6J 1S8,
Oct. 4/88

Pete Riegel,
3354 Kirkham Rd.,
Columbus, Ohio,
43221

Dear Pete,

Thanks for writing on my behalf to the A.I.M.S. Committee indicating my interest in measurement. I would like to take this opportunity to thank Scott Hubbard, who is the certifier for Michigan, for letting me help measure the Detroit Marathon course. He gave me several valuable pointers about map making as well as how to lay out a turnaround. He is an asset to measuring. I only wish I could have the chance to measure with Scott or some other good measurer so as to get some more pointers on measurement first hand rather than vicariously through Measurement News. I have very little call for T.A.C. certification of races in Ontario. I have measured the Springbank course in London, Ontario because it was the home of the Springbank International Roadraces which have attracted so many world class athletes such as Bill Rodgers, Frank Shorter, Ron Hill, Nick Rose, Alberto Salazar, and Jerome Drayton. This was my first T.A.C. measurement and I did this at the urging of Bob Baumel. Bob lived for some time in London while working on his masters in Physics at the University of Western Ontario. Back then he was also interested in metric and asked me to measure out a 5 km loop in an attempt to lure the Springbank Committee into going metric. I have also measured the Buffalo (N.Y.) to Niagara Falls (Ont.) Marathon, the Masters Games Marathon which was held in Toronto, and Patenaude's Choice (50 km, 50 mile, or 100 km) in St. Jacob's, Ontario. Patenaude's Choice ultramarathon had several non-Canadian runners so I was asked by the Race Director to get both O.T.F.A. and T.A.C. certification. I have been interested in measuring courses and having them T.A.C. certified because we in Ontario were behind in changing our methods of measurement. By following the U.S. methods I hoped to help change the methods used in Ontario and Canada so that we could have a common method. We have changed and now use the 0.1% short course prevention factor as well as the S.P.R. By incorporating this in to my measurements early I had fewer courses to remeasure than I might have had. I have also tried the short calibration course as I indicated in my last letter to you which was included in Sept. '88 Measurement News. John Craig of the O.T.F.A. has indicated that he would recommend its acceptance by the O.T.F.A. and the C.T.F.A. based on information I passed on from Measurement News as well as data comparing short calibration course method and the longer calibration course method. Having the opportunity to measure and get T.A.C. certification as well as reading Measurement News and trying out new methods has helped me keep up my interest in measuring.

I would like to make a suggestion to all course measurers that they make an attempt to measure a course with at least one other person. Having two people measuring means that the course only has to be ridden once and so the amount of time and danger to safety should be cut in half. It is also much more pleasant to have someone to talk to and discuss proper approaches to turns or where to position cones for the turnaround. If the race is a Marathon this could save a measurer having to spend an extra day of measuring. It also gives the new person a chance to get valuable experience measuring. Perhaps a list of people interested in becoming measurers could be circulated locally and then a measurer could contact one of these volunteers personally. Have the apprentice race measurer try his/her hand at map making and filling out the forms and then having them given to the main course measurer. This method of apprenticeship would ensure good quality measurers. When the data was sent into T.A.C. they could encourage these new measurers and give them some exposure by recording both the main measurer and the apprentice measurer's names on the Certification Course List. I know I would have liked to see my name beside Scott Hubbards on the course list for the Detroit Marathon.

"Who hath measured the ground" was the closing statement of **Was Shakespeare a road runner?** from John Disley in the Sept. '88 Measurement News. This is a fair question. When I measure a Road Race I discuss my fee with the Race Director but I also ask two other things. One is that my name goes on the entry form as course measurer. Seeing the name of an individual, especially if you know of his/her measuring ability from other race courses you have run, is better than seeing a Certification Pending. The other is that I receive free entry to this race as long as it is run on the course as I have measured it. In exchange for these I make every effort to arrive at this race early and check that the km/mile markers have been accurately placed. If it is a local race I make sure I have gone out the previous week and repainted the km/mile marks as well as the start/finish and any turnarounds as well so that there is no foulup of the course. This is not as easy as it sounds. I have had race directors use descriptions of old km/mile points. I have had people whose job it was to place the km/mile signs just use their odometers instead of looking for my old marks and nails because it was faster. How many runners are running on so called certified courses that are not accurate because of these or other reasons? If a measurer has his/her name on the entry form he/she is more likely to make sure that a race director doesn't allow these things to happen. Having free entry rewards the measurer for his/her effort at checking this course every year and keeping the statement "certified course" honest. I believe it should be T.A.C. policy to strongly suggest these two points be included by every measurer when contacted to measure a course. I would like to see the T.A.C. and the O.T.F.A. go so far as to send a letter to each race director who has been sent a certification suggesting that the course measurer be given free entry in exchange for their annual check of the course for accuracy. If a course is being used by another group other than the original race for which certification was obtained they also should be encouraged to give free entry. This also would get around the ill feelings some measurers feel about "their course" being used by someone who has not paid a measuring fee.

Thanks again,

Bernie Conway

SOLID TIRES

Some measurers like solid tires because they don't go flat and they don't change size with temperature. I have used an Eliminator tube, and it was OK but had a hard ride. John Disley gave me a Sure-Trak wheel which I now use. Unfortunately it has been taken out of production and no more are available.

Tom Knight sends further information. Cyclo Mfg. Co - 1438 South Cherokee St - Denver, CO 80223 makes a solid insert for tires. According to Tom, Bob Baumel tried them and didn't like them. Hard ride.

Tom also sent the clipping below. I called UTI and was told that I should get back in touch about March 30. UTI says they should have a manufacturer for the tires by then. They are of a one-piece construction and fit on your existing rim.

UTI's address is: UTI - 7 Whatney St - Irvine, CA 92718 - att. Kathy Adams.
Phone: 714-837-0800

I'll report on both Cyclo and UTI when I get further information.

pete

TECHTALK

A QUICK READ ON DEVELOPMENTS IN HIGH TECHNOLOGY

It doesn't need air, so new tire can't go flat

Anyone who owns a bike knows what a pain a flat tire can be. Soon, bikers may not have to worry about that problem. A chemical company in Irvine, Calif., has developed a tire that won't, or rather can't, go flat. A normal tire has two parts, a rubbery outer casing and an inner tube filled with air. The new tire, developed by UTI Chemicals Inc., has the same kind of rubbery outside, but inside is a rigid spongy substance made out of polyurethane, a type of plastic. The tire can't go flat because there's no air to leak. There have been plastic tires in the past, but none have given the biker a ride that could be considered comfortable. UTI has already struck a deal with the Chinese government to make and sell its tire there. It has also licensed a USA company, Capair Inc., to put it on wheelchairs. UTI research director Vincent Paroni says that the company is talking to a number of major bicycle makers, including Raleigh and Schwinn, about using the tire. He says the first bikes with the tire could be out as early as the first quarter of 1989.

921 Bath
Ann Arbor, MI
48103

Pete,

After a busy late summer certifying and re-certifying courses, there are a few things I'd like to share with you. The first has to do with where the women's finish line is in comparison with the men's, the effect of rain on a measurement and comparing cal rides for different bikes on a rolling cal course.

We might measure to the shortest point to locate a finish line, but I've noted at two major races that the women were directed left or right of center to finish. In effect, they would cover more distance than the men. I can appreciate that the two races were either trying to provide a separate, distinct finish for the women, and also to facilitate ease of scoring, but in one instance all the women ran long and a new record setter ran long in the other.

I think we need to spread the word that our finish lines need to be adjusted, where necessary, to account for any distance at the end of the race that is longer than the shortest possible route. Not that it matters, but my interest in this topic was perked because US records were at stake.

And rain. Just what is the effect of rain on a measurement? It doesn't do much for my bike, but what happens to each mile I ride? As you mention in discussing measurement of the LA Olympic course, since the 13 people had traveled thousands of miles, the measurement window couldn't be extended. Wouldn't that same argument hold true for busy folks that can't return before race day, and that they should go ahead with the measurement?

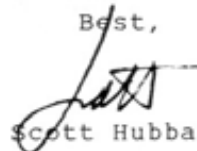
On a recent measurement, cal rides took place on a rolling course. I came up, consistently, 8 counts different. That does not happen to me. The other fellow only came up 1-2 counts different. I had no problem letting the math determine my constant, but, I wonder about the 2½' difference going back and forth. The same difference popped up in post-cal rides.

I wonder what there might be to lead me to believe that the ride that required the fewest counts isn't really closer to the 'true' figure I'm striving for? I'd think count 7608 is a better reflection of the cal distance than 7616. Or, are we in that land where the best solution, taking all factors into account, is to average the rides and get on with things?

On another matter, hey, how many measurers do you suppose run certified courses along the SPR? I've noticed that almost all runners run like cattle, following one another back and forth across the road. My bet is that nobody runs less than .1% long of a race. That means that everybody is probably running about 10' per mile long. I note this as a point of interest.

10/5/88

Best,



Scott Hubbard

COVER STORY - BILL NOEL

Bill Noel was born in Knoxville, Tennessee 50 years ago, and he was raised "all over" the southeast. He is a graduate of Georgia Tech and was awarded his MBA by the University of North Carolina following his "military career" as an officer in the USAF.

Following his formal education, Bill went to work for a bank in Atlanta and became a part of the bank's in house "efficiency expert" team. After a couple years of that, he moved on to Oxford Industries, the country's fifth largest apparel manufacturer, where he held a wide variety of positions, eventually becoming Operations Vice President. While with Oxford, he was transferred to New York City "for three years". Twenty years later, he still lives in Manhattan

Bill is an active, but far from world class athlete. He was a late starter and has completed over twenty marathons (PR of 3:19, the day before Boston dropped its standard to 3:10!) and fifty triathlons since turning 40. His proudest achievements are being the oldest person to have completed the London to Paris Triathlon and celebrating his 50th birthday by completing the Ironman Triathlon in Hawaii.

He is Executive Director and Director of Operations of the New York Road Runners Club and has been the director of hundreds of events produced by the NYRR. In addition, Bill is Associate Coordinator of the New York City Marathon and is unique within the organization in that he is the only person to have coordinated the Start, the Course, and the Central Park Finish. This experience gives him a perspective possessed by neither Fred Lebow nor Allen Steinfeld, the two people for whom he works.

Bill began measuring courses years ago, and he has seen many changes in the methodology employed over the years. Early in his measuring career, he recalls receiving a three page letter from Ted Corbitt explaining why the marathon distance on a certification application should be stated as 26.21875 miles, not 26.2 miles. He has measured courses all over the country and abroad as well. He has measured with many of the top measurers in the world and finds it interesting to observe the techniques of others and compare them with his own. Experience has shown that his measurements compare very favorably with those of the "experts" with whom he has worked.

During the summer of 1982, Ted Corbitt told Allan Steinfeld that Clain Jones was going to begin college in the fall, and he was interested in selling the Jones Course Measuring Device business (actually known as Clain's Counter Company). Ted suggested that the NYRR acquire the business to assure that it stayed within the sport. Allan and Bill visited Clain at his home in upstate New York and purchased the Jones Counter business for the Club.

At the time of purchase, Clain showed Bill how to make Jones Counters and, for several years, he manufactured, inventoried, accounted for, filled orders, and generally handled all phases of the Jones Counter business for the Club. At that time (and still) the devices sold at the rate of 450-500 per year, with the spring months and Marathon time bringing in over half the annual volume of orders. Since then the fabrication of the devices has gone through several hands, and the orders are now processed by the Club's Mail Order Department. Bill is proud of the quality of the devices through the years, and he claims to have received only a few back as defective, and most of these were damaged in shipping.

Bill reports that the "manufacture of Jones Devices has gone through a number of evolutions since he became involved in the process. Though it never was a mass produced item, , bill did get the assembly procedure systematized to the point at which he could consistently produce "about four an hour". Another change was dictated by the company that manufacturers the counters, as they stopped making the six digit model and would produce it only on special order (25,000 minimum). Ergo, the emergence of the five digit model (many readers have probably never seen anything but the five digit model - Bill maintains that it is easier to read and less prone to digit reversal anyway). Also, a heretofore unannounced recent development is the fact that the company that manufactured the gear drive part of the mechanism has gone out of that business. They even sold the equipment used to make the parts! Fear not brave measurers, as the ever diligent Mr. Noel purchased the entire remaining stock of this item, and that inventory should provide Jones Counters for another eight years, or so at the current volume.

Bill would also like it known that the NYRRC does not make any money on the sale of Jones Devices. In fact, when the time value of money is considered, as well as the cost of labor to fabricate and ship these items, the Club is selling them at less than break even. It continues to subsidize this "business" as a service to the sport. When prices change, they are dictated by the increase in the cost of parts and postage.

The current price of the JONES COURSE MEASURING DEVICE is \$30, with check payable to the NYRRC.(\$35 for foreign air mail) Payment must accompany the order. The correct address is:

NYRRC
9 East 89th Street
New York, NY 10128-0602
USA

Attn: Jones Device

ALL THE COURSES YOU EVER MEASURED

After trying for years to get WordPerfect to sort by measurer, we have finally succeeded. Now, if you wish, lists can be generated of all the certified courses measured by an individual. If you're an RRTC member, and you want a list of the courses you've measured, let us know and one will be sent. If you are not an RRTC member, you can still get a list. Just as with other certified course lists, the price is \$.50 per page, with a \$1.00 minimum order.



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of the USA**

The Governing Body for Athletics in the United States
including Track and Field, Long Distance
Running and Race Walking for
men and women and boys and girls
at all age levels.

WAYNE B. NICOLL
3535 Gleneagles Drive
Augusta, Georgia 30907
(404) 860-0712

1988 Annual Report - Vice Chairman East

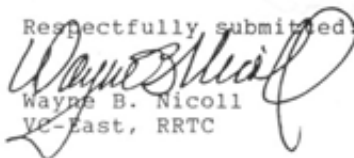
Accomplishments of the past year are discussed below. The figures shown will be actually be slightly higher since this report was prepared in mid-September.

1. Number of certificates (from other certifiers) receiving a final review before entry on the national course list: 260
2. Number of certificates issued by me: 70
3. Number of reviews of applications already reviewed by a certifier in training: 41
3. Appointment of new certifiers with final signatory authority: 3
Jay Wight - IL; Doug Loeffler - MS and LA; Kevin Lucas - NY State.
4. Appointment of certifiers in training: 2
Mike Wickiser - IN; Amy Morss - at large. Steve Vaitones, MA-RI, stepped down. I assumed the certifier duties and opened communication with NEAC.

Special Projects:

1. Verification measurement of the NJ Waterfront Marathon Course prior to the Men's Olympic Trials.
2. Technical advisor to the Women's Measurement Team for the Pittsburgh Marathon course prior to the Women's Olympic Trials.
3. Participated in a validation measurement of the race walk course in Indianapolis used for the 20K and 50K Olympic Race Walk Trials.
4. Developed and presented a workshop on Course Design/Management to the RRCA Convention in Indianapolis.
5. In February attended an International Measurers meeting in Miami and participated in a validation measurement of the Orange Bowl Marathon Course.
6. Served as technical referee for the 1988 Red Lobster 10K which yielded new womens 10K World Best and US records.
7. Measured and certified the 2.5 kilometer race walk loops for the TAC National T&F Championships in Tampa and the TAC National Masters T&F Championships in Orlando.
8. Continued communication with staff members of the Canadian T&F Assoc. to standardize measurement, certification and validation methods.
9. Assisted in the ongoing revision of the TAC Course Measurement Procedures Manual and development of the new TAC Road Race Officials Manual.

Respectfully submitted,


Wayne B. Nicoll
VE-East, RRTC

ANNUAL REPORT – VICE CHAIRMAN WEST

Course certification continues to thrive in the Western U.S. Perhaps the clearest evidence of this is the new blood brought into the certifier ranks. During the past year, six certifiers were appointed or promoted, including appointment of four new certifiers.

The first two appointments this year involved people already in the system. Felix Cichocki, after serving a year as Arizona certifier, was promoted to Final Signatory, and assumed responsibility for New Mexico as well as Arizona. Tom McBrayer, who had worked in the background for many years as a certifier in Texas, was elevated to Texas certifier when Kevin Lucas moved from that state.

The four new appointments later in the year were David Poppers in Colorado, Charles Tiltrum in South Dakota, Don Potter in Arkansas, and Lee Barrett in Oregon.

One result of all these appointments is that Tom Knight and myself, who each began the year listed as certifier for three states, are now listed for only one state each. The practical consequence is that measurers in four states now have a more local certifier to work with, instead of having to send applications long distance.

At a personal level, I haven't been able to measure many courses, and have even had some trouble getting my paperwork done, because I underwent major surgery. The ulcerative colitis I had suffered with for the past five years was eliminated by rearrangement of my abdomen. This involved removal of my large intestine, and construction of a new organ made of small intestine to replace the missing colon. After two operations, I am recovering well and am healthier than at any time in the past few years.

Pete Riegel has assumed responsibility for most of the new Course Measurement manual, but I am continuing to write part of the book, and expect to have some drafts soon.

Bob Baumel

September 15, 1988

ANNUAL REPORT
Validations Chairman, RRTC

Primary goals for 1988 were: (1) to improve the validation system by clarifying procedures; and (2) to enhance the general understanding of the validation process by more education and/or direct exposure to it among the TAC leadership most affected by the process.

During the 1987 TAC National Convention contact was made with key persons in the LDR and Race Walk Committees to open communication. Meeting validations requirements for records verification at their various National Championship events and the Olympic Trials was used as the focus for interpretation of standards to be met. This communication continued actively throughout the year.

In January a meeting was held in Miami with TACSTATS to settle on standards to apply to marks deemed unvalidatable and to deal with applications held in pending status. The operational procedures between TACSTATS and the Validations Chairman were clarified. Later in the month at the International Measurers Seminar held in conjunction with the Orange Bowl Marathon, verification of potential US Records on foreign courses was discussed. A meeting was held at the Dartmouth Relays (NH) with Canadian officials to open dialogue establishing a system for validation of US performances in Canada. Validation of foreign marks is an expressed concern of Athletes Advisory.

A cooperative effort between Women's LDR, RRTC, and the Pittsburgh Marathon Committee culminated in the formation of a TAC/USA Women's Measurement Team to insure the accuracy of the measurement of the Women's Olympic Trials course and all intermediate splits. Team members were selected leaders within TAC. Their participation has greatly enhanced technical understanding, particularly among the committees they represent. Media attention given this activity has been of invaluable assistance in providing the public information on technical standards for quality road events. The project also brought about the establishment of a position of technical advisor for the National Women's LDR Committee which the Validations Chairman will fill.

A workshop on basic course design and management was prepared jointly with the VC-East for presentation at the RRCA National Convention. The attendance was excellent and resulted in continued contact with a number of the participants who are seeking to improve standards in the sport.

The table presented below reflects the course validation activity for 1988 and assignments currently in progress. Whenever funding allowed, these validations were also used as training sessions to expand the understanding and qualifications of RRTC members and other measurers.

<u>DISTANCE</u>	<u>ID#</u>	<u>NAME</u>	<u>MEASURER</u>	<u>VALIDATOR</u>	<u>DATE</u>	<u>LENGTH (m)</u>
2.5 Km	NY87008WN	Eisenhower PK	G.Westerfield	D. Brannen	5/23/88	2500+
2.5 Km	KS86009BG	Racewalk Ch	M.Edwards	B. Glauz	5/14/88	2502+
5 Km	NY86005BT	JP Bullfeathers	D.McPhee	D. Brannen	10/16/87	5002+
5 Km	CA86068PR	Carlsbad 5000	J.Collias	W. Nicoll	5/12/88*	5003+
8 Km	NY83006TC	Onondaga PK	N.White	W. Nicoll	8/25/87	8002+
10 Km	FL88001WN	Red Lobster	W. Nicoll	B. Teschek	2/6/88*	10009+
12 Km	OK86057BB	Mohawk	G. Lafarlette	B. Baumel	11/1/87	12007+
12 Km	WA86010TD	Lilac Blsday	M. Renner	B. Baumel	10/18/87	12020+
½ Mar	SC85036WN	Island ½ Mar	C. Magera	B. Smith	11/21/87	21129+
50 Km	IN85076PR	TAC Walk	J. Pierce	W. Nicoll	5/6/88	50118+

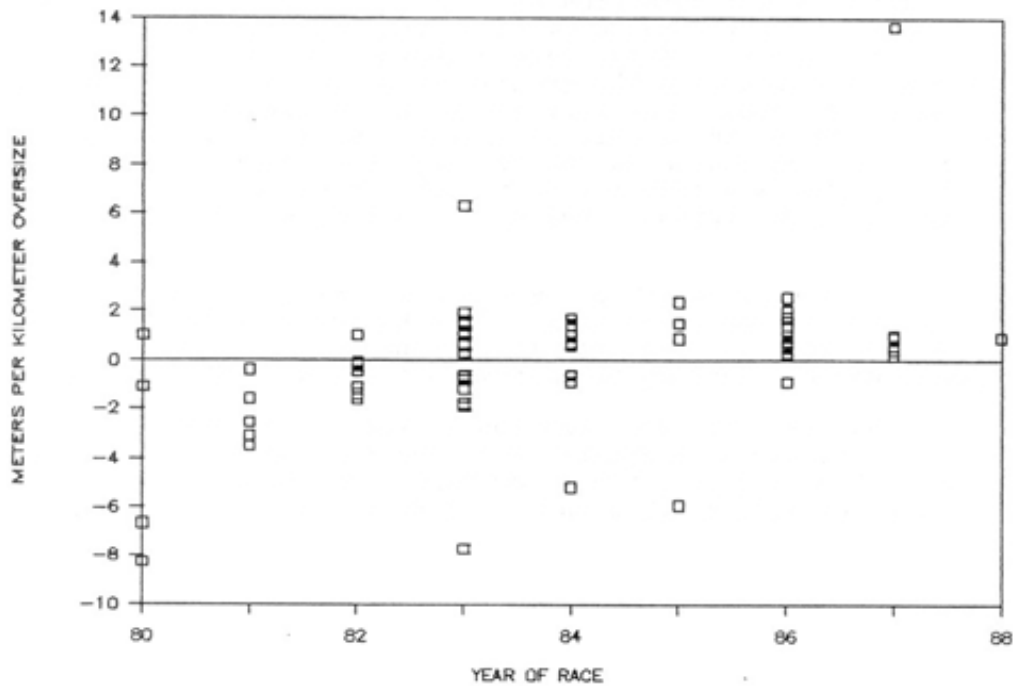
* Signifies previous validation applies based on evidence submitted.

Currently assigned, not completed:

10 Mile	NY84019AS	Trevira	B. Noel	R. Thurston
15 Km	FL87037BH	Gasparilla	E. McDowell+	W. Nicoll
100 Km	Gulf Race Walk		S.Demaree	E.T. McBrayer

Sally H. Nicoll
Sally H. Nicoll

VALIDATION MEASUREMENTS



FINISH LINES	
TIME	PLACE
0:44:13	1188

Finish Line Sub-Committee
 Alan Jones, Chairman
 3717 Wildwood Drive
 Endwell, NY 13870
 (607) 754-2339
 November 1988

FINISH LINE WORKERS

I have found that most problems in timing and scoring a road race are caused by finish line workers. The maxim I use is to recruit intelligent workers -- preferably ones who have helped before or have participated in running races. Then, instead of warning the worker about all the possible things that can go wrong, I try to explain how the whole system works and how the various back-ups are used. If the person is reasonably intelligent and things go wrong, adjustments can be made. However, if I explain the mechanical operation and get knowing nods, I know I'm in trouble. Let me illustrate with some war stories. I'm sure everyone reading this column could supply many additional war stories. In fact, if you send me your favorites, I will include them in the next column. The purpose of this exercise isn't just for the obvious laughs; we can learn from such stories.

WAR STORY I -- THE MAN WITH THE FAST FINGER

I scored a race recently but I wasn't in charge of the finish line. However, I still like to double check to make sure that the people who are going to supply data know their jobs. I didn't recognize the man holding the printing timer so I went up to him to ask if he understood his job. Yes, he did. (This is where I should have gotten nervous. I prefer someone who says, "I think I understand

but let's go over it again.") All he had to do was press the button when the gun went off and then press it again every time someone crossed the finish line. Right? What could be simpler? The course was out and back with the start and finish line only 50 meters apart. In fact, the runners crossed the finish line 50 meters after the start. I think you begin to picture what happened. Yes he did. He pushed the button when the gun went off and then pressed like mad as all 70 runners crossed the finish line as they headed out on the course. Someone came and told me what happened. "No problem," I said. We'll just throw out those times and start with place 70 or whatever. However, when I looked at the tape the runners all crossed the finish line about three minutes into the race. All I can figure is that he pushed the button about three minutes before the gun went off. Must have been checking it out without resetting!

WAR STORY II -- WHY IS IT SO HARD TO EXPLAIN WHAT A TICK SHEET IS FOR?

At the above race we got the times using the backup tick sheet. It wasn't too hard since it was a 10 km race with only about 70 runners. However, the second race that day was a 5 km with 250 runners. (For the second race we found a different person to run the printing timer.) As usual I went over the tick sheet procedures with the four women who had been given the assignment. (Why four, you ask? I don't

know but that is what the race director assigned and that was the cause of the problem.) When I told them that they should record, using tick marks, ALL times and as many competition numbers as they could, they asked if they could split into two teams to increase the number of competition numbers. Sounded good to me. I was running myself so when I finished I went over to check on how they were doing. Yes, they had broken into two teams, all right. One was putting tick marks on one sheet while the other was writing down the competition numbers -- with no correlation between them. "No problem," they said. They were going to transcribe the numbers over to the tick sheet as soon as things slowed down! It never occurred to them that there are things such as unregistered runners, missed times, missed competition numbers, etc.

WAR STORY III -- IF YOU RECRUIT INTELLIGENT HELPERS, DON'T GET THEM TOO SMART.

My favorite method of capturing times and select times is with an electronic device with that capability. Typically these have one or more push buttons to record the time of each person who finishes. In addition, another person records the competition numbers of as many finishers as possible. These times and select bib numbers can then be transferred to a computer for scoring. I have programmed a hand-held computer, the Psion, for this job and it allows one person to record both times and some select bib numbers. Every time a finisher crosses the line, the ENTER button is pressed. If there is enough time between runners, the bib number is entered before pressing ENTER. I have programmed this computer to do the necessary rounding so that when the computer is started, it immediately shows one second. When one second has passed, it shows two seconds and so on. Following my usual procedure I got a very intelligent guy to run this. He has a graduate degree in statistics and has run in many races. I neglected to tell him

about the rounding. Being a precise guy he checked his display with other watches which were started when the gun went off. (I was out on the course running the race so he couldn't check with me. Running races which you score is a sure fire way to invite problems.) He noticed the one second "error." So he started it again with a preset time off a running watch. (Of course this violates TACSTATS guidelines.) Still there was that one second "error." He fixed it! He started it one second later than the preset time!

NELL JACKSON

Nell Jackson, who died this past spring, was the athletic director of the State University of New York at Binghamton here where I live. (There is a story that when she arrived from her previous job at a Big Ten school, she asked where the football stadium was. Someone had to break the news to her that SUNYB has no football team.) She was also Secretary of TAC/USA. I scored a women's race for the University a few years ago and Nell helped me run off the results. As we worked we chatted and compared notes. She was a national class runner in the early '50s when I was in high school. I recalled that at our district meet runners from Morgan State came and ran some exhibition relays. The runner I remember was Josh Culbreth. I asked Nell if she knew him. A slight smile crossed her face. "I used to date him," she said.

FINISH LINE SUB-COMMITTEE MEMBERS

John Boyle	Philip Lockwood
Mark Crook	Neil MacDonald
Jack Dowling	Fred McCormick
Christopher English	Jack Moran
Bill Grass	Sally & Wayne Nicoll
Linda and Basil Honikman	Rick Staback
Alan Jones	Allan Steinfeld
Walt Jorgensen	Fred Torres
A.C. Linnerud	Ken & Jen Young

October 14, 1988

Wayne Nicoll / AW
3535 Gleneagles Dr.
Augusta, Ga. 30907

Wayne,


Must be nice to be in Georgia and away from all this wonderful weather we're having up here. One day last week we had rain, snow, sleet, hail, and sunshine all within a 1-hour period. Daytime temperatures are averaging around 40 F, and it seems like it has been raining forever. Anyhow, enough about the weather.

I have a little problem with some courses from [REDACTED]. I thought I could use some advice on. [REDACTED] sent me a 10-K course and a 1/2 Marathon course. Both courses have significant portions on unpaved roads. The 10-K is about 50% unpaved while the 1/2 Marathon has just under 3 miles of unpaved road. [REDACTED] asked for some advice about measuring the 10-K before he started, and I suggested he say down a 1000' cal. course on each surface. He didn't do that, but road the course based on his 1/2 mile calibration rides at home. There is no indication as to the roughness of the unpaved portion, but I think it is fairly hard packed. I'm not sure whether to accept this one or not.

The 1/2 Marathon is a little tougher. [REDACTED] was in a big hurry on this one. He calibrated at home at 7 AM. He then came to Erie to run in a race. After the race, he drove to [REDACTED] (about 2 hours from here) to measure 2 courses, finally re-calibrating back in [REDACTED] at 1 AM. The 1/2 Marathon course in [REDACTED] had almost 3 miles of unpaved road, and it was wet and drizzly. In addition, there was a 534' section he couldn't measure because it was behind a locked gate. He took a guess at the distance, finished the course, and apparently had someone else tape the 534' the next day. He corrected for the difference between his guess and the taping.

As an aside, both courses got to me the day the races were held. This has become standard practice with [REDACTED], which leaves him in a real bind when things go wrong. I think he accepts courses as certified on race day even if the paperwork has problems. I think I am going to send out a form letter to all the measurers in Pennsylvania this winter telling them I need their paperwork at least 3 weeks before a race to assure them of a certified course on raceday. I think I might also write to Peter Reigel to see if anything can be done to make something like this mandatory. I have seen a number of races this summer being advertised as TAC certified when I know there is either no paperwork yet submitted or defective paperwork which is unresolved on raceday. I think this is deceiving to the runners, and unfair to the race directors who try to do everything properly.

Well, so much for the editorial. If you could give me a little advise on these two courses I would appreciate it. Thanks.



Bob Edwards



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men and women and boys and girls
at all age levels.*

WAYNE B. NICOLL

3535 Gleneagles Drive
Augusta, Georgia 30907
(404) 860-0712

Bob Edwards
493 Dale Drive
Erie, PA 16511

17 October 1988

Dear Bob,

I knew it was only a matter of time before [REDACTED] would get to you. That kind of slam bang measuring activity is going to catch up with him.

Regarding the measuring he did on the 10K with the unpaved portion, it would depend on the roughness of the unpaved surface. I find that a rough surface yields more counts on a calibration course than a smooth surface. Try calibrating on the pavement for 1000 feet, then do it again in the grass, dirt, or rougher pavement beside the roadway. It is probably due to more wobble and more bounce where the wheel turns while off the ground. If that holds true then to have a safe course you would want your cal surface to be rougher than the course surface. It works in reverse on a validation - you would want to calibrate on a surface smoother than the race course to give the maximum break to the course. In this 10K case, he is probably shorter than he thinks he is because he calibrated smooth at home, and measured rough. If you can determine that the road was hard packed and easy to ride, I would let it go.

The half marathon is not so easy to determine. An unpaved road on a wet, drizzly day could be extremely hard to get an accurate reading on. You may have some clue as to the possible accuracy by his consistency, or lack of it, as reflected on the measurement data sheet. Also, wet weather can affect readings by cooling the road surface dramatically. He may have calibrated warm, measured cool, and recoiled warm again, never attaining a true large constant. If you want to send me either or both of those, I will give you my opinion. We have generally been accepting bike measurements on unpaved roads if the surface was easy to ride. I think you could insist on a 1000 foot cal course whenever the unpaved surface is significant.

On the submissions just before race day, the policy has been that the submission must be postmarked on the day before the race. The rule book (Rule 133, para.3,) states that the certification is effective as of the date that all measurements and necessary adjustments are submitted as evidenced by the postmark, although actual review and approval may be at a later date. In practice, we accept them if the initial submission is postmarked prior to race day. To do what you would like to do would require a rule change, which could be done next year - it is too late for this year. I think the best solution is wide publicity to the clubs and people

who measure, advising all concerned of the unfairness to runners with the premature advertising of TAC certification and the need to submit early.

I have considered a penalty to races who false advertise but I do not think we could enforce it on our own. If we could tack a penalty fee on the sanction when they applied to the association, it might work.

Enough of that. We are staying busy. I have lined up the Gasparilla 5 & 15K's for remeasurement and I start on the Carolina Marathon tomorrow. I have also begun taking a few local timing jobs. Sally says that is OK as long as she no longer has to clean up the streets afterwards. Sal got a good report on her latest checkup and the doctor does not want to see her for six months!

Cheers,


Wayne

Watch out: Put-downs backfire in time

Most of us have habits that can irritate our friends and loved ones. With me, it's my wrist watch.

Ever since I discovered this particular of watch several years ago, I've infuriated friends, co-workers and even casual acquaintances with conversations such as this:

"Nice watch you have there."

"Oh, thanks."

"One of those oyster-shell jobs, hmmm? Must be expensive."

"Christmas gift from my wife."

"Beautiful. But tell me, what can it do?"

"Do? It tells the time."

At that point, I feign amazement and say: "That's all? For all that money, it only tells time?"

They usually fall into my trap by saying something like: "What do you expect a watch to do?"

I PULL back my cuff, display my watch, and show them.

While jabbing at the tiny buttons on it's front and side, I say: "Besides keeping time in civilian or military mode, I expect it to be a fully functioning calculator. I also expect it to be an alarm clock. And to be a stop watch. And to give me the the day and date. And to beep on the hour."

In the past, I've had the model that not only did all those things, but could play my choice of three popular tunes.

As well as light up in the dark.

But this year, I'm capable of being even more infuriating because I have the newest model, with the most amazing feature yet.

After I have run through the above tricks, I now say:

"By the way, let me have your unlisted phone number. I want to store it in my watch's data bank."



Mike Royko

That really pops their eyes. But it's true. Through the genius of Japanese technology, I can store 50 names and phone numbers in my watch.

I merely touch a button and the names and numbers scroll across the watch face.

And I usually conclude my performance by saying: "All that for \$32.95 plus tax. Let's see, your watch cost about \$500, right? Well, if I buy the latest, improved model of my watch every two years, at the end of 30 years . . ."

I pause to do some fast figuring in my watch's calculator mode, and say: "At the end of 30 years, I'll have spent less for all of my amazing space-age, science fiction technology than you spent to, ha, ha, to find out what time it is."

It never fails to get a rise out of them. In fact, I have a friend who owns a \$5,000 Rollex and no longer speaks to me.

THAT'S BECAUSE they feel foolish. They spend hundreds or even thousands of dollars, and for what? To get information that is hanging on the walls of most homes and offices — the time of day.

But for only \$32.95, I can tap a button and call up the unlisted number of my bookie. Or

set the alarm to be sure that I don't oversleep at my desk and miss the cocktail hour.

I've never had as much satisfaction from a material possession.

That is, until I recently had a drink with an old friend I hadn't seen for a few years.

He was wearing one of those delicate wafer-thin watches, made in France, I believe, so I couldn't resist going into my put-down routine.

"Must have cost a pretty penny," I said.

"A bundle," he said.

IN A moment, I was putting my watch through it's paces. But he just roared with laughter and said:

"I can't believe this. You? Wearing a nerd watch?"

"A what?"

"That's the kind of watches the nerds wear."

"Uh, you don't understand. This watch is also a calculator, a stop watch, a phone directory, an alarm . . ."

He laughed again. "I know all that. That's why the nerds love them."

"Nerds? What do nerds have to do with it?"

"The computer nuts. The calculator freaks. The number crunchers. I've got a kid working in my office who has one exactly like it. Classic nerd. Keeps a slide rule, three pens, a tiny flash light and a peanut butter sandwich in his shirt pocket."

"UH, IT'S got a, uh, a two-year battery, you know?"

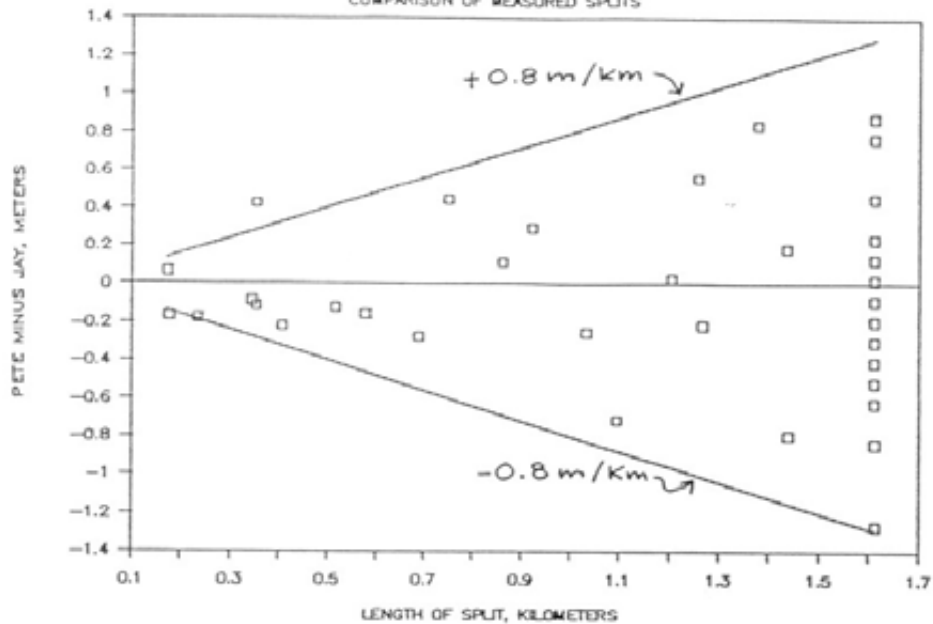
He slapped the bar and laughed uncontrollably. Then he said: "Who would have thought it? You, a nerd? Tell me, what ever possessed you to buy a watch like that?"

"Christmas gift from my wife."

Mike Royko writes for the Chicago Tribune.

THE OLD STYLE MARATHON/CHICAGO

COMPARISON OF MEASURED SPLITS



CHICAGO WAS A PRETTY GOOD RIDE

Jay Wight and I measured The Old Style Marathon/Chicago on September 10. The data for our basic ride (before final adjustments) agreed as well as I've seen two rides agree. We have a criterion that says the two rides should agree within 0.08 percent. We achieved this not only on the overall ride, but on 33 out of the 35 intervals we measured. The graph shows how things came out. "Pete minus Jay, Meters" simply shows Pete's measurement of an interval less Jay's. For example, on 18 mile-to-30 km, a distance of 1032.84 meters, including SCPF, Pete got 1032.91 (he was laying out) and Jay got 1033.16, for a difference of -0.25 meters.

The sloped lines show the limit of 0.8 meters per kilometer required for the overall ride, but generally not required for each individual split.

Other data:

Pete's precal/postcal: 9265.50/9264.77 counts per km (solid tire)
 Jay's precal/postcal: 9318.41/9311.83 (pneumatic tire)

Precal count span on 1000 ft cal course (4 rides) Pete: 1 Jay: 1
 Postcal count span on 1124.11 ft cal course (4 rides) Pete: 1 Jay: 1

Pete's total measured distance: 42239.9 meters
 Jay's total measured distance: 42241.6
 Difference: 1.7

Sum of shortest splits: 42234.0 meters

The reason for the oddball length on the postcal course was that Pete was paranoid about flats, and used his bike to lay down the approximate cal course greater than 1000 feet. The postcal was done, leaving the course measurement safe, and then the calibration distance was steel-taped.

HANDICAP RACING

In 1977 I ran a 5 mile handicap race. "Olympic Memories" was put on by Ben Buckner, with cookies and Olympic slides at his house after the race. It was a lot of fun. At the start, the watch was started, and when the time arrived for your age and sex, off you went. Prizes were awarded in the order you finished - no age groups or sex separation. Instant awards, passed out as you exited the chute.

TACSTATS just sent their 1988 statistics, so I thought I'd take a whack at working up a handicap chart. No great science was involved. I simply graphed all the single age records for men and women, and then tried out different equations until I found a couple that fit the data pretty well. These equations represent what a top American runner could be expected to run on their best day. Most of the data points show slower times, since the standard is intended to represent the best. Most of the single age records are "soft", with only a few defining the envelope of excellence.

Once the age standard equation was done, I used it to calculate expected finish times for people of all ages, and then made up a handicap chart. There are 3 levels - 100%, 90%, and 85%. The percentage level of the handicap should be chosen so that the best age performer wins, but not by much. Here at Battelle, where I work, we have a monthly 5k run, held during lunch hour. Our best age-rated runner is Marie Burleson (38) who can do the course in about 18 flat. This is about 90 percent of the best speed for a 38 year old woman. Therefore, for our race, a 90 percent handicap level is appropriate.

If we used the 100 percent level, we would see runners beating Marie who were running at 88 or 89 percent while she ran 90, and that's not good. If we used a lesser handicap level, Marie would have too much of a head start, equally bad. So we use 90 percent.

Using the 90 percent handicap, we start the watch and wait, since we have no 70 year old women. A 56 year old woman starts at 3:14. Marie (38) starts at 6:39. I'm 53 and male and start at 6:59, knowing I'll not catch Marie even from scratch. Our faster men, age 35, start at 9:35. At the finish the people come pouring past the line all at once, and it's over!

In most local races I'd use 85 percent. No system is perfect, but this one will give close to the desired effect - if all goes well, everybody will finish at once!

The nice part about a handicap race is that you know that everybody ahead of you ought to be slower, so you can expect to catch up to them. Of course, you have to fear the people behind you, who are faster than you. This is the reverse of the feeling you get in most races. It's a heady feeling gaining on the others ahead of you, although being passed is no more fun than in a regular race. Near the finish it really gets competitive!

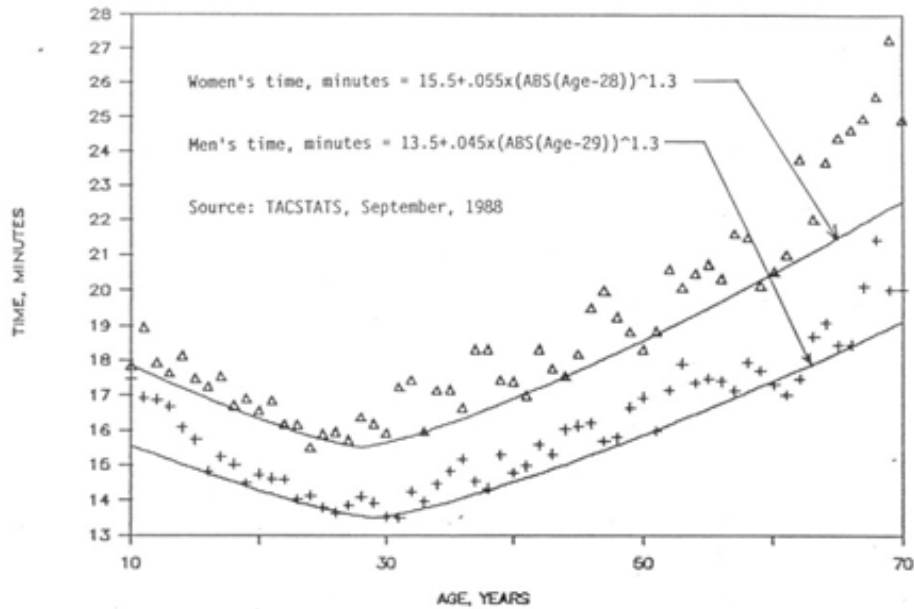
Put on a handicap 5k and let me know how you liked it. I may work up some more of these tables for other common distances.

A handwritten signature in cursive script, appearing to read "Pete".

5 KILOMETER AGE HANDICAP STARTING TIMES

AGE	SEX	100%		90%		85%		AGE	SEX	100%		90%		85%	
		M	S	M	S	M	S			M	S	M	S	M	S
70	F	0	0	0	0	0	0	36	F	6	16	6	58	7	22
69	F	0	13	0	15	0	15	20	F	6	16	6	58	7	22
68	F	0	26	0	29	0	31	53	M	6	17	6	59	7	24
67	F	0	39	0	43	0	46	21	F	6	24	7	7	7	32
66	F	0	52	0	58	1	1	35	F	6	24	7	7	7	32
65	F	1	5	1	12	1	16	52	M	6	26	7	9	7	34
64	F	1	17	1	26	1	31	34	F	6	31	7	15	7	41
63	F	1	30	1	40	1	46	22	F	6	31	7	15	7	41
62	F	1	42	1	54	2	0	51	M	6	35	7	19	7	45
61	F	1	54	2	7	2	15	23	F	6	39	7	23	7	49
60	F	2	7	2	21	2	29	33	F	6	39	7	23	7	49
59	F	2	19	2	34	2	43	50	M	6	44	7	29	7	55
58	F	2	31	2	47	2	57	32	F	6	45	7	30	7	57
57	F	2	43	3	1	3	11	24	F	6	45	7	30	7	57
56	F	2	54	3	14	3	25	31	F	6	52	7	37	8	4
55	F	3	6	3	27	3	39	25	F	6	52	7	37	8	4
54	F	3	17	3	39	3	52	49	M	6	53	7	39	8	6
70	M	3	28	3	51	4	5	26	F	6	57	7	44	8	11
53	F	3	29	3	52	4	5	30	F	6	57	7	44	8	11
69	M	3	39	4	3	4	17	10	M	7	1	7	48	8	16
52	F	3	40	4	4	4	19	48	M	7	1	7	48	8	16
68	M	3	49	4	15	4	30	27	F	7	2	7	49	8	17
51	F	3	51	4	17	4	32	29	F	7	2	7	49	8	17
67	M	4	00	4	26	4	42	28	F	7	5	7	53	8	20
50	F	4	2	4	29	4	45	47	M	7	10	7	57	8	25
66	M	4	10	4	38	4	54	11	M	7	10	7	57	8	25
49	F	4	13	4	41	4	57	46	M	7	18	8	7	8	35
65	M	4	21	4	49	5	7	12	M	7	18	8	7	8	35
48	F	4	23	4	52	5	10	13	M	7	26	8	16	8	45
64	M	4	31	5	1	5	19	45	M	7	26	8	16	8	45
47	F	4	34	5	4	5	22	14	M	7	34	8	25	8	54
63	M	4	41	5	12	5	31	44	M	7	34	8	25	8	54
46	F	4	44	5	16	5	34	15	M	7	42	8	33	9	3
10	F	4	44	5	16	5	34	43	M	7	42	8	33	9	3
62	M	4	51	5	23	5	42	16	M	7	50	8	42	9	12
11	F	4	54	5	27	5	46	42	M	7	50	8	42	9	12
45	F	4	54	5	27	5	46	17	M	7	57	8	50	9	21
61	M	5	1	5	34	5	54	41	M	7	57	8	50	9	21
44	F	5	4	5	38	5	58	18	M	8	4	8	58	9	30
12	F	5	4	5	38	5	58	40	M	8	4	8	58	9	30
60	M	5	11	5	45	6	6	19	M	8	11	9	6	9	38
13	F	5	14	5	49	6	9	39	M	8	11	9	6	9	38
43	F	5	14	5	49	6	9	38	M	8	18	9	14	9	46
59	M	5	21	5	56	6	17	20	M	8	18	9	14	9	46
42	F	5	23	5	59	6	20	21	M	8	25	9	21	9	54
14	F	5	23	5	59	6	20	37	M	8	25	9	21	9	54
58	M	5	30	6	7	6	29	36	M	8	31	9	28	10	2
41	F	5	33	6	10	6	31	22	M	8	31	9	28	10	2
15	F	5	33	6	10	6	31	35	M	8	38	9	35	10	9
57	M	5	40	6	18	6	40	23	M	8	38	9	35	10	9
40	F	5	42	6	20	6	42	34	M	8	43	9	42	10	16
16	F	5	42	6	20	6	42	24	M	8	43	9	42	10	16
56	M	5	49	6	28	6	51	33	M	8	49	9	48	10	22
17	F	5	51	6	30	6	53	25	M	8	49	9	48	10	22
39	F	5	51	6	30	6	53	32	M	8	54	9	53	10	28
55	M	5	59	6	39	7	2	26	M	8	54	9	53	10	28
38	F	5	59	6	39	7	3	31	M	8	59	9	59	10	34
18	F	5	59	6	39	7	3	27	M	8	59	9	59	10	34
37	F	6	8	6	49	7	13	30	M	9	3	10	3	10	38
19	F	6	8	6	49	7	13	28	M	9	3	10	3	10	38
54	M	6	8	6	49	7	13	29	M	9	5	10	6	10	42

SINGLE AGE RECORDS FOR 5 KILOMETERS



TO PETE

I enjoyed the article "Was Shakespeare a road runner", which I found in Pete Riegels MN, very much. Those problems of overdressed runners, hilly courses and hot weather have been described very clearly by the German poet Theodor Fontane in his poem "Archibald Douglas", when Earl Archibald (1449-1514), the "Great Earl" with the nickname "Bell the Cat" tried to run with King James IV from Stirling Castle to Linlithgow:

Der Weg war steil, Und die Sonne stach, Und sein Panzerhemd war schwer, Doch ob er schier zusammenbrach, Er lief doch nebenher.	The Way was steep, And the Sun scorched, And his Shirt of Mail was heavy, But if he broke down nearly, He ran besides him yet.
---	--

(By the way: King James rode a horse !)

Best regards,

DIPL.-ING. HELGE IBERT
 BERATENDER INGENIEUR FÜR BAUWESEN VBI

DEAR PETE !
 THANKS AGAIN FOR SENDING ME
 YOUR "MN".
 I WILL BE IN NEW YORK THIS
 NOVEMBER.

31

HLR

THE COURSE LIST - HOW IT IS ORGANIZED

Yes, there is a kind of perverted logic behind the way the listings appear in the list of certified courses. Here it is:

- 1) Four spaces are available for listing the length of a course.
- 2) Course lengths are listed like this:

```
    5 kilometers .....05k
   10 kilometers.....10k
  100 kilometers.....100k
  100 miles.....100M
   10 miles.....10M
  3.87 miles.....03+M (distance appears in text)
  Marathon.....Mar
Half-Marathon.....HMar
    Track.....Trck (distance appears in text)
Calibration course.....Cal (distance appears in text)
```

The "0" is used for single-digit distances so they will sort out before the double-digit distances.

3) The only decimal distance used is 2.5k, since this is a more or less standard racewalk loop distance. All other distances that are not even numbers will appear with a "+" after the even part of the distance.

4) The reason the above is done is so that the computer can sort the courses by distance and get things pretty well in order. 2.5k will appear just above the 20k and 20M listings because the computer thinks "." is less than "0". 100k and 100M will appear just above 10k and 10M because the computer thinks "0" is less than "k".

5) Since "k" comes before "M" in the alphabet, metric distances appear before mile distances of the same numerical value.

6) So far we have no metric certified courses beyond 100 km or mile courses beyond 100 miles. When they appear they will be listed as "UMar", or "ultramarathon", with the exact distance listed somewhere in the text.

"Drop" and "Separation" were introduced to the course list in 1986. Previous to that time courses were listed by NRDC. In the NRDC listings, a short abbreviation of the nature of the course appears where "drop" and "separation" presently appear. The combined listing of all courses thus has a mixture of data in these columns.

At present the course list is maintained in WordPerfect language. Courses are confined to one line, because using two lines per course would double the list's length, which presently exceeds 100 printed pages.

Note for certifiers: Town name is limited to 13 characters including spaces. Race name is limited to 26 characters including spaces. If either is longer on your certificate, it will be abbreviated as the course registrar chooses, unless you indicate a preference for the abbreviation.

Course Registrar's Report:

The transition from one computer to another was smooth and uneventful. This year to October 24, 826 courses were added to the list. The current total is 5698. Since May, there have been 18 requests for photocopies of certificates/maps; 2 requests for course lists. Course lists are available on computer discs or as a printout.

Marathon maps are very popular. Runners appreciate certified courses, and race directors are beginning to advertise their races as "TAC certified." Locally, runners call to inquire about where to race on the weekend. I keep a copy of OHIO RUNNER handy and try to accommodate all requests.

A handwritten signature in cursive script, appearing to read "Joe Hiegel".

ASSOCIATION OF INTERNATIONAL
MARATHONS AND ROAD RACES

Technical Committee
Peter S. Riegel, Course Registrar

3354 Kirkham Road
Columbus, OH 43221 USA
614-451-5617 (home)
614-424-4009 (office)
telex 245454 Battelle

September 2, 1988

Ted Paulin - Olympic Park - Swan Street, Melbourne
Victoria 3002 - AUSTRALIA

Dear Ted,

Here is an updated list of the maps I have received. Although it does not reflect the entire roster of AIMS courses, it does cover many of the major events. I'm sure things will improve with time.

I have also been receiving measurement information. Most of it is pretty good, and I am greatly encouraged. Until I saw the information I had no idea that things were in such good shape.

There are minor deficiencies in both the maps and the measurement procedures, but generally I think things are good, and getting better.

General comments:

Measurement - Measurement should do this:

1) Calibrate four rides before the measurement and four rides after the measurement. Use the larger of the two constants as official.

2) Two rides of the course are required. The official one is the ride that obtains the shorter measured length for the course. Example: Ride 1 yields 42217 meters. Ride 2 gives 42237 meters. Ride 1 is "official" and 20 meters should be added to the course to give the extra 42 meters that the 1.001 short course prevention factor requires.

Maps - The map should allow a perfect stranger to go to the race site and lay down the course, even if all the paint marks have disappeared. In addition to a clear depiction of the streets used, the map should show the exact locations of start, finish, and turnaround (if used).

Again, I am very pleased with what has been submitted, and I thank those measurers for sending along the information. International course measurement has come a long way in a short time, and it is due to the hard work of those who took the time to do it right.

Best regards,



xc: Andy Galloway - PO Box 10-106 - Hamilton, New Zealand

Andy: If you have space in the newsletter please pass on these compliments.

GENERAL CHARACTERISTICS OF AIMS MAPS RECEIVED

Types of maps:

- 1 - Large scale city map with streets identified
- 2 - USA Standard map - all information on one letter size piece of paper
- 3 - Race brochure map
- 4 - Photocopy of race brochure map
- 5 - Large, clear map good except as noted
- 6 - List of all streets
- 7 - Photographs of key points

Noted Deficiencies:

- A - Streets not identified
- B - Portions of route not clear
- C - poor copy of map, hard to read
- D - Start and Finish not clearly shown
- E - Turn around point not clearly shown

COURSE	LOCAL MEASURER	AIMS MEASURER	MAP TYPE	DEFICIENCIES/COMMENTS
Barcelona Marathon	Vancells	Schneider	5	D
Berlin Marathon	Ibert	Disley	1	None - highest quality
Brisbane - Sunny Queen	Houston	Cundy	5	D
Brussels Marathon	?	Bleuel	5	D
Buenos Aires Marathon	?		5	E
City to Surf - Sydney	Paulin		5	None
Hamburg Marathon	Horn	Ibert	5	D
Helsinki Marathon		Bresky	5	D
London Marathon	Disley	Riegel	1	None
Long Beach Marathon	Scardera		2	None
Los Angeles Marathon	Scardera		2	None
Rio de Janeiro Marathon	Eichler	Galloway	5	A, B, D, E
Lisbon Marathon	Campos	Vancells	5,6,7	None
Melbourne Marathon	Paulin		3	None
Munich Marathon	Pirrung	Damm	4,6	D
New York City Marathon	Noel	Riegel	2	None
Orange Bowl Marathon	Loeffler	Riegel	2	None
Penang Marathon	Silvaraj	Paulin	5	E
Romaratona	Vancells		4	A, C, D
Rotterdam Marathon	Van Maren	Ibert	3,5	D, E (validated after race with J. Disley)
San Diego Marathon	Pendleton	Letson	2	B
25 Km de Berlin	Menzel	Ibert	1	None - highest quality
Golden Horn 1/2 Marathon	Tekin	Selby	3	A, B, D
Glasgow 1/2 Marathon	Duguid	Disley	1	B, D