



Measurement News

Fall 2006 Issue 133

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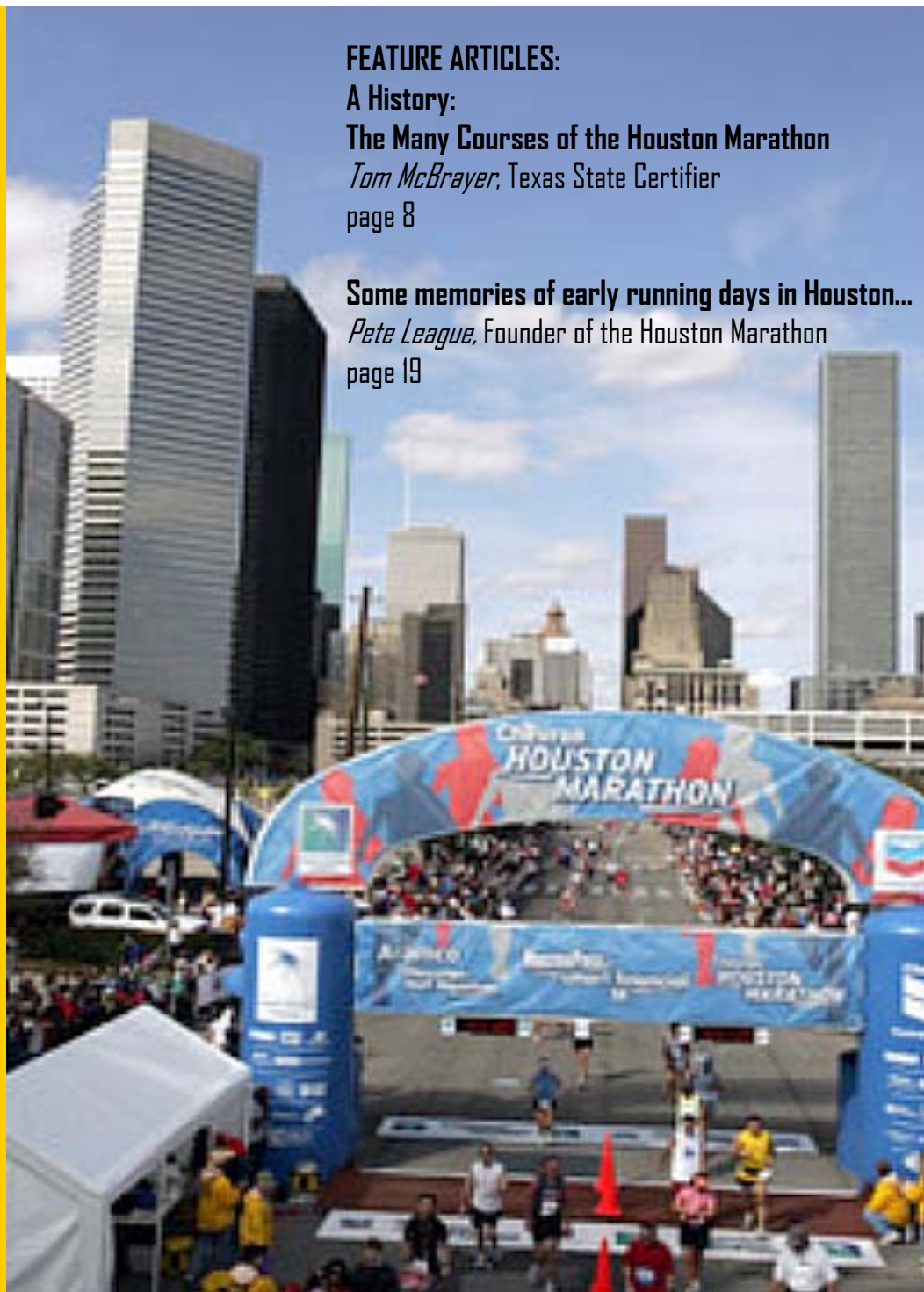
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Photo by Victah Sailor, www.photrun.net



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USA Track & Field/ Road Running Technical Council

Measurement News

Fall 2006 Issue 133

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ABOUT MEASUREMENT NEWS:

Measurement News (MN) is the journal of the **USA Track & Field/Road Running Technical Council (USATF/RRTC)**. *MN* maintains its important role for ALL concerned parties to communicate and discuss matters affecting our sport at all levels, including race walking, road racing, track & field, records, finish line timing, and road course certification.

MN continues to assist in the *RRTC's Mission* to make all aspects of road course measurement for *USATF* certification as good as it can be. There is a long standing tradition that **"no cows are sacred"** within the pages of *MN*. All submissions are welcomed, your opinions, ideas, and suggestions will always be given space. Absolutely all parties are equally invited to contribute and participate in the dialogue.

Electronic or hard copy material and photos are always welcomed.

MN is published quarterly, Spring, Summer, Fall, and Winter. *RRTC* Officers, Regional Certifiers, *USATF* Representatives, Course Measurers, and *AIMS/IAAF* Officials and Course Measurers will receive a **free online Subscription**.

MN Online: To view or download a current or back issues of *MN*, visit: <http://rrtc.net/mn>

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MN Deadlines for Submissions and Ads: 2006: *Winter Issue* **November 17**.

2007: *Spring Issue*, **February 16**, *Summer Issue* **May 18**, *Fall Issue* **August 17**, and *Winter Issue* **November 16**.

MN Advertising: *Half Page* @ \$100.00 per 4 consecutive issues or \$30.00 per single issue, *Full Page* @ \$150.00 per year or \$45.00 per single issue, and add 15% for Inside Front Cover/ Back Cover.

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Complete information about USATF/RRTC, visit: <http://www.usatf.org/events/courses/certification/>.





Editor's Note

Kevin P. Lucas

Pete Riegel, Ohio Regional Certifier, was gracious to join me to co-host two **Course Measurement Sessions** at the **USATF Associations Workshop** in Pittsburgh on August 25-27. On Saturday we had full audience for a short 30 minute session entitled **Course Measurement 101**, which we mainly fielded questions and talked about the importance of road course certification. On Sunday we had a generous 4 hour time slot from 8-12 noon for a more in-depth presentation and a little hands on measuring. **Pete** and I decided to try to beat the rain by doing the measuring field work first rather than last, but we got wet anyway. After drying off, we showed our 5 students a new digitized version of **Tom McBrayer's Course Measurement Video**, covered my 8 Step Course Measurement presentation, and went over many of the **USATF** web site resources available for course measurers. Judging by the kinds and number of questions we received on Saturday, there is work to do to clarify what course certification is all about. These seminars were held to strengthen and develop the relationship between **USATF Associations** and the course certification process, at the same time, to assist a few new developing course measurers. Read more about the Course Measurement Sessions on page 36.

As a follow up to our feature article on **Glen Lafarlette, Joe McDaniel** of Oklahoma was very nice to update **Measurement News** readers on our colleague **Glen**. **Joe** tries to visit **Glen** about three times a week. **Glen** is keeping pain under control with a few medications. Naturally due to his illness, **Glen** continues to lose weight and tires easily. Despite the illness, regular visits from many old friends keeps **Glen** in pretty good spirits. **Glen's** wife **Coneil** continues efforts with **Glen's Road Race Service** with a lot of appreciated help from volunteers.

Our good friend to the north, **Bernie Conway**, has quickly recovered from a week long hospital stay because of a burst appendix. On his trip to Mexico for **AIMS** meetings, which ended up being canceled, **Bernie** got as far as Detroit but was fortunately delayed due to weather conditions. After a physically uncomfortable overnight in Detroit with pains in his abdomen, **Bernie** returned home to make it to the emergency room for several tests and was subsequently admitted. He is back running and measuring, recently completed the measurement of the **Toronto Waterfront Marathon, Half Marathon and 5 km**. **Bernie** was fast to point out, "I'm not operation prone. Except for my tonsils I had never had an operation until 2004 when I was 63." Read **Bernie's** column on page 32.

After 20 years, I finally broke down and purchased a new bike, a hybrid **2007 TREX 7.2**. Local **RV&E Bike Shop** of Fairport, NY outfitted the bike with **Armadillo** tires, two water cages, rear rack and bag, and small air pump, I added a new **JOL Counter** and **Protégé 9.0** cyclocomputer. What an incredible difference in shifting while climbing hills. Using my old road bike, **1986 Schwinn Super le Tour**, thought I just couldn't climb hills anymore because I was just getting a bit older. Three gear sprockets make a huge difference. Buying the new bike has renewed my joy of riding for the simple pleasure of riding. More importantly, using the new bike to measure three courses recently has actually been more fun than work.



Kevin P. Lucas



Chairman's Comments

Gene Newman

The November 29th—December 3rd **USATF Annual Meeting** in Indianapolis is quickly approaching. I hope to see many you at our **RRTC Meeting** held during that time. There are two host hotels, **Westin Hotel** and **Hyatt Regency**, for the **Annual Meeting**, however the **Westin Hotel** at 50 S. Capital Street is the main host hotel. I suggest **RRTC** members all try to stay at the **Westin**. The **Annual Meeting** hotel reservation rate is \$105 per night plus the customary 15% tax. Please try to make your reservations early. The hotel telephone numbers are: 317-262-8100 and 800-588-1864. For additional registration information, please visit the **USATF** web site: <http://www.usatf.org/about/AnnualMeeting/>.

Would like to thank **Mike Wickiser** and **Jim Gilmer** for conducting a great Workshop in Albany, NY. After stepping down as chairman, **Mike** has maintained an active role. I certainly appreciate all **Mike** has done for our organization. Do any of you know areas that are in need of developing folks to measure courses for **USATF Certification**? Please contact **Mike** or myself and we could try our best to schedule a workshop in the area. The **RRTC** is very interested in developing new measurers and need your assistance in targeting areas measurers are needed.

Finally, the **RRTC Road Course Measurement Bulletin Board** web site has been very busy lately. I would like to encourage all of you to visit at least once a week : <http://measure.infopop.cc/eve/ub>. There have been quite a few interesting ideas and questions posted. As an example; Can we use a GPS to measure a calibration course? We all know the standard and inexpensive GPS devices will not be acceptable; however there are GPS units that the cost exceeds \$20,000, which are very accurate. It has been decided to accept these more accurate GPS measurements for calibration courses provided the measurement has been done by a licensed surveyor with the proper GPS equipment and training.

Hope all of you are having a wonderful summer with family and friends. While taking it easy as summer winds down please be sure to send me your ideas and suggestions for agenda items at our upcoming **Annual Meeting**.

Best to all,

Gene Newman



A History:

The Many Courses of the Houston Marathon

Tom McBrayer, Texas State Certifier

Like most marathons of the time, at the beginning of the **70's** running boom, the *Houston Marathon* started out small. There were less than a hundred finishers who ran that first 5 mile loop course. The event was held in a local park in December of **1972**. Unlike most marathons, the *Houston Marathon* was fortunate to have as its first director, an experienced runner and talented administrator; his name was **Pete League**, who had recently transferred to town from New Jersey via California. *Pete* brought with him a strong *Amateur Athletic Union (AAU)* background. AAU was the *USATF* of the day, the national governing body of the sport.

Pete League had already directed several of the standard distance events in Houston, 15 km, 20 km, etc., so the marathon was the logical next step. *Pete* measured the 5 mile loop in *Memorial Park* using one of the early *Jones Counters* and *Ted Corbitt* certified the course to be accurate.

Interesting side note: In **1968** *Pete* measured one of the three *Olympic Marathon Trials Preliminary* courses in Santa Rosa, CA. The course turned out to be fast, *David O'Reilly* won in 2:16. In fact, the times were so fast, *Pete* was asked by *Ted Corbitt* to re-measure the course a second time. The re-measurement checked out OK.

The *Houston Marathon* used the *Memorial Park* 5 loop course in **1972**, **1973** and **1975**. There was no marathon in **1974**. In **1976**, *George Kleeman* measured a new 3 loop course, which included portions of the original 5 loop course while

expanding into an adjoining neighborhood. *George* took over as race director in **1977** and continued through **1980**. During his tenure, *George* brought on board a major sponsor, *Tenneco Oil*, and measured a new 2 loop course. This new course would have a start and finish in the downtown area and utilized the comforts of the *Convention Center*.

The **1979** event served as the *AAU National Men's and Women's Marathon Championships*. The men's winner was *Tom Antczak* with a time of 2:15:28. *Sue Petersen* of California was the women's winner in 2:46:17.

In **1980**, a 10 km run was held in Houston that featured *Jeff Galloway*, **1972** Olympian. *Jeff* was the winner, as you might imagine, with an outstanding time. *Jeff* promptly told the race director the course he ran was not a 10 km, it was short. The resulting investigation revealed the calibration course used for the measurement was 50 feet short of the presumed half mile distance. All the recently certified courses were immediately suspect including the **1978** through **1980** marathon editions. The calibration course was corrected right away by a professional surveyor using an EDM.



7 AM Start of the 2006 Chevron Houston Marathon.

Photo by Victah Sailer, www.photrun.net

The *Houston Marathon* even attracted **Bill Rogers** in **1981**, *Rogers* ran 2:12:20 that year. Prize money awards were added in **1982**. In **1982** **Benji Durden** of *Colorado* ran a 2:11:12 and took home \$28,750 for his first place finish.

In **1980**, *George Kleeman's* job took him to California and direction of the marathon was taken over by **David Hannah** who served in that position until **2001**. On *David's* watch, a big breakthrough came in **1986** with a citywide course, starting and finishing in the downtown area and visiting a number of neighborhoods, all with the blessing of City Hall.

A bit of background: In **1984**, a delegation from Houston was invited to visit the *New York City Marathon* as guests of **Manufacturers Hanover Bank**. At that time, *Manufacturers Hanover* was sponsor of the *New York City Marathon* as well as of the **Corporate Challenge**, a 3.5 mile worldwide event aimed at corporations and Houston was one of their venues. Representatives of the *Houston Marathon*, **Houston Police Department** and the mayor's office rode in the lead vehicle to observe how a big citywide marathon worked. They took good notes. The **City of Houston**, including all departments, offered full backing, realizing the advantages of involving the various neighborhoods. The *Houston Marathon* two loop course continued through **1985** with slight variations as the race continued to grow in size.



1992 Women's Olympic Marathon Trails measurement team, front row: Betsy Hughes, Amy Morss, Elizabeth Langton, Carole Langenbach, back row: Sally Nicoll, Tom McBrayer, and Mary Anne McBrayer, missing, but present: Carol McLatchie, then Women's LDR Chair.

A new **George R. Brown Convention Center** to replace the aging facility the marathon had used for over a decade, opened in **1987**. Although it would involve yet another course change, the marathon committee made the move without hesitation. The new location adapted quite well to the existing concept, a citywide course with a start and finish convenient to the center. The 500,000 plus square feet available floor space served both pre and post-race activities including a pre-race expo.

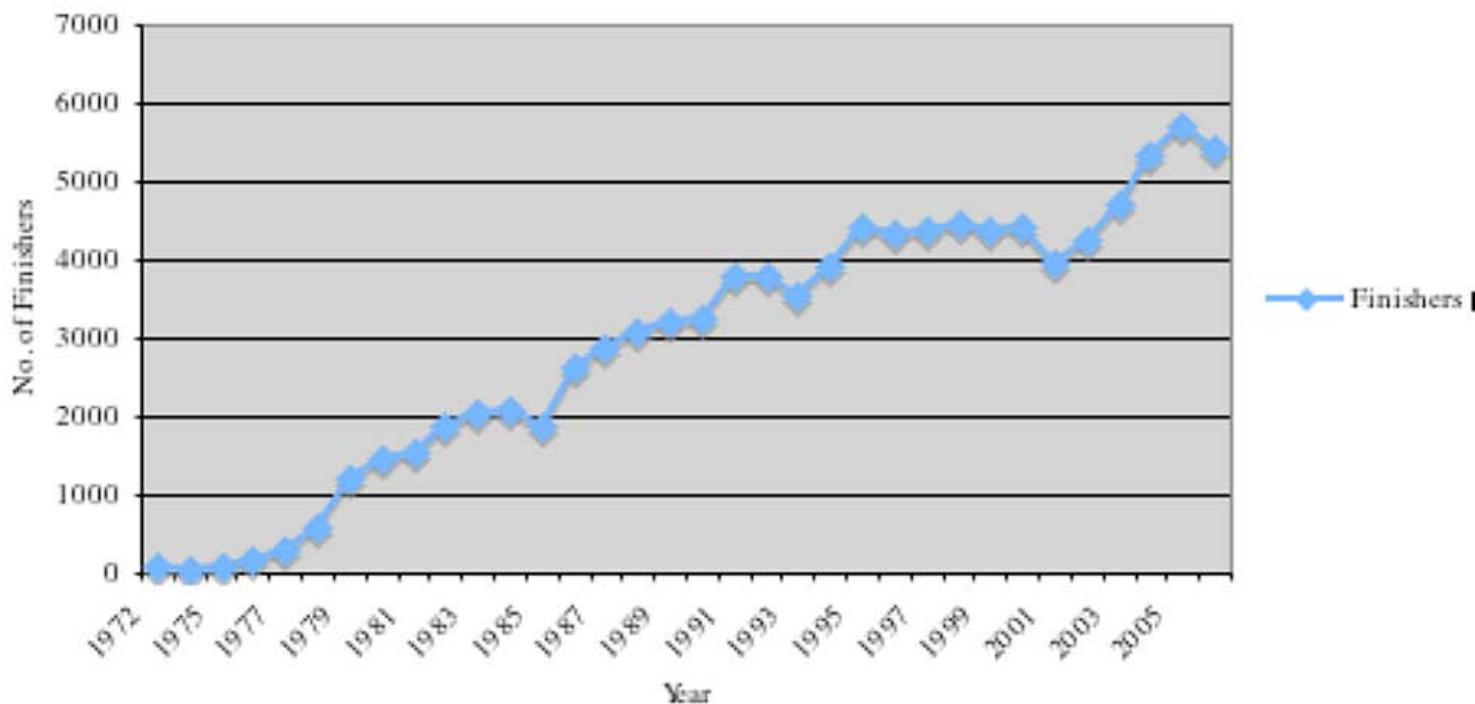
This **1989** citywide course would serve as a model for all future Houston courses. Most of the minor changes over the years would be because of various road construction.

With the **1992 Barcelona Olympics** coming up, **USATF** had awarded the **Men's Olympic Marathon Trials** to Columbus and the women's trials to Long Beach. Unfortunately, Long Beach lost their sponsor and had to cancel out. Houston was asked to take over and host the **Women's Olympic Marathon Trials** in January **1992**.

Continuing the tradition set at the **1988 Women's Olympic Marathon Trials** in Pittsburgh, a team of four women Measurers; **Amy Morss, Elizabeth Langton, Betsy Hughes, and Carol Langenbach**, rode the **1992 Women's Olympic Marathon Trials/Houston-Tenneco Marathon** course for validation early on the morning of September 15, **1991**. The ladies were accompanied by **Tom McBrayer**, the measurer of record, and **Carol McLatchie**, Chair of Women's LDR and the **USATF** representative to **RRTC**. Final calculations showed the course (based on the tightest ride) to be 53 meters over marathon distance. All standard validation procedures were followed including use of calibration constants without the **SCPF**.

The **1992 Women's Marathon Trials** starting 30 minutes earlier than the main field of the *Houston-Tenneco Marathon*, proved to be a very competitive race. Minnesota's **Janis Klecker**, the eventual winner in 2:30:12, had turned around at Mile 15 to assist **Cathy O'Brien** who had taken a fall. *Cathy* wound up second running 2:30:26 and Texan, **Francie Larrieu-Smith**, ran 2:30:39 and placed third.

Marathon Growth Chart
(Finish numbers courtesy of Jack Lippincott who has run every Houston Marathon since 1975.)



The *Houston Marathon* growth has been steady over the years topping 4000 finishers in '95 and 5000 nine years later. A 5 km run was added in **1995**, which proved popular with spouses and relatives of the marathoners as they waited for the marathon finish. The 5 km started a few minutes after the marathon, utilizing the same start and finish and the course was designed to actually coincide with the marathon for about 2 km, making these runners feel a real part of the day.

The half marathon debuted in **2003**, was an instant hit with runners not quite ready for the full marathon distance. And, as happened in many other cities, in **2006** there were more finishers in the half than in the marathon, 7236 to 5414. The course was the same as that for the marathon with an appropriate turnaround and it, too, used the same start and finish. The half starts at the same time as the marathon, adding to the excitement. The **2007** and **2008** *Aramco Houston Half Marathon* will serve as the *USATF Men's and Women's Half Marathon Championship*. The event has hosted the *Men's Half Marathon Championship* since '05.

Over the 35-year history of *Houston Marathon*, 11 certified course numbers have been assigned to the 42.195 km distance. Prior to the early **1980's**, during *Ted Corbitt's* reign, numbers were not assigned. A course was measured and paperwork submitted to *Mr. Corbitt* who reviewed all measured courses and issued a certificate, but no numbers were used. The *Houston Marathon's* first numbered certified course was issued in **1984**.

Very few changes were made to the *Houston Marathon* course during the **1990's** and, to date, those few changes were made to accommodate Houston's ongoing construction. And that seems to be the pattern for the foreseeable future. The growth of Houston's light rail system and rebuilding of major arteries in and out of the downtown area promises future measurers a full plate.

Increased prize/bonus money announced for 2007 USA Half Marathon Championships - 8-24-06

The *Aramco Houston Half Marathon*, host of the **2007 USA Half Marathon Championships**, has announced an expanded U.S. prize money structure. The increase brings the total payout to \$59,500, with \$12,000 going to the men's and women's champions.

Race officials also announced a bonus of \$4,000 for breaking the existing race record of 1:02:07 and 1:10:55 for men and women, respectively, plus an additional \$5,000 for breaking the existing American records of 1:00:55 and 1:07:34 for men and women respectively.

Masters will compete for a total purse of \$1,500 per gender, with the champions receiving \$750 each. The **2007 USA Half-Marathon Championships** will be held in conjunction with the thirty-fifth running of the **Chevron Houston Marathon** on January 14, **2007**. Two of the top three U.S. finishers will qualify for the **IAAF World Road Running Championships** to be held in Udine, Italy, October 14, **2007**.

The **USA Half-Marathon Championships** will be the first race on the **2007 USA Running Circuit (USARC)**, a **USA Track & Field** road series featuring **USA Championships** from 5 km to the marathon and attracts the best U.S. distance runners.

The mission of the *USA Running Circuit* is to showcase, support, and promote U.S. runners. Since its inception in **1995**, the *USARC* and its races have provided over \$4 million dollars to U.S. distance runners.

A long-time supporter of *USATF* long distance running, *The Chevron Houston Marathon* organization has contributed to the further development of U.S. athletes including as a Silver sponsor of the **USA Distance Project**. The *USA Distance Project* is a partnership of the *Long Distance Running Division of USA Track & Field* and major U.S. events and running-related corporations dedicated to sustaining the long-term development of elite USA distance athletes, enabling them to compete successfully in domestic and international competitions and major championship events.

For more information on the **2007 USA Half Marathon Championships** visit: <http://www.usatf.org/>



Brian Sell of Rochester Hills, Mich., won the second U.S. title of his career at the 2006 USA Men's Half Marathon Championship, Houston, TX
Photo by Victah Sailer,
www.photorun.net



Meticulous process needed to certify Don Carroll Race **Jaycees official records 10K distance on bicycle, one step at a time**

Joanne Beck, Daily News Staff Writer

BATAVIA, NY — It took *Steve Tufts* five hours to complete a 10K.

It's not a record he's ashamed of.. After all, he traced the route, 6.2137119 miles exactly, entirely on bicycle with a foot on the ground.

It was time well spent, he says, to learn how to certify a 5K and 10K road race. The route will be used for the **Donald R. Carroll Race** June 10. *Tufts'* newfound skill will later be used by the **Batavia Area Jaycees** for its **Labor Day 5K**, said *Tufts*, who serves as the non-profit's community development vice president.

When *Carroll's* race began more than two decades ago, it started and finished on Bank Street near the **YMCA**. It later got moved out near **Genesee Community College**, where it's been located for the last 10 years. The proceeds also shifted from sending needy children to **YMCA's Camp Hough** to helping out students with **GCC** scholarships.

When *Carroll* realized he was too "burned out" and needed a break, he canceled the race last year. Now that it's back, with the help of **YMCA** staff and community volunteers, the course has returned to its roots. Walkers and runners will once again take off and return on Bank Street.

The lapse in time meant the course had to be re-measured and certified. Since the *Jaycees* had been investigating certification for its **Labor Day 5K**, the group offered to help with *Carroll's* effort, *Tufts* said. The *Jaycees* was going to have its course done by **USA Track & Field**, a national and not-for-profit governing body for assorted races in the United States. That's an important step serious runners and race walkers look for in races, he said.

"Even though the *Jaycees* and *Don Carroll* don't expect any national records to be set here in Batavia, most runners like to compare performances run on different courses. And such comparisons are difficult if course distances are not reliable," he said. "A reliable course will attract more participants, a goal of any race organizer."

The easiest way to have a course certified, he said, is to hire someone already skilled at measuring courses for **USATF** certification. You can also measure it yourself.

"If you are sufficiently motivated and willing to devote the time and attention that it requires," he said.



Photo by Joanne Beck/Daily News

INCH AT A TIME: *Steve Tufts of the Jaycees demonstrates how it took him five hours to learn how to certify the Donald R. Carroll Race course using his mountain bike, a recording device attached to his front wheel and one foot on the pavement for each the 5K and 10K distance.*



So the group made a deal with a course certifier in Rochester. If *YMCA* contracted its certification with company rep **Kevin Lucas**, *Lucas* would in turn teach *Tufts* how to certify the course himself. Because the *Jaycees* was saving the usual \$250 certification fee, it donated the money to the *YMCA*.

That is when *Tufts* and his mountain bike came into the picture. He met *Lucas* at the *YMCA* at 8 a.m. April 30. Despite all of today's technology with computers and satellite imagery, *Tufts* said, the most reliable technique to measure a road course is the calibrated bicycle method. A device called the **Jones Counter** was attached to the front fork of his bike, allowing it to count each front wheel spin. In order to determine the number of counts needed to accurately measure a course, the counter and bike need to be calibrated.

Tufts and *Lucas* chose a section of Evergreen Drive to create a 1,000-foot calibration course. Using a 200-foot steel measuring tape, they marked off 5 consecutive sections to add up to a 1000-foot course. They each then rode the course four times, noting the number of counts on the *Jones* device each time. They took an average of each notation to get the number of counts for each 1000-feet. They then multiplied the number of counts per 1000 feet to reach a 10K, or 6.2137119 miles, distance. There are 5,280 feet per mile. Simple math was used to determine how many counts for a mile, he said.

Once the pair had calibrated their bikes, they headed back to the *YMCA* to begin measuring the 10k course. When more than one race occurs at an event, he said, it is ideal to have them end at the same finish line. So *Tufts* and *Lucas* chose the **U.S. Postal Service** mailbox in front of the former **St. Jerome building** for the finish line. They then rode the course backwards to get to the start.

It's crucial to travel over the shortest distance possible so that, no matter what slight variation a runner may take, it will never be less than what the race is supposed to be.

"We kept tight along each road and even used the gutters as we rounded curves," *Tufts* said. "The only thing left to do was return to the calibration course and recount the measurements on our bikes over four passes. This was necessary to account for any changes in temperature or tire pressure throughout the morning. There was indeed a small difference, so we returned to the starts and pushed them back by a few calculated feet. Our job for the day was done."

It took them five hours to complete the task. A week later, *Lucas* provided the *YMCA* with certificates for both 5K and 10K courses.

And a couple of weeks after that, *Tufts*, "full of confidence from my recent mentoring experience," went out and measured another course for the *Jaycees Labor Day 5K*, he said. It begins and ends on State Street, near MacArthur Drive. He is also drawing a course map, which he'll send in with a \$30 fee to get the course certified.

Runners will be able check out the *USATF* web site to view all certified courses at: <http://www.usatf.org/events/courses/search/>. That also includes **GO ART!'s Firecracker 5K**, **Genesee County ARC's Friends and Family 5K** and **Fetal Alcohol Syndrome 5K Run**.



The USATF website offers a variety of resources for Event Directors, including:

- Certified Course Maps
- Course Certification Information
- Course Measurer Contact Information
- Event Sanctioning & Insurance Information
- USATF Championship Bid Information
- Competition Rules
- Tips on Organizing Competitions
- Comprehensive Online Calendar

To access all of this, and more, visit:

www.usatf.org/groups/EventDirectors/

And be sure to add your upcoming event to USATF Calendar:

www.usatf.org/calendars/mgmt/

(this is a free service)





An Excellent Electronic Counter for Only \$7 Neville Wood, Validations Chairman

The *Bell cyclocomputer* available at *Walmart* for only \$7 can be adapter for use as an excellent electronic counter. Mode change is made simple through a single large button. Wheel circumference can be set to an exceptional 5000 mm to allow the recording of double revolutions with one magnet and single revolutions with two magnets.

A peculiarity of this counter is that zeroing the display does not delete a surplus count held in memory. An easy operational modification corrects for this problem.

Measurers who still do not trust electronic counters would nevertheless do well to upgrade their *Jones Counters* with the inexpensive *Bell*. All measurements could be done using the *Bell* with the *Jones* as back up for overall course measurement.

1. Introduction

I have always considered myself too sophisticated a bicycle user to bother ever looking in the bicycle section in *Walmart*. However the other day while looking for a *Schrader* inner tube, I did look in the section and noticed a wired cyclocomputer by *Bell* for only \$7. Only wired models are suitable for use as electronic counters, but have been disappearing in the current fashion for the retrograde wireless ones. Therefore, even though the *Bell* package gave no hint of its suitability as a counter I purchased one.

On checking the circumference setting I was amazed to find that it could be set to an exceptional 5000 mm, so that trip distance incremented by one for every two magnet impulses detected by the sensor. Thus, with one magnet on the wheel, double revolutions are recorded, and with two magnets, single revolutions.

I checked out performance against the traditional *Jones Counter* and the *Protege cyclocomputer* in several long rides, and found that although sometimes it agreed precisely, sometimes it showed an additional impulse. Later, I proved that this impulse was not generated during measurement, but was present at the start and would not allow synchronization of the wheel rim zero with that of the meter. Sometimes it took many attempts to get rid of it. I checked several possible sources for this additional impulse but without success. The computer appeared to be generating this extra impulse randomly. Then I had an inspiration. With all other electronic counters I have tested, zeroing the display also deletes any surplus impulses held in memory, but not accounted for in the display. I supposed the *Bell* was an exception and indeed this proved correct. A procedural fix was then easy to devise.

2. Programming the Computer

The *Bell* is unique as far as I know in that all mode changes are done with a single button. (There are no buttons on the back like most other cyclocomputers.) First select odometer mode and hold button for two seconds. The default circumference (2124) is displayed, but soon afterwards the right digit begins to increment. When it reaches zero, press the button and repeat for two more digits. On the last digit press the button at 5. Then select km and finally press the button once more to get trip distance mode (DST).



Reset the trip distance by holding the button for two seconds. Make sure though that you are not accidentally in odometer mode (ODO and only one decimal place shown.) Holding the button in odometer mode results in the circumference reverting to the default setting, and you will have to go through a complete resetting.

3. Wheel–Rim Marking

As previously described in the reference, fractions of a revolution are read from markings on the rim, use a black **Sanford Sharpie Permanent Marker** to create very permanent marks on the rim. Red can be used to designate smaller divisions. Assign increasing values in an anticlockwise direction as viewed from the right-hand side of the wheel and clockwise from the left-hand side. Designate a zero spoke on the same side of the wheel as is desired for the computer sensor.

Marking the rim requires estimation of 0.6 and 0.8 of a spoke interval for a 32-spoke wheel and 0.5, 0.6, 0.7, 0.8, and 0.9 for a 36-spoke. These can be measured accurately on a card and the card used repeatedly or simply eye-balled.



Time to mark a rim in fractions of a revolution is less than 25 min. Time to mark in spoke intervals is 5 min.

Note that if the above instructions have been followed correctly, fractional revolutions should increase with forward rotation of the wheel in the forks. Also, after completing installation, there should be excellent synchronization of the rim zero point with that of the meter. If a mistake is detected, simply turn the wheel 180 degrees in the forks.

1. Wheel with 32 spokes in fractions of a revolution, mark the first divisions using the following precise correlations:

Spoke	0	4	8	12	16	20	24	28
Rev	0	0.125	0.250	0.375	0.500	0.625	0.750	0.875

Finally, using the fact that 0.8 spoke intervals equals 0.025 rev and 1.6 spoke intervals equals 0.050 rev, work on either side of the first marks until the whole rim is marked in divisions of 0.025 rev.

2. Wheel with 36 spokes in fractions of a revolution, mark the first divisions using the following precise correlations:

Spoke	0	9	18	27
Rev	0.00	0.25	0.50	0.75

Finally, work on either side of the first marks until the whole rim is marked in divisions of 0.025 rev using the following correlations:

Spoke interval	4.5	3.6	2.7	1.8	0.9
Rev interval	0.125	0.100	0.075	0.050	0.025

3. Wheel in spoke intervals

Marking a rim in spoke intervals is very fast and subsequent readings are very fast and accurate. Rotation can be read down to 0.003 rev equivalent to 0.06 of a count on the *Jones*, but the downside is that in order to correlate with meter readings in revolutions, the measurer has to divide rim readings by the number of spokes. Obviously though, this would be the method of choice when using a rented bicycle.



4. Installation

With electrical tape and or plastic ties mount the sensor on the upper inside of the forks. Use the same side of the bicycle as was used to designate the zero spoke in rim marking. Mount a magnet on spoke 20 of a 36-spoke wheel or 18 of a 32-spoke wheel. (Spoke numbers increase in the forward direction of rotation.) Align the magnet with the sensor and check that clearance is 4 mm or less. If meter readout is desired in single rather than double revolutions, an additional magnet should be similarly mounted on spoke 2. (This magnet can be scrounged or another Bell unit purchased for spares.)

5. Basic Measurement

Measurement is very similar to that of other electronic counters where whole revolutions are read from the trip distance display and partial revolutions from the marked wheel rim, but with the Bell a special procedure is

necessary to delete a spurious count that might be held in memory at start.

Align the zero point on the rim with the start and roll back the wheel until an impulse is observed. The speed display will become active and the bicycle icon on the screen will move. If the trip distance does not increment then there is no problem with a spurious count. Roll forward until displays become active and the trip distance increments, re-zero the trip distance by holding the button for 2 seconds, and start measurement.

If trip distance increments when the wheel is rolled back then a spurious count has to be deleted. Disconnect the meter by pushing it slightly forward on its mount before rolling the wheel forward until the magnet can be seen. Reconnect the meter, re-zero, and start measurement. Deleting a spurious count should only be necessary once during a complete series of measurements.

Ride continuously until the desired revolutions are registered on the meter (ignore the decimal point) or until about one revolution before the desired finish. Stop the bicycle immediately and push forward slowly until the desired fraction of a revolution is indicated on the wheel rim or until the wheel is aligned with the desired finish line. If there is a need to go backward through the zero point on the rim, note the meter reading at the stop and decrement this by one for every passage through the zero point.

Do not roll backward through the rim zero point unintentionally as this can generate one or two spurious revolutions. Avoid stopping the bicycle during measurement, but if this is necessary do so immediately after the meter increments or glance down at the rim reading and stop remote from the zero point and also the 0.5 rev point if using two magnets.

When using a single magnet the meter reading must be doubled. An additional rev must also be added if the meter does not increment during the last passage through zero to the final reading. The requirement for this addition can be checked by pushing the wheel forward through zero after taking the final rim reading and observing the meter increment.

The meter display disappears in less than four minutes if there is no activity, and should be recovered by pressing the mode button twice rather than by simply riding off.

For additional procedures with the counter see Sections VII-IX in the report on the *Protege* listed in the reference.

6. Minor Disadvantages Compared to Other Electronic Counters

1. Uses a small silver oxide battery which may not have a long life.
2. Needs a unique zero procedure at the start of measurements.
3. If accidentally hold mode button for two seconds while in odometer mode, have to go through a complete resetting of the circumference.

7. Major Disadvantages Compared to Other Electronic Counters

1. Display of rev (DST) is small.

8. Minor Advantages Compared to Other Electronic Counters

1. Can freeze reading without generating spurious counts by disconnecting counter from its mount.

9. Major Advantages Compared to Other Electronic Counters

1. Circumference setting to 5000 mm to allow easy operation with one or two magnets.
2. Very easy mode setting with only one large button.
3. Low cost (\$7) and ready availability through *Walmart*.

Reference

1. “*Protege cyclocomputers as revolution counters*”, *Measurement News*, Autumn 2005, number 130;
<http://home.earthlink.net/~caverhall/protege/contents.htm>.



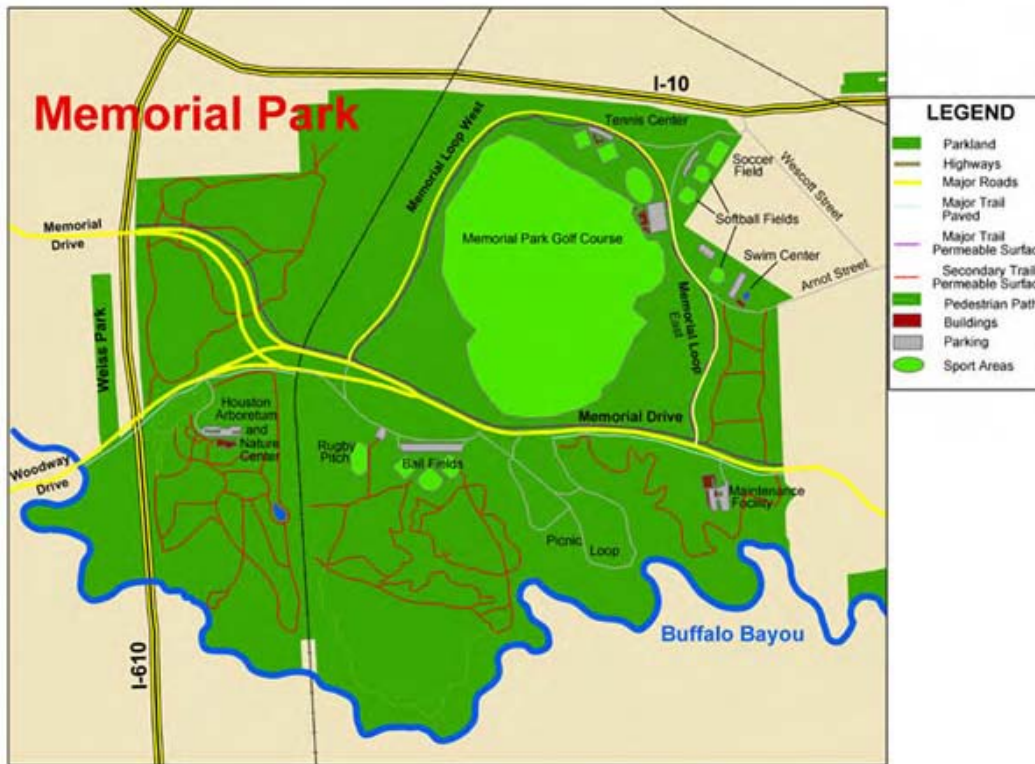
Some memories of early running days in Houston...

Pete League

Influenced by his father, who founded the Atlantic City Marathon in 1959 and using experiences from organizing road races in Northern California, Texas, and Ohio, Pete League founded the Houston Marathon in 1972. Pete has been a long time road course measurer, measuring since the early 1960's. Austin, Texas is now home to Pete and his wife Lynn.

The humidity...WOW! I was new to Houston looking for a house to live in, having been transferred with *Shell Oil Company* from a much more temperate climate of the San Francisco Bay Area. With a couple of free hours available in between appointments, I thought that a ten mile run might be a good way to stretch my legs and discover some of what Houston had to offer. I soon found Houston's **Memorial Park** and parked in the picnic loop area, by chance, came across an excellent running trail nick named the **Ho Chi Min Trail**, which is a very appropriate naming. In fair shape at the time, I still found myself stopping to recover fairly often because of the sauna like heat and humidity. My ten mile run was quickly shortened to five miles.

Where are all the races? Asking around, I could only find a rare race or two. To the best of my recollection, there was a two mile affair in **McGregor Park**, a half hour run on the track at **Rice University**, and the **Galveston Marathon**. That was it for running events in Houston in the early 1970's.



Map of Houston's Memorial Park, once know as Camp Logan, founded during World War I, 1917.

early 1970's. The 30 km, held in *Memorial Park* during the fall of 1972, was our first **AAU Championship** event. There was no defined, well-groomed, and lighted running trail in those days, just a narrow path created by the few joggers and runners of the day.

"Fred, I want to put on a marathon and can you help me identify a sponsor" **Fred Johnson**, a stockbroker and runner, found a generous and supportive contact at **Igloo Corporation**. *Igloo* was the first **Houston Marathon** sponsor, coming up with just enough cash to get us going and providing *Igloo coolers* as prizes for every finisher.

"How would you like to chair the long-distance running committee (of the AAU)?" **Nancy Laird** asked. **Nancy was the then-current chairperson.**

In June 1972 I set out to develop a program of distance running events for the AAU. Setting a goal of having a race at each of the championship distances, 5 km, 10 km, 15 km, 20 km, 25 km, 30 km, one hour, cross country, and marathon, we got started. We also kicked off, in 1972, another popular event: a summer series of long-distance all-comers races on the track at **Rice University**. **Leonard Hilton**, the anchor member of the **University of Houston's** world indoor record distance medley relay team, ran Houston's very first four minute mile during one of those all-comers meets in the

Focus on the basics. Marathon organizers wanted to ensure a safe, accurate course, so the first *Houston Marathon* consisted of five 5 mile loops within the *Memorial Park* area, as well as a finishing mile and 385 yards. The start was on Crestwood Street and the finish was at a point just to the east of the old tennis center. A hand made “digital clock”, manned by a couple of volunteers gave runners 5 mile split times. It was a heavy cardboard sign with the hour and minutes being changed as time progressed, and the seconds were called out by the volunteers. So, a runner would see something like **2 HOURS, 15 MINUTES**, and he or she would hear the exact time, say “**2 – 15 AND 52 SECONDS**”. A complete set of results, including every runner’s 5 mile split times were printed and distributed. The course had been defined and measured using the *bicycle wheel measurement standards* and measurements and supporting data were sent to **Ted Corbitt**, the national road course certification guy in New York, who certified the course as being accurate. Local runner **Don Slocomb** helped me tremendously in that effort. On race day, we had less than minimal police assistance , just the assistance of a lone motorcycle officer.

Memories of Boston... When I ran my first marathon at *Boston Marathon* in **1960**, the tradition was for all the finishers to enjoy a beef stew dinner in Boston’s **Lenox Hotel**. *Boston*’s finish line, after a final right-turn from Commonwealth Avenue, was in front of the *Lenox Hotel* on Exeter Street. So, I thought, “Why not provide a beef stew meal for our *Houston Marathon* finishers?” After contacting a former *Campbell Soup Company* colleague, we had as many cases of **Bounty Beef Stew** as we needed. **Father Lynch** of *Saint Theresa’s Parish* in *Memorial Park* was kind enough to let us use the church hall as a pre- and post-marathon gathering point. One of my fondest memories is of **Harry and Gloria McLeod**, **Lynn League**, and **Mary Anne McBrayer** dishing out plates of beef stew and other food goodies provided by **Kroger’s** (which, through those early years, generously supported the *Houston Marathon*). And then there was **Tom McBrayer**, after having completed the marathon, helped to mop the floor after everyone had left. Sadly, we lost *Harry* several years ago, but *Gloria*, *Mary Anne* and *Tom* happily remain as very close friends.

About the race itself: The first *Houston Marathon* was held on the last Saturday of **1972**, December 30th. **Danny Green** of The Woodlands, TX and co-founder of the *Houston Harriers* was Houston’s first winner running 2:32:33. About 75 or so runners completed the race. The fastest finishing mile (and 385 yards) was turned in by two *Rice University* students who later gained national recognition: **Jeff Wells** and **John Lodwick**. In fact, in **1976** *Jeff* won Houston in 2:17: 46 and in **1978** he finished in one of the closest second-place finishes in 2:10:15 in *Boston Marathon* history, only 2 seconds behind *Bill Rogers*.

A side note about one notable 1972 marathon entrant: A couple of weeks before the marathon I got a call from **Dick Peebles**, a long time and very popular sports writer with the *Houston Chronicle*. *Dick* said that he received a call from a runner by the name of **Frank Stranahan** who wanted to know how to enter. Naturally I told *Dick* that as far as I was concerned, I could enter *Mr. Stranahan* right then. For the golfers who might read this, they will remember that *Frank Stranahan* was one of America’s finest amateur golfers in the **1940’s** and **1950’s**, winning 70 amateur championships. *Frank* also finishing second to **Ben Hogan** in the **1953 British Open**. He was a devoted physical fitness guy, carrying a set of weights with him while traveling to golf tournaments. After retiring from competitive golf in **1965** or so, *Frank* took to running marathons.



In 1984 Pete League runs the race he first created in 1972. That same year, Charles Spelling of Great Britain won in 2:11:54 and Norwegian Ingrid Kristiansen ran an incredible 2:27:51, she still holds the record for the fastest women’s time at Houston.



Meet the Regional Certifiers

Kevin P. Lucas, Editor

Scott Hubbard, Michigan Regional Certifier:

The self professed “big fan” of country music, first introduction to course measuring came in **1981** when he directed the *Dexter-Ann Arbor Run*. His plan for the **1982** event was to convert the 7 and 15 mile events to a downtown finish and use standard distances of 10 km and a half marathon. “I didn't know a thing about certification but wrote to **Ted Corbitt** who sent me the information I needed to get started. I still have those early documents and the early letters of certification from *Ted* that were written on his home typewriter.”

Using an undersized borrowed bike, *Scott* set off to measure the new half marathon course. *Scott* says “As fate would have it, the *Dexter-Ann Arbor Half Marathon* remains the most difficult course I've measured due to the 15 km of twisting, rolling road it follows between 2.7 and 12 miles of the course. The final 1.1 miles was hard too because of the SPR and how busy the road is.” Working so hard to get that measurement correct all subsequent measurements have been much easier, “mostly”. *Scott* remains loyal to the same measuring bike since **1983**, a *Trek 10 Speed*.

Scott told *MN* a couple of pretty good course measurement stories. “Like anybody who has measured as long and as many courses as I have, there are lots of stories to tell. Most of my best ones are about the *Detroit Free Press Marathon*. It seems every year since I started measuring the marathon route in the mid-80's, there's been a different course and not a year has passed without some unusual thing happening. Easily, the best story was in **1999** when the race finished in *Tiger Stadium*.”

“On a hot summer morning, I was thirsty and tired approaching mile 23 in downtown Detroit. There was a barricade across the road but I noticed I had room to pass through. I aimed for the curb and just then a voice over a cop car PA told me to stop. So, I stopped, reluctantly. I looked around the corner and saw a large number of police cars and motorcycles plus an ambulance in front of a large church. The cop came over and told me I couldn't go through. I told him what I was doing and I'd be gone in 20 seconds. He said no and put in a call to somebody. 'Somebody' roared up, got out and started quizzing me and asked for ID. I asked why he needed to see ID and he said, "Because you might be a terrorist." I told him what I was doing and asked why I couldn't go through. He said, "I can't tell you."

Fine. "When can I go?" He told me, "Maybe in 45 minutes." Swell. I was not happy. At all. I rode over to a grassy area, saw a local TV truck, looked inside and asked what was going on in the church. The answer, "*Al Gore* is in there." Oh. That explained a few things. *Al* was campaigning at black churches that morning. Finally, he came out and his entourage roared off to the next target, I mean, destination. Lucky for me I'd thought to note my counts when initially stopped so I picked up again and rode off to *Tiger Stadium*, arriving downright whipped but entertained.”



Marathoners cross the Ambassador Bridge between 3 and 4 miles, which links Detroit to Windsor, Canada.

Each year when having to re-measure the *Detroit Free Press Marathon* course, *Scott* must coordinate efforts to cross the border into Canada via the *Ambassador Bridge* and back using the *Detroit Windsor Tunnel*. “In **2001**, for some reason, I didn't get around to measuring until September and in the process learned things would be very different that year. My inquiries came post 9/11 and the border was busy with meetings and planning sessions. I was among the first to learn all about the tighter security and impossibility of an international marathon. I notified the *DFP* officials who came up with an all US course in a couple weeks time. Don't think I took my final measurement until about a week before race. Then there's the one about the missing bridge in Windsor, running into a just opened car door in Windsor, and a grilling on the Detroit side by an international border booth official. And I'm just getting warmed up!”

Scott ran cross country and track in high school and in college at *Eastern Michigan University*. After college, “I continued to run with dwindling success and more aches and pains into the mid-**90's**,” *Scott* said. Due to a foot ache *Scott* started cycling for exercise. “One thing has led to another and I've done some bike racing in recent years, road and mountain, with more serious racing in the past couple years.” The foot ache was later diagnosed as arthritis. “I can run on it but can't go as far or fast as I'd like but I'm content to still get out there at any speed.”

In addition to course measuring and duties as the Michigan Regional Certifier, *Scott* is an announcer at road races, track meets, and cross country events, and regularly writes about running. “I've written my *Running Shorts* column in *Michigan Runner* magazine since '82 and have also had things published in *Runner's World* and *Marathon & Beyond*.” The announcing at road race finish lines first began at the *Crim 10 Mile* in Flint . Since then, “I added the *Detroit Free Press Marathon* in '83 and have expanded into high school, college and open track and cross-country announcing,” *Scott* explains.

Running is a major part of *Scott's* family life as well. Not only did *Scott* run for *EMU*, younger brother *Don* did, and now son *Jeff* does. *Jeff* competed for *EMU* in the **2005 NCAA Cross Championships** in Terre Haute, Indiana. “My ex-wife *Karen* has a lengthy running resume including 4 *Detroit Free Press Marathon* wins and 2 *Olympic Trials*.” Much faster brother *Don* was recently inducted into the **2006 Ann Arbor Huron High School River Rat Hall of Fame** (read more on page 36).

Scott has also coached a little high school and college track and cross county. “Spent 3 years as a teacher, 4 as a Mr. Mom, 14 years in a running specialty store.” National masters runner *Paul Aufdemberge*, who recently won the Masters title in 50:34 at the *Crim 10 Mile* for the second year, is a co-worker of *Scott's*. “Lucky me,” *Scott* sighs.

1989, *Scott* assisted *Pete Riegel* to validate *Cathy O'Brien's 10 mile World Record* set on the *Crim 10 Mile* course. June of **1990** *Scott* earned *IAAF Level A* measurer status while attending an *IAAF Road Course Measurement Seminar* held in Columbus, OH. In **1996** *Scott* was a member of the measurement team for the *Atlanta Olympic Marathon* course.

About his long involvement with course measurement, *Scott* says, “Ah, you know, I've just been around a long time. I recall the half mile calibration courses, all the measuring rules changes and getting to meet and work with too many capable and hard working people along the way. I try to keep my nose clean and hope for good things to happen.”



Peter Riegel, Ohio Regional Certifier:

Born in Pennsylvania in January 1935, but raised in New Jersey. *Pete* began his college life at **Purdue University**, but was drafted into the **U.S. Army** after only completing one year. "I did basic training at **Fort Dix**, NJ and spent my two years in Fairbanks, AK." Fortunately, "While home on leave, I ran into **Joan Vallone** waiting for a bus and offered her a ride. This led to marriage in 1959 just before I graduated in Mechanical Engineering," *Pete* tells us.

MEASUREMENT NEWS

March

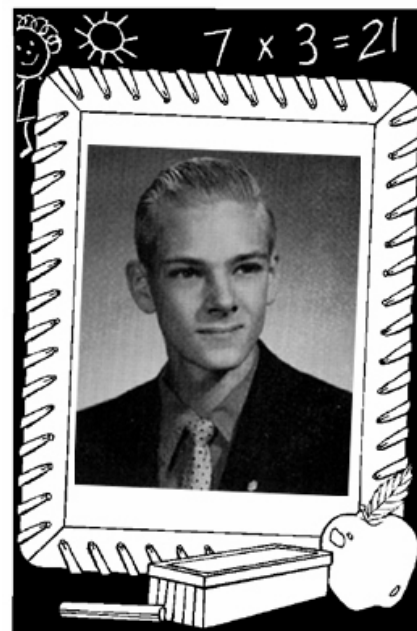
1991

Issue #46



Here we see Joan Riegel, RRTC's Course Registrar, getting started on the new file drawer for the 1991 certificates. The file cabinets contain over 8000 course documents, each of which represents a lot of work by us. Read all about Joan inside.

Joan, in addition to their raising two sons, **Stu** and **Tom**, found time to serve as Course Registrar from 1988 until 2000. *Pete* says, "She had her own TV show on the local **PBS** station, taught needlework in Adult Education, and spent 5 years as Race Director of the **Columbus Marathon** after doing 5 previous years as Assistant Director." *Stu* has followed his mother's footsteps by taking on the job of Course Registrar in 2006. *Tom* is an active course measurer in Fulks Run, VA.



*Teaneck High School,
New Jersey 1953*

something stable, where I would not be moved around, as I did not like the effect that moving around might have on the family."

Looking for the ideal job, *Pete* found **Battelle Memorial Institute** of Columbus, OH., a research-for-hire nonprofit firm global science and technology enterprise developing and commercializing technology while managing laboratories for customers. **Battelle** experienced "major growth when it supported early research in **Xerox** and was paid in stock." For almost 28 years *Pete* worked in the development of underwater breathing apparatus under **US Navy** contract. "It was interesting work, and I got to travel around and dive a lot. Mostly it involved being presented with a problem, inventing a device which would solve the problem, and writing a technical report about the work." In 1978, *Pete* worked a research job in a West Virginia coal mine. "It was nice to get back underground again. Good people."

"In 1995 **Battelle** offered a very nice early retirement buyout, and I snapped it up. I was overjoyed to not have to work any more, even though it was interesting work."

Pete proudly says he ran for 22 years, from 1973-95, participating in 217 races at distances ranging from 1 to 106 miles, 50 were marathons. 1973: First race - **Canton Half Marathon** - 1: 36:25, 1976 - 1 mile best - **Worthington Fun Run** - 5:38, 1976: 20 km best - **Hoover Reservoir** - 1:20:14, 1977: 5 mile best - **Olympic Memories** - 30:47, 1978: 10 mile best - **Sheriff's Trophy** - 64:28, 1980: 10 km best - **Grandview** - 38:31, 1980: Marathon best - **Athens Marathon**, OH. - 2:56:42, 1981 - 50 mile best - **Toledo** - 7:44:25, 1982 - 5 km best - **Battelle RC** - 19:43, 1984 - 100 mile best - **Dublin 24 Hr Relay** (one person team) - 23:06:36, 1995: Last race - **Upper Arlington 5 Miler** - 46:41.

"I got interested in the measurement of road race courses when I discovered, through study of **USGS** maps, my first marathon was 1.5 miles too long," *Pete* says. The other factors were two influencing people, fellow runner, **Ben Buckner**, professor of Surveying at **Ohio State**, and **Ken Young**, who he met in 1982 while researching a technical paper **Athletics Records and Human Endurance**. "Ken took me on a run around **Esperero Canyon Trail**, AZ., we talked about technical stuff as we ran. He persuaded me to take on the job of Ohio Certifier," *Pete* told us. **Ken Young** was the founder of **National Running Data Center**, the first depository for U.S. certified course and road race records.



There were a few other people who influenced *Pete* early on. Most importantly after *Ted Corbitt*, “*Bob Letson*, who was Arizona and Southern California certifier at that time, had worked out a one-piece-of-paper approach to submitting data to *Ted Corbitt*. He also developed the map style generally used today, and remains the best mapmaker I have seen. This made things easier for *Ted*, who was horribly overloaded at the time” *Pete* describes.

Pete first began corresponded with *Bob Letson* in **1978** after *Alan Jones*, inventor of the *Jones Counter*, told him that *Bob* had a similar pace calculator to the one *Pete* developed and was selling. “He had done the same thing, and we had fun compared notes.” Later in **1981** *Pete* asked *Bob* for assistance to certify a course, at the same time course certification was first decentralized.

The *Race Pace Computer Formula* developed by *Pete* and first published *Time Predicting, Runner's World, August 1977*. *Pete* has refined his formula for swimming, bicycling, and walking, *Athletic Records and Human Endurance, American Scientist, May-June 1981*. *Race Pace Computer Formula* $t_2 = t_1 * (d_2 / d_1)^{1.06}$, t_1 equals initial time, d_1 equals initial distance, d_2 equals new distance being calculated for, and t_2 equals predicted time for new distance.

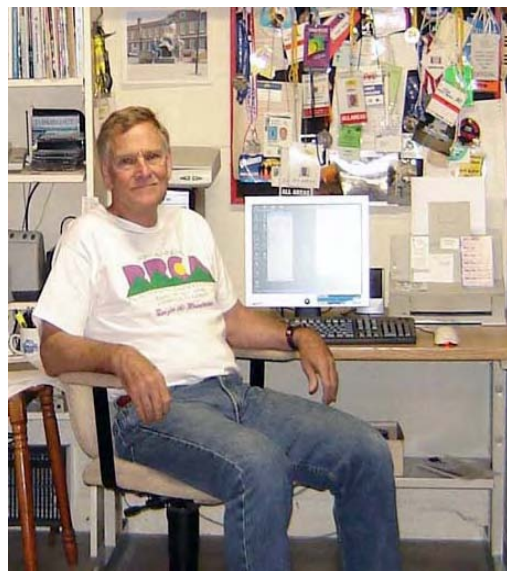
1982, *Pete* wrote “the first of the modern measurement books – it has all the forms and instructions we use today, but is much briefer,” *Pete* humbly says, “It broke no new ground, but was intended to organize the data presentation that I wanted people to send me as Ohio certifier.”

Bob Letson and *John Brennand*, both of California, organized a group of measurers to tackle the **1983** measurement of the **1984 Los Angeles Olympic Marathon** course, which was *Pete* was happily a part of despite the unusual cold drizzly California weather. “*Letson's* report of the measurement, done jointly with me and *Bob Baumel*. *Bob* is another person who has had a huge influence on me. *RRTC* has benefited greatly from his work.”

Pete sites working with international course measurers like, *John Disley* of Great Britain and **1952 Olympic** bronze medalist, *Helge Ibert* of Germany and *Hugh Jones* of Great Britain and current Secretary of *AIMS*, “have given me perspective I’d never have had without working with them.”

Measurement News was started by *Pete* in **1982** as an informal newsletter sent out to fellow course measurers. *Measurement News* became the official *USATF/RRTC* publication and, over the years, has covered many of the developments in course measurement. *Pete* says, “When I began measuring and producing *Measurement News*, I had a manual typewriter and no computer. As equipment improved, so did the quality of communication, which I believe is essential to doing a good job.”

Following the resignation of *RRTC* Chairman, *Allan Steinfeld*, in **1986**, because of his very busy event management schedule, “I wound up being in charge of U.S. race course measurement for about 15 years before I passed it on a few years ago. At one point we had over 20,000 race course maps filed in our home.” As past chairman, seminar instructor, and course measurer, *Pete* has really enjoyed being able to travel all over the world.



Surrounded by event credentials and awards, Pete sits at his home office.

A very brief summary of *Pete's* course measurement body of work: Measured 338 U.S. race courses **1982 - present**, Measured 38 international race courses, Conducted 26 course measurement seminars, Certified 1744 US race courses Wrote 1 course measurement book, Co-wrote 5 course measurement books *RRTC*, *IAAF*, and Canada, Ohio Regional Certifier – **1982-present**, Editor, *Measurement News* – **1982-2002**, Chairman, *USATF/Road Running Technical Council* – **1986-2000**, and International Measurement Administrator for the Americas, *IAAF/AIMS* - **1993-2002**.

“All in all, course measuring has been a very satisfying part of my life.”

Brian Smith, South Carolina Regional Certifier:



"I like to believe I attended the best school in all of Africa. **Pretoria High School for Boys** was small, unisex, and between **1910-53** produced 13 **Rhodes Scholars**, and one **Nobel Laureate in Physiology, Max Theiler**, for developing a vaccine for yellow fever," boosts **Brian**. As a kid **Brian** participated in all organized sports, yet only made the swim team. "I seemed to have a dearth of both slow and fast twitch fibers." **Brian** never completed the "annual compulsory six mile cross country" under an hour and always finishing in distress, while his class mates would out sprint him. "My conception gave me a Mensa-esque I.Q., a dollop of irrationality and a tendency to abandon longish projects before completion," **Brian** tells MN

Brian Smith was born in South Africa, Bloemfontein, Orange Free State, August **1928**. Apprenticed to a pharmacist, not able to enter medical school, "spent spare time buying, repairing, and selling used motorcycles, to pay for flying lessons." With flying now in his blood, he sailed to England and joined the **Royal Air Force (RAF)**. In the **RAF Brian** was part of the first generation to fly jet fighters.

Service in the **RAF, Brian** soon discovered hard aerobic activity and a squash court. "Each air base had a squash court. Although a poor tennis player I became a better than average squash player and sweated profusely many times a week."

In **1952 Brian** had arranged to crew on a yacht going to Helsinki for the **Summer Olympic** games. "Instead the **RAF** seconded me to the **US Air Force**, spending three months at **Luke AFB, AZ**, adapting to **USAF** aircraft and procedures." Later off to Taegu, South Korea (**K-2**) with the **474th Fighter Bomber Group** flying 100 combat missions in **F84G Thunderjets**. **Brian** says of his Korean War experience, "My unit lost one in four pilots due to death or capture. My aircraft was hit by ground fire a few times. I never met a MiG. A **MiG 15** with it's 30mm cannon, if piloted by a Russian veteran, would surely have been my doom."



F-84Gs Fighter-Bomber Squadron - 1952.

Giving up his permanent military commission, opportunities in the USA seemed endless, **Brian** chose to make the move. Once in Wisconsin, entering medical school was a goal once again. **Brain** tells us, "Shamelessly portraying myself as a decorated veteran I wrote to 60 plus medical schools. Only the **University of Chicago Pritzker School of Medicine** invited me for an interview. Once there a kindly admissions staff allowed me to take extensive placement tests, then enter the university to take six pre-med courses, then a wild-card into medical school. I took root, staying for an internship, residency in internal medicine, fellowship in nephrology, and a year on the faculty."

Brian happily found four squash courts while at the **University of Chicago**, "two in the gym and two under the stands." He played a lot of squash while in Chicago. "**Fermi National Accelerator Laboratory** used one of the courts under the stands to house the first self sustaining nuclear reaction ever."

Soon **Brian** was recruited by **Cheves Smyth, MD**, Dean of **Medical College of South Carolina**, now named **Medical University of South Carolina (MUSC)** in Charleston, SC, which has a long history serving the citizens of South Carolina since **1824**. "Beach property in South Carolina was dirt-cheap in **1965**. My wife, **Mildred**, now a retired obstetrician, and I moved into a rambling house on the Isle of Palms where we raised six sons. Yet, Charleston lacked a squash court and I soon turned idle."

"This idyllic life soured when I developed hypertension, needing a combination of three drugs for control. At that time there were suggestions in the medical literature that aerobic exercise benefited hypertension. I began to run barefooted on the beach after dawn and dusk dips in the sea. After six months my blood pressure was normal without medication, but I had also lost much fat, and was on a very low sodium vegetarian diet." Following, **Brian** started training to run a marathon and was soon sidelined with severe right heel pain.

Competitive cycling was next. “My first criterium convinced me I lacked the guts to race elbow to elbow in a peloton, so I focused on bicycle time trials. The track coach at **Baptist College**, correctly diagnosed my heel pain as achilles tendonitis, which appropriate stretching soon kept at bay. After that I ran more than I cycled but the two led me easily into triathlons,” *Brian* explains.



In 1978 **Mark Newberry**, the dean of **MUSC**, put together the **Cooper River Bridge Run**. *Brian* was asked to head up a Scientific Symposium held the day before the race. “I invited exercise physiologists and others to speak, and called upon SC native, **Ted Corbitt**, to give the opening address. He gripped us all with his memories of marathons, the **Olympics** and his two successful attempts at the 24 hour record. **Ted** was our house guest for a few days. He moved about as silently as a cat, munching on dry uncooked food he had brought with him. I found him a thoughtful introverted gentleman who hid his amusement when I told him how I measured courses,” *Brian* says.

Using his reliable **Raleigh International** bike and the local high school track as a calibration course, *Brian* “had laced a track fixed sprocket rear hub into a 700-C road rim.” “I started with the pedal crank at 12 o’clock and counted each revolution out loud and estimated the final crank position in tenths. I neglected to do post measurement calibrations. **Ted** gently told me how it was done in the real world. I got a surveyor in the **Charleston Running Club** to contact **Ted** and soon we had a measured mile on **Sullivan’s Island**, the first in South Carolina. Subsequently I found the high school track to be accurate.”

Dr. Brian Smith was race director for the **Cooper River Bridge Run** from 1979-84. The first year, hand written results were compiled and mailed to all finishers, there were 1350 entrants and 1050 official finishers, 778 male and 237 female, and 47 runners breaking the 40 minute barrier. “Until 1986, with the aid of countless volunteers my family timed and scored the **Cooper River Bridge Run** using a single PC without hard drive, and programs all written in MS basic by my son, **Tommy**, who was a junior in high school. The 6500 entrants of the 1986 race convinced me I could no longer handle that degree of stress.”

1986, **Wayne Nicoll** lived in Augusta, Georgia, I agreed to become a regional certifier. **Wayne** spent two days competently and patiently indoctrinating me. 1987 *Brian* was appointed as final signatory and has been certifying course measurements in South Carolina ever since.

In April 1988 *Brian* assisted **Dan Brannen**, **Wayne Nicoll** and **Mike Wickiser** ensure **New Jersey Waterfront Marathon** course in Jersey City, NJ for the 1988 **U.S. Men’s Olympic Marathon Trials**. Just a week before the event, the group scheduled the validation measurement. The start/finish area in **Liberty State Park** had extensive grassy sections that required measurement by steel tape, which was completed the first day. The second day, without a police escort the group got started measuring at 3:30 am, fighting the cold and wind. The only saving grace was the first 10 km of the course was also the last 10 km of the course needing only to be measured once.

Brian claims he did his best running and cycling when he was 45-55 years old. “My VO2 max was probably a little under 50. I could never quite break 40 minutes for 10 km nor 65 minutes for 25 miles on the bike.”



Brian and Dan Brannen, Jersey City, NJ for the 1988 U.S. Men’s Olympic Marathon Trials course measurement.

“Numerologists may be interested in my fastest marathon. Having run 6 sequential marathons between 3:14 and 3:16, training around 40 miles per week I felt sure I could break three hours with more training. For 6 weeks before the November 1978 **Isle of Palms marathon**, won by **Robert Schuau** in 2:25:42, I logged 60 miles a week. Three 20 mile runs each week at 8 minutes a mile or better pace. The race started at 8 am on Saturday **November 11th**. My wife **Mildred** and son, **Tommy**, cycled with me as I ran. I reached halfway in under 90 minutes, but came unglued in the final miles and crossed the line in **3:11:11**. Truthfully the seconds are in doubt. The timers said I was just over eleven minutes but they rounded all times up to the next minute. My official time read 3:12. All this on the 11th day of the 11th month at 11 minutes 11 seconds after 11 o’clock.”

For many years *Brian* organized marathon training classes, starting two months prior to the *Isle of Palms Marathon*, which later became the *Kiawah Marathon*. “Participants were given printed work outs tailored to individual preferences. We gathered each Sunday morning for a long training run.”

Brian ran his 22nd and final marathon in **1994**, his slowest performance of 4:20. Not long after the marathon, *Brian* twisted his knee playing tag with the grandkids. “It took a while for the knee to heal by which time I had gained much weight. Even 12 minute miles were unpleasant after that and I took to the bicycle completely.”

My peak aerobic experiences were 3 man 100 mile team time trials on the bike. We could easily break five hours with a brief pit stop in Walterboro. The elation of the concentration, the absolute trust in both my buddies, head down, two inch separation between tires, and always a cooling breeze was more than I ever got running.

Returning to South Africa in **1979** for the *Comrades Marathon*, which is a 90 km / 56 mile ultra-marathon, traditionally run on *Youth Day*, June 16, between Pietermaritzburg and Durban. The race alternates each year from an “up-run”, Durban to Pietermaritzburg, to a “down-run”, Pietermaritzburg to Durban. The event was initiated in **1921** by World War I veterans who wished to hold an endurance event that would commemorate fallen Comrades as well as symbolize the pain and suffering experienced on the battlefield. *Brian* says, “Bad choice, it was the uphill year in **1979**, a gain of 2000 feet. I finished in 9:33. Never again.”

Riding long distances on the upright bike became growingly painful for *Brian*. “In **2004** I switched to a recumbent and did a 100 mile time trial that year and the next, both solo and averaged just under 15 mph. They were my last.” *Brian* argues that the most recent 100 km could be it. “I ride 10 to 5 miles daily without leaving our quiet subdivision.”

“From my early 20’s aerobic exercise has molded and bettered my life in countless ways. I have been most fortunate.”



Dr. Brian Smith on his recumbent bike, without a Jones Counter.

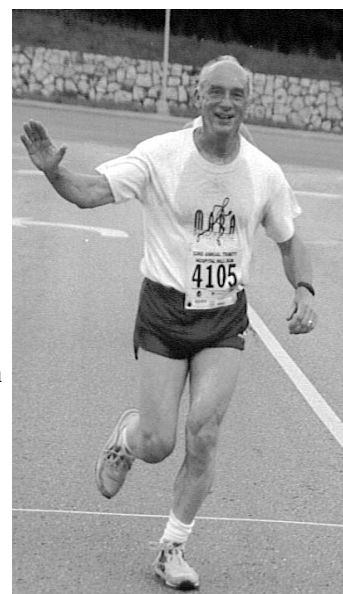
Bill Glauz, Kansas and Missouri Regional Certifier:

A **Grand Rapids South High School** track and cross country runner who quit running all together for 20 years, came back to the sport again in the late **60's** with the encouragement of co-workers. Since then, **Bill** has run 8 marathons, including posting a 3:07 at **Boston** in **1978**, and boasts a personal best of 2:56. 3 times **Bill** run the famous **Pike's Peak Ascent**, **1978** in 3:51:22, **1979** in 3:37:41, and **1982** in 4:03:00. Unfortunately today a bad back prevents **Bill** from running any more.

Undergraduate work was at **Michigan State University**, in Mechanical Engineering and then on to **Purdue University** to earn a PhD in engineering. **Jones Counter** inventor, **Alan Jones**, and **Bill** went to school together at **Purdue**. Retired now after 40 years doing engineering research at **Midwest Research Institute** in Kansas City. **Bill** worked a few interesting projects including **Satan V** rockets for **NASA-Huntsville, AL**, but modestly says, "most of my work was in highway transportation, including computer simulation, traffic enforcement, and winter maintenance." While working at **MRI** and **Bill** starting to run again, course measuring wasn't very far behind.

Learning about the course certification program, **Bill** first began sending course measurement data to **Ted Corbitt**. "Back then, before the **Jones Counter**, we measured courses pushing a surveyor's wheel, and **Ted** was quite critical of some of my pushing," **Bill** says. Despite the rigorous introduction to course certification, **Bill** managed to stay with it and was appointed **TAC Association** course certifier in **1985**. "**Tom Knight** would review and countersign my work," and "I have been certifying courses for Kansas and Missouri ever since, averaging 50-60 courses per year."

Most memorable measurement was a cold day in January, **2004**, in Saint Louis, Missouri, **Bill** assisted **Carol McLatchie** in directing the validation measurement of the **2004 USA Women's Olympic Trials Marathon**. "I kept all the data and did the calculations, with a little long distance assistance from **Pete Riegel**." Dressed for the cold 31 degree measuring weather were **Carol McLatchie**, **Carol Kane**, CT, **Kathy Vierzba**, TX, and **Mary Edwards**, MO, while **Tom Eckleman** and **Bill** assisted.



Near the finish of the 1996 Hospital Hill Half Marathon, the Grandfather of All Kansas City Road Races



Taking final counter readings at the finish line of the 2004 USA Women's Olympic Trials Marathon course.



'80's training run with Frank Shorter and others.

1982 at the **RRCA Annual Convention** in San Francisco, **Bill** was awarded the **Scott Hamilton Award**. The award honors an outstanding **RRCA Club President** for his work as president of the **Mid America Masters Track and Field Association**, MO.

Teaming up with **Mike Lundgren**, Missouri State Record Keeper, **Bill's** running club scores races in the greater Kansas City area. "We do a number of races each year", three events have more than 3000 participants. **Bill** and company do computerized results using **Alan Jones' RunScore** coupled with a **Champion Chip System**.

Bill and wife, **Barb**, just recently celebrated their 50th wedding anniversary. **Barb** has been by **Bill's** side helping out with race related activities when ever she can. "We have 4 smart children, 2 boys and 2 girls, all of whom are now Engineers following in their father's foot steps. All of our children are married and have given us 8 wonderful grandchildren."

Gene Newman, RRTC Chairman and Arizona Regional Certifier:

In 1968 *Gene* earned a Bachelor of Mathematics Education degree from *Glassboro State College* (since 1992 the college was renamed *Rowan College*) and that same year immediately began teaching at *Oakcrest High School* in New Jersey. 4 years later in 1972 *Gene* took a new teaching position at near by Galloway's *Absegami High School*. While hard at work teaching *Gene* also attended *Temple University's* Masters of Mathematics Program from 1970-75.

Some of the highlights of *Gene's* 33 years in teaching include: Director of Math Club for 20 years, "*Absegami HS* was the number the #1 Ranked school competing in the *NJ Math League* for 17 years in Atlantic County. *Gene* was named *Teacher of the Month* several times, and his AP Calculus students consistently scored well above the National Average for both Calculus AB and BC with an average score of 4.2."

Gene started coaching as *Absegami HS's* junior varsity soccer coach 1973-78, finishing with a team record of 48-17-11. Later became varsity head coach in 1979-82, ending with a record of 54-21-3. "The highlight was our team reaching the South Jersey Group 3 Finals."

The summer of 1982 *Gene* took a soccer team to Denmark for 3 weeks. "Our team played in a tournament with teams from Denmark, Sweden and 3 other American teams. We finished ahead of the American teams, but learned lots from the foreign teams," *Gene* explains.

After coaching soccer *Gene* went on to coach girls cross country at *Absegami* from 1993-2000. "I feel I turned around the *Absegami Cross Country* program, we were consistently ranked in the Top 10 for South Jersey." Winning overall record for all years was 62-20, winning 4 Atlantic County Cross Country Championships, 1 League Championship, 1 Conference Title (first in our school's history), 2 Division Titles (first in our school's history), was named *Press Coach of Year* for 1999, became assistant distance girls track coach 1994-2000, and coached 7 County Champs in the distance events. In 2003 *Gene* was honored for coaching to be placed on the *Wall of Fame* at *Absegami*.

Gene told us, "While coaching high school, I always encouraged the schools to have their course measured by me with no charge. Some schools did take this offer, but surprisingly most did not. I just don't understand their reasons for not having an accurate course, but who am I to judge their feelings."

2000-02 *Gene* was hired by *G. Larry James*, Dean of Athletics and Recreational Programs and Services, to coach women's cross country and track at *Richard Stockton College*. Named *New Jersey Athletic Conference (NJAC) Coach of the Year* for indoor track during the 2001-02 season.

Carole, *Gene's* wife and former educator, and *Gene* have retired to Green Valley, Arizona after spending many years teaching in New Jersey. "Both of us feel we have found an ideal place to live. The weather is outstanding all year long with no need to shovel snow or have endless gray days." The *Newman's* enjoy outdoors activities, running, hiking, birding, and tennis. "I'm married to a wonderful person."

Gene and *Carole Newman* have two sons, *David* and *Michael*, who have both married and found perfect mates. The proud father and grandfather says, "My oldest son lives in Newport, Rhode Island and has 3 boys ages 3, 6, and 9. My youngest son lives in Albuquerque, New Mexico and their expecting a boy child this August."

"I never considered myself to be fast, but enjoyed meeting people with a common interest." *Gene* was a runner in high school who later came back to running in the late 70's by to competing in local road races. Wasn't until 1983 as President of the *Boardwalk Runners* *Gene* recognized how important accurate courses were runners.



The first experience with course measuring came in **1985** tackling the *Atlantic City Marathon* measurement. Being a pretty good high school math teacher, "I never had difficulty with the math, but my first maps were terrible. I now use power point, which I find to be best for me and others to view." In those days course measurement paperwork for New Jersey was sent to **George Delaney**, New Jersey Regional Certifier. After *George* resigned, paper work then went to **Wayne Nicoll**.

In **1987** *Wayne Nicoll* appointed **Dan Brannen** as final signatory to act as the new NJ Certifier. *Gene* helped *Dan* with number of course measurements and in the process made a new good friend. When it came time for *Dan* to step back from certifier duties, he asked *Gene* if he would be interested in becoming a Certifier. "Of course I felt this was an honor." As a certifier in training, "Wayne guided me through the process and after about a year I became a certifier for NJ **1992**." 1 year later *Gene* became the certifier for Delaware.

Meeting good people like **Frank Greenberg**, past President of *TAC*, and **Norman Green**, past Masters LDR Chair, both have been very encouraging. With *Frank's* encouragement "I got involved with some politics of the *TAC* in the early **80's**."

"A short time after retiring to Arizona **2002**, I asked **Tom McBrayer** about being the Certifier for Arizona. Since it was vacant he appointed me. One of my first duties as Arizona Certifier was to help with a measurement workshop in Phoenix." **Pete Riegel** conducted the workshop, "I always respected *Pete* and saw how much he means to the *RRTC*." **Mike Wickiser** was also at the workshop, "he has always been a tremendous help. There are not enough words to express how much I appreciate *Mike*. He is one special person!"

In **2004** when *Tom McBrayer* was thinking about stepping down as Vice Chair telephoned, asking if *Gene* might be interested in the position. "I was honored and appointed in the fall," at the *RRTC Meeting* in Connecticut. "In **2005**, **Mike Wickiser** asked if I had interest in taking over his position." **2006** brought a new honor for *Gene*, LDR Chair, **Fred Finke**, and President, **Bill Roe**, chose *Gene* to act as new *RRTC* Chair.

To date, *Gene* has measured and certified about 300 courses. "I hope to continue on for many years to come," says *Gene*.



Gene before a match, since retiring tennis has become one of Gene's favorite sports.

Gene wanted to tell *MN* readers about couple of measuring stories; "One day I had a phone call from a reporter for the *NY Times*. He wanted to do a story about me since I was the NJ Certifier. I thought it was a prank since the reporters last name was "Kent" (superman). Well, I said okay and never expected him to show for an interview. He did arrive and the interview went on and the story was printed in the paper the following Sunday." The second story is short, "While measuring a *Half Marathon on Absecon Island*, it was so windy I was blown off my bike. I had completed about 10 miles, but had to start the process all over again."

"I don't want to see us (*RRTC*) becoming fixed on hard fast rules. We are a council and I feel we should supervise the measurement and certifying of all road racing courses in the United States. *USATF* Certification is the runner's assurance that the course was measured accurately by uniform standards." *Gene* closed by telling *MN* his 6 part prescription for the *RRTC*; "We should have an open line of communication with the public, which can be accomplished through *MN*, certifiers, and other members of the council. It is important to have measurement workshops to encourage more

people to measure. Equally, we should maintain and update the course list and measurers list for anyone to find what he or she desires. Meet with *USATF*, *AIMS*, and *IAAF* officials, and respond to the needs of the event participants. Maintain the Validation Program for records. And, be open to new methods for timing events and also measuring, like the cyclocomputer measuring method developed by **Neville Wood**.

Michael Franke, Regional Certifier:

At the **1981 Drake Relays Marathon** Michael was helping out a good friend, **Shane Dooley**, by calling out split times, soon discovered split times “were of little value because most of the mile marks were incorrect. **Shane** ended up finishing second, only seven seconds behind the winner. I felt so bad for the fellow that I told him if he ran the race the following year, I’d personally make sure the distance and the splits were correct. I didn’t have a clue.” “**Shane** finished in second at **Drake** 4 years, never did win the darn thing.”



The summer of **1981** Michael and a couple of running partners designed a new **Drake Relays Marathon** course, but didn’t officially measure it until the following spring. “I measured it with a borrowed a **Jones Counter** from the **Drake University Athletic Dept.**, but I didn’t have a procedure to follow, so I made up my own. After a thorough explanation of the measurement method I used, **Ted Corbitt** approved the course,” Michael says.

The **Drake Relays Marathon** course measurement was the start of Michael’s 25 year affair with the **Drake Relays**, and organizing, assisting and scoring running events throughout central Iowa. “I was also involved with the formation of central Iowa’s running club, the **Capital Striders** and served as the newsletter editor for the first two years.”



“In **1993** I met **Jim Lewis**, the Nebraska and Iowa Certifier, who gave me a **Course Measurement Manual** and general information I’d been missing. I quickly discovered there was a much less time consuming way to measure a course. **Jim** was also the person who recommended that I assume the duties of Iowa State Certifier,” Michael explains. Later in **1999** Michael began corresponding with **Bob Baumel**, who, “for several months, gave me valuable guidance, detailed explanations, and a thorough understanding of the roll and duties of a certifier. I couldn’t have had a better teacher.” In **2004** Michael was made the Regional Certifier for Montana in addition to Iowa.

Attending the **2002 USATF Annual Meeting** in Kansas City was one particularly fond memory as a certifier. “My wife **Carol** and I had the pleasure of having dinner with **Bob Baumel**, **Pete Riegel**, and **Tom** and **Mary Anne McBrayer**.” Michael says it was “An evening with the sages of course measurement was a delight, indeed.”

*Checking finish line results for 400 participants
at the Sweetcorn Festival 5 km in Adel, Iowa.*

“Unfortunately, for the past several years, I haven’t had the opportunity to actively measure courses as I would like. My job in information technology for an insurance company occupies a good portion of my time.” **1988** Michael and longtime friend **Cal Murdock**, **USATF Iowa Association** LDR Chair, formed **CMac Racing Service** to score time 55 and 60 events a year. “I’m assisting with and scoring road races, and high school and college cross country meets.” “It’s pretty rare when I have a free weekend during the Spring, Summer, or Fall. Actually it seems pretty rare when I have any free time at all.”

Beyond the **Bix 7** in Davenport, Iowa has many fine events like the **Dam to Dam 20 km**, the largest 20 km in the US with 3530 finishers, plus another 1225 finishers in the 5 km in **2006** and the **Living History Farms 10 km XC**, the largest cross country race in North America with 4381 finishers in **2005**.

When Michael does find a little spare time while working many times 7 days a week, he spends it with **Carol** doing family activities, they especially enjoy attending events at their former colleges, **Carol** graduated from **Drake University** and Michael from **Iowa State University** with a BS in nutrition and biochemistry. “I still manage to squeeze in about 40 to 45 miles a week, however, anymore, it’s done at a “gentleman’s” pace.” Michael at times finds himself jogging to keep up with **Carol** during her brisk evening walks. “She has too many fast twitch muscles.”



AIMS Races in the Americas

Bernie Conway, AIMS-IAAF Measurement Administrator for the Americas

Below is a complete list of **AIMS Races in the Americas** from the **AIMS** and **IAAF** publication **Distance Running** (July – September **2006**). If you are interested in obtaining more information about any of them you may obtain a readable and downloadable PDF version of *Distance Running* at www.inpositionmedia.co.uk/publishing/d_run.html.

You can also get the race features by going to the **AIMS website**, www.aims-association.org, and clicking on *Distance Running*. The "**Opinion**" articles are available under the menu item "**Articles**" and the **Calendar and Directory** cover those departments of the magazine.

AIMS Races in the U.S.A.

<u>Name of Race</u>	<u>Month</u>	<u>Where Run</u>	<u>Measurer(s)</u>
Atlanta Marathon & Half Marathon	November	Atlanta, Georgia	Woody Cornwell
BAA Boston Marathon	April	Boston, Massachusetts	Ray Nelson
Big Sur Half Marathon on Monterey Bay	October	Carmel, California	Ron Scardera
Big Sur International Marathon	April	Carmel, California	Ron Scardera
Freihofer's Run for Women 5K	June	Albany, New York	Kevin Lucas
Hawaiian Half Marathon	June	Honolulu, Hawaii	Mike Wickiser
Honolulu Marathon	December	Honolulu, Hawaii	
Lake Tahoe Marathon	September	Tahoe, California	Doug Thurston
Maui Marathon & Half Marathon	September	Kahului, Hawaii	Ron Scardera
Las Vegas Marathon & Half Marathon	December	Las Vegas, Nevada	Bill Callanan
Los Angeles Marathon	March	Los Angeles, California	Ron Scardera
Marine Corps Marathon	October	Quantico, Virginia	Robert Thurston
Mount Desert Island Marathon	October	Northeast Harbor, Maine	Ray Nelson
Myrtle Beach Marathon	October	Myrtle Beach, South Carolina	Danny White
Oklahoma City Memorial Marathon	April	Oklahoma City, Oklahoma	Glen Lafarlette
Pacific Shoreline Marathon	February	Mission Viejo, California	Ron Scardera
Portland Marathon	October	Portland, Oregon	Lee Barrett
Salt Lake City Marathon	June	Salt Lake City, Utah	
Seattle Marathon	November	Seattle, Washington	Tom Cotner
Twin Cities Marathon	October	Minneapolis/St. Paul, Minnesota	Rick Recker
Marathon at Seafair	July	Seattle, Washington	
Under Armour Baltimore Marathon	October	Baltimore, Maryland	John Sissala
Walt Disney World Marathon & Half Marathon	January	Orlando, Florida	Tom Ward
St. Croix International Marathon	January	U.S. Virgin Islands	
World's Best 10 km Road Race	February	Puerto Rico	Pedro Zapata

AIMS Races in Canada

<u>Name of Race</u>	<u>Month</u>	<u>Where Run</u>	<u>Measurer(s)</u>
BMO Bank of Montreal Vancouver Marathon	May	Vancouver, BC	Paul Adams & Mark Smith
HSBC Calgary Marathon & Half Marathon	July	Calgary, Alberta	Marcel LaMontagne
ING Edmonton Marathon	August	Edmonton, Alberta	Marcel LaMontagne
ING Ottawa Marathon	May	Ottawa, Ontario	Bernie Conway
Niagara Fallsview Casino Resort Int'l Marathon	October	Buffalo, NY to Niagara Falls, Ont.	Bernie Conway
Quebec City Marathon, Half Marathon & 10 km	August	Quebec, Quebec	Laurent Lacroix
Royal Victoria Marathon, Half Marathon & 10 km	October	Victoria, BC	Laurie Upton
Scotiabank Toronto Waterfront Marathon & Half Marathon	September	Toronto, Ontario	Bernie Conway
Toronto Marathon & Half Marathon	October	Toronto, Ontario	Dave Yaeger
Vancouver Sun Run 10 km	April	Vancouver, BC	Paul Adams, Mark Smith, & Mike Bjelos

Other AIMS Races in the Americas

<u>Name of Race</u>	<u>Month</u>	<u>Where Run</u>	<u>Measurer(s)</u>
Buenos Aires Half Marathon	September	Buenos Aires, Argentina	Antonio Varela Hugh Jones Fernando Azeredo Rodolfo Eichler Rodolfo Eichler Ivan Gomes Jr. Ivan Gomes Jr. Rodolfo Eichler Rodolfo Eichler
Buenos Aires Marathon	October	Buenos Aires, Argentina	
Run Barbados Marathon & 10 km	December	Barbados	
City of Rio de Janeiro Marathon	June	Rio de Janeiro, Brazil	
Rio de Janeiro Half Marathon	August	Rio de Janeiro, Brazil	
Half Marathon of Bahia	October	Bahia, Brazil	
10 km Corpore São Paulo Classic	November	São Paulo, Brazil	
São Paulo Half Marathon Corpore	April	São Paulo, Brazil	
São Paulo Marathon	May	São Paulo, Brazil	
Pampulha Lagoon International Race	December	Minas Gerak, Brazil	
Cayman Islands Marathon	December	Grand Cayman, Cayman Islands	Hugh Jones & Bernie Conway Pedro Zapata David Parducci David Parducci Hugh Jones Mike Sandford Rodolfo Martinez Figueroa Pedro Zapata Luciano Gallardo Luciano Gallardo Pedro Zapata Pedro Zapata
Bogota International Half Marathon	July	Bogota, Columbia	
Media Maraton Int'l	September	Medellin, Columbia	
Marabana Marathon & Half Marathon	November	Havana, Cuba	
Guayaquil Marathon	October	Guayaquil, Ecuador	
La Ruta de las Iglesias	September	Quito, Ecuador	
Quito Ultimas 15K	June	Quito, Ecuador	
Standard Chartered Bank Stanley Marathon	March	Stanley, Falkland Islands	
Reggae Marathon	December	Kingston, Jamaica	
Gran Maraton Pacifico	December	Mazatlán, Mexico	
Maraton Int'l de Guadalajara	October	Guadalajara, Mexico	Pedro Zapata Luciano Gallardo Luciano Gallardo Pedro Zapata Pedro Zapata
Maraton LaLa Int'l	March	Torreon, Mexico	
Tangamanga Int'l Marathon	June	San Luis Potosi, Mexico	
Maraton Monterrey – Powerade 2006	December	Monterrey, Mexico	
Panama City Int'l Marathon	August	Panama City, Panama	
UWI-SPEC Half Marathon	November	St. Augustine, Trinidad	

Until the next issue,

Bernie Conway





Running Shorts

Scott Hubbard, Michigan Runner

Scott Hubbard is the Regional Certifier for Michigan and columnist for *Michigan Runner* magazine. The only racing he does these days is on a bike in the relative cocoon of the peloton.
Photo by John Brabbs, RunMichigan.com

DONNY. Via equal parts good timing and perspiration, I was lucky to be part of a few notable first at *Ann Arbor Huron High School*. In my day, high school started with the 10th grade and *Huron* was under construction. While all students still attended *AA Pioneer High*, the decision was made to start the sports program for *Huron* and those that live in its district in Fall '67, my sophomore year. Only the sports programs were split up, classes remained a mix of *Pioneer* and *Huron* students.

I'd innocently signed up for cross-country, not knowing what I was in for and 2 weeks into the season we beat *Tecumseh* in a dual meet, the first sports victory in *AA Huron* history! Flip forward to Fall '69 and a move from way overcrowded *Pioneer* into the beautiful new building along the banks of the Huron River. Through a marvelous confluence of events including several new runners, great coaching, new building aura, normal and unexpected improvement, our team won the *State Class A Cross-country Championship* in November. On the following Monday, a school assembly was held in our honor. Sweet stuff!



Scott and younger brother Donny.

In track I set records in the 1 and 2 mile runs mostly because the school was so young. They were reasonable times but, friends, they merely set the stage for those that followed, particularly a budding runner I looked at across the dinner table every day-brother *Don*. In junior high, *Don* ran some promising times, hinting at his potential. I figured he'd help the *Huron* team right away as a sophomore, run some respectable track times and, beyond that, my crystal ball went fuzzy. I hoped he'd do well but you never know how what seems possible with young athletes will pan out. Little did I know *Don* was born to run and seize races with relish and abandon.

Since his longest junior high race was 880 yards (pre-metric era), it took *Don* a while to adapt to the 2 1/2 mile cross-country distance as a 10th grader. On a weekly basis he improved, confidence grew and in the State meet he wound up a solid 7th place, one spot behind a star teammate, *Karl Tsigdinos*. A few weeks later *Don* ran a 4:25 mile in a time trial, a whiff of things to come.

Indoors in track, *Don's* first official race was a mile win in an auspicious 4:19. The state mile record was 4:13 at the time. In one race he went from, 'When will he be good?' to, 'How good will he get?' As the season progressed, *Don* supplied answers regularly and with authority. By outdoor season it was clear he could run both long and hard, short and fast. I began wondering, "Who is this guy and why did he acquire all the fast twitch fibers in the family?" In his first outdoor meet he won the 440 yard dash, the 880 yards in 1:58 and anchored the mile relay to a win. This established a pattern of fast times, success and included a stirring near miss over 880 yards to the eventual State champ in a dual meet.

At the regional meet, *Don* a 4:16 mite, setting a sophomore class record. At the State meet, he was poised to win with 220 yards to go when the heat of the day smothered him and he ended up third, again in 4:16. Not including the odd quarter mile race where he was a little out of his element, *Don* only lost twice during the track season. He was disappointed not to win the State meet mile but, oh, what a year it had been.

Don battled injuries for the first time as a junior in cross-country but managed to win the conference and place second at the regional meet. During the winter season, *Huron* qualified to run in a special 'suburban' high school mile relay at the *NCAA Indoor Track & Field Championships* in Detroit's *Cobe Arena*. As the race got under way, the crowd of 11,000 erupted as never before. As anchorman, *Don* got the baton first but was quickly passed by two others. My mother sitting next to me let out an, "Oh no," but I calmly said, "It's not over."

Watch, he'll come back." With the crowd going nuts, *Don* gradually caught and passed **Ken Delor**, State sprint champ later that spring and closed on the leader. Would he, could he ... no, he came up a stride short to finish second. It was an exciting, no, thrilling climax in the supercharged environment.

Outdoors he anchored strong *Huron* relays of every kind to wins including the 2 mile relay at the prestigious **Mansfield Relays** (Ohio). At the regional meet at Ypsi, just a mile from where I was competing at the same time for **EMU**, *Don* won the mile in 4:12.8, a new junior class record. Shortly after he was diagnosed with a stress fracture in a foot. Despite not running for a week and running on a very painful foot, he won the State meet mile in 4:16. Unable to walk afterward, teammates carried him out to the victory stand.

As a senior, *Don* was nagged again by injuries in cross-country but he rallied to take second in the conference meet. At the end of the winter indoor season, while anchoring a sprint medley relay at the **Huron Relays** at **EMU**, an awful thing happened. *Don* went flying around the initial turn in first, directly into the path of the **Northville** coach who was in the wrong place at the worst time. *Don* flipped and landed on his shoulders, then lay stunned in lane one as the relay continued. He was taken from the hushed field house by ambulance and a broken collar bone was the diagnosis. Broken also was *Don's* spirit in wake of the incident. The slight and slender star ran on healthy doses of adrenaline and talent, for sure but it was his ability to channel and thrive on the emotion of the moment that raised his game an extra notch.

Badly hurt, passion compromised and impaired, high hopes of a 4 minute mile were lost too. After a month, *Don* returned to running wearing a figure 8 strap around his shoulders that restricted movement. A month away was tough enough but damage to his psych was just as limiting. Races were run tentatively but yielded a conference 2 mile win and qualification at the regional meet for the State meet mile. I watched him at the State meet as he trailed the field in last place for 3 laps and wondered what he was thinking and feeling. Later he'd tell me he felt like he was running in a fog. The final gun lap woke him up and he produced a sub-60 second split to finish 5th in 4:19, certainly not what he wanted but extraordinary under the circumstances.

A week later, the first Tri-State Meet (Ohio, Indiana, Michigan) was held in Fort Wayne, IN. Despite only finishing 5th in the State meet mile, Michigan selectors thought highly enough of *Don's* skills to let him anchor the 2 mile relay. He loved relays, feeding on his teammates energy but lack of training and diminished focus cost him a couple steps and what was a usual winning anchor became an unusual loss. In perspective though, it was just a tough way to end a remarkable prep career that quite a few older coaches, athletes and fans readily recall. It was 3 years worth the price of admission, coming through as often as he did and so fast.

I've written about *Don* in these pages before but needed to set the stage for a special honor he received recently. On May 6, he was inducted into the **Ann Arbor Huron Hall of Fame** with 5 others. Introducing *Don* for induction was his old track coach, **Kent Overbey** (still coaching in 2006. I was on his first team in '69!) Legendary for the length of his team banquets, *Kent* gave a passionate and long-winded speech highlighting *Don's* many *Huron* accomplishments and concluded with, "*Donny* is the best runner we've ever had at *Huron*." Among those in attendance were *Don's* nephew **Jeff**, now running for **EMU** and a former rival at **AA Pioneer** and All-American at Tennessee, friend **Chip Hadler**. Also there was *Jeff's* mom, my ex-wife **Karen** who did more than a little bit of running in her day and my youngest brother, **Marshall**.

Don had undergone arthroscopic gall bladder surgery the Thursday before the Saturday banquet and while sitting there quietly, *Chip* leaned over and said, 'You know what's so impressive about *Donny* besides the things he did is the credit he gives to his teammates. He's very sincere about that.' In *Don's* remarks, which he said he'd keep brief to applause and laughter in view of *Kent's*, bless him, loquacious comments, he confirmed *Chip's* thoughts. *Don* singled out family, his 2 coaches *Overbey* and cross-country coach **Des Ryan** for thanks and dosed with, "And my teammates who made it all worthwhile, fun and were always there for me."

Don still holds a few records at *Huron* 32 years later and in time they may be broken but the *Hall of Fame* is forever. Biased I may be but I can't think of a more deserving *Huron* athlete induction.

Cheers, **Scott H**





USATF Associations Workshop Course Measurement Sessions August 26-27—Pittsburgh, Pennsylvania

Kevin P. Lucas, Editor

The *USATF Associations Executive Committee*, headed by **Alan Roth**, Chairman, along with **Andy Martin**, Director of Grass Roots Programs, wanted to include a couple of sessions on course measurement at this year's **2006 Associations Workshop** in Pittsburgh. Each year *USATF Associations* gather for workshops covering the programs, organizational efforts, and governance of our sport at the local level. **Pete Riegel**, Ohio Regional Certifier, joined me to co-host the two *Course Measurement Sessions* held August 26th and 27th.



2006 USATF Associations Workshop Course Measurement Class, from left to right: Joseph Corra, WV, Pete Riegel, OH Regional Certifier, Maureen Scullin, OH, Jim Wilhelm, OH, Kevin P. Lucas, National Certifier, Peter Vilasi, PA, and Jim Lang, PA.

For our first session on Saturday was called *Course Measurement 101*. After handing out over 100 copies of *Measurement News*, we gave a short 30 minute presentation covering the benefits of course certification, differences between event sanctioning and course certification, and who can measure a course for certification. Questions from the audience ranged from “How do I get certified to measure courses?”, to, “Are regional certifiers certified?”, to, “Why do courses expire after 10 years?”, and “What is the difference to re-new a course versus to re-certify a course?”

The second session on Sunday was set up as a basic training for course measurers. Due to the very cloudy skies, we decided to do the outdoors measuring work first. Naturally it rained anyway. Moving inside and toweling off, we calculated the outcomes for our measurement exercise:



Peter Vilasi, Pete Riegel, and Jim Wilhelm calculating measurement data.

*Peter V. = 295.19 meters
Pete R. = 295.12 meters
Joseph C. = 294.44 meters
Jim L. = 293.33 meters
James W. = 292.49 meters (best of the day)*

Our practice course had seven 90 degree turns around curbed medians and two diagonal sections, laid out in a figure 8 pattern. **Jim Wilhelm** said he rode the course as tight as possible around all turns.

After viewing **Tom McBrayer's** newly digitized 15 minute *Course Measurement Video*, the final hour and half we covered my 8 Step Course Measurement presentation in detail, and closed the session by going over many of the *USATF* web site resources for measurers added by **Bob Baumel**, *RRTC* Webmaster..



USE OF PROGRAMMABLE HAND-HELD CALCULATORS TO SIMPLIFY THE PRESSURE- MONITORING METHOD FOR COURSE MEASUREMENT

Neville Wood, Validations Chairman

Calculations used in the pressure-monitoring method for course measurement have been automated using programmable hand-held calculators. In calibration, wheel rim readings in hundredths of a revolution and one tire pressure reading are directly keyed into the calculator. On each measurement of a 5 km race course, a pressure reading is keyed into the calculator and it automatically shows the number of revolutions necessary to complete the course at the current calibration factor. That measurement which yields the longest course is the one used for certification purposes. More than one pressure reading is taken in courses longer than 5 km.

1. Introduction

I find that in the field measuring courses, the stress of heavy traffic and sometimes hostile weather conditions reduces my clarity of thought. Therefore, I thought to reduce errors and reduce time in the field, I should automate calculations using my programmable calculators I had on hand.

2. Calculators



The **HP 32SII** is a nice RPN calculator with a large clear display, but unfortunately has not been manufactured for several years. It has become a classic and the present-day price is \$400.

The replacement for the 32SII is the very similar but more powerful 33s. This uses RPN or regular notation. I purchased mine from **Walmart** for only \$35, but expect to pay a little more in an **eBay** auction.

The **Casio fx-7700G** is very old, and although it displays more lines, the display is smaller and not as clear. It uses three expensive batteries. I suspect that one could be bought on **eBay** for less than \$10.

3. Calculation of calibration factor

I have shown previously (*MN, Summer 2006, #132, 12*) that with temperature change, the calibration factor changes by 1.33 rev/km/bar of resulting tire-pressure change. This pressure coefficient was determined on a *Hutchinson Carbon Comp* tire (700 x 23), but seems to be very similar for other tires on other wheels.

I have a 300 meter calibration course, and the tire pressure I use (580-600 kPa), it always yields 143 whole rev on the counter. At pre-calibration:

$$\text{Cal Fac, rev/5km} = (A+B+C+D)/400 + 143]1.001 \times 5 / 0.3 = (A+B+C+D) \times 0.041708 + 2385.717$$

Where: A, B, C, and D are rim readings in hundredths of a rev
1.001 = SCPF

At anytime later the calibration factor is given by:

$$\text{Cal Fac, rev/5km} = \text{Pre-cal Cal Fac} + 1.33(E - F)5/100 = \text{Pre-cal Cal Fac} + 0.0665(E - F)$$

Where: E = pre-calibration pressure
F = current pressure

$$\text{Cal Fac, rev/ml} = \text{Cal Fac, rev/5km} \times 1.609344/5 = \text{Cal Fac, rev/5km} \times 0.3218688$$

$$3 \text{ ml to 5 km, rev} = (5 - 3 \times 1.609344) \times \text{Cal Fac, rev/5km}/5 = 0.0343936 \times \text{Cal Fac, rev/5km}$$

4. 5 km program for the Casio fx-7700G

P0

“R1”?→A
“R2”?→B
“PRESS”?→E
“R3”?→C
“R4”?→D
0.041708(A+B+C+D) + 2385.717→G

P1

“PRESS”?→F:0.0665(E-F)+G→HΔ
0.3218688H→I Δ
0.0343936H→JΔ

5. 5 km program for HP 32SII and 33s

A

A0001 LBL A
A0002 INPUT A
A0003 INPUT B
A0004 INPUT E
A0005 INPUT C
A0006 INPUT D

B

B0001 LBL B
B0002 INPUT F
B0003 $(A+B+C+D) \times 0.04171 + 2385.717 + (E-F) \times 0.0665$
B0004 STO G
B0005 VIEW G
B0006 $G \times 0.3218688$
B0007 STO H
B0008 VIEW H
B0009 $G \times 0.0343936$
B0010 STO I
B0011 VIEW I
B0012 GTO B
B0013 RTN

6. Typical calculator inputs

Pre-calibration (rim readings in hundredths of a rev, pressure in kPa): 58, 62, 578, 58, and 62.

Measurement 1: 580 kPa

Measurement 2: 570 kPa

7. Operation of the fx-7700G

Below is shown the results from the above typical inputs:

Keys	Display
SHIFT DISP Fix 2 EXE	
SHIFT PRGM Prg	Prog
0 EXE	R1?
58 EXE	R2?
62 EXE	PRESS?
578 EXE	R3?
58 EXE	R4?
62 EXE	2395.73
SHIFT PRGM Prg	Prog

1 EXE	PRESS?
580 EXE	2395.59
EXE	771.07
EXE	82.39
EXE	82.39
SHIFT PRGM Prg	Prog
1 EXE	PRESS?
570	2396.26
EXE	771.28
EXE	82.42

The displayed numbers are permanently lost if the calculator is turned off. However numbers can still be accessed from memory locations, e.g.: ALPHA I EXE = 82.42.

8. Operation of the 33s (and similarly the 32SII)

Below is shown the results from the above typical inputs:

Keys	Display
DISPLAY FIX 2	
XEQ A	A? (old value)
58 R/S	B?
62 R/S	E?
578 R/SC?	
58 R/S	D?
62 R/S	F?
580 R/SG =	2395.59
R/S	H = 771.07
R/S	I = 82.39
R/S	F?
570 R/SG =	2396.26
R/S	H = 771.28
R/S	I = 82.42
MODES 1	771.28 82.42

If the calculator is turned off, the last two numbers reappear when it is turned on again.

9. Suggested procedure for a 5-km certification

At pre-calibration, key into the calculator the rim readings from the four rides and the pressure reading taken between the second and third rides. There is no need to record the readings on paper, because if necessary they can be recalled from calculator memory.

On the first ride of the race course, do not mark the splits, but take a pressure reading about halfway. Key this reading into the calculator to get the number of revs to complete the course.

On the second ride, take a pressure reading at the start or preferably just before the first mile, and after keying this into the calculator, get the revs between each mile split and the revs between mile three and the finish. Mark each split and re-zero the meter before measuring to the next one and to the finish. Immediately after this second ride, take the finish at the furthest point as that to be used for certification.

10. Suggested procedures for certification of courses longer than 5 km

The calculator programs are easily adaptable for courses longer than 5 km. For instance, to measure a marathon while laying down mile splits, use rev/ml displayed by the calculator to locate each split and re-zero the meter before going to the next one. Update the pressure every five miles. Calculate the finish as 0.21875 ml x rev/ml from the 26-mile split.



Boston, New York to host 2008 Olympic Marathon Trials

06-22-2006

INDIANAPOLIS - One of the most celebrated pre-Olympic events, the **2008 U.S. Olympic Marathon Trials**, will be hosted by two of the world's most distinguished marathon organizers. **USA Track & Field** on Thursday awarded the **2008 U.S. Olympic Team Trials - Women's Marathon** to the **Boston Athletic Association** and the **2008 U.S. Olympic Team Trials - Men's Marathon** to the **New York Road Runners**.

"The successful bids from the **B.A.A.** and **NYRR** to host the **2008 Olympic Marathon Trials** create an opportunity to continue and expand an established working relationship," said **USATF CEO Craig A. Masback**. "Working together, we will create a higher level of visibility for the sport and our athletes. Both cities will put on world-class events as our athletes attempt to fulfill their *Olympic* dreams, using fan-friendly race formats that will make the races even more appealing."

Women take to Beantown



The **B.A.A.** will host the women's event on **Sunday, April 20, 2008**, the day before the 112th running of the **Boston Marathon**.

Starting and finishing at the traditional **Boston Marathon** finish line on Boylston Street, the **Olympic Trials** race will feature a specially designed course that tours historic Boston with a one-time loop that passes **Boston Public Garden**, **Boston Common**, the **State House** and **Beacon Hill**.

The course will then feature four loops of approximately six miles each proceeding down Commonwealth Avenue, crossing the **Charles River** into **Cambridge** using the **Massachusetts Avenue Bridge**, running east, then west along Memorial Drive. Runners then return from each of the Core Loops via Massachusetts Avenue.

"There's nothing in our sport quite like the **Boston Marathon** and **Patriots' Day** weekend," said **Guy Morse**, Executive Director, **Boston Athletic Association**. "The **B.A.A.** and the greater Boston running community are pleased and excited to have been selected to host the USA's best female marathoners in their *Olympic* quest. Like much of the City itself, the **B.A.A.** has worked to make this course and will work to make the next *Olympic Trials* experience unique to Boston. This is a downtown course in a city synonymous with running."

Men hit the Big Apple

NYRR, the organization behind the world's largest marathon, leading advocate of American long distance running, and organizer of a year-round calendar of races in **Central Park**, successfully bid to conduct the men's **Olympic Trials** during the marathon weekend of **November 2, 2007**. The course is expected to be a criterium-style course in **Central Park** that will start and finish near **Tavern on the Green**. It will be the reverse of the loop used when **NYRR** hosted the **USA 8K Championships** from **2002 to 2004**. Athletes will run the loop five times, with distance added to complete the full 42.195K of the marathon.

"We are honored to be named as host for the **2008 Men's Olympic Marathon Trials**," said **Mary Wittenberg**, President and CEO of **New York Road Runners**. "At the **2004 Olympic Games** in Athens we entered the next great era of American marathon running, as we build upon that foundation we look forward to crowning our American superstars on the ultimate stage - New York City."

Significant prize money

Both events will provide \$250,000 in prize money in addition to paying travel and lodging costs for athletes who achieve the *Olympic Trials* "A" qualifying standard of 2:39:00 for women and 2:20:00 for men. In **2004**, 24 women and 14 men met the *Olympic Trials* "A" standard.

In **2004**, a total of 120 women and 85 men competed in their respective *Olympic Trials* races.

In addition to marathon times, women can qualify by running a track time of 33:00 or faster for 10,000 meters and men can run qualifying standards by achieving track performances of 13:40 for 5,000 meters or 28:45 for 10,000 meters. Athletes who achieve these times or qualify with a marathon time faster than 2:47:00 for women and 2:22:00 for men may compete in the race but do not receive funding. There are currently 46 women and 67 men qualified to compete in the **2008 Olympic Trials Marathon**.

A one-day qualifying opportunity took place at the **USA Marathon Championships** hosted by the **Twin Cities Marathon** on **October 2, 2005**. The regular qualifying window for athletes to achieve their qualifying times began January 1 and will go through **March 23, 2008** for women and **October 7, 2007** for men. *Olympic* qualifying standards have not yet been set by the **International Association of Athletics Federations**.

For more information visit www.usatf.org.

Editor's Note: New York City selected to host the 2008 Olympic Marathon Men's and Boston to host the Women's Trials. The course measurements and/or validations should provide ideal opportunities for measurers to gather together to meet, measure, and validate these two courses. These types of important course measurements presents the RRTC the challenge to demonstrate just how important course measurement certification and pre-race validation process are to the sport of road racing. Let's get planning when the measurements of these two courses will take place.



USATF RRTC Course Measurement and Certification **Workshop July 29, 2006 — Albany, New York** **Jim Gilmer, New York Regional Certifier and** **Mike Wickiser, Indiana Regional Certifier**

To promote **USATF** course certification and reinforce the number of capable course measurers in the Albany area, **George Regan**, Executive Vice-President of the **Adirondack Association**, and **Jim Gilmer**, New York Regional Certifier, asked **Mike Wickiser**, RRTC Workshop Coordinator, to conduct a course measurement workshop in Albany, NY. New York already has 22 active course measurers across the state. Notice of the initial 2 day workshop was sent out on the **USATF Associations Listserv** and posted at the **RRTC Course Measurement Bulletin Board**.

Working on the local front, **Jim Gilmer** secured a venue for the mid summer workshop at the **University of Albany**, with the assistance of long time runner and math professor **Ed Thomas**. With an air conditioned classroom, convenient location to a calibration course, and a twisting turning closed loop course to practice measuring, the university's uptown campus proved to be most satisfactory setting for the day's activities.



Workshop participants at the end of their newly measured 1000 foot calibration course.

From left to right: Jim Thomas, Gary Gelvin, Ray Lee, Jim Gilmer, and Jeff Gleba.

The shortened workshop was held on Saturday, July 29 from 8:00 am to 5:00 pm, started out with the group setting goals for the day. Participants decided they wanted a combination lecture and 'hands on' approach to encompass measuring and **USATF** certification. A viewing of **Tom McBrayer's Course Measurement Video** followed opening comments and introductions. The discussion portion of the workshop covered the layout and use of calibration courses, the calibrated bike measurement method, and following the **Course Measurement Procedures Manual** as a guide.

Working between the classroom and field on the **UA Campus**, the group accomplished the following:

- Laid out and team measured a calibration course
- Worked through and temperature adjusted of a calibration course
- Measured the campus perimeter road
- Practiced off-set maneuvers around traffic, barriers, and moving points using the "3-4-5" right triangle technique
- Determined the Working Constants and Final Constants for the day
- Crunched the data to determine final course measured length

None of the participants had any prior experience in course measurement, yet interest level was high. The group decided to forego lunch and breaks and continue straight through. As a result of the activities completed, both the 1000 foot calibration course and 2.8 mile closed loop course measurements were used and subsequently **USATF Certified**.

E-mail follow-up evaluations reflected a high level of satisfaction with the instruction, course materials, activities, and venue. Importantly, all participants indicated a willingness to assist with course measurement in the future, but not yet ready to tackle a measurement on their own.



University of Albany Uptown Campus map.





New Certified Course Entries

USATF Certified Course List

Stu Riegel, Course Registrar

Courses Received May 12 - August 15, 2006

Distance	Units	Course ID	Sta- tus	City	Course Name	Drop m/km	Sep Pct	Meas First	Measurer Last	ReplacesID
	5 km	AL06017JD	A	Pinson	Butterbean Festival 5K	0.0	0	Rick	Melanson	
	1 mi	AL06018JD	A	Pinson	Butterbean Festival 1 Mile Run	0.0	4	Rick	Melanson	
	5 km	AL06020JD	A	Ft. Rucker	Above The Best 5K	0.3	1	Richard	Carroll	
Cal		AL06021JD	A	Montgomery	Montgomery Street Calibration Course	0.0	100	West	Marcus	
	5 km	AL06022JD	A	Heflin	The Cleburn Classic 5K	0.0	0	Rick	Melanson	
	5 km	AR06002DLP	A	Little Rock	ARORA 5K	0.0	1	Bill	Torrey	
	5 km	AR06003DLP	A	Greenwood	Fourth of July 5K	0.4	11	Bill	Torrey	
	21.0975 km	AZ06009GAN	A	Payson	Rim Country Challenge Half Marathon	-0.6	2	Gene	Newman	
	5 km	AZ06010GAN	A	Payson	Rim Country Challenge 5km	-2.4	10	Gene	Newman	
	21.0975 km	AZ06001TLB	A	Scottsdale	Valley of the Sun Half Marathon	9.5	22	Thomas	LaBlonde	AZ02005GAN
	10 km	CA06010RS	A	Buena Park	Coaster Run 10km	0.0	1	Ron	Scardera	
	5 km	CA06011RS	A	Buena Park	Coaster Run 5km	0.0	2	Ron	Scardera	
	5 km	CA06016RS	A	Irvine	PCRF Reaching For The Cure 5km	0.0	1	Ron	Scardera	
	5 km	CA06018RS	A	Vacaville	Lagoon Valley All Weather 5k Course 2	0.4	1	Jeff	Smith	
	10 km	CA06019RS	A	Vacaville	Lagoon Valley All Weather 10k Course 2	0.2	0	Jeff	Smith	
Cal		CA06020RS	A	Napa	Cuvaison Winery Service Rd 1000' Calibration	0.0	100	Doug	Thurston	
	5 km	CA06021RS	A	Sacramento	Sacramento Race For The Cure 2006	0.2	5	Doug	Thurston	CA04016RS
	21.0975 km	CA06022RS	A	Napa to Sonoma	Carmers Wine Country Half Marathon- Even Y	1.0	92	Doug	Thurston	
	5 km	CA06023RS	A	Los Angeles (Westwood)	Guts and Glory 5km	0.0	1	Ron	Scardera	
	42.195 km	CA06024RS	A	Fresno	Fresno Pacific University Marathon	0.0	0	Eric	Schwab	
	5 km	CA06025RS	A	Sacramento	Shriners 5km 2006	0.0	2	Doug	Thurston	
	8 km	CA06026RS	D	Sacramento	Shriners 8km 2006	0.0	0	Doug	Thurston	CA05027RS
	21.0975 km	CA06027RS	A	Coronado	Western States Police & Fire Games Road Rac	0.0	0	Gerry	Rahill	
	5 km	CA06028RS	A	Costa Mesa	LiveStrong Challenge 5km	0.0	0	Ron	Scardera	
	10 km	CA06029RS	A	Costa Mesa	LiveStrong Challenge 10km	0.0	0	Ron	Scardera	
	5 mi	CA06030RS	D	Los Angeles	Nike Run Hit Remix 5 Mile	0.2	6	Ron	Scardera	
	8 km	CA06031RS	A	Sacramento	Shriners 8km 2006	0.0	0	Doug	Thurston	CA06026RS
	5 km	CA06032RS	A	Irvine	Bastille Day 5km	0.0	0	Ron	Scardera	CA04026RS
	5 mi	CA06033RS	A	Los Angeles	Nike Run Hit Remix 5 Mile	0.2	7	Ron	Scardera	CA06030RS
	5 km	CA06006TK	A	San Jose	The Mercury News 5K	0.0	3	Tom	Knight	
	10 km	CA06007TK	A	San Jose	The Mercury News 10K	0.0	1	Tom	Knight	
	10 km	CA06008TK	A	San Jose	The Mercury News 10K Alt.	0.0	1	Tom	Knight	
	5 km	CA06009TK	A	Palo Alto	Jeremiah's Promise 5K Run/Walk	0.0	0	Tom	Knight	
	42.195 km	CA06010TK	A	San Francisco	The San Francisco Marathon	0.0	1	Tom	Knight	CA05011TK
	21.0975 km	CA06011TK	A	San Francisco	The San Francisco First Half Marathon	-3.4	36	Tom	Knight	
	21.0975 km	CA06012TK	A	San Francisco	The San Francisco Second Half Marathon	1.6	46	Tom	Knight	
	5 km	CA06015TK	A	San Francisco	The San Francisco Marathon 5K	0.0	9	Tom	Knight	
	5 km	CA06016TK	A	San Francisco	Komen Race for the Cure	0.0	0	Tom	Knight	CA05023TK
	42.195 km	CO06011DP	A	Fort Collins	Old Town Marathon	8.1	83	Benji	Durden	CO05006DP
	21.0975 km	CO06012DP	A	Denver	Denver Half Marathon	0.0	0	Duane	Russell	
	42.195 km	CO06013DP	A	Denver	Denver Marathon	0.0	0	Duane	Russell	
	21.0975 km	CO06014DP	A	Denver	Rocky Mountain Half Marathon	0.0	1	Dave	Poppers	CO05015DP
	8 km	CO06015DP	A	Denver	Women's 8K	0.0	6	Dave	Poppers	CO05016DP
	5 km	CO06016DP	A	Englewood	Tiny Miracles	1.8	4	Duane	Russell	
	10 mi	CO06017DP	A	Durango	Narrow Gauge	0.0	1	John	Carpenter	
	5 km	CO06018DP	A	Littleton	Jackass Hill 5K	0.0	0	Mike	Montgomery	
Cal		CO06019DP	A	Highlands Ranch	Ridgeline Blvd 1200 ft	0.0	100	Duane	Russell	
	10 km	CO06020DP	A	Highlands Ranch	HRCA Independence Day Sunset	0.0	0	Duane	Russell	
	5 km	CO06021DP	A	Ault	Rat Race	0.0	3	John	Lonsdale	
	10 km	CO06022DP	A	Ault	Rat Race	0.0	2	John	Lonsdale	
	5 km	CO06023DP	A	Golden	Golden Gallop	-0.2	3	Duane	Russell	
	1 mi	CO06024DP	A	Superior	Superior Downhill Mile	34.0	96	Benji	Durden	
	5 km	CO06025DP	A	Westminster	Chamber Challenge	4.4	80	Duane	Russell	
	5 km	CO06026DP	A	Lakewood	USCAA 5km	0.0	0	Duane	Russell	
	10 km	CO06027DP	A	Lakewood	USCAA 10km	0.0	0	Duane	Russell	
	5 km	CO06028DP	A	Northglenn	Paint The Town Run/Walk	-0.2	2	Virgil	Hall	
	5 km	CO06029DP	A	Fort Lupton	Trapper Day	0.0	0	Duane	Russell	



Distance Units	Course ID	Sta- tus	City	Course Name	Drop m/km	Sep Pct	Meas First	Measurer Last	ReplacesID
5 km	CT06005JHP	A	North Haven	Mitos Run for Hope 5K	0.0	10	Bob	Stephenson	
5 km	CT06006JHP	A	Seymour	Victory Over Lymphoma 5K	1.8	8	Bob	Stephenson	
3.5 mi	CT06007JHP	A	New Hartford	West Hill Pond 3.5 Mile	-0.5	3	Peter	Hawley	
21.0975 km	CT06008JHP	A	Fairfield	Fairfield Half Marathon	0.0	3	Guido	Brothers	
5 km	CT06009JHP	A	Newtown	Newtown Road Race 5K	0.0	3	Bob	Stephenson	
5 km	CT06010JHP	A	Fairfield	Fairfield 5K	0.0	11	Guido	Brothers	
Cal	CT06011JHP	A	Granby	Floydville Rd Calibration Course	0.0	100	Guido	Brothers	
5 km	CT06012JHP	A	Granby	Farmington Valley YMCA Fall 5K Classic	-1.2	3	Guido	Brothers	
5 km	DC06004JS	A	Washington	Race for the Cure	0.0	17	John	Sissala	DC05003JS
4 mi	DC06004RT	A	Washington	Hugh Jascourt Four Mile	0.0	0	R	Thurston	
5 km	HI06002MS	A	Kailua	Windward 5K	0.0	15	Ronald	Pate	
21.0975 km	HI06003MS	A	Kailua	Windward Half Marathon	0.0	0	Ronald	Pate	
21.0975 km	HI06001MW	A	Honolulu	Hawaiian Half Marathon	0.0	14	Mike	Wickiser	HI01034PR
5 km	IA06002KU	A	Davenport	Swing 5k Home Run	0.0	4	Karl	Ungurean	
5 km	IA06001MF	A	Marshalltown	Ethan's Tractor Run 5K	0.0	12	Bill	Lorenz	
5 km	IA06002MF	A	Ankeny	Ankeny Summerfest 5K	0.2	4	Bill	Lorenz	
Cal	IA06003MF	A	Carlisle	Summerset Trail 1000 Feet	0.0	100	Bill	Lorenz	
4 mi	IL06030JW	A	Elmhurst	Four On The Fourth	0.0	0	Paul	Basbagill	IL05035JW
10 km	IL06031JW	A	Chicago	Share Your Soles 10K	0.0	4	Susan	LeMay	
5.8 km	IL06033JW	A	Chicago	Israel Solidarity Day	0.0	0	Neyl	Marquez	
10 km	IL06035JW	A	Chicago	The Main Course	0.0	0	Neyl	Marquez	IL99017JW
5 km	IL06035JW	A	Aurora	Rush-Copley Promise 5K	0.0	4	Susan	LeMay	
5 km	IL06037JW	A	Des Plaines	Chase To The Taste 5K	0.0	2	Paul	Basbagill	
10 mi	IL06038JW	A	Chicago	Fleet Feet Sports Soldier Field 10 Miler	0.2	1	Neyl	Marquez	IL04049JW
10 km	IL06041JW	A	Chicago	Run For The Zoo 10K	0.3	4	Susan	LeMay	IL05038JW
5 km	IL06042JW	A	Chicago	Run For The Zoo 5K	0.6	8	Susan	LeMay	IL04029JW
Cal	IL06043JW	A	Jacksonville	West Lafayette Avenue Calibration Course	0.0	100	Alan	Avery	
5 km	IL06044JW	A	Jacksonville	Passavant Hospital 5K	0.0	0	Alan	Avery	
10 km	IL06045JW	A	Jacksonville	Passavant Hospital 10K	0.0	0	Alan	Avery	
21.0975 km	IL06046JW	A	Hoffman Estates	Run For A Reason Half Marathon	0.0	2	Jay	Wight	
5 km	IL06047JW	A	Montgomery	Montgomery 5K Family Fun Run/Walk	0.0	1	Dick	Lamer Mayer	
10 km	IL06051JW	A	Chicago	Proud To Run 10K	0.0	1	Susan	LeMay	IL05062JW
5 km	IL06052JW	A	Chicago	Proud To Run 5K	0.0	1	Susan	LeMay	IL03040JW
5 km	IL06056JW	A	Naperville	Tails & Trails XC 5K	0.0	2	Winston	Rasmussen	
5 km	IL06057JW	A	Glencoe	Flower Power 5K (Chicago Botanic Garden)	0.0	0	Neyl	Marquez	
21.0975 km	IL06058JW	A	Chicago	Chicago Distance Classic Half Marathon	0.0	2	Neyl	Marquez	IL05076JW
10 km	IL06060JW	A	Chicago	Chicago Gay Games 10K	0.0	0	Neyl	Marquez	
5 km	IL06061JW	A	Chicago	Chicago Gay Games 5K	0.0	0	Neyl	Marquez	
21.0975 km	IN06004MW	A	French Lick	French Lick West Baden Mini Marathon	0.0	2	Nick	Johnson	
Cal	IN06005MW	A	Indianapolis	I.U.P.U.I 1000 foot Calibration	0.0	100	Mike	Wickiser	IN01501JG
20 km	IN06006MW	A	Indianapolis	I.U.P.U.I Racewalk	0.0	0	Mike	Wickiser	
2 km	IN06007MW	A	Indianapolis	New York St. Racewalk loop	0.0	0	Mike	Wickiser	
1 km	IN06008MW	A	Indianapolis	Crew Technical Services 1km	0.0	0	David	Harriman	
5 km	KS06013BG	A	Overland Park	Harmony Elementary	0.0	0	Lou	Joline	
2 mi	KS06014BG	A	Olathe	Nathaniel's Run	0.0	0	Lou	Joline	
5 km	KS06016BG	A	Lansing	On the Run	5.2	2	Lou	Joline	
5 km	KS06018BG	A	Overland Park	Mother's Day 5K Run	2.2	2	Lou	Joline	
5 km	KS06019BG	A	Overland Park	Steps to the Cure	0.0	0	Lou	Joline	
5 km	KY06004MS	A	Calvert City	Git Fit 5K	-0.2	1	Steve	Durbin	
5 km	KY06032PR	A	Lexington	A Midsummer Night's Run 5k	0.0	7	Jim	Kaiser	
10 km	MA06005JK	A	Franklin	Dean College 10K	-0.3	4	Steve	Vaitones	
5 mi	MA06009JK	A	Devens	Parker Classic 5 Mile	0.0	0	Kurt	Staven	
5 km	MA06012JK	A	Hopkinton	Sharon Timlin Road Race 2006	2.0	6	Steve	Vaitones	
5 km	MA06013JK	A	Dunstable	Firecracker 5K	1.2	5	Steve	Vaitones	
5 km	MA06005RN	A	Quincy	RYKA Iron Girl Boston	0.0	3	Ray	Nelson	
10 km	MA06006RN	A	Quincy	RYKA Iron Girl Boston	0.0	2	Ray	Nelson	
10 mi	MA06007RN	A	Newburyport	Yankee Homecoming	-0.2	2	Ray	Nelson	
5 km	MA06008RN	A	Newburyport	Yankee Homecoming	-0.6	3	Ray	Nelson	
5 mi	MA06009RN	A	Lowell	Lowell Spinners 5 Mile	0.3	3	Ray	Nelson	
2 mi	MA06010RN	A	Lowell	Lowell Spinners 2 Mile	0.6	5	Ray	Nelson	
5 mi	MA06011RN	A	Weymouth	Dreamcatcher Classic	0.0	1	Ray	Nelson	MA04024RN
5 km	MD06006JS	A	Bel Air	Bel Air Town Run, Revised	2.1	9	Lynn	Davis	
42.195 km	MD06007JS	A	Frederick	Frederick Marathon	0.1	1	John	Capoccia	MD04003JS
5 km	MD06008JS	A	Baltimore	The New Balance Jenny Smith 5K	0.0	4	John	Sissala	
42.195 km	MD06009JS	A	Baltimore	Under Armour Baltimore Marathon	0.2	1	John	Sissala	MD05025JS
5 km	MD06010JS	A	Hagerstown	Vince Tantillo Memorial 5 Km Run	0.0	0	Tim	O'Keefe	



Distance	Units	Course ID	Status	City	Course Name	Drop m/km	Sep Pct	Meas First	Measurer Last	ReplacesID
5 km		MI06005SH	A	Grand Rapids	Fifth Third Riverbank	-0.6	3	Ralph	Dewey	MI03004SH
25 km		MI06006SH	A	Grand Rapids	Fifth Third Riverbank	-0.1	1	Ralph	Dewey	MI03005SH
5 km		MI06007SH	A	Cutlerville	Brian Diemer Amerikam	0.0	0	Ralph	Dewey	MI01014SH
10 mi		MI06008SH	A	Flint	Crim	-0.3	1	Scott	Hubbard	
5 km		MI06009SH	A	Kalamazoo	Southwest Michigan Race for the Cure	0.0	3	Don	Kern	
5 km		MI06010SH	A	Grand Haven	Snug Harbor Kickoff to Summer	-0.4	8	Don	Kern	
10 km		MI06011SH	A	Bloomfield Hills	Heart of the Hills	0.3	2	Mark	Neal	MI91011SH
5 km		MI06012SH	A	Bloomfield Hills	Heart of the Hills	0.6	4	Mark	Neal	MI93021SH
8 km		MI06013SH	A	Trenton	Zanglin Downriver Run	0.0	1	Scott	Hubbard	MI95018SH
5 km		MI06014SH	A	Beverly Hills	Run For Humanity	0.0	2	Mark	Neal	
10 km		MI06015SH	A	Decatur	Steve's Raider Stomp	0.2	2	Don	Kern	
5 km		MI06016SH	A	Decatur	Steve's Raider Stomp	0.4	4	Don	Kern	
5 km		MI06017SH	A	Norton Shores	Run For Wings	0.0	1	Derek	Bailey	
Cal		MI06018SH	A	Muskegon	Plymouth Road 1000'	0.0	100	Derek	Bailey	
5 km		MI06019SH	A	East Grand Rapids	Reeds Lake Run	1.6	4	Ralph	Dewey	MI02014SH
10 km		MI06020SH	A	East Grand Rapids	Reeds Lake Run	0.8	2	Ralph	Dewey	MI02013SH
5 km		MI06021SH	A	Jackson	Groundhog Gallop	0.0	3	Scott	Hubbard	
5 km		MI06022SH	A	Ann Arbor	Gallup Gallop	0.0	3	Scott	Hubbard	
8 km		MI06023SH	A	Flint	CRIM	-0.8	8	Scott	Hubbard	MI91013SH
10 km		MN06001RR	A	Rochester	Harvest Classic	0.0	0	Philip	Laird	
1 mi		MN06002RR	A	Minneapolis	Medtronic TC 1 Mile	0.0	60	Barb	Leininger	
5 km		MN06003RR	A	Bayport	Bayport 5km	0.0	1	Rick	Recker	
5 km		MN06004RR	A	St. Paul	Menuudo 5K	0.0	0	Eric	Paulson	
21.0975 km		MN06005RR	A	New Prague	New Prague Half Marathon	0.0	0	John	Simota	
5 km		MN06006RR	A	Chanhasen	Arborateum	0.0	0	Rick	Recker	
30 km		MN06007RR	A	Glenwood	Lake Minnewaska	0.1	22	Tom	Reagan	
5 km		MN06008RR	A	Bloomington	Race for the Cure	0.0	14	Rick	Recker	
5 km		MN06009RR	A	St. Louis Park	Park & Run	0.4	2	Don	Wright	
21.0975 km		MN06011RR	A	Wayzata	Lake Minnetonka	0.1	44	Don	Wright	
5 km		MN06012RR	A	St. Paul	Walk On The Wild Side	0.0	0	Eric	Paulson	
5 km		MN06013RR	A	Chaska	Chaska 5K	0.0	1	Rick	Recker	
10 km		MN06014RR	A	Chaska	Chaska 10K	0.0	0	Rick	Recker	
12 km		MN06018RR	A	St. Cloud	Great Mississippi	0.8	2	Tom	Reagan	
5 km		MN06019RR	A	Monticello	Monticello	0.0	1	Rick	Recker	
10 km		MN06020RR	A	Minneapolis	Nokomis	0.0	6	Rick	Recker	
10 km		MN06021RR	A	Robbinsdale	Whiz Bang	0.0	0	Don	Wright	
10 km		MN06022RR	A	Moorhead	MSUM	0.0	2	Dale	Summers	
10 km		MN06023RR	A	Minneapolis	Life Time Fitness	0.0	3	Don	Wright	
5 km		MN06024RR	A	St. Paul	Highlandfest	0.0	0	Barb	Leininger	
1.25 km		MO06009BG	A	Columbia	Twin Lakes 1.25 k	0.0	0	Wayne	Armbrust	
5 km		MO06010BG	A	St. Louis	Race for the Cure	-0.4	10	Jeff	Neuschwander	MO03023BG
5 km		MO06011BG	A	Kansas City	Broadway Bridge	0.0	0	Lou	Joline	
10 km		MO06012BG	A	Kansas City	Broadway Bridge	0.0	1	Lou	Joline	
5 km		MO06015BG	A	Kansas City	Hospital Hill	7.4	10	Lou	Joline	
21.0975 km		MO06020BG	A	Maryville	Maryville Marathon & Half Marathon	0.0	0	Lou	Joline	
5 km		MO06021BG	A	Kansas City	Race for the Cure	0.0	1	Keith	Raymer	
10 km		MT06004MF	A	Billings	Heart & Sole 10K	-1.2	2	John	Devitt	MT93005GT
5 km		MT06005MF	A	Billings	Heart & Sole 5K	-2.4	3	John	Devitt	MT93004GT
5 km		NC06112NW	A	Durham	Lung Run	0.0	0	Neville	Wood	
5 km		NC06113NW	A	Raleigh	Wood Valley 5K	0.2	2	Neville	Wood	
10 km		NC06114NW	A	Cary	Inside-Out Sports Classic 10K	-2.9	10	Neville	Wood	
21.0975 km		NC06115NW	A	Cary	Inside-Out Sports Classic Halfmarathon	-1.2	5	Neville	Wood	NC04055PH
42.195 km		NC06015PH	A	Manteo	Outer Banks Marathon	0.0	34	R P	Kale	
21.0975 km		NC06016PH	A	Manteo	Outer Banks Half Marathon	0.0	28	R P	Kale	
21.0975 km		NC06016PH	A	Manteo	Outer Banks Half Marathon	0.0	28	R P	Kale	
5 km		NC06017PH	A	Greenville	Flat Out Five (River Walk Finish)	1.8	3	Paul	Hronjak	
5 km		NC06018PH	A	High Point	Race To Embrace 5K Run	0.0	2	Dick	Forbis	
5 km		NC06019PH	A	Charlotte	Summer Breeze 5K	0.0	4	Tim	Rhodes	
5 km		NC06020PH	A	Murfreesboro	NC Watermelon Festival 5K	0.0	3	John	Dilustro	
5 km		NC06021PH	A	Maggie Valley	Maggie Valley Moonlight Race 5K	0.0	2	Alan	Johnson	
8 km		NC06022PH	A	Maggie Valley	Maggie Valley Moonlight Race 8K	0.0	2	Alan	Johnson	
Cal		NC06023PH	A	Maggie Valley	Moody Farm Rd 1,000' Cal	0.0	100	Alan	Johnson	
Cal		NC06024PH	A	Murfreesboro	West High St 1,000' Cal Course	0.0	100	John	Dilustro	
5 km		NC06025PH	A	Asheville	Bele Chere (Stadium)	-2.0	7	Ed	McGinnis	
8 km		NC06026PH	A	Greenville	East Carolina Road Runners 8K #1	0.0	3	Paul	Hronjak	
Cal		ND06001MS	A	Fargo	40th Ave S 300 meters	0.0	100	Tom	Clow	
5 km		NE06003KU	A	Omaha	YWCA Put Your Foot Down Against Violence	0.0	1	Gary	Meyer	
5 mi		NE06004KU	A	Omaha	Nebraska 5-Mile	0.0	1	Gary	Meyer	



Distance	Units	Course ID	Status	City	Course Name	Drop m/km	Sep Pct	Meas First	Measurer Last	ReplacesID
Cal		NH06002RF	A	Keene	West Street 1000' Calibration Course	0.0	100	Ron	Fitzpatrick	
	5 km	NH06003RF	A	Keene	Spring Runoff 5K Road Race	0.0	0	Ron	Fitzpatrick	
Cal		NH06005RF	A	Penacook	Snow Street 1000 Foot Calibration Course	0.0	100	Ron	Fitzpatrick	
	5 km	NH06006RF	A	Penacook	Angel 5K Road Race	0.2	4	Ron	Fitzpatrick	
	5 km	NH06007RF	A	North Hampton	North Hampton Old Home Days Road Race 5K	0.3	0	Ron	Fitzpatrick	NH96010WN
	5 km	NH06008RF	A	Dublin	Dublin Days 5K Road Race	-2.4	6	Ron	Fitzpatrick	
42.195 km		NJ06001GAN	A	Atlantic City/Ventnor/Ma	Atlantic City Marathon	0.0	0	Gene	Newman	
21.0975 km		NJ06002GAN	A	Atlantic City/Ventnor/Ma	Atlantic City Half Marathon	0.0	0	Gene	Newman	
	5 km	NJ06511JHP	A	Barneget	Barneget Township 5K	0.0	0	Jane	Parks	
	5 km	NJ06512JHP	A	Batsto Village	Batsto Pig Iron 5k	0.0	0	Jane	Parks	
	5 km	NJ06513JHP	A	Hackettstown	Hackettstown 5K	0.0	0	Jane	Parks	NJ06505JHP
	5 km	NJ06515JHP	A	Cedar Grove	Run for Life	11.0	16	Jane	Parks	
	5 km	NJ06516JHP	A	Clinton	Sprintin' Clinton - 2006	0.0	1	Jane	Parks	
	5 mi	NJ06517JHP	A	Glen Rock	Glen Rock Jaycees Arboretum 5 Mile Run	0.0	1	Jane	Parks	
	2.5 mi	NJ06518JHP	A	Glen Rock	Glen Rock Jaycees Arboretum 2.5 Mile Run	0.0	3	Jane	Parks	
	5 mi	NJ06009LMB	A	Rumson	Rumson Run 2006	0.4	2	Paul	Hess	
	5 km	NJ06010LMB	A	Pennington	Pennington Run For Fun 5K	-0.6	4	Larry	Baldasari	
	5 km	NJ06011LMB	A	Medford	Matt Weiner Memorial 5K	0.0	0	Gene	Hoopes	
	5 km	NJ06012LMB	A	Madison	Madison High 5	-0.1	1	Dave	Hoch	
	5 km	NJ06013LMB	A	Glen Rock	Tribute Run 5K	0.0	1	Larry	Baldasari	
	5 km	NJ06014LMB	A	Watchung	Watchung Hills Municipal Alliance 5K	1.8	6	Larry	Baldasari	
	5 km	NJ06015LMB	A	Somerville	Legal Runaround 5K	0.3	4	Larry	Baldasari	
Cal		NV06001MW	A	Reno	Marathon De Mayo Calibration	0.0	100	Suzy	Truax	
42.195 km		NV06002MW	A	Reno	Marathon De Mayo	0.0	0	Suzy	Truax	
26.2188 mi		NY06001DK	A	East Meadow	Reckson Long Island Marathon	-0.1	3	David	Katz	
13.1094 mi		NY06002DK	A	East Meadow	Reckson Long Island Half Marathon	-0.1	3	David	Katz	
	5 km	NY06003DK	A	Northport	Visiting Nurse Service 5K	0.0	3	David	Katz	
	10 km	NY06003JG	A	Lakeland	Grunt Run 10K	0.2	1	Dave	Oja	
	5 km	NY06004JG	A	Cazenovia	Chilly Chili 5K	0.6	8	Dave	Oja	NY04054AM
	4 mi	NY06005JG	A	Syracuse	Tipperary Hill Shamrock Run	-0.2	2	Don	Hughes	
	5 km	NY06018JG	A	Charlton	Charlton Heritage 5K Run	0.0	0	Pat	Glover	
	5 km	NY06019JG	A	Burnt Hills	BH-BL Rotary Apple Run 5K	0.0	0	Jim	Gilmer	
	4 mi	NY06022JG	A	New York	NYRR Run 4 Parks	0.1	0	Paul	Hess	
	1 mi	NY06023JG	A	Lockport	Checkers Mile	0.0	1	John	Grandits	
21.0975 km		NY06024JG	A	Grand Island	Grand Island 1/2 Marathon	0.0	0	John	Felix	
Cal		NY06025JG	A	New York	Springfield Rd 1000'	0.0	100	Jim	Gilmer	
7.94687 mi		NY06026JG	A	Wilmington	Whiteface Mountain Uphill Road Race	-85.7	56	Jim	Gilmer	
	5 km	NY06027JG	A	Tonawanda	Lindsay's Legacy 5K Run	0.0	4	John	Grandits	
	10 mi	NY06028JG	A	LaGrange	The Laurel Run for Disability Awareness	0.0	0	Phil	Quinn	
	5 km	NY06029JG	A	Oyster Bay	Brooke Jackman 5K	0.0	0	Gary	Westerfield	
	10 km	NY06030JG	A	Fayetteville	Fayetteville 10K	0.0	1	Dave	Oja	NY04026AM
	8 km	NY06031JG	A	Utica	Run/Walk to the Rescue 8K	0.0	1	Dave	Oja	
	5 km	NY06032JG	A	Rock Hill	Rhulen Rock Hill Run and Ramble	1.4	8	Brian	Cavanagh	
Cal		NY06033JG	A	Orchard Park	Erie Co. Comm. College South Campus 1000'	0.0	100	Jeff	John	
	4 km	NY06034JG	A	Orchard Park	People & Paws 4K	0.0	0	Jeff	John	
	10 km	NY06035JG	A	Brewerton	Swamp Rat 10K	0.0	0	Dave	Oja	NY91017AM
	5 km	NY06036JG	A	Brewerton	Swamp Rat 5K	0.0	0	Dave	Oja	NY91016AM
	4 mi	NY06037JG	A	North Tonawanda	Tim Frank Memorial Canal Fest 4 Miler	0.0	0	Bob	Laskowski	NY03009AM
	5 km	NY06038JG	A	Batavia	Batavia Area Jaycees Labor Day 5K Run	0.0	1	Steve	Tufts	
	5 km	NY06039JG	A	Buffalo	Buffalo Police Chase	-0.1	8	John	Grandits	
	5 km	NY06040JG	A	Fayetteville	Green Lakes Endurance Runs	0.0	0	Don	Hughes	
	1 mi	NY06041JG	A	Cazenovia	Cazenovia 4th of July 1-Mile	0.0	0	Dave	Oja	
	5 km	NY06042JG	A	Cazenovia	Cazenovia 4th of July 5K	3.1	10	Dave	Oja	NY87011BT
	10 mi	NY06043JG	A	Cazenovia	Cazenovia 4th of July 10-Miler	1.0	3	Dave	Oja	NY85008WH
	10 km	NY06502JHP	A	Valhalla	Race for Rehab 10K	-0.5	2	Jane	Parks	
	5 km	NY06106KL	A	Bergen	Jenny Kuzma Memorial Bergen 5 km	-0.9	4	Kevin	Lucas	
	1 mi	NY06107KL	A	Bergen	Jenny Kuzma Memorial Bergen 1 Mile Split	-0.2	38	Kevin	Lucas	
	10 km	NY06108KL	A	Rochester	Lilac 10 km	0.0	0	Kevin	Lucas	NY04002KL
	5 km	NY06109KL	A	Rochester	Lilac 5 km Split	4.9	55	Kevin	Lucas	
	5 km	NY06110KL	A	Rochester	Lilac 5 km	-0.1	0	Kevin	Lucas	NY04003KL
	5 km	NY06119KL	A	Greece	Northwest YMCA 5 km	-0.3	6	Kevin	Lucas	NY05136KL
1.25 km		OH06016PR	A	Dayton	Jack Mortland Race Walks	0.0	0	Felix	LeBlanc	
	5 km	OH06017PR	A	Orrville	YMCA 5k Summer Fun Run	1.2	3	Jim	Wilhelm	
	10 km	OH06018PR	A	Orrville	YMCA 10k Summer Fun Run	0.6	2	Jim	Wilhelm	
	5 km	OH06019PR	A	Dalton	Dalton YMCA Holiday Jog 5k	-0.2	1	Jim	Wilhelm	
	5 km	OH06020PR	A	Dublin	Columbus Half Marathon 5 km	0.0	0	Pete	Riegel	
21.0975 km		OH06021PR	A	Dublin	Columbus Half Marathon	0.0	0	Pete	Riegel	
Cal		OH06022PR	A	Troy	Old Staunton Road 1054.29 feet	0.0	100	Eric	Miller	
	5 km	OH06023PR	A	Troy	Run for the Prize 5k	0.0	0	Eric	Miller	
	5 km	OH06024PR	A	Mason	Eye Run for Vision 5k	0.2	4	Steve	Prescott	
	10 mi	OH06025PR	A	Groveport	Cap City 10 Miler	0.0	0	Pete	Riegel	OH05031PR
	5 km	OH06026PR	A	Columbus	Night Moves 5 km	0.0	1	Pete	Riegel	OH01054PR
	5 mi	OH06027PR	A	Columbus	Night Moves 5 Mile	0.0	1	Pete	Riegel	

Distance	Units	Course ID	Status	City	Course Name	Drop m/km	Sep Pct	Meas First	Measurer Last	ReplacesID
5 km		OH06028PR	A	Symmes Township	2006 Racewalk Champs OH 5km - Cincinnati	0.1	2	Don	Connolly	
5 km		OH06029PR	A	Westerville	Run/Walk for the Whisper 5k	0.0	0	Pete	Riegel	
10 km		OH06030PR	A	Massillon	Sippo Valley Rail Run 10k Trail Trot	0.0	0	Jim	Wilhelm	
5 km		OH06031PR	A	Massillon	Sippo Valley Girls on the Run 5k	0.0	0	Jim	Wilhelm	
15 km		OK06010DG	A	Tulsa	Tulsa Run 2006	0.3	13	Glen	Lafarlette	
5 km		OK06011DG	A	Tulsa	Tulsa Run 5 km 2006	0.8	40	Glen	Lafarlette	
5 km		OK06012DG	A	Oklahoma City	Gusher Gallop Alternative Course	0.0	1	Don	Garrett	
5 km		OK06013DG	A	Oklahoma City	Bricktown Blaze	-0.2	1	Don	Garrett	
8 km		OK06014DG	A	Oklahoma City	Paws with a Cause 8 km	0.0	0	Don	Garrett	
3 km		OK06015DG	A	Oklahoma City	Paws with a Cause 3 km	0.0	0	Don	Garrett	
5 km		OK06016DG	A	Oklahoma City	Red Earth 5 km	0.0	0	Don	Garrett	
10 km		OK06017DG	A	Oklahoma City	Andy Payne 10 km	0.0	0	Don	Garrett	
5 km		OK06018DG	A	Oklahoma City	Andy Payne 5 km	0.0	0	Don	Garrett	
5 km		OK06020DG	A	Norman	Old Glory Alternate	0.0	1	Don	Garrett	
42.195 km		OK06021DG	A	Oklahoma City	Andy Payne Marathon	0.0	0	Don	Garrett	
5 km		OK06026DG	A	Tulsa	Route 66 Run (alternate)	9.0	4	Coneil	Lafarlette	OK93045BB
42.195 km		OR06002LB	A	Eugene	Walk With Me Eugene Marathon	0.0	0	Tyler	Burgess	
10 km		OR06003LB	A	Portland	LiveStrong Challenge Portland 10km	0.0	0	Lee	Barrett	
5 km		OR06004LB	A	Portland	LiveStrong Challenge Portland 5 km	0.0	0	Lee	Barrett	
10 km		OR06005LB	A	Beaverton	Mid-Summer Meltdown 10km	0.2	2	John	Spurgeon	
5 km		OR06006LB	A	Beaverton	Mid-Summer Meltdown 5km	0.4	2	John	Spurgeon	
5 km		PA06004LMB	A	Chalfont	Chalfont Challenge 5K	0.3	1	Larry	Baldasari	
5 km		PA06005LMB	A	Warrington	Special Equestrians 5k	-1.2	5	Larry	Baldasari	
5 km		PA06006LMB	A	Washington Crossing	Revolutionary Run- MBO 5K	0.0	6	Larry	Baldasari	
5 km		PA06009WB	A	Collegeville	Collegeville Run/Walk for Arthritis	0.0	0	Bill	Belleville	
5 km		PA06010WB	A	Pennsburg	Eileen Brode Breast Cancer Run/Walk 5K	0.0	0	Bill	Belleville	
5 km		PA06012WB	A	Philadelphia	Philly Tri Sprint 5km Run	-0.1	4	Bill	Belleville	
10 mi		PA06014WB	A	Dunmore	Greater Scranton YMCA 10 Mile Road Race	0.0	0	Stephen	Nichols	
5 km		PA06015WB	A	Oxford	Mainstreet 5K	-1.2	10	Doug	White	PA05013WB
5 km		RI06006RN	A	Johnston	Metals Recycling 5K	0.9	4	Ray	Nelson	
5 km		RI06007RN	A	Lincoln	Rhody 5K	0.3	4	Ray	Nelson	RI05003RN
5 km		SC06020BS	A	Seneca	Seneca 5K Challenge	0.0	5	Wayne	Terry	
5 km		SC06021BS	A	Florence	Spirit of Florence 5K	0.0	0	Danny	White	
5 km		SC06022BS	A	Greenville	Furman 5K	0.0	1	Jim	Roberts	
5 km		SC06023BS	A	Williamston	Williamston Spring Water Festival	0.0	2	Wayne	Terry	
5 km		SC06024BS	A	Belton	Belton Standpipe Festival 5K	0.2	3	Wayne	Terry	
5 km		SD06001MS	A	Brookings	Volstorff Scotty Roberts 5k	0.0	4	Andy	Stockholm	
5 km		SD06002MS	A	Brookings	Run for Beef and Eggs 5K	-0.2	4	Andy	Stockholm	
10 km		TN06014DJR	A	Knoxville	Knoxville Track Club 2006 Expo 10,000	0.0	0	Allan	Morgan	
5 km		TN06015DJR	A	Franklin	Franklin Classic 5K	0.0	1	Jim	Zeigler	
8 km		TN06016DJR	A	Kingsport	Crazy 8's 8K Run - "Rain Course"	0.0	1	Dave	Rogers	
5 km		TN06017DJR	A	Chattanooga	Riverbend 5K	0.0	1	David	Presley	TN04020DJR
10 km		TN06018DJR	A	Chattanooga	Riverbend 10K	0.0	1	David	Presley	
1 mi		TN06019DJR	A	Kingsport	Blue Lizard Crazy Mile	0.0	18	Dave	Rogers	
1 mi		TN06020DJR	A	Loretto	Sacred Heart School Independence Day Mile	-0.5	2	Danny	Michael	
5 km		TN06021DJR	A	Clarksville	R3 Anniversary 5K	0.0	0	Tomas	dePaulis	
8 km		TN06022DJR	A	Clarksville	Clarksville Turkey Trot 8K	0.0	0	Tomas	dePaulis	
10 km		TN06023DJR	A	Brentwood	Senior Olympics 2006 10K	0.0	0	Tomas	dePaulis	TN06011DJR
1 mi		TN06001MS	A	Kingsport	Duck Island Mile	-0.9	28	Matthew	Studholme	
5 km		TN06002MS	A	Bluff City	United Way of Bluff City 5K	0.3	1	Matthew	Studholme	
Cal		TN06003MS	A	Greeneville	Piggyback Lane 1000 feet	0.0	100	Matthew	Studholme	
5 km		TN06004MS	A	Greeneville	Keep Greene Beautiful 5K	0.6	3	Matthew	Studholme	
5 km		TN06005MS	A	Greeneville	Astros 5K	2.4	4	Matthew	Studholme	
42.195 km		TX06012ETM	A	Fort Worth	Cowtown Marathon	0.0	1	Jim	Gilliland	TX05007ETM
5 km		TX06013ETM	A	Victoria	Living in the Light 5K Run and Walk	0.0	9	Clent	Mercile	
5 km		TX06016ETM	A	Houston	Eeyore's 5K Fun Run	0.0	0	Robert	Barnhill	TX03014ETM
5 km		TX06018ETM	A	Corpus Christi	BUC Days Rodeo Run	0.0	1	Clent	Mercile	
5 km		TX06044ETM	A	Corpus Christi	Casa Coastal Bend 5K	0.0	0	Roger	Soler	
5 km		TX06045ETM	A	Fort Worth	Buffalo Boogie 5K	0.4	16	Charles	Clines	TX04038ETM
5 km		TX06046ETM	A	The Woodlands	David's Dream Run 5K	0.0	0	Robert	Barnhill	
5 km		TX06047ETM	A	Fort Worth	Fireman's 5K	12.4	64	Michael	Polansky	
Cal		TX06048ETM	A	Waco	Air Base Road Kilometer	0.0	100	Scott	Ruplinger	
5 km		TX06049ETM	A	Waco	Lake Waco Wetlands 5K	-2.4	7	Scott	Ruplinger	
5 km		TX06050ETM	A	Wichita Falls	5K Run of Faith	0.0	3	Charles	Clines	
5 km		TX06051ETM	A	University Park	Run for the Vision 5K	0.0	2	Ken	Ashby	
1 mi		TX06052ETM	A	University Park	Run for the Vision Mile	0.0	10	Ken	Ashby	
20 km		TX06053ETM	A	Dallas	Tour de Fleur 20K	0.0	0	Patrick	Cheshier	



Distance	Units	Course ID	Status	City	Course Name	Drop m/km	Sep Pct	Meas First	Measurer Last	ReplacesID
10 km		TX06054ETM	A	Dallas	Tour de Fleur 10K	0.0	0	Patrick	Cheshier	
5 km		TX06055ETM	A	Dallas	Komen Dallas Race for the Cure 2006	0.8	4	Patrick	Cheshier	TX99087ETM
5 km		TX06056ETM	A	Sugarland	HDSA 5K Walk and Run	0.0	0	Robert	Barnhill	TX03062ETM
10 km		TX06057ETM	A	San Marcos	Country Roads	0.0	0	Maurice	Johnson	
42.195 km		TX06015JF	A	Austin	Silicon Lab Marathon Relay	0.0	0	John	Ferguson	TX05014JF
5 km		TX06016JF	A	Austin	Casa 5K	0.0	2	John	Ferguson	
21.0975 km		TX06017JF	A	Austin	3M Half Marathon	4.8	81	John	Ferguson	TX03021JF
5 km		UT06002TLB	A	Salt Lake City	Running For Relief 5K	0.0	0	Demetrio	Cabanillas	
21.0975 km		UT06003TLB	A	Salt Lake City	Salt Lake City Half Marathon	0.3	14	Demetrio	Cabanillas	
5 km		VA06005MS	A	Bristol	Rhythm and Roots Reunion 5K	0.6	3	Matthew	Studholme	
10 km		VA06006RT	A	Norfolk	Chesapeake Bay 10K	0.0	1	R P	Kale	
5 km		VA06007RT	A	New Kent County	Derby Days 5K	-1.0	4	R.P.	Kale	
10 km		VA06008RT	A	Alexandria	Run Slim 10K	0.2	2	R	Thurston	
5 km		VA06009RT	A	Alexandria	Run with the Eagles 5K	0.0	3	Richard	Schoen	VA05014RT
10 km		VA06010RT	A	Fredericksburg	YMCA 10 km	0.0	1	Vic	Culp	
5 km		VA06011RT	A	Alexandria	Kelley Cares 5K	-0.4	3	R	Thurston	
10 km		VA06012RT	A	Portsmouth	Elizabeth River Run 10K	0.0	3	John	Price	
5 mi		VA06013RT	A	Fairfax County	Burke Lake Park 5 Mile	-0.4	1	Bob	Platt	
5 km		VA06014RT	A	Stephens City	Aquathon 5K	0.0	0	Neal	Riemenschneider	
10 km		VA06015RT	A	Arlington	Marine Corps 10K	-1.6	10	R	Thurston	
15 km		VT06001RF	A	South Royalton	Chase Race 15K	0.0	0	Ron	Fitzpatrick	
10 mi		VT06002RF	A	Montpelier	Paul Mailman Montpelier Ten-Miler	0.0	1	Robert	Murphy	
8 km		WA06008BL	A	Mercer Island	Mercer Island 8 km	0.0	0	Tom	Cotner	
42.195 km		WA06001LB	A	Vancouver	Nautilus Marathon Relay	0.0	15	Lee	Barrett	
5 km		WA06002LB	A	Vancouver	Nautilus 5km	0.1	6	Lee	Barrett	
8 km		WI06029JW	A	Madison	Crazy Legs Race	1.1	30	Tom	Aten	
10 km		WI06034JW	A	Green Bay	Bellin 10 Kilometer Run	0.0	2	David	Moore	WI04055JW
42.195 km		WI06039JW	A	Madison	Mad City Marathon	0.4	6	Tom	Aten	WI05056JW
21.0975 km		WI06040JW	A	Madison	Mad City Half Marathon	0.7	11	Tom	Aten	WI05057JW
2 mi		WI06048JW	A	Fredonia	Frebeka Five 2 mile	1.9	2	Donald	Weyer	
5 mi		WI06049JW	A	Fredonia	Frebeka Five	0.8	1	Donald	Weyer	
10 km		WI06050JW	A	Cedar Grove	Holland Fest Run	0.0	1	Donald	Weyer	
5 km		WI06053JW	A	Valders	Heart and Sole 5K	0.0	2	David	Moore	
Cal		WI06054JW	A	Janesville	Memorial Drive Calibration Course	0.0	100	Norman	Yarger	
5 km		WI06055JW	A	Janesville	Janesville Relay For Life 5K	0.0	5	Norman	Yarger	
5 km		WI06059JW	A	Hales Corners	Nancy's Race For A Cure	0.0	0	Ken	Gilgenbach	

Renewed

10 km	CA89032RS	A06 Cypress	Cypress Community Fest 10k	0.0	2	R	Hickey	
5 km	CA89033RS	A06 Cypress	Cypress Community Fest 5k	0.0	5	R	Hickey	
42.195 km	CA95001TK	A06 Napa	Sutter Home Napa Valley Mar	2.2	89	T	Knight	
5 km	CO95005DP	A06 Aspen	Race for the Cure	0.0	2	D	Belmonte	
5 km	GA90005WN	A06 Ft Valley	Peach Festival	0.0	1	D	Hagemes	
5 km	GA95015WC	A06 Rome	Clocktower Run	-0.6	1	L	Roberts	
5 km	GA96008WC	A06 Cave Spring	Cave Spring	1.2	2	L	Roberts	
5 km	IN94005MW	A06 Munster	Munster Rotary Run-a-Round	0.0	4	C	Hinde	
10 km	IN94006MW	A06 Munster	Munster Rotary Run-a-Round	0.0	1	C	Hinde	
5 km	NJ95019DB	A06 West Orange	West Orange 5 km	0.0	0	D	Brannen	
5 km	NY86005BT	A06 Buffalo	JP Bullfeathers/Nickel Cty			D	MacPhee	
5 km	NY95026AM	A06 Cheektowaga	The Crabapple Run	0.0	7	J	Grandits	
5 km	NY96011AM	A06 Amherst	The Great Race	0.0	1	J	Grandits	
5 km	PA88004RE	A06 Harrisburg	Capitol 5000 Course	1.2	5	P	Barner	
5 km	TN96012RH	A06 Lebanon	Wilson Bank & Trust Fall Clas	0.0	2	T	dePaulis	



USA TRACK & FIELD ROAD RUNNING TECHNICAL COUNCIL REGIONAL CERTIFIERS

REGIONAL CERTIFIERS - Contact the following people for USATF Road Course Certification Information. Certifiers for each state provide referrals to experienced measurers for hire in your local area or expert guidance on how to measure a course for USATF certification.

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(Marathon & Beyond, Nov/Dec 2005)

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for Fastest Course, Organization and
Crowd Support (Ultimate Guide To Marathons)

★ Host of the 2007 US Men's & Women's
Half Marathon National Championships

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