



The Athletics Congress of the USA

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

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15 October 1991

Sally H. Nicoll
Ragged Mountain Club
Potter Place, NH 03265

Dear Sally,

Attached is a report of the pre-validation team measurement of the Columbus Marathon in Columbus, OH. This marathon has been selected as the 1991 TAC/USA Men's Marathon Championships in November 1991 and as the Men's Olympic Marathon Trials event in April 1992. Thus the RRTC felt it was appropriate and in keeping with past precedents to check the length of the course prior to either of the events.

An RRTC measurement team composed of Mike Wickiser, Karl Ungurean, Bill Grass, Bernie Conway (Canadian IAAF measurer) and myself assembled in Columbus on the weekend of 5-6 October 1991. The event was hosted by Pete Riegel, the course measurer/certifier, and Doug Thurston, the race director. The team was hosted at the Marriot Courtyard Motel in Dublin, a suburb northwest of Columbus.

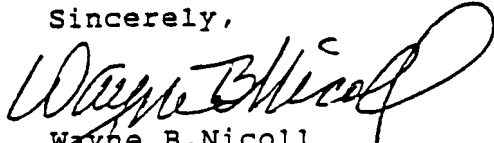
The measurement was conducted on Saturday, 5 October under threatening skies and moderate temperatures. The team gathered at the Riegel home and bikes were calibrated on a 1000' course starting at the edge of Pete's driveway. Pete planned the measurement so there was no need to transport bikes during the measurement and also allowing for a reasonably safe ride along the course. The course was measured in segments, starting at the 10K mark near the calibration course and proceeding forward on the course to a reference point in downtown Columbus. We were visited by several media representatives both at the calibration course and along the race course. At the downtown point we shifted over to the finish line and proceeded in reverse to the new Ameriflora Park project. We were admitted to the park after signing waivers and restarting our measurement on the other side of a closed project fence gate we were not allowed to ride through. We continued to the same downtown reference point and shifted over to the start, riding to the 10K mark where we had begun the measurement. We recalibrated on the same calibration course.

We were accompanied by Pete Riegel and Doug Thurston who assisted us in keeping on the measured path. About two thirds through the ride we encountered rain, high winds, and a ten degree drop in temperature. We continued in spite of the conditions and gradually dried out and warmed up as we moved into the uphill portion of the course. The route passed through or near the Ohio State campus twice. On the return trip we encountered heavy vehicular and pedestrian traffic as football fans were proceeding to the Ohio State-Wisconsin game. Mike Wickiser experienced a flat tire with about eight kilometers to go and rode both the remaining course distance and the four rides of the calibration course on the flat tire! (REAR TIRE)

Following recalibration we returned to the hotel, cleaned up, and enjoyed a lunch where we calculated the results. That evening Doug Thurston hosted a dinner at the motel where we had a chance to relax and discuss the measurement in detail. Pete produced computer generated results which are included with this report. The group decided to accept the Sum of Shortest Splits as the official distance, which was 42236 meters. The following morning we had breakfast together and departed for home.

Deepest thanks go to Pete and Doug for the assistance rendered and hospitality shown during our stay, resulting in a highly successful team measurement. We are also grateful to the team members who sacrificed time, funds and energy to be part of this project.

Sincerely,


Wayne B. Nicoll
Vice Chair East, RRTC



Men's Olympic Trials Marathon Measurement Team assembled in front of the full-size replica of Columbus' ship Santa Maria, now moored in the Scioto River near the finish line - l-r: Wayne Nicoll, Bill Grass, Pete Riegel, Race Director Doug Thurston, Bernie Conway, Mike Wickiser, Karl Ungurean

Prevalidation of Columbus Marathon - US Men's Olympic Marathon Trials

October 5, 1991

Validators: Bill Grass, Wayne Nicoll, Bernie Conway, Karl Ungurean, Mike Wickiser

Calibrations done on Kirkham Road 1000 feet. Calibration course checked out at 999.99 Feet at 56 F. Corrected length = 999.92 feet. However, excess tension was used on tape. Therefore 1000 feet is used in these calculations

Recorded Calibration Counts

	Bill	Wayne	Bernie	Karl	Mike
	38800	76000	90000	67000	12400
	41636.5	79035	92868	70046	15267
	44474	82071	95735	73093	18134
	47312	85105	98603	76139	21001
	50149	88139	101471	79185	23868
	80000	47000	36000	40400	57800
	82837	50038	38871	43449	60668.5
	85675	53076	41741	46498	63536
	88513.5	56113	44611	49547	66403.5
	91351	59151	47481	52596	69270

Interval Calibration Counts

	2836.5	3035	2868	3046	2867
	2837.5	3036	2867	3047	2867
	2838	3034	2868	3046	2867
	2837	3034	2868	3046	2867
Avg	2837.25	3034.75	2867.75	3046.25	2867
Ct/km	9308.563	9956.529	9408.629	9994.259	9406.168
	2837	3038	2871	3049	2868.5
	2838	3038	2870	3049	2867.5
	2838.5	3037	2870	3049	2867.5
	2837.5	3038	2870	3049	2866.5
Avg	2837.75	3037.75	2870.25	3049	2867.5
Ct/km	9310.203	9966.371	9416.831	10003.28	9407.808
Av ct/km	9309.383	9961.45	9412.73	9998.77	9406.988

Recorded Counts

	Bill	Wayne	Bernie	Karl	Mike
10k	62500	1000	14000	92400	36000
15k	109098	50834	61092	142449	83074
20k	155617	100593	108088	192443	130094
hydrant	168041	113880	120644	205796	142652
Finish	74500	21000	27000	12700	49000
40k	94955	42880	47706	34681	69678
35k	141549	92729	94841	84778	116791
30k	188131	142571	141955	134842	163883
fence	215243	171595	169363	163970	191281
fence	19900	76000	74000	68800	95900
hydrant	73709	133533	128405	126656	150276
Start	74200	34000	29000	27000	51000
5k	120827	83887	76156	77139	98129
10k	167452	133769	123308	127252	145231

Interval Counts

	Bill	Wayne	Bernie	Karl	Mike
10k					
15k	46598	49834	47092	50049	47074
20k	46519	49759	46996	49994	47020
hydrant	12424	13287	12556	13353	12558
Finish					
40k	20455	21880	20706	21981	20678
35k	46594	49849	47135	50097	47113
30k	46582	49842	47114	50064	47092
fence	27112	29024	27408	29128	27398
fence					
hydrant	53809	57533	54405	57856	54376
Start					
5k	46627	49887	47156	50139	47129
10k	46625	49882	47152	50113	47102

Interval Meters - all distances calculated using average constant without extra 1.001.

	Bill	Wayne	Bernie	Karl	Mike	SOSS
10k						
15k	5005.5	5002.7	5003.0	5005.5	5004.2	5002.7
20K	4997.0	4995.2	4992.8	5000.0	4998.4	4992.8
hydrant	1334.6	1333.8	1333.9	1335.5	1335.0	1333.8
Finish						
40k	2197.2	2196.5	2199.8	2198.4	2198.2	2196.5
35K	5005.1	5004.2	5007.6	5010.3	5008.3	5004.2
30K	5003.8	5003.5	5005.3	5007.0	5006.1	5003.5
fence	2912.3	2913.6	2911.8	2913.2	2912.5	2911.8
fence hydrant	5780.1	5775.6	5779.9	5786.3	5780.4	5775.6
Start						
5k	5008.6	5008.0	5009.8	5014.5	5010.0	5008.0
10K	5008.4	5007.5	5009.4	5011.9	5007.1	5007.1
Total	42252.5	42240.5	42253.4	42282.6	42260.1	42236.0

Wickiser accounted for his bike length at fence. Others did not. 2 meters has been added in the 20 to 30 km range, below, which is calculated on the basis of SOSS:

	Interval Meters	Cum Meters	Desired Meters	Adjust Meters
Start		0	0	0.0
5 Km	5008.0	5008.0	5005.0	-3.0
10 Km	5007.1	10015.1	10010.0	-5.1
15 Km	5002.7	15017.8	15015.0	-2.8
20 Km	4992.8	20010.6	20020.0	9.4
30 Km	10023.2	30033.8	30030.0	-3.8
35 Km	5003.5	35037.3	35035.0	-2.3
40 Km	5004.2	40041.5	40040.0	-1.5
Finish	2196.5	42238.0	42237.2	-0.8