

Measurement News



May 2001

Issue #107

Mater Artium Necessitas



The Antarctica Marathon has been held for the last several years on King George Island, just north of the Antarctic Peninsula. A cruise ship brings competitors from Argentina south. This year bad weather prohibited landing on the island by the contestants. It was decided to run the race on the ship. Measurement of the course was done by the Calibrated Rope Method. Here Malcolm Gillis (foreground) and Jim Starkovitch (rear) measure a portion of the course. See story inside. Photo: Marc Chalufour

MEASUREMENT NEWS

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Chairmans Clatter - March-April 2001

From Mike Wickiser

I can tell spring is here by the increase in measurement activity. Hardly a day goes by without a batch of new measurement certificates or someone calling about a course map or measurement. So far this year we, the RRTC, have reworked the measurement certificate document and changed the course renewal process. For the most part, the questions these changes brought about have been answered. New 2001 courses are showing a December 31, 2011 expiration date and renewed courses are getting new certificates still using the original number but also showing updated race director information and indicating an expiration date. These two were no small task and I thank all who were involved and who helped work out the details of these changes.

For anyone wondering what the big deal over renewed courses is, the other day a certifier received a renewal form but no course map. The statement that the course was personally examined with a copy of the map was signed as well. Unfortunately when asked, the requester couldn't produce a map and didn't know where to find one. This is not an infrequent situation and really points out the reason for doing away with renewed courses.

Those issues covered, there is little else to discuss this month. I would like to relay an interesting story that happened while laying out splits for an upcoming marathon. After taking a lunch break midway through the day's work, I got onto my bike and started out to locate the 14 mile split. Riding with traffic next to the curb lane, I was flipped off my bike and tumbled onto the ground. I soon realized that I was the victim of somebody in a hurry to get to the dry cleaners. This guy had pulled up while I was starting out about a block back, gotten his laundry and opened his car door without a glance into traffic, right into my bike. I now had a bike tire that resembles a pretzel and the guy who I hit has a door that opens a lot further than Detroit ever intended.

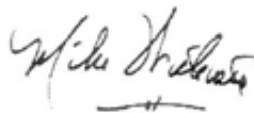
Asking the clerk at the dry cleaner to call the police, I was informed that the guy whose car I had just hit WAS a COP! At this point I went out to talk things over, with the knowledge that this guy was NOT going to get a ticket. Experience has taught me that policemen write tickets, but they don't get them.

I was educated to the 'fact' that 'most' people ride against traffic. This is what I suppose I have been doing wrong all along! Since I was not buying that line, I was next informed that since he was already parked and I was 'moving traffic' that he couldn't be at fault. About now, I am getting worried that this guy is going to get away with this line of crap and I will be screwed. Maybe even get a ticket myself!! It hits me that no one has called the police since the police are already here. Remember this guy is a cop.

Some lengthy discussion ensued about who was at fault and I did get this guy's name and information along with a promise to pay for the damages. Apparently he was more concerned about a police report than I was. Within three days I received a money order to pay for a new wheel & tire.

Oh, by the way, riding against traffic is still a no-no, as is opening your car door into traffic. For now I am going shopping for a new tire & wheel. Hope the cop knows a good body shop. His door and front fender didn't look much better than my bike tire. Karen says he now has a door that opens both ways.

Happy measuring,



Mater artium necessitas (anonymous Latin saying) *Necessity is the mother of invention*

MEASUREMENT OF THE 2001 ANTARCTICA MARATHON

By Marc Chalufour - Associate Editor, *Running Times Magazine*

In 1997 the course for the Antarctica Marathon was roughly two miles short, due to white-out conditions on top of the Collins Glacier - which the runners must scale during the first 5k, and then again at the midway point of the race. The other two years in which the race has been run (1995 and 1999) were full marathons, however sticklers could certainly question the validity of the the measurements.

Equipped with a laser this year, the race staff was confident that the 2001 course would be the most accurate to date. The cost and time necessary to reach Antarctica, however, prevented the measurement team from doing their work until the final two days before the race. While the athletes were to be touring the South Shetland Islands, the crew planned on laying out and measuring the course on King George Island aboard the ATVs which had been brought from Argentina. High seas unfortunately thwarted plans to transfer the ATVs from the ship to the Zodiacs, and nearly kept the course team from going ashore. After a day of waiting, they were able to board a Zodiac and go ashore. Without the ATVs, however, they were forced to walk the course in winds that gusted up to 70 miles per hour.

Feb. 5th, race day, passed as the seas remained too high for either the course team to return to the ship or the athletes to go ashore. Finally at 4 a.m. on the 6th the team was able to return; however the seas were still too high to transfer 140 runners to the shore for the race. By mid-day the difficult decision was made to abandon the on-land course and to run the marathon on the ship.

As the captain of the *Ljubov Orlova* weighed anchor and pulled out of Maxwell Bay, Jim Starkovich of Marathon Tours and Malcolm Gillis, an entrant in the marathon and director of the Rocket City Marathon, set out to measure the two decks of the ship with a rope. Having measured the rope with a ruler, the two then went up and down the hallways of the lower deck, and along the sides of the outer upper deck, to determine their distance. The final numbers were 422 laps on the upper and 324 on the lower.

Some runners decided to get the race over with while the ship was moving, but the majority ran the following morning as we cruised into, and then set anchor, in Neko Harbor on the Antarctic Peninsula.

The lower deck was completely enclosed, had a series of bulkheads, and one end of the rectangle involved going through double doorways on either side of a hallway. The upper deck was outside for three of the four sides of the rectangle, with the fourth side going through a hallway as well, with a doorway on either side. Naturally these doors created a bit of a bottleneck. Each doorway had a pretty high threshold (6 or so inches) presumably to keep water coming under the doors.

Malcolm Gillis adds (exerpts from his article in *HTC News, Magazine of the Huntsville Track Club*, March/April 2001):

...We sailed back to King George Island and were able to bring the shore party back aboard. The news was not good. The weather forecast was for conditions that would prevent the landing of the marathon group for the next couple of days. The decision was made to sail to the Antarctic Continent at beautiful Neko Harbor. Good weather was promised for that site.

For the marathon, Thom proposed running aboard the ship. The reaction on board was mixed with some angry with the decision while others accepted the idea. I wondered how they would do it as there was no deck that went completely around the ship. The bow of the ship had a large crane and some of the Zodiacs were stored there. Two U-shaped decks wrapped around the stern, a narrow enclosed lower deck and a wider shorter exposed deck above. To make a runnable course, we would cut through the interior of the ship at the open end of the U's. Jim Starkovich recruited me to help

him measure the decks. We used a piece of cord which measured 10 meters long and we got a reasonable, but not certified measurement.

...A crew member on the ship measured out a ten meter piece of cord for the measurement. I don't know how accurately he measured it. We then stretched it out on deck and the person in back would move up to the front person position and we would repeat the process. At the turns we just laid the rope in a curve about ten inches from the corner.

I verified our outdoor deck course by pacing it off in my one yard per stride mode, and my roommate used the toe to heel foot by foot method since his shoe is right at 12 inches long. We both measured to the course to be within a couple of feet.

...After supper that evening, the marathon was discussed. A 5:30 AM start was proposed. They also asked how many would rather start at 10 AM. With only five raising their hands, that time was dropped. The plan was for the competitive runners to use the upper, wider deck, with the others using the lower, enclosed deck. When a count was made and 50 some odd wanted to run the upper deck, I suggested another count of 10 AM runners. This time we had 12 volunteers, easing the crowding at the 5:30 run. I talked to Steven Kilburn, my Buenos Aires roommate, and suggested that he run the second time slot with me for the less crowded conditions. We later both checked the upper deck measurement by different methods and found the 100 meter length to be pretty accurate.

The next morning found us pulling into Neko Harbor as the first group was pounding out their laps. The 10 o'clock runners got priority on the first boats ashore, so we could visit the continent proper before our run. I took this opportunity and was on the first Zodiac. After a short look around, I went back to the ship to get ready to run. Even at that, it was two minutes past ten when I got on deck to run. Not a problem, however, as they were running late. Actually, the 5:30 race did not start till about 6:15 and we were at least 30 minutes late in starting.

The tail end of the first group were still running as we lined up to start. It was crowded, especially during the short trip across the inside of the ship. There was a six inch threshold at each door, and most of the first group still on the course walked this part. Steven and I were setting the pace. My strategy was to run hard toward the bow if there was a clear space to get to before going inside, otherwise to run my pace and fall into line at the door. There had been complaints of shoving during the half marathon, but Steven and I were able to get around without contact during our race. Steven seemed content to follow me around most times, but occasionally he would pass, and shortly he would be close behind again. He did take a potty break that allowed me to make up some of those laps.

...At an hour I had asked Jim for a lap count, and found I had done 122 laps the first 63 minutes. It was not a super time for 12.2K, but not bad for this course. Not long afterward we changed directions. I was about a third of the way around when the change signal came and I continued to the end of my lap before reversing. The rest had just turned where they were I guess, as everyone kept telling me to go the other way as I finished my lap. The other direction caused me to notice my bad knee in short order and that was the end of my original pace. Steven kept it up, however, and finished with the best time of the trip, 3:34. Steven and the fastest woman, Janet Green, are both from Canada.

My lap times had slowed, and runners that I had been passing began to lap me. I was passed by one lady and I found her pace to be encouraging for me, and I ran with her for most of the rest of the race. Near the end, I heard them call out one mile to go for two of the fellows that had been lapping me. I was still a short distance ahead of them, so I speeded up enough to keep them from passing me again. With a lap and a half to go, I picked up my watch to get my finish time. As I started my last lap, I decided to get a one lap split and clicked the watch. Since I was timing myself, naturally I picked up the pace and had a 30 second 100 meters, about the pace of my first hour. My marathon time was 4:21, a personal worst by 42 minutes. Later I would find it still placed me ahead of all those 50 and over. It had been decided not to give awards due to the different times, courses and conditions.

...It was a rewarding trip. Antarctica is a wonderful wilderness area with fascinating wildlife and beautiful terrain. The tour and airfare cost was about \$4400 this year. Annual tours are planned, but fill up early. I had checked on space for 2002 in January and found four spaces left. However, there had been two cancellations for this year and I was able to use one of those.

YEAR 2000 MEASUREMENT ACTIVITY

This summary is based on the course list as it existed on March 1, 2001. It was assumed that all of the year 2000 courses had been received, and indeed none have been received since then. Here is how we did last year:

Most active certifier: Tom McBrayer - 104 courses certified (140 in 1999)
Most active measurer: Paul Hess, with 40 (20 in 1999)
Most active state: Texas, with 110 courses certified (129 in 1999)
Measurers active in 2000: 272 (313 in 1999)
State with most active measurers: Texas, with 19 (19 in 1999)
Courses certified in 2000: 1101 (1182 in 1999)

STATUS OF CERTIFIED COURSES AS OF MARCH 1, 2001

Active courses (including renewed courses)	10146
Courses renewed after 10 year expiration	196
Total courses	19927

LENGTHS OF COURSES CERTIFIED IN 2000

Length	Number	Percent
5 km	564	51.2
10 km	147	13.4
Mar	66	6.0
Cal	57	5.2
8 km	40	3.6
Hmar	40	3.6
5 mi	34	3.1
4 mi	29	2.6
1 mi	19	1.7
10 mi	16	1.5
15 km	16	1.5
Other	73	6.6
Totals	1101	100.0

PERFORMANCE OF USATF MEASURERS SINCE 1982

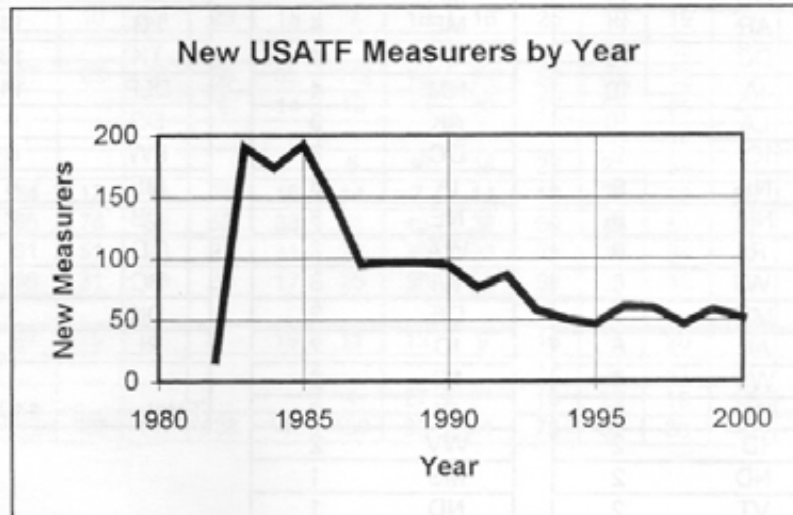
Based on the USATF certified course list as it existed on March 1, 2001

Top Measurers Since 1982	
Measurer	Courses
Lafarlette	651
Nicoll	541
Linnerud	537
Scardera	514
Thurston	418
Brannen	402
White	391
Hinde	364
McBrayer	349
Courtney	305
Hubbard	279
Beach	273
Recker	270
Riegel	255
Knoedel	251
Smith	220
Witkowski	210
Nelson	205
Knight	197
Sissala	191
Wight	182
Newman	175
Dewey	163
Wisser	153
Ensz	148
Connolly	147
Standish	145
Hickey	143
Berglund	129
Letson	127
Lucas	120
Belleville	116
Melanson	116
Hronjak	108
Grass	106
Katz	105
Pierce	105
GuidoBros	103
LeBlanc	102
Ferguson	100

Courses Measured by Other Measurers	
Courses Measured	Number of Measurers
50 to 99	37
20 to 49	84
10 to 19	134
5 to 9	195
2 to 5	612
1 only	652

Note: These listings are based on sorted surnames only, thus some inaccuracy exists.

New Measurers by Year	
Year	New Measurers
1982	17
1983	190
1984	173
1985	192
1986	149
1987	94
1988	96
1989	96
1990	94
1991	76
1992	86
1993	57
1994	50
1995	46
1996	61
1997	59
1998	46
1999	58
2000	51



2000 US CERTIFICATION STATISTICS

Courses Certified in State in 2000	
TX	110
IL	78
NC	71
CA	68
FL	65
NY	56
NJ	44
OH	38
MI	37
OK	34
SC	34
CT	33
KS	29
AL	27
MA	27
VA	27
MD	26
GA	25
NH	22
CO	19
MO	19
MN	18
PA	18
TN	18
WA	16
IN	15
OR	14
AR	11
DC	10
IA	10
LA	10
KY	9
NE	9
NM	9
RI	9
WI	8
ME	7
AK	6
WV	4
DE	3
ID	2
ND	2
VT	2
MS	1
NV	1
Total	1101

Measurers Active in State in 2000	
TX	19
FL	16
NY	16
NC	14
CA	12
GA	12
IL	10
KS	10
TN	9
MO	8
VA	8
IN	7
OH	7
OR	7
PA	7
SC	7
AL	6
CT	6
NH	6
NJ	6
OK	6
AR	5
CO	5
KY	5
LA	5
MD	5
MA	4
ME	4
MN	4
NM	4
AK	3
DC	3
IA	3
NE	3
WA	3
WI	3
DE	2
ID	2
MI	2
RI	2
WV	2
MS	1
ND	1
NV	1
VT	1
Total	272

Courses Certified by Certifiers in 2000	
ETM	104
JW	85
PH	72
DL	64
RS	54
AM	53
BG	50
GAN	48
PR	45
RT	39
SH	37
RN	36
BB	34
BS	34
DR	32
WN	31
JS	27
WC	25
RH	24
JD	22
MW	21
DP	19
RR	18
KU	17
MR	16
WB	16
JF	14
LB	14
TK	13
DLP	11
DS	9
FW	6
MF	4
DB	2
TD	2
BC	1
DK	1
RL	1
Total	1101

Measurers with 10 or More	
Hess	40
Hinde	37
Scardera	33
Thurston	24
Lafarlette	23
Rhodes	23
Hronjak	22
Hubbard	22
Nelson	22
Sissala	21
Witkowski	21
McBrayer	18
Melanson	17
Beach	16
White	16
Wight	16
Dewey	15
Nicoll	15
Ferguson	14
Gerweck	14
Polansky	14
Recker	14
Knight	13
Knoedel	13
Standish	13
Gilmer	12
Joline	12
Poppers	12
Riegel	12
Ashby	11
Cotner	11
Newman	11
Vaitones	11
Ward	11
Belleville	10
Cornwell	10
Total	619

This column contains surnames only. Note that several measurers may share the same surname.

This data was taken from the course list as it existed on March 1, 2001.

NUMBER OF CERTIFIED COURSES BY CERTIFIER AND YEAR

This data was taken from the course list as it existed on March 1, 2001.

Only those certifiers active in 2000 are shown in this list.

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Total	
AM								28	31	50	35	45	41	40	35	54	36	71	52	518	
AM																				1	1
BB		35	72	81	73	66	60	55	52	74	79	49	56	60	35	52	39	33	34	1005	
BC							1	1	3	2	2	4	1	3	3	2	4	6	1	33	
BG				14	37	22	31	31	28	36	38	37	50	48	49	33	71	59	50	634	
BS					19	43	34	31	51	27	43	27	36	32	41	27	26	30	34	501	
DB					6	50	71	38	39	45	43	41	39	31	26	43	3	3	2	480	
DK		1	10	7	2	3		2					21		21	19	7	3	1	97	
DL						23	18	16		41	77	68	51	53	66	53	72	53	66	708	
DL																				13	13
DLP							4	8	12	4	5	9	10	5	3	9	13	17	11	110	
DP							10	23	27	35	36	29	29	14	10	11	12	20	19	275	
DR		1	10	15	20	19	19	29	17	19	19	21	20	18	17	42	24	26	32	368	
DS													2	1	3	3	2	2	9	22	
ETM				10	26	36	65	71	87	71	87	103	101	112	131	115	143	140	104	1402	
FW						2	4	5	5	9	9	1	7	2	1	5	10	1	6	67	
GAN											15	31	24	25	16	42	48	42	48	291	
JD					6	11	6	26	25	28	21	16	13	17	20	28	25	19	22	283	
JF																				14	14
JS								5	14	6	19	15	19	34	22	26	30	28	27	245	
JW						41	50	67	65	72	69	70	82	79	64	80	66	85	85	890	
KU								1	5	15	11	14	7	4	7	8	8	15	17	112	
LB							3	13	15	12	9	11	8	14	13	6	15	16	14	149	
MF									11	7	10	7	8	6	8	10	8	6	9	94	
MR					1	19	20	25	18	16	17	18	15	16	19	7	11	19	16	237	
MW							10	21	23	15	7	18	16	25	19	19	21	29	21	244	
PH															42	65	41	46	72	266	
PR	1	66	110	154	143	97	85	58	66	62	112	75	51	52	62	52	59	53	45	1403	
RH									4	14	10	33	22	27	25	25	48	23	24	255	
RL	4	48	37	61	6	1									7	16	7	5	1	193	
RN											5	36	18	22	21	39	38	36	36	251	
RR		2	9	27	46	34	12	18	25	16	14	7	14	18	20	32	26	17	18	355	
RS		2	24	48	51	55	76	68	52	83	61	43	38	60	43	61	52	74	54	945	
RT		9	41	66	55	61	51	23	22	31	22	30	23	42	39	34	39	28	39	655	
SH					22	36	31	19	33	17	25	39	32	58	37	33	20	31	37	470	
TD	1	24	36	52	33												3			151	
TK		11	33	32	43	37	29	8	7	19	11	13	9	15	11	20	18	16	13	345	
WB														12	39	41	27	31	16	166	
WC										4	27	21	15	25	18	17	22	25	174		
WN		4	32	125	124	112	106	117	138	148	139	93	81	75	67	36	49	41	31	1518	

NUMBER OF CERTIFIED COURSES BY STATE AND YEAR

This data was taken from the course list as it existed on March 1, 2001.

	1979	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Total
AK		1				1	4	4	5	5	9	9	1	7	2	1	5	10	3	6	73
AL		2	14	8	17	12	11	5	26	27	39	25	28	17	20	24	37	31	25	27	395
AR			4	5	9	4	4	8	8	13	4	5	9	10	5	3	10	13	17	11	142
AZ			13	14	23	20	20	7	10	10	16	9	6	3	8	12	9	6	15		201
CA	1	4	68	103	146	130	94	133	129	88	139	103	87	81	112	76	103	75	95	68	1835
CO			29	17	15	30	14	20	23	26	35	36	29	29	14	10	11	12	20	19	389
CT			1	10	17	23	19	21	31	20	20	19	21	22	20	18	43	24	27	33	389
DC			3	23	25	17	9	11	4	9	7	6	16	11	19	17	11	21	21	10	240
DE				12	25	18	18	13	13	23	23	18	10	11	4	11	11	8	8	3	229
FL			17	21	60	52	71	70	63	72	84	74	56	59	75	54	75	54	67	65	1089
GA			7	20	50	41	28	32	29	30	35	37	30	24	15	31	18	17	22	25	491
HI			7	6	9	9	9	6	1	3		5		3	3		9	5			75
IA		1	7	5	12	4	16	5	21	11	14	8	11	10	11	13	13	8	13	10	193
ID			1	1	4		1		1	1	2			1	2				1	2	17
IL			6	17	11	48	52	45	50	68	70	75	72	69	82	79	64	83	67	78	1036
IN			11	23	36	21	17	8	8	15	10	4	16	16	16	12	25	21	23	15	297
KS			7	6	12	31	14	21	20	24	23	29	30	33	23	40	24	49	40	29	455
KY			1	9	19	13	7	16	6	15	7	12	7	1	4	4	11	6	3	9	150
LA			2	2	11	2		1	5	5	2	6	6	4	8	9	4	7	11	10	95
MA		2	4	4	17	29	22	17	34	36	36	26	37	17	21	19	33	35	30	27	446
MD			4	8	16	17	28	14	7	17	5	17	14	19	21	19	20	19	14	26	285
ME			4	3	26	15	6	9	12	11	17	26	17	16	11	7	9	12	7	7	215
MI			21	27	37	22	36	31	19	33	17	25	40	37	58	37	33	24	31	37	565
MN			5	11	27	46	32	12	18	25	15	14	7	14	17	20	33	26	17	18	357
MO			13	14	10	6	8	10	11	4	14	9	7	17	25	9	9	23	18	19	226
MS			1	3	18	6		2	7	2	1	3	5	1		6	1	5		1	62
MT			1	8	5	8	1	4	1	1	3	7	10		3			2			54
NC		1	16	41	88	70	72	56	52	61	57	58	34	25	27	42	64	44	47	71	926
ND			1	3		2	1			1	2									2	12
NE			4	22	20	25	17	3	5		6	7	7	1	1	5	3	3	9	9	147
NH			11	11	21	17	16	9	11	12	12	21	34	13	26	28	15	33	25	22	337
NJ		2	15	13	20	38	46	51	33	35	39	50	62	56	48	36	67	41	35	44	731
NM			1		3	3	5	3	11	11	15	4	4	4	4	4	8	2	4	9	95
NV				6	4	5		4	1	4	2	2	4	1	3	3	2	4	7	1	53
NY		3	28	60	57	48	44	41	45	41	65	43	62	76	52	70	79	44	76	56	990
OH		1	43	51	46	52	56	64	64	62	60	91	69	52	53	55	32	48	53	38	990
OK			34	69	72	65	51	54	50	51	74	78	47	56	60	34	50	39	34	34	952
OR			23	32	32	14	11	11	9	12	13	8	11	8	12	13	6	14	14	14	257
PA		1	23	24	28	29	38	57	50	48	34	26	50	26	32	44	41	28	33	18	630
RI			2	1	4	5	1	2	9	1	5	4	10	6	5	5	10	5	9	9	93
SC				15	32	41	52	37	35	51	25	36	22	29	29	42	27	23	29	34	559
SD			1	6	6	2			4	1	1	1	2			1	2	1	1		29
TN			3	10	13	10	16	19	9	14	26	23	18	15	21	14	15	38	17	18	299
TX			10	22	37	97	105	94	71	83	70	85	101	98	105	124	111	136	129	110	1588
UT				3	6	6	14	11	6	15	4	10	10	6	7		8	3	13		122
VA		1	12	17	21	23	26	24	19	14	26	15	17	12	31	24	24	26	24	27	383
VT				1	5	3	5	1	4	3	7	8	4	5	1	4	8	1	6	2	68
WA		1	25	37	53	34	18	20	28	20	14	18	18	15	17	19	7	15	20	16	395
WI			7		13	22	20	17	4	14	12	5	6	16	11	15	14	21		8	205
WV			8	4	7	2	4	3	3		4	3	1	1	4	2	5	3	4	4	62
WY				1				2													3
Total	1	20	518	829	1245	1238	1159	1108	1085	1148	1220	1203	1165	1053	1148	1115	1219	1168	1184	1101	19927

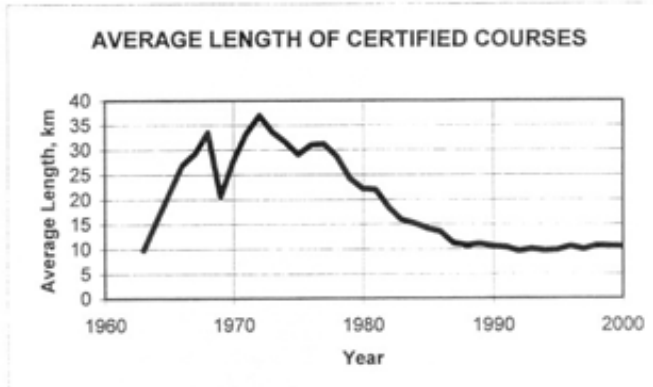
US CERTIFIED COURSES BY YEAR

Year	Courses
1963	2
1965	25
1966	31
1967	24
1968	20
1969	12
1970	23
1971	31
1972	34
1973	60
1974	62
1975	59
1976	58
1977	52
1978	202
1979	334
1980	400
1981	464
1982	521
1983	633
1984	829
1985	1245
1986	1238
1987	1159
1988	1108
1989	1085
1990	1148
1991	1220
1992	1203
1993	1165
1994	1053
1995	1148
1996	1115
1997	1219
1998	1168
1999	1184
2000	1101



In these graphs, the data was taken from the historical list generated by Malcolm Heyworth, and combined with data from the modern list. Malcolm's data was used from 1963-1983, while 1984-2000 used the modern list

All courses certified before 1982-1984 which did not contain the 1.001 short course prevention factor were decertified, and the currently-used listing was begun.



Year	Avg km
1963	9.9
1965	21.4
1966	26.9
1967	29.3
1968	33.5
1969	20.7
1970	27.7
1971	33.3
1972	37.0
1973	33.6
1974	31.6
1975	29.1
1976	31.0
1977	31.2
1978	28.6
1979	24.2
1980	22.2
1981	22.0
1982	18.4
1983	15.9
1984	15.2
1985	14.2
1986	13.4
1987	11.1
1988	10.7
1989	11.0
1990	10.6
1991	10.3
1992	9.5
1993	10.0
1994	9.6
1995	9.8
1996	10.5
1997	9.9
1998	10.7
1999	10.6
2000	10.5

Sri Chinmoy Multidays: Corbitt Astounds, Others Excel

Exerpts from the article by Sahishnu Szczesiel for
Ultramarathon World
<http://fox.nstn.ca/~dblaike/index.html>

The fifth annual Sri Chinmoy Ten Day Race started on April 26th, 2000, when 14 runners took off from the starting line at the 6:00pm dinner bell at Wards Island Park, across the river from the teeming metropolis that is New York City. It was a cool spring and the wind had teeth to it as the runners made their way around the asphalt lollypop course. They would be followed four days later by 29 other distance athletes when the companion Six Day Race began. The field was truly international, as 20 countries were represented. The one mile loop was flat and scenic, as the park setting and the waterways nearby offered changing and unusual vistas of the city that never sleeps.

On April 30, the Six day event began. The biggest surprise would be the participation of the Hall of Famer, running pioneer, the father of long distance running in this country- 81 year old Ted Corbitt. Ted started his first multiday, intent on walking up to fifty miles a day. In the prime of his career back in the 60's and 70's, Ted would probably have run this race if it had existed then. Ted was never afraid to test his limits- he used his body and spirit as a laboratory, trying to discover his physical capabilities for extreme endurance. Race after race he entered. But this race was 25 years removed from those prodigious training weeks and months of competitions. Ted had endured severe asthma attacks that curtailed his competitive career in the mid 1970's. Recently with the advice of a few enlightened doctors, he gradually overcame that affliction. He began to walk long distances last spring and summer, hopeful of toeing the line for the race that was only a few miles away from his home in the Bronx. He told us last spring that he had bought a camping tent for the race, so he might as well train for the Six Day so that he could put the tent to good use. Ted had in recent years walked in a 24 hour, 100 mile, and 80km events dedicated to his memorable achievements, which are numerous, and was even seen watching the 1000 mile racers and 3100 mile distance experts negotiate their adventures. He was again a pioneer- no one over 80 had ever finished a six-day.

Ted walked the first mile in 15:40 and had his effort mask on already. He was serious about doing well.

Ted reached 55 miles before the first day ended and seemed satisfied with his results. After a short nap, he was back on the road, still intent on completing the race.

As the second day ended.....Ted turned in another 50 mile day, giving him 105 miles. His next goal was 150 miles for three days- the recommended standard for people to stay in the race. People who were a lot younger than Ted. Still he continued on, stopping once for a blister treatment in

medical, but otherwise intact and injury free.

Ted walked most of the night after an early evening nap, then plodded on needing 10 miles in the last five hours to make 150 by 6:00 PM on Wednesday. Make it he did, establishing a new three day mark for over 80 folks. His 150 miles was a great achievement, but the effort had tired him out considerably. He was leaning quite a bit forward due to a muscle imbalance, but otherwise felt okay. Ted didn't think he could reach his goal of 301 miles, but he was happy and grateful.

I walked a half a lap with him to gauge his condition, and we ended up talking about the 1952 Olympic Marathon, and later how he had wanted to run across America after hearing about Kiwi Bruce Tulloh's record setting adventure in 1973. Ted was firm in believing he could cross in 42 days or so. He also had decided to taper down and rest more often so that he could finish the whole six days.

With less than three days to go, the runners prepared for the final push. With rain nowhere in sight and the temperature moving into the low 80's, conditions would be good for a push to the end. Ted walked more slowly and took more frequent breaks. He added 31 miles to his total for four days- 181 miles.

Not making his goal bothered Ted a lot, but he had already passed one of the runners, and was looking forward to stopping completely on Saturday. His forward lean was more pronounced, but was a product of tired or weak obliques and psoas muscles near the hip. His chiropractor friend worked on him a lot for two evenings, and Ted regained a little better posture for the last day push. His fifth day total of 208 miles was still excellent, and with warmer air settling into the area, it was time for one last effort.

Like the last hour of a 24-hour race, the last day of a multiday is usually a time to let everything go. Run until you drop. Reach deep inside for that last bit of energy, and pray the end comes soon. As the last sunrise painted the course in reddish-gold hues, the runners picked up their intensity one last time. Nobuaki used his dynamic strength to run 81 miles on the last day, shaving David Luljakis lead from 48 to 21 miles, but David cruised in for his second six -day victory in the last three years with 502 miles. Dipali Cunningham also hammered on the last day and finished with 80+ miles for a total of 456+ miles, and her third victory in three tries for the ladies. Elvira Janosi held on for the win in the 10 Day with 550 miles, her personal best. Rimias Jakelaitis, fighting a flu-like attack for days, set a new course record for 10 days for the men with 745 miles. And to great applause, Ted Corbitt walked 32 miles on the sixth day for a 240 mile total, and a walk into immortality.

PUZZLE OF THE MONTH

This puzzle was sent to me by Art Smith:

"The hat problem goes like this:

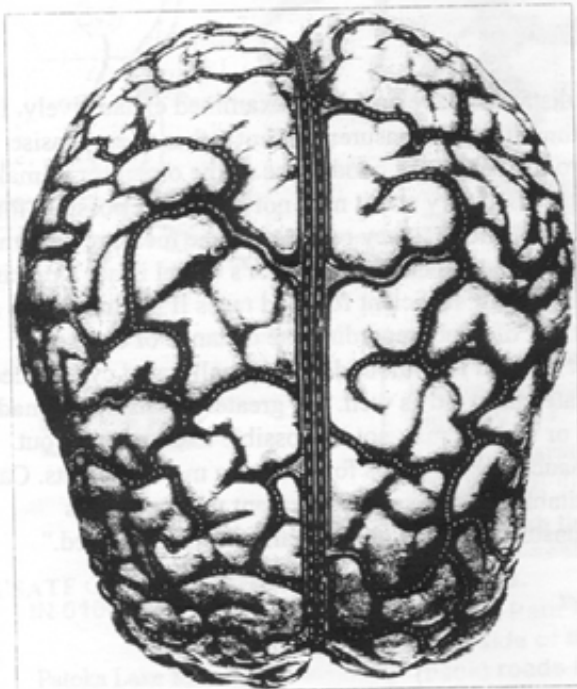
Three players enter a room and a red or blue hat is placed on each person's head. The color of each hat is determined by a coin toss, with the outcome of one coin toss having no effect on the others. Each person can see the other players' hats but not his own.

No communication of any sort is allowed, except for an initial strategy session before the game begins. Once they have had a chance to look at the other hats, the players must simultaneously guess the color of their own hats or pass. The group shares a hypothetical \$3 million prize if at least one player guesses correctly and no players guess incorrectly."

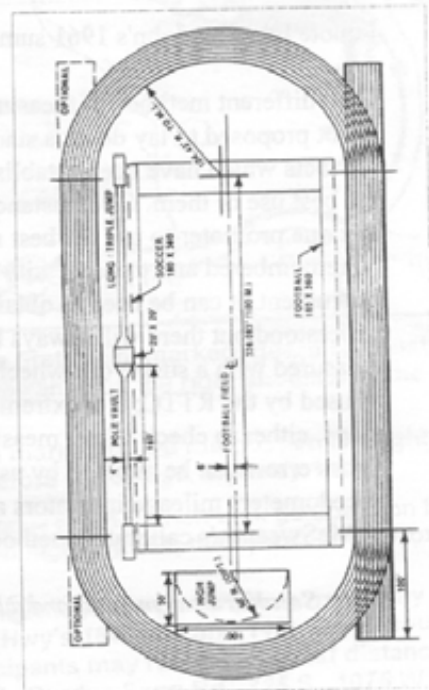
I immediately responded with a solution that I thought would guarantee a 50 percent chance of winning the money. However, I received this message in return to my solution:

"So it would seem. However, there is a strategy for a 75% win with 3 people. Reading about the hat puzzle, it seems (believe it or not) with 15 people there is a strategy that will win 90% of the time."

I can't figure it out. Readers may do better. Please send answers directly to Pete Riegel, and don't spoil it by going to MNForum. We can wait for that after we see who is wise, and otherwise. *Pete*



The measurer's brain shown above is a scientific discovery by Jean-Francois Delasalle.



Interested in track construction? Check out: <http://www.usctba.com>

JOHN JEWELL - The developer of modern course measurement in England

Today I received MN and was pleased to see my little article on the historical contribution of John Jewell to our craft. Sincere thanks go to Pete Riegel who inherited John's 1961 paper from Ted Corbitt, scanned it and sent it to me, since he thought this bit of history was appropriate for a UK web site.

A few weeks ago I sought permission from John to publish this seminal work on comparing measurement methods. John is now 89 and although he remembers the events well, his speech can prove difficult to follow. He was very ready to give permission for this publication. His wife Joan had spotted spelling errors in this work and asked me to correct them. This was a task she had done from 1962 when she and John married and he became editor of that excellent publication the RRC newsletter. I have run the spell check over it, but anyone noticing errors please contact me.

John said that he had worked for two years on the measurement system and of course it was he who first translated the British cyclists' calibrated bicycle method to road running courses. He also mentioned the subsequent work to get the IAAF to accept the calibrated bicycle method as standard.

John got to the heart of the method. The last 40 years have been minor tinkering!

John's paper is on my website at <http://coursemeasurement.org.uk>

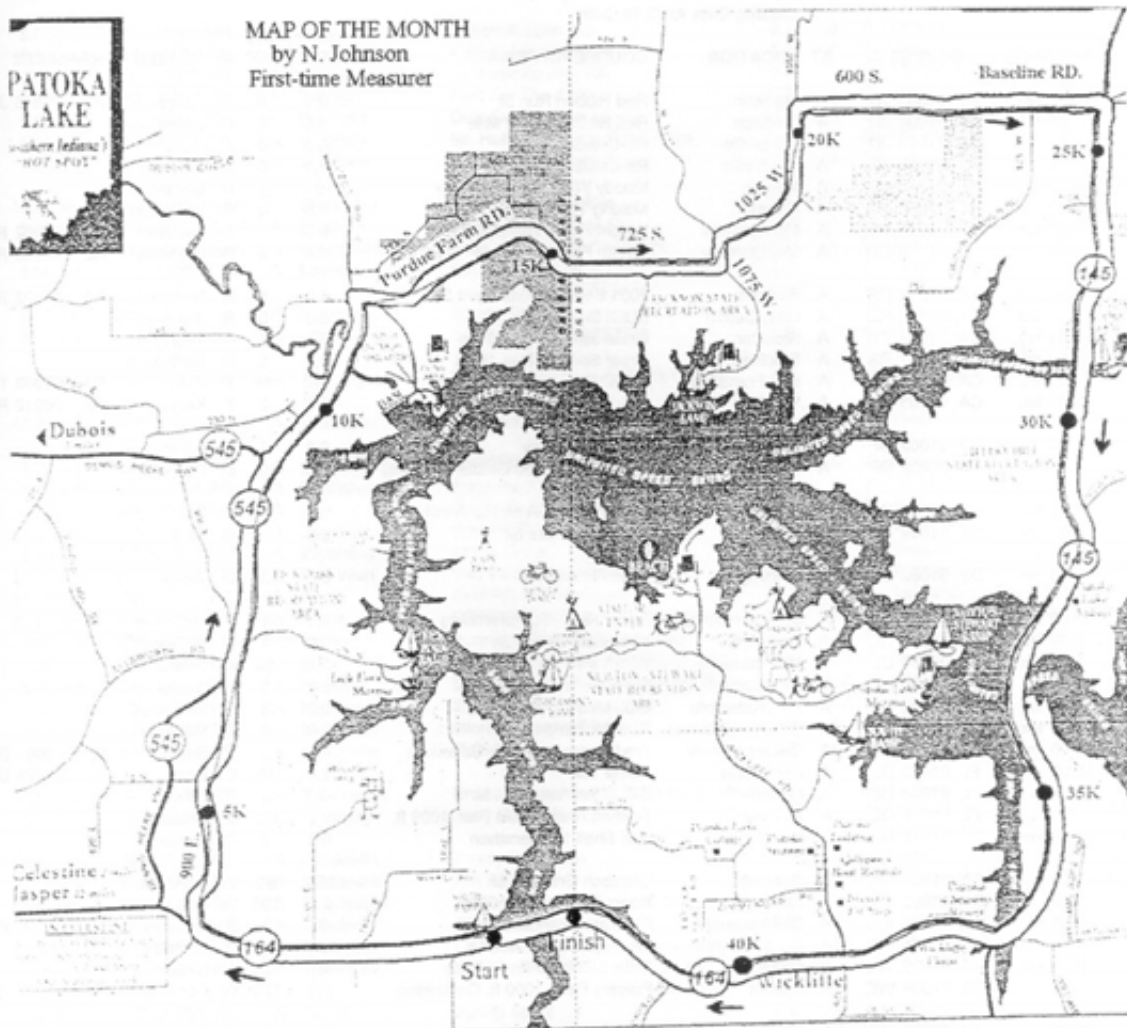
I quote here just John's 1961 summary:

"The different methods of measuring road distances have now been examined exhaustively. It is not proposed to lay down a standard method of road measurement but rather to emphasise the facts which have been established and to leave it to the good sense of the organiser to make the best use of them. Circumstances of road events vary and it may not always be possible for any one promoter to use the best method. Firstly the accuracy required of the measurement must be remembered and the necessity to check measurements. The surveyor's wheel is not a precision instrument, it can be used to obtain an accuracy just sufficient for road races if its limitations are understood but there will always be an element of doubt regarding the distance of courses measured with a surveyor's wheel. The best method is without doubt the calibrated cycle wheel as used by the RTTC; it is extremely accurate and rapid as well. Far greater use might be made of maps, either to check wheel measurements or when it may not be possible to carry these out. Gross errors can be avoided by use of Ordnance Survey maps for checking measurements. Car speedometers mileage indicators are not suitable for course measurement unless used as in McSweeney's calibrated method. Other unsuitable methods have also been mentioned."

Mike Sandford m.sandford@lineone.net



MAP OF THE MONTH
by N. Johnson
First-time Measurer



USATF Certified Course
IN 01003 MW

Patoka Lake Marathon

Start – Parallel with the first main (marked) guard rail post direct before the boat ramp entrance on the right shoulder of the road, highway 164.

Finish – Parallel with a marked guard rail post on the right shoulder of the road before the bridge, highway 164

Start/Finish line location – From French Lick go south on highway 145, turn west (right) on highway 164, then proceed approximately 2.5 miles.

Course Path – On all highways the participants must stay to the right side of the road (Hwy's 164, 545, and 145). On all county (back) roads the participants may run the shortest distance between curves (900 E., Purdue Farm Rd., 725 S., 1075 W., 1025 W., 600 S., Baseline Rd.

Cable-Mounted Counter Quest Continues

Laurent Lacroix

Last year I reported on the results of my experimentation with a cable-mounted counter. I was not entirely satisfied with the performance and set-up of the counter at the time, especially the reliance on electrical tape which I felt hindered the reliability of the device. Fortunately I had a lot of cold winter nights to reflect upon improvements to the counter.

I took the typical Canadian approach to any problem: throw money at it! I purchased some new Jones/Oerth Counters and promptly began taking them apart. I observed that the brass part of the wheel assembly, which fit so nicely into Paul Oerth's plastic connector, had a thicker unthreaded part that I could modify to fit into the cable housing. Off I dashed to Canadian Tire to purchase a tap and die set and went to work.

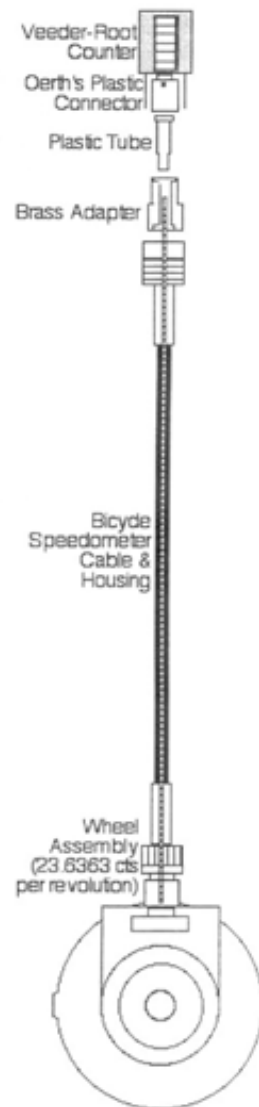
I had to wait until early April to test the counter. I did this by mounting a cable-mounted counter to the left side of the hub, and a Jones/Oerth Counter to the right side. Though the Jones/Oerth Counter's numbers would count down, the difference between start and finish counts should be identical for both. Unlike earlier tests, I simplified the comparison by taking the wheel assembly from a Jones/Oerth Counter so that both would read 23.6363 counts per revolution. Also unlike the first series of tests, I found that increasing the bend in the cable had no perceptible effect on the performance of the counter.

I was able to test the counter for four days before sending it to John McBean, who is using it to establish the km splits for the 2001 World Championship courses.

Paul Oerth has agreed to supply the parts I require for assembling more cable-mounted counters.

Comparison of Counts Between Cable-mounted Counter and Jones/Oerth Counter

Cable-mounted Counter			Jones/Oerth Counter			Comparison
Start	Finish	Difference	Start	Finish	Difference	
104450	145066.5	40616.5	166702.5	126086	40616.5	0
145066.5	151721	6654.5	126086	119431.5	6654.5	0
151721	171990	20269	119431.5	99162.5	20269	0
173250	198596	25346	97902.5	72556.5	25346	0
198596	201338.5	2742.5	72556.5	69814	2742.5	0
201338.5	215063.5	13725	69814	56090	13724	1
265317	344710	79393	105835.5	26442.5	79393	0
346025	423352	77327	125127.5	47800.5	77327	0



HISTORY OF MEASURING AND CERTIFICATION IN CANADA

Written in 1984 by Norm Patenaude and Gabriel Duguay

It all started with the 1972 Olympic Marathon Trials held in Montreal, where the course had been measured once with the instrument that was considered the best at the time: the surveyor's wheel. It was a surprise when no Canadians were able to qualify for the 1972 Olympics and the analysis of the kilometre time splits revealed the course to be too long by a kilometre. Norman Patenaude and Ron Wallingford had placed 4th and 11th respectively in these trials. During that year, Norman, the unofficial National Marathon Statistician, had been trying to compile an up-to-date official all-time marathon ranking list, but it soon became apparent that the statistical time results had no value without a list of accurately measured courses. Norman then organized the initial Canadian Course Measurement Program based mostly on international correspondence with Ted Corbitt (U.S.A.) and a little with John Jewell (Great Britain). With the help of Ron Wallingford, then Canadian Track and Field Association (C.T.F.A.) Technical Coordinator, Norman proposed a road course measurement policy to C.T.F.A. in 1972. In 1974, C.T.F.A. finally accepted in their rules that all marathons, national championships and international road and walking events be certified prior to competition.

Bob Lazenby measured the first Canadian certified course, which was the 1974 National Marathon Championships held in Kitchener, Ontario. Bob later joined efforts with Norman to form the first measurement sub-committee. At the 1975 Boston Marathon, on Norman's initiative, a group of people including Ted Corbitt and Gabriel Duguay met to form the first Canadian Road Runners Club and discuss road course measuring. Gabriel Duguay, a runner himself, was dissatisfied with the non-existent road measuring standards in Quebec in 1974, and had been encouraged by Michel Rose to establish national and international contacts to develop a program for the Quebec Road Runners Association.

In early 1976, Bob Lazenby suggested the evaluation of measuring reports, which had been done by Ted Corbitt up to now, be handled in Canada only. That summer, Norman and Ron Wallingford took care of the measurement of the Olympic Games Marathon, using the calibrated bicycle method. At the 1979 Commonwealth Games Trials, the first Canadian course measuring meeting was held at which Gabriel was nominated to replace retiring Bob Lazenby. In 1979, Gabriel translated all of Ted Corbitt's measuring documents (with Ted's authorization), and mailed them to the 77 Quebec road race directors, in 1980. In that year Norman started to attend the Run Canada meetings to update the measuring rules and have a section on course measurement included in the Run Canada Policy Handbook. Since then, Gabriel has given four provincial measuring clinics to form 30 measurers and three course certifiers in Quebec. He has also measured 125 courses, two of which were international level events certified by Ted Corbitt.

In January of 1984, Norman and Gabriel got together with C.T.F.A.'s Technical Director, Tom MacWilliam to propose a plan for the development of qualified measurers and certifiers in Canada. The purpose of the plan was to standardize the work done by all the existing measurers and certifiers, improve the measuring and reporting of important road race measurements, increase the number of people on the road course measurement and certification sub-committee, bring the Canadian Road Course Measurement Program level to an acceptable international level and encourage more people to measure and certify road race courses. Through Fitness and Amateur Sports funding, apart from the goodwill of the measurers and certifiers, a first practical national measuring and certification clinic will be held in Ottawa July 21-22. Each province has delegated a representative to form the basis of their measuring and certification program. Sharon Clayton, C.T.F.A.'s Special Projects Manager coordinated the efforts of all interested parties to make the clinic happen.

Afterword by John Craig and Laurent Lacroix:

The 1984 course measurement seminar was well attended and most areas of the country were represented. Much good will and hard work continued over the next few years, despite funding cutbacks. Measurement documents and manuals were written (we have been using them until recently), and in some places (Ontario) a good system of measurement and certification was established. Granted, things moved slowly and finally lost momentum somewhere along the line, but that was probably a result of inadequate funding and in dealing with other important issues. This was also given low priority at the CTFA and, with no one actually in charge of the issue, it was shuffled from desk to desk at times.

Many of those involved during that period of time are still around and the system survived, not in spite of them, but because of them. Things did not move quickly or with a purpose at times, but they did move.

Roger Burrows, in particular, was interested in measurement and certification and was in the Canadian Track and Field Offices for most of the period that followed. He kept the flame alive by conducting measurement seminars, checking documentation and measuring courses. Other experienced measurers in different cities across the country worked in isolation, measuring courses and taking on protégés.

1999 proved to be the beginning of a new chapter in Canadian course measurement and certification. Two pivotal events allowed an evolution in the process: Pete Riegel's measurement seminar in Vancouver, and the Pan Am Games in Winnipeg. These allowed measurers from different parts of the country to meet and discuss how things could be improved. Bernie Conway, Canada's only IAAF/AIMS Grade 'A' measurer at the time, was given Athletics Canada's blessing and full support in becoming the country's chief measurer and certifier. The new system is now funded solely through certification fees and independent of its governing body's funding priorities.

While the process may have lost its way for a period, it was not dormant for 15 years. Thanks to a few dedicated individuals in isolated pockets around the country, the dream of those that came before, a national measurement and certification system, is still alive.

Historical Course Measurement Information from the RRTC Website

<http://www.rrtc.net>

- Measurement of Montreal 1976 Olympic Marathon
- History of the Jones Course Measuring Device
- Ted Corbitt's 1964 Measurement Monograph (Adobe PDF* 110 kB)
- John Jewell's Pioneering 1961 Paper (on Mike Sandford's UK measurement site)
- Measurement in Canada from 1972 - 1984 (on Run Canada measurement site)

WHAT TO DO WITH AN "EXTRA" CALIBRATION?

Calibration Rides		
	Counts on 500 m	Constant cts/km
Calibration 1	5869.25	11750.24
Calibration 2	5862.25	11736.22
Calibration 3	5861.25	11734.22

Possible Constants for the Day	
	Constant cts/km
Average, 1 & 3 (both rides)	11742.23
Larger, 1 & 3 (both rides)	11750.24
Average, 1 & 2 (first ride)	11743.23
Larger, 1 & 2 (first ride)	11750.24
Average, 2 & 3 (second ride)	11735.22
Larger, 2 & 3 (second ride)	11736.22

Counts Obtained on Rides of the Course		
	First Ride	Second Ride
Counts	117512	117431

Distances Using Various Constants		
	First Ride, m	Second Ride, m
Using average, 1 & 3	10007.64	10000.74
Using larger, 1 & 3	10000.82	9993.92
Using average, 1 & 2	10006.79	
Using larger, 1 & 2	10000.82	
Using average, 2 & 3		10006.71
Using larger, 2 & 3		10005.86

A certifier called with an interesting question. A measurer had sent him data, but had thrown in an "extra" calibration between his two rides of the course, and the certifier was wondering how it might be handled.

The data may be seen above. The measurer used his first and second calibrations to determine the proper constant for his first ride. He used the second and third calibration to determine the proper constant for his second ride. He used the larger constant in all calculations.

The measurer concluded that no final adjustment was necessary.

The certifier, however, was troubled. If the middle calibration was ignored, and only the first and third calibrations were used, bracketing both measurements, then it appeared that 6.1 meters should be added to the course.

I gave the opinion that the middle calibration might be unusual in a 10 km measurement, but should be treated as valid. I thought the course was OK as it stood.

The difference between measurements, using the larger constant, came to 5.04 meters. If, however, the average was used, the two measurements differed by only 8 cm.

Certifiers should watch for this. We ask that 0.0008, or 8 m in 10 km, be the upper limit for disagreement between measurements. When a large calibration change occurs, use of the larger constant may produce a large disagreement. Before sending the measurer out to do it again, use the average constant to check for agreement.

Comments?

