



Pete Riegel and Max Coleby working on data at the Tower of London.

# MEASUREMENT NEWS

#24 — July, 1987

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## LONDON MARATHON MEASUREMENT

Your Editor was invited, as an AIMS measurer, to check out the course of the 1987 London Marathon and to ride the lead vehicle to see that the runners followed the measured path. During the course of this activity I got the chance to meet and talk with John Disley, Chris Brasher and others who are active in international race organization.

John Disley had established a tentative course which he believed to be very close to the right distance, and he gave me a map which made it easy to follow the course. Because of extensive roadworks in the West India Docks and the Isle of Dogs, some of the curbing in place during measurement and on race day consisted of large square timbers. Indeed, one short piece of road was unpaved (but firm) when we measured it and paved by the time the runners ran it. By the time you read this an exact reproduction of the course as run on race day would be extremely difficult. And as for the courses of yesteryear, they are lost in the mists of antiquity.

On the morning of May 3 Max Coleby and I calibrated our bikes on an (EDM established) 800 meter calibration course on The Mall, a traffic-free street that extends from Admiralty Arch to Buckingham Palace. I had to do some fast talking to stay out of trouble with a Park Policewoman who didn't appreciate me riding my bike against the traffic (which was unnecessary anyway since the cal course was laid out on both sides of the road - after being lectured I rode legally thereafter on calibrations). We then drove to the start and met the two police motorcyclists who were to be our protectors. John led the way on a small folding bike that turned out to have a leaky back tire. At each stop, while Max and I did our data writing John got busy with the pump. Because of the soft small tire John had a very difficult ride.

I asked Max to figure out where all the miles and 5k's should be, and then I followed him, stopping at (and checking) his marks. When we got to the Tower of London we encountered a stretch of about 400 meters of cobblestones (covered with carpet on race day), and were forbidden to bike through the Tower anyway. So we restarted on the other side of the Tower and finished up the ride.

The last few miles of measuring on The Mall were fun because the Guard was changing (or they were Trooping the Colors - I never got this quite clear) and the streets were lined with people. It didn't take long to realize it wasn't us they were watching. Later, after dinner, we steel-taped the cobblestones at the Tower.

While figuring up my numbers I discovered that I had made one of the most fatal of mistakes - I had surely transposed a number, and in the worst possible place. At my recorded count for the finish line! After doing a numerical examination of my measured distance and Max's, and a look at



whether Max could have transposed, and after going out and pacing off the distance, I came to the only reasonable value that the transposition could have. The transposition only came to my attention because Max and I differed by 10 meters in the interval from mile 26 to the finish - and this is one easy straight shot.

After we figured up the numbers we found that we needed to find another 50 meters, so next day I went out and checked out a place that John had discovered. Instead of taking the short way around a certain block on Narrow Street we took the long way, and got back the 50 meters we needed. I did not calibrate the bike this day, assuming that because of the solid tire and the short distance any errors would be inconsequential.

Agreement between Max and me was OK, the difference being 22 meters. Because of his sacrificial-goat position he was at a disadvantage.

For you figurers, here's our overall-ride data - Note - both Max and I were using bikes with a British solid tire that, as you can see, changed its calibration very little as the day went on. It's a dandy tire, but is, unfortunately, no longer being made.

	<u>Pete</u>	<u>Max</u>	
<u>Precal</u>	7431	7414	
The Mall	7432	7416	
800m	7431	7415	
6:20 AM - 44F	7431	7414.5	Note: complete data is available. Send SASE to Pete Riegel
<u>Postcal</u>	7426	7416	
Noon - 50F	7429	7416	
	7430.5	7416	
	7430.5	7416.5	
Counts on Course	387964	387401	

Added distance steel-taped at Tower: 388.95 meters = 389 meters

Distance added at Narrow Street to make up shortage: 52 meters

Distance added to start: 3 meters.

Astute figurers will find that we added only 21 meters as a short-course prevention factor, rather than the 42 we would add in the US, and which I would have added left only to my own devices. International standards are not yet fixed in concrete, and the 21 meters seemed to come close to satisfying the requirements.

Because the surveyor's certificate for the 800 meter cal course had not yet arrived by the day before the race, John helped me do a quick-and-dirty steel taping of the cal course, and we came up with 799.82 meters. This was close enough to 800 to convince me that the surveyor's EDM figure of 800 meters was the correct value to use.

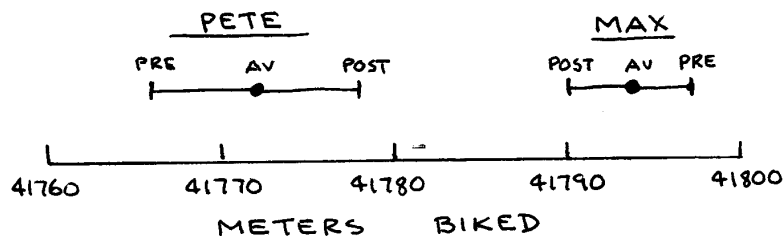
# LONDON MARATHON - 3 MAY 87 - PETE RIEGEL, MAX COLEBY

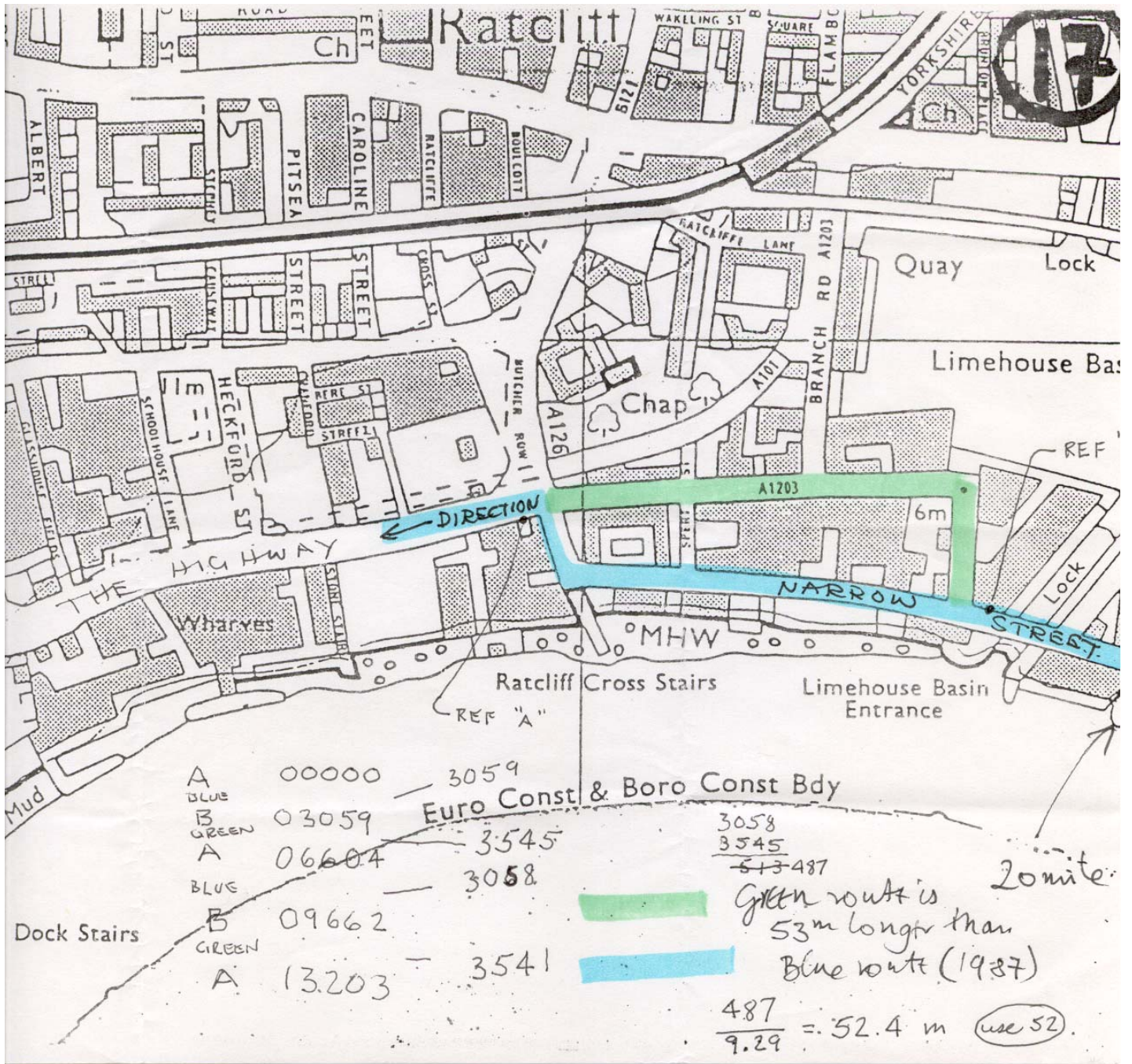
	<u>PETE</u>	<u>MAX</u>
PRECALIBRATION		
THE MALL 800m	7431	7414
6:20 AM 44°	7432 } 7431.25	7416 } 7414.875
	7431 } AV	7415 } AV
	7431 } 7430.125	7414.5 } 7415.5
		AV
POSTCALIBRATION		
NOON - 50°	7426 } 7429	7416 } 7416.125
	7429 } AV	7416 } AV
	7430.5 } 7430.5	7416 } 7416.5
		AV

<u>CONSTANTS</u>	PRE.	$\frac{7431.5}{800} = 9.28906$ c/m	9.26859	c/m
	POST.	9.28625 c/m	9.27016	c/m
	AVG.	9.28766 c/m	9.26938	c/m
		= 14947.0 c/mi	= 14917.6	c/mi

## MEASUREMENT OF COURSE

	<u>PETE</u>	<u>MAX</u>
BLUE START	5200	50330
REF (TOWER "A")	(3) 36079 > 330879	(3) 80728 > 330398
REF (TOWER "B")	(3) 42800 > 57085	(3) 87500 > 57003
FINISH	(3) 99885	(4) 44503
TOTAL COUNTS	387964	387401
AVG. DISTANCE	41772.0	41794
PRECAL DISTANCE	41766	41797
POSTCAL DISTANCE	41778	41790





## OVERALL ADJUSTMENTS

"OFFICIAL" BIKED DISTANCE	41772 m
TAPED AT TOWER	389
DISTANCE ADDED AT NARROW ST	<u>52</u>

SUB TOTAL

42213

DESIRED =  $42195 \times 1.0005 =$

42216

ADD 3 m to (BLUE)

ADD 5 m to (GREEN)

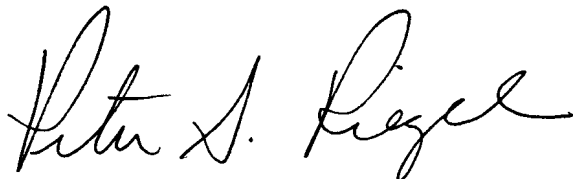
10 MAY 1987  
LONDON

TO WHOM IT MAY CONCERN :

I ATTEST THAT, DURING THE PERIOD FROM  
3 MAY TO 9 MAY, 1987, I DID EXAMINE AND  
MEASURE THE LENGTH OF THE COURSE OF  
THE 1987 MARS LONDON MARATHON.

A COURSE LENGTH OF 42216 METERS WAS  
OBTAINED DURING SAID MEASUREMENT.

ON 10 MAY 1987 I RODE IN THE LEAD  
VEHICLE AND OBSERVED THAT THE  
COMPETITORS FOLLOWED THE SAME COURSE  
THAT I EXAMINED AND MEASURED.



PETER S. RIEGEL  
AIMS MEASURER  
CHAIRMAN, ROAD RUNNING TECHNICAL COMMITTEE,  
THE ATHLETICS CONGRESS OF THE USA

3354 KIRKHAM ROAD  
COLUMBUS, OH 43221  
USA



Pete Riegel  
3354 Kirkham Road  
Columbus  
Ohio 43221  
UNITED STATES OF AMERICA

London Marathon (1985) Ltd  
PO Box 262  
Richmond  
Surrey  
TW10 5JB

Telephone: 01-948 7935

Date: 27 February 1987

Dear Pete,

The trans-Atlantic arguments seem to thrive on the geographical distance that we are apart and I am sure if we lived more cheek by jowl, half our misunderstandings would disappear and we'd all trust each other a lot better.

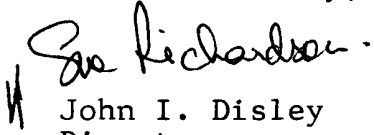
I am sure the time has come to try and have a face to face encounter with you and I am now officially inviting you personally to come to London and measure and witness the 1987 marathon. In order to comply with the AIMS criteria, it would be necessary for you to be available on Sunday 3 May. As always, an early start will be necessary but we will have police protection around the course. Then you could be our guest in London through to the following Sunday when you would ride in the lead car and ensure that the course that you certificated was the one that was run. You will, of course, be welcome to stay Sunday night as well unless you want to rush away.

We will, of course, meet your travel expenses and your accommodation and pay you a per diem allowance of £40.00 to cover your food.

I have talked this over with Chris Brasher and my other colleagues here, like Max Coleby, who will be accompanying you on the ride and may have, in fact, done a preliminary certification ride the previous month and we all agree that your presence would enhance the cause of road measurement.

Please let me know fairly soon if you can take this week off to join us.

Yours sincerely,

  
John I. Disley  
Director

(Dictated by Mr Disley but signed in his absence.)



THE ATHLETICS CONGRESS  
OF THE USA

Road Running Technical Committee  
Peter S. Riegel, Chairman

3354 Kirkham Road  
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March 6, 1987

John Disley CBE - PO Box 262 - Richmond, Surrey - ENGLAND TW10 5JB

Dear John,

I just called your office and was informed that you are off on a skiing holiday. In my mining days I lived in Colorado at 11000 feet and skied every weekend. Then I moved eastward, and the hills seemed so insubstantial that I've rarely done it since. The high mountains are a great tonic. I loved living up there among the peaks.

I have made reservations for my trip, as follows:

Arrive Heathrow May 2 at 8:45 AM on TWA flight 770

Leave Heathrow May 11 at 9:55 AM on TWA flight 709

Let me know a place I should go to upon arrival, and a phone number where you will be. Pick out a hotel that is handy for you. My tastes are simple.

The cost for the ticket is \$763. I have until April 10 to cancel these arrangements in case you wish to try to arrange a less expensive flight. They are the cheapest fares currently available to me, and I'm working on a TWA special that may come out to \$520, but may not. The \$763 is a solid price.

I am assuming that you do not expect me to fly first class or take the Concorde.

I also assume that my trip will consist of two periods of work which bracket some days of free time in between. I leave it to you to inform me what time I may consider my own between work stints. I should point out that I am not in a rush to get away from you. I genuinely enjoy meeting new people in this game, and I know I'll enjoy our time together. But I plan to take the intermediate time and get out of London and into some of the beautiful areas of Great Britain that I have only seen in pictures. Maybe do some walking. Get some air in my soul.

I plan to bring the front wheel from my bike. If you can come up with a bulletproof wheel for me I will not do this. I want to be absolutely sure that the ride is not spoiled by a flat tire. I fantasized about this in Rio and Sao Paulo, since I was using a borrowed bike. It would be insupportable to fly halfway around the world, spend a week of time, and have the whole thing thrown in the toilet by a simple puncture.

As for reimbursement I would like to have the cost of my airline tickets sent to me before I leave home. Then, upon completion of my travel I will send you an accounting for the remainder. This arrangement will keep me solvent and is, I think, fair. I expect that my accommodations outside London will be less expensive than those in town. Naturally I would not expect you to cover any of my transportation expenses incurred while I am between jobs, although I would expect the L40 per diem to apply regardless of my location.

If you wish to call me do it this way: Call at 7:00 to 7:30 AM New York time. I will be at my office number (above). Let the phone ring no more than three times and hang up if I don't answer. I am always at my desk at that time, except for the odd bathroom trip or coffee break. If I don't get it in three rings it means I'm not there at that moment. Just call back in 5 minutes.

It's indeed a pleasure to get a chance to do this, given my increasingly enfeebled condition. At 52 I have only three years left, according to Lennart, before my hands shake the bicycle so badly that I can't read the Jones counter through my trifocals. And the risk of breaking my hip too! (I assume you read Lennart's recommendation concerning age limits for measurers with the same degree of amusement as I did). Lennart does not run, as I recall. The idea that someone of our maturities might retain a vestige of vigor must be inconceivable to him. Oh well, I'm sure we can somehow dodder our way through the course. Perhaps I will invest in one of those tricycles that I see oldsters riding in some of our Florida and Arizona retirement communities. Or even fit my wheelchair with a Jones counter. I suppose I should show more respect for the idea. After all, a lot of people are done up by 55, but I think I, at least, have a bit more time than that, given ordinary good luck. Time will tell, I guess.

Best regards,

A handwritten signature in cursive script, appearing to read "Pete". The signature is written in black ink and is positioned below the typed text.



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Telephone: 01-948 7935

Date: 10 March 1987

Dear Pete,

I am delighted that you can join in the celebration of this year's Mars London Marathon. I am sure that you will enjoy the experience of cycling through the city of London at crack of dawn (probably in pouring rain although this should be a magnificent spring period!) and I trust that you will not disagree too much with my preliminary measurements which I intend to have freshly marked at every mile point and at 5 kilometre positions before you arrive.

Your itinerary is fine and I suggest you go ahead and do the best deal you can for your flights, bearing in mind that, although London Marathon is not penniless, we are a charity and are expected to be prudent with our piggy bank. If you can get the TWA special price of \$520 without having to sit in the cargo hold, that would be terrific, otherwise the \$763 price is acceptable. I will arrange for a dollar cheque to be sent to you as soon as you let me know which air fare you have achieved.

Your hotel during your stay will be the Tower Hotel whose front door is three metres from the course at the 22 mile mark and can be reached from Heathrow by taking the underground train as far as Hammersmith where you change from one side of the platform to the other and take a District Line train labelled Tower Hill or Upminster. It's the same line but some trains only go as far as Tower Hill, which is your destination. You come out of the Underground and the small sketch map will show you how you make the final 500 metres of your journey.

My plan is to measure the course from start line to finish on Sunday morning early. An officially surveyed (EDM) calibration course, 600 metres or further, will be available between our hotel and the start of the race. Although we have three starts for the marathon, it is my intention only to measure the Blue

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route where all the best men will line up and a 1200 metre spur which brings the best women into the Blue route. There is one section of the route over the cobblestones of the Tower of London Wharf which we intend to carpet for the day which I have had steel taped (400 metres exactly) by Allan Steinfeld and Co. but you might want to do this again during your stay just to check that you have not taken anything for granted. This we could do on Sunday afternoon or early evening.

Monday is a Public Holiday in London so the shops will be shut if you were thinking of spending the £40 a day and, as long as you're happy with the measurements, there is no reason why you shouldn't go away from London and get a breath of fresh air. We will add 9 x £40 converted to dollars for your per diem allowance to your dollar cheque for the air ticket.

We can give you some advice on where to go if you want to get out of London and, in fact, Chris Brasher and I have a cottage in the Lake District which might appeal to you although getting you there is not the easiest job by public transport.

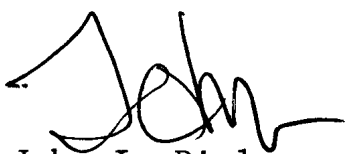
You can use my measuring bike which has a solid front wheel tyre (27" frame) but if you want to bring your own wheel, let me know the size if it isn't 27" and I will arrange a suitable bike for you.

As to your age and maturity, I think one reason that Lennart rides a good bike is that he is prematurely cautious and not inclined to fidgety movements. Incidentally, I'm at least 5 years older than you, have already got one artificial hip and yet still managed six days' downhill skiing in Mirabel last week without having my legs broken by a Frenchman! This, in itself, is quite a feat!

Rather than meet you at the airport, an occupation that is always fraught with problems, I suggest you telephone me when you reach the hotel on 979-1707 and I will then arrange to pick you up on Saturday afternoon and drive you around the course so that you can get your bearings.

Looking forward to meet you and best regards,

Yours sincerely,

A handwritten signature in black ink, appearing to read 'John I. Disley', with a stylized, cursive script.

John I. Disley  
Course Director

Enc.



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Telephone: 01-948 7935

Date: 31 March 1987

Dear Pete,

I trust that we are now clear about your transportation from Columbus to London and the dates, etc. and that you will be getting your cheque for the fare and per diem in good time.

My measuring bicycle has 27" wheels and I have a solid tyre if you wish to use one. The bike has three speeds but the London course has very few inclines so, unless the wind is against us, three gears are ample to do the job properly.

I will try and arrange for you to meet some of our British measurers while you're in town and will try not to have this interfere with any tourist plans that you devise between now and the London Marathon.

I have arranged Police protection (two motor cyclists) for early Sunday morning which should be sufficient for us to have a total run through from start to finish. However, we will need to steel tape to your satisfaction a section over the cobble stones at the Tower of London where, from experience, I have found that a bicycle wheel is a very unsatisfactory method of measuring. At the moment I believe that this section is 400 metres although some new kerbing may have altered this by a foot or so. We needn't do this on Sunday. In fact, if it's a fine afternoon, Sunday is a very bad day because of the masses of public walking about on this site.

The calibration course: I am hoping to have a new one surveyed with an EDM in The Mall which is Britain's premier ceremonial route and, incidentally, at the 25 mile point on the marathon course. However, I need the Queen's permission, or rather the Lord Chamberlain, to have the job done and to bang two nails into the surface of the road. Believe it or not, this might take at least two weeks to get through the Royal protocol process. However, that's my problem but I will ensure that we have some way of calibrating the bike by the time you arrive.

/Cont'd....

I've just read the letter to you from Dan Brannen who asks about the status of Jack Selby. The position with Jack is that, because of his age (he is in his late 60's), AIMS has only granted him a UK status for measuring. We just felt, after our seminar in Frankfurt two years ago, that we couldn't take responsibility for him in foreign traffic conditions where all these idiots drive on the right! So, Jack has not *Non UK* certified any marathons for AIMS but has done sterling work in the UK domestically and, as you will obviously note, with the ultra distance people.

I attach a map of the London Marathon course based on an ordnance survey map which I have shrunk to about 3 miles to the inch. I would hope to have larger scale versions of this map available for your perusal in a few weeks' time but, as you will see, the London route is convoluted and, just like nature, abhors straight lines. Both the start and finish can be varied by 20 or so metres although I would like to leave the finish more or less where it was last year and yo-yo about with the start.

Let me know if you have any problems. Looking forward to meeting you at the Tower Hotel on Saturday, 2 May.

Best wishes,

Yours sincerely,



John I. Disley  
Director

Enc.