

JIM HARVEY ENDURANCE SEMINAR NOTES

Yesterday I attended a seminar with Jim Harvey (coach of Irish record holder Mark Carroll and US Olympian Amy Rudolph amongst others) with Bud Baldaro (UK Endurance coaching guru- in particular for his work at Birmingham University and Tipton Harriers) chirping in from the sidelines. When you consider that Carroll's 3k PB (7:30) is faster than the British record and that he has clocked more sub 13:20 times than any British athlete- there is clearly something to be learned from Harvey. Carroll also boasts a 1500m time of 3:34, 5000m of 13:03 and marathon of 2:10 in his only attempt. There was a lot of good material covered which I've attempted to discuss below with substantial editing, corrections and alterations together with some of the sections contributed by David Chalfen (England Athletics Area Coach Mentor) who organised the evening. I've attempted to gather together Jim's historical and training based advice mostly based on his work with Mark Carroll and other athletes over the years in addition to his general training philosophies and view of current US versus UK distance running. In general it concerns senior athletes living as full time athletes whether as collegiate runners or full-time pros.

The first part of the presentation mostly centred around Jim's training philosophy and how his athletes progressed from the end of the season until they were ready to start racing at the summer and what struck me about his approach was it's simplicity. He would have his athletes running 95-105 miles a week (though mileage itself wasn't the target but rather the volume if that makes much sense- there was no chasing of specific mileage targets but there was a determined approach to fit as many miles in as appropriate and necessary if that makes sense and pushing the "outer envelope" of an athlete's aerobic capabilities). The event focus was for a 5k specialist on basis that this provides a great and relevant basis to move up to 10k and – adapted as required – to the marathon; and downwards it will deliver top results at 3k and 1500m.

In the early autumn there would be a two week break after the track, the first week of which was spent resting and the second week or which was rest or general low level jogging. This was then fairly rapidly ramped up with about 60 then about 70-75 miles in successive weeks and by the fifth week the ongoing max of 95-105 is achieved and maintained for roughly 12 weeks with 5 days around Christmas which ease off slightly. This is obviously in stark contrast to the "1 easy week every 4 weeks" pattern quite frequently proscribed.

A weekly schedule would look something like:

Monday: Distance double AM: 6 PM: 10-12 both steady
Tuesday: AM Easy PM Track session
Wednesday: Midweek long run - 12-15 miles steady
Thursday: Distance double but easier than Monday
Friday: AM Easy PM Track session

Saturday: Single run of around 75 minutes;10-12 miles easy
Sunday: Long run 18-22 miles max.

For many this is a Monday to Sunday cycle but needn't necessarily be. He stresses that the two hard workouts were on Days 2 and 5 to spread the intensity load and to make the weekly long run more than just a fatigued plod. He never has 3 hard workouts in a 7 day cycle.

There were never more than 2 sessions per week and the timing of the sessions was such that there was a healthy break between the two sessions and the long run in order to recover fully. This is perhaps slightly inaccurate as when later questioned about speed development and leg speed Jim revealed that his athletes quite regularly would go down to the track, sometimes twice a week and do 10 laps of striding the straights and jogging the bends or something like 10 x 150 in order to keep them ticking over. He mentioned Rudolph in particular benefited from regularly keeping in touch with her speed over the winter and bio-mechanically ran much smoother than otherwise.

This added up to a weekly schedule of around 95-115 miles generally.

The sessions were of 10k in volume pretty much year round from the Autumn right through till about 6 weeks before the track period which mentally must have been very tough. The sessions were long reps with staples being 6 x mile, 10 x k, 5 x 2k or one particular "Tergat" work-out was mentioned which was 3k, 2 x 2k, 3 x 1k which anecdotally I know Alan Storey has used in the past though at much faster paces as more of a peaking workout. Another session given which had some pace variation was 1k,2k,1k,2k,1k with the Ks at a pace roughly 3s per lap faster than the 2ks or alternating between 10k pace and 5k pace I believe. Later in the session Jim clarified that all of these sessions were run at 10k pace as opposed to 5k pace and off of relatively short recoveries. When there were shorter reps of less than 1000 they were run at 5k pace though and often there were shorter reps interspersed between the longer ones. One point I was hoping to get some further detail on was whether he worked at athletes target 10k paces, current 10k paces or 10k effort pace which with the number of miles in the legs, and the time of season could be substantially different though I suspect it might well be trivial. It was these sessions which helped give the athletes the aerobic base they needed to be strong in races which he felt was crucial. Every third or fourth work-out was a tempo run of about 5 to 8 miles at approx LT, either sustained constant pace or cutting back 10 secs per mile from about 5.15 pace and the usual heart rate run at was approximately 180 and about 85% of MHR.

The pace of the recovery and steady running was also brought up. He opined that far too many athletes run their steady/easy/recovery runs at a pace which is far too quick for them and that Carroll rarely ran under 6:15 minute miling for easy running and that it was often slower than that - doing quite a lot of his running with his wife Amy Rudolph (who is no slouch herself!) and over 7 minute

miling. Perhaps the phrase that best summed up his approach to the pace when queried about it was that as long as they were able to get the workouts in at the right pace it didn't really matter what pace their runs were and valiantly refused when attempted to be drawn into naming set values for heart-rates, paces or percentages. Very old school. Faster steady running was done about 5:40 pace or quicker. It was key to avoid the "grey area" which for athletes of Carroll's level is about 5:40-5:50 pace which is too fast for recovery but not sufficient for aerobic advancement. Jim's approach seemed to be that he had his athletes running the schedule he had set with each run having a purpose and that as long as the runs were done and the volume put in then the pace of those runs wasn't the greatest issue. The relevant paces – also combined to some degree with how the runner feels on the day – were guided by physiological tests at the beginning of the autumn period and then set against heart rate zones. Ongoing lactate tests not were also mentioned, so the heart rate monitor was a regular tool. What I would love to know is a more accurate breakdown of the paces which Carroll ran at over the course of the week even if they weren't set. Were the mornings runs recovery runs at 7+mm and the evening runs generally faster at the mid 6s.

An interesting anecdote was shared by Bud whilst discussing mileage about a GB international who was training at a Kenyan camp (this is a key difference and most Kenyan training is different). When he arrived being a bit cautious he asked the coach "how many miles will we be running this week" and he was told "70" - "Only 70" thought the athlete "I can cope with that" - so they headed out in the morning and ran for 60 minutes all very slowly. Then came back and had breakfast and chatted, told a few jokes etc. Then they went out towards the middle of the day (I'm thinking that'll be quite hot...) and ran incredibly fast. Then they took another long break before heading out for the evening run of 60 minutes (again very slow) - at the end of the week this athlete totted up the mileage in his journal and it added up to 150! He took it to the Kenyan coach and asked "I thought we were doing 70?! There's 150 miles here!" at which point the coach looked concerned and took hold of the journal. He studied it for a short while then took a marker pen and carefully put a thick line through every morning and evening run before turning to the athlete and saying "that doesn't count- it's too slow". Take from that what you will but I generally think it's a pretty good argument for lots of "junk" as they're put or recovery miles even if some might take offence at an "inflated" training diary.

The longer run in evenings and general run length was really the third issue to come up. Jim was heavily of the opinion that a 12 miler gives a substantially higher development though no particular reasons for this were given and it'd be good to see if there are any apart from what he's learned over the years (which generally means it's probably right and the science will get there eventually...) - what I'd also like to know if he thinks it is 10-12 miles per see that gives the big jump or more the time frame and intensity. For Carroll the difference between 10 miles (~60 low) and 12 miles (~72) puts him perfectly in that bracket of the longest sort of aerobic run you can do before it becomes a long run - possibly a

delayed onset muscle soreness issue starts around 10 miles and in particular for most athletes at least, runs of over 75 minutes (12+ for Carroll, 10 miles for mortals) in duration are fatiguing. Run length in general he felt was very important (as he pointed out at one point - it's pretty easy to run 70 miles a week if you just run 5 miles twice a day!) and that it's the last third of each more challenging run or session that brings the performance development element. The same in sessions as the first third should feel an absolute breeze, the second you're starting to work and the final third is where the hard work and the development really comes in. In particular for this he highlighted a session he used to test fitness which was 3 x 3 x 800 with a minute between reps and 3 minutes between sets with the average pace sustainable close to an athlete's 5k pace.

Which brings us on to the next period which was the transition phase or as Jim put it "when the really hard work starts" and occasionally in this phase mileage would be scaled back in order to accommodate the much harder sessions run at a substantially faster pace 3k leading on to 1500 pace or quicker. An example of this was 5 x km with 3 minute recovery Mark could get close to doing in 2:30 at his peak. About 6-8 weeks before the track season this transition period would begin which would generally involve 2 work-outs per week of hard anaerobic work which brought him on substantially in a very quick period (bringing to mind I think a Bideau quote about Mottram that he could be in PB shape at any time of the year with 6 weeks notice) with two hard sessions in each week. Following this intense and difficult period a final "test" workout would be done and after this Carroll would know that he could go to Europe and stand on any starting line confident in his ability. With full recovery this session varied from year to year but generally seemed to be along the lines of "Mile, 2 x 800, 1 x 600 or 2 x 400" with paces such as 3:57, 2 x 1:51, 82. One year with the aid of some training partners doing in and out 400s Mark ran a 7:37 3k in an abandoned stadium - this was done because he hadn't had sufficient races that year and was still looking for a bit of sharpness.

There was very little XC racing for Carroll – because the US XC season is so early he felt that this would detract from delaying a real track peak until mid/late summer, and wouldn't present Carroll in a suitably competitive state for the XC races. Carroll during the autumn/winter period would generally only do 2 or 3 races just as a progress check on how training was going. He always avoided having a long indoor season as it was felt that it was near impossible to have a successful indoor season and then go on to peak successfully at a major track championship.

The issue of female athletes was brought up and overall, in his experience women (and he's coached fewer number of females) tend to max out about 15% less mileage than men – seem slightly more injury prone and also more vulnerable on iron deficiency which he stressed should be monitored thoroughly with regular tests for ferritin levels with a number of specific values mentioned.

He also stressed magnesium deficiency is a factor in under-performance. Lost heavily through sweat and alcohol intake inhibits its absorption (which coaching Irish runners is obviously a huge consideration not made up through Guinness despite their best efforts) magnesium levels can be critical. For athletes low in magnesium it is well worth considering magnesium supplement (not magnesium sulphate or oxide though as these tend not to work particularly effectively.) Magnesium is rarely tested for and so is often an unrecognised factor.

Because of the professional set up, Harvey is able to delegate the detail of this to professional S+C experts. He was very low key on his involvement and didn't discuss in much further detail but he clearly has a good eye for runners' bio-mechanics (in particular stressing "symmetry") and knows what to do with any weaknesses he observes. He also made the point that as a coach part of the role wasn't to know everything but to know your limits and send athletes to someone who does know everything about a given subject taking the ego out of the process - as he put it "it's all about the performance".

Hills weren't used extensively but in the second part of the base phase, over about 6-8 weeks, an 800m hill of a moderate gradient such that good running for was still possible was used. The format was 6 to 8 reps in roughly 2.30, driving back down in a pick up truck for the purpose of recovery.

One issue discussed in quite a bit of detail was why the US is experiencing such a strong upsurge (50 athletes under 13:46 this year) and especially in comparison to the UK and this including the obvious teenage prodigies Derrick and Fernandez with Evan Jager making the Olympic team only a year older. High school xc was discussed including at age 15-17 - '500 mile club - a target for runners to hit 500 miles in the 10 week summer holidays. A few he accepts should do a bit less but he mentioned that it's not exceptional for some to thrive on a bit more and in particular mentioning Dathan Ritzenheim. In 2000/2001 the US had a truly prodigious year group (Webb/Hall/Ritz- each an American record holder now over the Mile/HM/5000 respectively) with Tegenkamp only a year earlier and this has driven the resurgence to a high degree from a low in 2000 with only two qualifiers for the Olympic marathon.

Harvey believes strongly in the approach outlined above. We give a huge amount away to the Kenyans in terms of aerobic miles run by the age of 20 and believes that the only way forward is volume driven to take us closer to what we did in the 80s as opposed to the interval driven approach which was dominant in the US in the 90s and is still present in the UK to a lesser degree. In particular he stressed the use of the internet in particular mentioning Letsrun and Flotrack for showing athletes across the country how others were training and fostering a very positive almost community aspect. As young athletes see the sort of mileage that is capable of by their peers it generally encouraged them to try and emulate them and look at being competitive on a national stage as opposed to just beating their class-mates. Whilst this philosophy could be altered in the UK (and some I'm

sure would argue it already has been) a serious problem for us is that whilst remaining minority sports XC is much more seriously taken in the US particularly in High School and also in University. Harvey would strongly recommend now that many UK athletes take the advantages of a Collegiate education as it essentially allows them to run as near professional for 4 years with superb medical back up and coaching though he also stressed that he would only recommend it at certain institutions. He also pointed out that athletes must be aware that racing demands and the like would be made on them over those 4 years but that after that they have the rest of their career to race exactly the way they want.

Harvey highlighted that there were problems in the US system and in particular that lots of US athletes were now being attracted at a very early age towards the marathon and not particularly reaping the rewards. Ritzenheim didn't run to his enormous potential after being tempted into a very early début at New York and has since run much better once stepping back down to the track (Ritz of course being coached at Colorado by Mark Wetmore (of Running with the Buffaloes with high aerobic mileage usually in singles) and then Brad Hudson before finally shifting to Salazar) with a blitzing 12:56 5000 and World Half bronze in 60:00 (a superb turnaround from a 2:10:00 London Marathon) however it was also agreed that the huge aerobic base he put down had helped him in his current shorter races. Likewise Hall who was struggling post-collegiately had a fantastic turnaround with a mileage focused approach leading to a 59:43 HM at Houston and an American record in a totally solo run. Following this though, and despite some very strong marathon performances, he has started to look flat, particularly at the Olympics after running London in a superb 2:06 and subsequently at Boston and New York despite respectable finishes, and Harvey also believes that maximising 5/10,000 speed before stepping up, given that he believes you generally run your best marathon as your second or third, is absolutely crucial. Of course quibbling as to whether a 2:06 marathon or a 12:56 5000m is a better result for an athlete is a place British Endurance would love to be at the moment.

He makes it sound very simple but when you try and drill a little deeper you find the wealth of knowledge there.

Bryn Reynolds