

1/25/94

BRUSH-UP

	800					800 W					5K RW - WSW			
30	10025					10055								
35	9693	332				9693	362				9720			
40	9359	334	2			9329	364	2			9380	340		
45	9021	338	4	2		8961	368	4			9026	354	14	
50	8676	345	7	3	1	8586	375	7			8658	368	14	
55	8320	356	11	4	1	8200	386	11			8276	382	14	
60	7948	372	16	5	1	7798	402	16			7880	396	14	
65	7554	394	22	6	1	7374	424	22			7470	410	14	
70	7131	423	29	7	1	6921	453	29			7046	424	14	
75	6671	460	37	8	1	6431	490	37			6608	438	14	
80	6162	509	49	12	4	5892	539	49			6148	460	22	
85	5584	578	69	20	8	5284	608	69			5650	498	38	
90	4901	683	105	36	16	4571	713	105			5082	568	70	
95	4045	856	173	68	32	3685	886	173			4380	702	134	
100	2884	1161	315	132	64	2494	1191	305			3416	964	262	

Feb. 20, 1993

To: Rex Harvey  
From: Al Sheahen

Re: Throwing Standards

Rex:

Here are my proposed throwing standards for men. In each of the four events, I've listed an "alternate" set of standards. The alternate is basically the same as the 1989 standards for the younger age groups.

I wasn't able to reach you over the weekend, but I did reach Dave Douglass. His shot put at the 1992 Decathlon equalled 632 points (10.04 \* 630)

By changing the OC from 20.40 to 23.12, the existing open WR, he'd get 732 points. He felt that was too much. In other words, he felt leaving the OC at 20.40 produced a better point total than moving the OC to 23.12.

REX 11.26 = 691  
1.1228 12.53 = 639  
59 11.52x 13.04 = 670

732

	SHOT			DISCUS		
	1989	Alt. 1993	1993	1989	Alt. 1993	1993
21.40 OC	20.40	20.40	23.12 *	OC 69.50	69.50	74.08*
30	20.16	20.16	23.12	30	69.43	69.43 74.08
35	19.14	19.14	23.12	35	65.94	65.94 71.24*
40	18.13	18.13	21.41 *	40	62.61	62.61 69.48*
45	17.14	17.14	18.77	45	58.90	58.90 66.12*
50	17.82	18.45 *		50	61.78	61.78 65.30*
55	16.72	16.34		55	57.92	57.92 58.14
60	16.52	16.05*		60	62.05	61.54
65	15.00	14.70*		65	56.50	55.62*
70	14.89	14.35		70	50.73	49.70
75	13.16	12.85 13.07		75	44.84	43.78
80	11.53	11.35 11.92		80	39.49	37.86*
85	9.95	9.85		85	34.41	32.40
90	8.54	8.35		90	29.70	27.64
95	-	6.85		95	-	23.62
100	-	5.35		100	-	20.25

\*World Record

Comment: I can live with either the "alternate 1993" or the plain "1993." The plain is more attuned to the open WR. It would give the 30s & 40s lower scores vs. the older guys in the decathlon events (shot & javelin); and would give lower age-graded percentages in all four events to the younger guys.

The "alternate" keeps the compromise we developed three years ago, where we basically ignore Oerter, etc. In talking with Douglass and Gary Miller, they couldn't come up with any event which was scored too high or too low. They seemed satisfied with the 1989 factors.

Note that the new 50+ stds shown here are a little more lenient than '89, which would slightly raise the percentages and IAAF points a bit. Hopefully, that's good.

Also note that the hammer WR is 86.74. I couldn't get that to work at all,

	HAMMER			JAVELIN		
	1989	Alt. 1993	1993	1989	Alt. 1993	1993
OC	76.85	76.85	81.96	OC 90.42	90.42	91.46*
30	75.94	75.94	81.96	30	85.30	85.30 91.46
35	72.09	72.09	76.56	35	80.02	80.02 87.26*
40	68.31	68.31	71.16	40	75.35	75.35 79.95
45	64.58	64.58	65.76	45	71.20	71.20 72.64
50	64.58	67.88		50	66.00	65.32
55	60.51	62.48		55	58.71	58.00
60	60.04	59.16		60	59.48	59.00
65	54.50	53.36		65	54.14	53.70
70	54.12	51.32		70	48.88	48.40
75	47.15	45.92		75	43.47	43.10
80	40.03	40.52		80	38.31	37.80
85	33.56	35.12		85	33.61	32.50
90	27.54	29.72		90	29.17	27.20
95	-	24.32		95	-	?
100	-	18.92		100	-	?

Feb. 21, 1993

To: Rex Harvey  
From: Al Sheahen

Re: Throwing Factors

Rex: Here are the factors that go with the standards I sent you earlier:

<u>SHOT</u>			<u>DISCUS</u>			
	<u>1989</u>	<u>Alt.</u> <u>1993</u>	<u>1993</u>	<u>1989</u>	<u>Alt.</u> <u>1993</u>	<u>1993</u>
OC	1.000	1.0000	1.0000	OC	1.000	1.0000
30	1.012	1.0120	1.0000	30	1.001	1.0010
35	1.066	1.0660	1.0000	35	1.054	1.0540
40	1.125	1.1250	1.0799	40	1.110	1.1100
45	1.190	1.1900	1.2318	45	1.180	1.1800
50	1.145	1.1057	1.2531	50	1.125	1.1250
55	1.220	1.2485	1.4149	55	1.200	1.2000
60	1.235	1.2710	1.4405	60	1.120	1.1293
65	1.360	1.3878	1.5728	65	1.230	1.2495
70	1.370	1.4216	1.6111	70	1.370	1.3894
75	1.550	1.5875	1.7992	75	1.550	1.5875
80	1.770	1.7974	2.0370	80	1.760	1.8357
85	2.050	2.0711	2.3472	85	2.020	2.1451
90	2.390	2.4431	2.7689	90	2.340	2.5145
95	-	2.9781	3.3752	95	-	2.9424
100	-	3.8131	4.3215	100	-	3.4321

<u>HAMMER</u>			<u>JAVELIN</u>			
	<u>1989</u>	<u>Alt.</u> <u>1993</u>	<u>1993</u>	<u>1989</u>	<u>Alt.</u> <u>1993</u>	<u>1993</u>
OC	1.000	1.0000	1.0000	OC	1.000	1.0000
30	1.012	1.0120	1.0000	30	1.060	1.0600
35	1.066	1.0660	1.0705	35	1.130	1.1300
40	1.125	1.1250	1.1518	40	1.200	1.2000
45	1.190	1.1900	1.2464	45	1.270	1.2700
50	1.190	1.1321	1.2074	50	1.370	1.3843
55	1.270	1.2300	1.3118	55	1.540	1.5590
60	1.280	1.2990	1.3854	60	1.520	1.5325
65	1.410	1.4402	1.5360	65	1.670	1.6838
70	1.420	1.4975	1.5970	70	1.850	1.8682
75	1.630	1.6736	1.7848	75	2.080	2.0979
80	1.920	1.8966	2.0227	80	2.360	2.3921
85	2.290	2.1882	2.3337	85	2.690	2.7822
90	2.790	2.5858	2.7577	90	3.100	3.3243
95	-	3.1600	3.3701	95	-	?
100	-	4.0618	4.3319	100	-	?

Comment: I didn't work with the factors; instead, I just worked with standards. Mainly, because I don't know which way we want to go -- with the "alternate" method or the plain WR method. Please advise which way you think is best.

I took the factors out to four places for analysis only. We can cut to three or two when we finalize.

I did this quickly, so please check for typos.