

Table 1: Level 4 Sequence Formats

10' Sequences					6' Sequences			
Strokes	# Minutes	@	Stroke Rate		Strokes (AVG)	# Minutes	@	Stroke Rate
168	2'2'2'2'2'	@	16/18/16/18/16		100 (16.7)	2'2'2'	@	16/18/16
172	2'2'2'2'2'	@	18/16/18/16/18		104 (17.3)	3'2'1'	@	16/18/20
176	2'2'2'2'2'	@	16/18/20/18/16		112 (18.7)	2'2'2'	@	18/20/18
180	4'3'2'1'	@	16/18/20/22		112^ (18.7)	1'2'3'	@	16/18/20
184	3'3'3'1'	@	16/18/20/22		116 (19.3)	3'2'1'	@	18/20/22
188	2'2'2'2'2'	@	18/20/18/20/18		124 (20.7)	2'2'2'	@	20/22/20
192	2'2'2'2'2'	@	20/18/20/18/20		124^ (20.7)	1'2'3'	@	18/20/22
196	2'2'2'2'2'	@	18/20/22/20/18		128 (21.3)	3'2'1'	@	20/22/24
200^	1'2'3'4'	@	16/18/20/22		136 (22.7)	2'2'2'	@	22/24/22
200	4'3'2'1'	@	18/20/22/24		136^ (22.7)	1'2'3'	@	20/22/24
204	3'3'3'1'	@	18/20/22/24		140 (23.3)	3'2'1'	@	22/24/26
208	2'2'2'2'2'	@	20/22/20/22/20		148 (24.7)	2'2'2'	@	24/26/24
212	2'2'2'2'2'	@	22/20/22/20/22		148^ (24.7)	1'2'3'	@	22/24/26
216	2'2'2'2'2'	@	20/22/24/22/20					
220^	1'2'3'4'	@	18/20/22/24					
220	4'3'2'1'	@	20/22/24/26					

Table 2: Level 4 Pace Chart

2K pace	Pace per Stroke Rate							2K pace	Pace per Stroke Rate							
	Warmup/ Recovery	16	18	20	22	24	26		Warmup/ Recovery	16	18	20	22	24	26	
01:27	02:03	01:49	01:45	01:42	01:38	01:34	01:31		02:01	02:51	02:31	02:26	02:21	02:16	02:11	02:06
01:28	02:04	01:50	01:46	01:42	01:39	01:35	01:31		02:02	02:52	02:32	02:27	02:22	02:17	02:12	02:07
01:29	02:05	01:51	01:48	01:44	01:40	01:36	01:33		02:03	02:53	02:34	02:29	02:24	02:18	02:13	02:08
01:30	02:07	01:52	01:49	01:45	01:41	01:37	01:34		02:04	02:55	02:35	02:30	02:25	02:20	02:14	02:09
01:31	02:08	01:54	01:50	01:46	01:42	01:39	01:35		02:05	02:56	02:36	02:31	02:26	02:21	02:15	02:10
01:32	02:10	01:55	01:51	01:47	01:43	01:40	01:36		02:06	02:58	02:38	02:32	02:27	02:22	02:16	02:11
01:33	02:11	01:56	01:52	01:49	01:45	01:41	01:37		02:07	02:59	02:39	02:33	02:28	02:23	02:18	02:12
01:34	02:13	01:57	01:54	01:50	01:46	01:42	01:38		02:08	03:00	02:40	02:35	02:29	02:24	02:19	02:13
01:35	02:14	01:59	01:55	01:51	01:47	01:43	01:39		02:09	03:02	02:41	02:36	02:31	02:25	02:20	02:14
01:36	02:15	02:00	01:56	01:52	01:48	01:44	01:40		02:10	03:03	02:42	02:37	02:32	02:26	02:21	02:15
01:37	02:17	02:01	01:57	01:53	01:49	01:45	01:41		02:11	03:05	02:44	02:38	02:33	02:27	02:22	02:17
01:38	02:18	02:02	01:58	01:54	01:50	01:46	01:42		02:12	03:06	02:45	02:39	02:34	02:29	02:23	02:18
01:39	02:20	02:04	02:00	01:56	01:51	01:47	01:43		02:13	03:08	02:46	02:41	02:35	02:30	02:24	02:19
01:40	02:21	02:05	02:01	01:57	01:52	01:48	01:44		02:14	03:09	02:48	02:42	02:36	02:31	02:25	02:20
01:41	02:22	02:06	02:02	01:58	01:54	01:49	01:45		02:15	03:10	02:49	02:43	02:38	02:32	02:26	02:21
01:42	02:24	02:07	02:03	01:59	01:55	01:50	01:46		02:16	03:12	02:50	02:44	02:39	02:33	02:27	02:22
01:43	02:25	02:09	02:04	02:00	01:56	01:52	01:47		02:17	03:13	02:51	02:45	02:40	02:34	02:28	02:23
01:44	02:27	02:10	02:06	02:01	01:57	01:53	01:48		02:18	03:15	02:53	02:47	02:41	02:35	02:29	02:24

Table 3: Level 4 Distance Chart (10' Sequences)

2K pace	10 Minute Intervals: Total Strokes, Total Meters															
	168	172	176	180	184	188	192	196	200^	200	204	208	212	216	220^	220
01:27	2794	2815	2832	2852	2871	2891	2908	2932	2954	2957	2977	2989	3013	3039	3069	3063
01:28	2768	2789	2811	2831	2853	2875	2897	2915	2933	2936	2956	2977	2995	3020	3044	3047
01:29	2733	2748	2769	2791	2810	2821	2842	2865	2891	2889	2911	2931	2954	2979	3005	3001
01:30	2708	2723	2744	2766	2783	2794	2815	2838	2864	2861	2883	2902	2925	2950	2975	2972
01:31	2670	2689	2710	2731	2751	2768	2789	2811	2834	2831	2853	2875	2897	2915	2933	2936
01:32	2646	2665	2685	2706	2726	2743	2763	2785	2808	2805	2826	2847	2869	2887	2905	2908
01:33	2623	2642	2656	2674	2691	2708	2723	2744	2763	2766	2783	2794	2815	2838	2864	2861
01:34	2591	2605	2624	2644	2660	2670	2689	2710	2733	2731	2751	2768	2789	2811	2834	2834
01:35	2556	2574	2592	2612	2630	2646	2665	2685	2706	2706	2726	2743	2763	2785	2808	2808
01:36	2534	2552	2570	2589	2607	2623	2642	2661	2682	2682	2701	2718	2738	2759	2782	2782
01:37	2513	2530	2548	2567	2585	2600	2619	2638	2658	2658	2677	2694	2713	2734	2756	2756
01:38	2492	2509	2527	2545	2563	2578	2596	2615	2635	2635	2653	2670	2689	2710	2731	2731
01:39	2452	2468	2485	2505	2522	2534	2552	2575	2599	2597	2617	2633	2656	2676	2700	2697
01:40	2432	2448	2465	2484	2501	2513	2530	2553	2577	2574	2594	2610	2633	2653	2675	2673
01:41	2412	2428	2444	2462	2478	2492	2509	2527	2545	2548	2565	2578	2596	2620	2645	2643
01:42	2393	2408	2425	2442	2458	2472	2488	2506	2524	2526	2543	2556	2574	2597	2622	2619
01:43	2363	2382	2398	2415	2432	2452	2468	2485	2501	2503	2520	2534	2552	2570	2589	2592
01:44	2337	2352	2371	2390	2407	2420	2440	2457	2476	2474	2493	2513	2530	2548	2565	2570

01:45	2319	2333	2349	2367	2382	2393	2408	2429	2450	2448	2466	2480	2501	2519	2539	2540
01:46	2291	2309	2324	2341	2358	2374	2389	2409	2429	2428	2446	2460	2480	2498	2518	2519
01:47	2274	2291	2306	2323	2339	2355	2370	2390	2409	2409	2426	2440	2460	2477	2497	2498
01:48	2256	2274	2288	2305	2321	2337	2352	2371	2390	2390	2407	2420	2440	2457	2476	2474
01:49	2233	2246	2264	2281	2296	2309	2326	2342	2359	2360	2376	2393	2408	2429	2448	2448
01:50	2207	2223	2241	2257	2274	2291	2309	2324	2339	2341	2358	2374	2389	2409	2429	2428
01:51	2190	2207	2220	2236	2251	2266	2280	2299	2316	2318	2334	2345	2363	2383	2405	2402
01:52	2175	2190	2204	2220	2235	2249	2263	2281	2298	2300	2316	2326	2345	2364	2386	2383
01:53	2153	2165	2182	2199	2213	2223	2240	2257	2277	2276	2293	2309	2326	2346	2366	2364
01:54	2137	2149	2166	2183	2197	2207	2223	2241	2260	2259	2276	2291	2309	2328	2347	2345
01:55	2113	2128	2144	2161	2177	2190	2207	2224	2242	2240	2257	2274	2291	2306	2321	2323
01:56	2099	2113	2129	2146	2161	2175	2190	2208	2225	2223	2240	2256	2274	2288	2303	2305
01:57	2084	2099	2111	2125	2139	2153	2165	2182	2197	2199	2213	2223	2240	2257	2277	2276
01:58	2055	2070	2085	2101	2115	2128	2144	2160	2177	2177	2193	2207	2223	2241	2259	2259
01:59	2041	2055	2070	2086	2100	2113	2128	2144	2161	2161	2177	2190	2207	2224	2242	2242
02:00	2028	2041	2056	2071	2086	2099	2113	2129	2146	2146	2161	2175	2190	2208	2225	2225

Table 3 Cont'd: Level 4 Distance Chart (10' Sequences)

2K pace	10 Minute Intervals: Total Strokes, Total Meters															
	168	172	176	180	184	188	192	196	200^	200	204	208	212	216	220^	220
02:01	2014	2028	2042	2057	2071	2084	2099	2114	2130	2130	2146	2159	2175	2191	2209	2209
02:02	2001	2014	2028	2043	2057	2070	2084	2099	2115	2115	2130	2144	2159	2176	2193	2193
02:03	1974	1987	2001	2017	2031	2041	2055	2073	2092	2091	2107	2120	2138	2154	2172	2171
02:04	1961	1974	1988	2002	2016	2028	2041	2056	2071	2073	2087	2099	2113	2132	2152	2151
02:05	1949	1961	1975	1989	2002	2014	2028	2042	2057	2059	2073	2084	2099	2117	2137	2135
02:06	1929	1944	1957	1971	1985	2001	2014	2028	2042	2045	2059	2070	2084	2103	2122	2120
02:07	1916	1931	1944	1958	1972	1987	2001	2015	2028	2029	2043	2055	2070	2085	2100	2102
02:08	1899	1911	1927	1942	1956	1967	1982	1996	2012	2011	2025	2041	2055	2070	2085	2088
02:09	1887	1899	1912	1927	1939	1949	1961	1978	1995	1993	2008	2020	2036	2051	2067	2068
02:10	1875	1887	1900	1914	1926	1936	1949	1965	1981	1980	1995	2006	2022	2037	2053	2054
02:11	1857	1871	1883	1898	1911	1924	1936	1952	1967	1967	1981	1993	2009	2023	2039	2038
02:12	1846	1859	1872	1884	1897	1911	1924	1937	1949	1952	1964	1974	1987	2004	2021	2020
02:13	1830	1841	1855	1869	1882	1892	1907	1920	1934	1934	1948	1961	1974	1991	2007	2007
02:14	1812	1825	1840	1853	1867	1880	1895	1907	1921	1922	1935	1949	1961	1978	1993	1993
02:15	1801	1814	1826	1839	1852	1864	1875	1890	1905	1906	1919	1929	1944	1960	1978	1975
02:16	1791	1803	1815	1828	1840	1852	1864	1879	1893	1894	1907	1916	1931	1947	1965	1962
02:17	1780	1793	1804	1817	1829	1841	1852	1867	1881	1882	1895	1904	1919	1935	1952	1950
02:18	1759	1771	1785	1799	1812	1823	1837	1851	1866	1866	1880	1892	1907	1922	1938	1937

02:19	1749	1761	1774	1788	1801	1812	1825	1840	1854	1853	1867	1880	1895	1907	1921	1922
02:20	1739	1751	1764	1776	1789	1801	1814	1826	1838	1839	1852	1864	1875	1890	1905	1906
02:21	1729	1741	1751	1764	1775	1786	1797	1811	1824	1825	1837	1846	1859	1874	1890	1890
02:22	1709	1721	1733	1746	1759	1769	1782	1796	1810	1810	1823	1834	1848	1863	1878	1878
02:23	1699	1711	1723	1736	1748	1759	1771	1785	1799	1799	1812	1823	1837	1851	1866	1866
02:24	1690	1701	1713	1726	1738	1749	1761	1774	1788	1788	1801	1812	1825	1840	1854	1854
02:25	1680	1692	1704	1716	1728	1739	1751	1764	1777	1777	1790	1801	1814	1828	1843	1843
02:26	1665	1678	1690	1703	1716	1729	1741	1754	1766	1767	1779	1791	1803	1817	1832	1832
02:27	1652	1663	1675	1688	1700	1709	1721	1735	1751	1750	1763	1774	1789	1802	1818	1817
02:28	1643	1654	1666	1679	1690	1699	1711	1725	1740	1740	1753	1763	1778	1792	1807	1806
02:29	1634	1645	1657	1669	1680	1690	1701	1713	1726	1727	1739	1749	1761	1777	1793	1792
02:30	1620	1633	1644	1656	1668	1680	1692	1704	1715	1717	1729	1739	1751	1766	1782	1781

Table 4: Level 4 Distance Chart (6' Sequences)

2K pace	6 Minute Intervals: Total Strokes, Total Meters												
	100	104	112	112^	116	124	124^	128	136	136^	140	148	148^
01:27	1672	1691	1731	1729	1752	1789	1792	1814	1863	1864	1886	1936	1933
01:28	1657	1678	1720	1721	1740	1783	1780	1804	1844	1848	1870	1922	1924
01:29	1637	1655	1688	1691	1710	1754	1755	1778	1825	1826	1848	1895	1893
01:30	1622	1640	1672	1675	1694	1737	1738	1760	1807	1808	1829	1875	1873
01:31	1598	1618	1657	1658	1678	1720	1721	1740	1783	1780	1804	1844	1848
01:32	1584	1604	1642	1643	1663	1704	1705	1724	1765	1763	1786	1825	1829
01:33	1570	1587	1622	1620	1640	1672	1675	1694	1737	1738	1760	1807	1808
01:34	1552	1568	1598	1601	1618	1657	1658	1678	1720	1721	1743	1789	1790
01:35	1530	1548	1584	1585	1604	1642	1643	1663	1704	1705	1727	1771	1772
01:36	1517	1535	1570	1571	1589	1627	1628	1648	1688	1689	1710	1754	1755
01:37	1505	1522	1557	1557	1575	1612	1613	1633	1672	1673	1694	1737	1738
01:38	1492	1509	1543	1544	1562	1598	1599	1618	1657	1658	1678	1720	1721
01:39	1468	1484	1517	1518	1538	1575	1578	1597	1642	1640	1663	1704	1705
01:40	1456	1472	1505	1505	1524	1561	1564	1583	1627	1625	1648	1688	1689
01:41	1444	1460	1492	1493	1509	1543	1544	1564	1603	1606	1626	1672	1671
01:42	1433	1449	1480	1480	1497	1530	1531	1551	1589	1592	1611	1657	1655
01:43	1414	1432	1468	1466	1484	1517	1518	1535	1570	1571	1592	1632	1635
01:44	1399	1416	1448	1451	1467	1505	1503	1522	1557	1557	1578	1618	1621

01:45	1388	1403	1433	1433	1451	1484	1487	1503	1543	1542	1564	1603	1606
01:46	1371	1387	1421	1420	1439	1472	1475	1491	1530	1529	1551	1589	1592
01:47	1361	1377	1410	1409	1428	1460	1463	1479	1517	1516	1538	1575	1578
01:48	1350	1366	1399	1398	1416	1448	1451	1467	1505	1503	1522	1557	1557
01:49	1337	1353	1382	1384	1398	1433	1431	1451	1484	1487	1503	1543	1542
01:50	1321	1338	1371	1372	1387	1421	1420	1439	1472	1475	1491	1530	1529
01:51	1311	1326	1357	1356	1373	1403	1405	1422	1460	1461	1479	1517	1516
01:52	1302	1316	1347	1346	1363	1392	1395	1411	1448	1449	1467	1505	1503
01:53	1289	1304	1330	1333	1348	1382	1382	1400	1437	1437	1455	1492	1491
01:54	1280	1294	1321	1323	1338	1371	1372	1389	1425	1426	1443	1480	1478
01:55	1265	1281	1311	1312	1328	1361	1361	1377	1410	1409	1428	1460	1463
01:56	1256	1271	1302	1302	1318	1350	1351	1366	1399	1398	1416	1448	1451
01:57	1247	1261	1289	1288	1304	1330	1333	1348	1382	1382	1400	1437	1437
01:58	1230	1245	1274	1274	1290	1321	1321	1338	1371	1372	1389	1425	1426
01:59	1222	1237	1265	1265	1281	1311	1312	1328	1361	1361	1379	1414	1415
02:00	1214	1228	1256	1257	1271	1302	1302	1318	1350	1351	1368	1403	1404

Table 4 Cont'd: Level 4 Distance Chart (6' Sequences)

2K pace	6 Minute Intervals: Total Strokes, Total Meters												
	100	104	112	112^	116	124	124^	128	136	136^	140	148	148^
02:01	1206	1220	1247	1248	1263	1292	1293	1308	1340	1341	1358	1392	1393
02:02	1198	1212	1239	1239	1254	1283	1284	1299	1330	1331	1348	1382	1382
02:03	1182	1195	1222	1222	1238	1268	1270	1285	1321	1320	1338	1371	1372
02:04	1174	1188	1214	1214	1228	1256	1257	1273	1305	1307	1323	1361	1360
02:05	1167	1180	1206	1206	1220	1247	1248	1264	1296	1298	1314	1350	1350
02:06	1154	1168	1198	1197	1212	1239	1239	1255	1286	1288	1304	1340	1339
02:07	1147	1161	1190	1189	1203	1230	1231	1245	1274	1274	1291	1324	1326
02:08	1137	1151	1177	1179	1192	1222	1221	1237	1265	1265	1282	1314	1317
02:09	1130	1142	1167	1167	1181	1208	1210	1224	1256	1255	1273	1305	1307
02:10	1123	1135	1159	1159	1173	1200	1202	1216	1247	1247	1264	1296	1298
02:11	1111	1125	1152	1151	1166	1192	1194	1208	1239	1238	1254	1283	1284
02:12	1105	1118	1144	1144	1157	1182	1182	1197	1225	1227	1241	1274	1273
02:13	1096	1108	1132	1134	1146	1174	1173	1189	1217	1219	1232	1265	1264
02:14	1085	1098	1125	1126	1139	1167	1166	1181	1208	1210	1224	1256	1255
02:15	1078	1091	1116	1115	1129	1154	1156	1170	1200	1201	1216	1247	1247
02:16	1072	1084	1109	1108	1122	1147	1149	1162	1192	1193	1208	1239	1238
02:17	1065	1077	1102	1102	1115	1140	1141	1155	1185	1185	1200	1230	1230
02:18	1053	1066	1091	1092	1105	1132	1133	1147	1177	1177	1192	1222	1221

02:19	1047	1060	1085	1085	1098	1125	1126	1139	1167	1166	1181	1208	1210
02:20	1041	1053	1078	1079	1091	1116	1115	1129	1154	1156	1170	1200	1201
02:21	1035	1046	1070	1069	1082	1105	1106	1119	1147	1147	1162	1192	1193
02:22	1023	1035	1059	1060	1072	1098	1098	1112	1140	1140	1155	1185	1185
02:23	1017	1029	1053	1053	1066	1091	1092	1105	1132	1133	1147	1177	1177
02:24	1011	1023	1047	1047	1060	1085	1085	1098	1125	1126	1140	1169	1170
02:25	1006	1018	1041	1041	1053	1078	1079	1092	1118	1119	1133	1162	1162
02:26	997	1009	1035	1034	1047	1072	1072	1085	1111	1112	1126	1154	1155
02:27	989	1001	1023	1023	1036	1061	1063	1076	1105	1104	1119	1147	1147
02:28	984	995	1017	1018	1030	1055	1057	1069	1098	1097	1112	1140	1140
02:29	978	990	1011	1012	1023	1047	1047	1061	1087	1089	1102	1132	1132
02:30	970	982	1006	1005	1018	1041	1041	1055	1080	1082	1095	1125	1125