

HTR Report
Thoroughbred Handicapping Newsletter
Nov/Dec 2007

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Handicapping Technology and Research

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*Late News
Big Thanks to our Subscribers*

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Advanced Handicapping
Maiden Winners – “Just Broke Maiden”

We often revile the steady diet of maidens presented at most tracks. Sometimes as much as 50% of a weekday card can be made up of non-winners races. With all those maiden races – there are also a lot of recent maiden winners to deal with.

After a horse breaks its maiden at any level, it will almost surely have to take a step up in class and meet tougher horses, all of which have also won a race previously. The demands immediately increase for maiden winners, just as it would for high school football player that moves on to college ball – the new faces are faster, more competitive and have greater stamina.

The step out from the maiden ranks has to be the toughest transition for a thoroughbred in terms of class. Handicappers as well as the horse's connection will now have to guess if the horse can handle a more difficult assignment and deal with new challenges while facing down tougher foes. Most experienced handicappers understand the tenuous nature of the maiden win. Will the figures hold, or was the horse facing such soft company that he ran an exemplary speed and pace numbers? The easy wire-to-wire romp in a maiden claimer can get flattened vs. hardcore claimers or allowance veterans that fight back.

This month we'll look at several interesting facets of the maiden win. We want to find out when maidens return successfully and when they are likely to fail.

First we look at a par chart that lists EPR levels for various types of maiden races as compared with other class levels. This chart is for Class-A track such as KEE, SA or BEL.

Males Class-A Tracks (NYRA, SoCal, GP, KEE, CD) Average PER			
Par	3up Class Level	3yr/3up Maiden Level	2yr Maiden Level
108	Stakes		
105	Nw2/OCL		
104	C32		
103	Nw1		
102	C20	3up Msw	
101	C15		2yr Msw
100	C12	3up M50	
099	C10	3up M40	
098	C08	3up M32	2yr M50
097	C06	3up M25	
096	C05	3up M20	2yr M32

Deductions

Females	-3 to -4
Statebred	-1 to -4
Track Class	-1 to -4
Time of Year (3yr)	-1 to -4

These are averages. Each field varies as does the time-of-year for quality. In the top header of each race, HTR2 displays the EPR (Estimated Performance Rating) that indicates the likely winning PER or *par* for the field based on all these factors and the estimated quality of the entrants.

The typical maiden winner will take a 1-step jump up in class next out. Msw → Nw1; M32 → C10 are good examples. Some trainers are even more ambitious though and push the horse into a 2-step raise. Additionally the horse will often have to stretch out further in distance and possibly change surface as well. This transition is difficult and the more challenges a horse must face the lesser are its chances of winning.

Advanced Handicapping
Maiden Winners – “Just Broke Maiden”

Below are the statistics for returning maiden winners.

The races tested were from October 1, 2006 – September 30, 2007 with a purse of \$10,000 or more. I did not test races with a distance of less than 5.5f or more than 9.0f.

Won* Last Start in a Maiden Race	5.5f-9.0f			Purse \$10,000+		
Item	Plays	Wins	Win%	ITM	WROI	I.V.
All	11899	1479	12%	37%	0.76	1.03

* Official winner - does not include maiden winners that were disqualified and thus could run again in maiden company. There were about 90 such horses I found while running this data (finished 1st in their maiden race but were disqualified). They return and win again in their next maiden try about 25% of the time with a profitable ROI despite expected heavy betting – so they become the only horses able to break their maiden twice!

Analysis

Remember what this test entails - ONLY those horses that broke their maiden in their most recent start.

Win-percentage may be a bit deceptive here as there could be more than one maiden winner entered in a race and no such horses in many others. However, the Impact Value of 1.03 confirms that 12% wins are typical with an average field size of about 8.2 horses. The I.V. is perfectly neutral, meaning there is no positive or negative correlation. The “just broke maiden” winners score at exactly their expected rate. The ROI is below normal for a wide sample leaving no doubt that these horses are over bet due to the obvious win last out and usually have contending figs.

What can we conclude from this “all-burger” test? Nothing really, except that we can remain open minded to a “just broke maiden” chances of winning next out, while accepting the fact that they may be poor bets (underlays) most of the time. I ran other tests and separated by gender, age, level of maiden race, even layoff, and there was very little difference in that overall impact and win rate.

When the maiden winner returns, which factors best predict the horse will win again?

Top 5 Positive Factors

Won* Last Start in a Maiden Race	5.5f-9.0f			Purse \$10,000+		
Item	Plays	Wins	Win%	ITM	WROI	I.V.
K=1	1311	403	31%	63%	0.91	2.40
HTR=1	1402	402	29%	61%	0.92	2.24
FC=1	857	238	26%	59%	0.94	2.16
PER=1	1527	404	26%	58%	0.90	2.07
S/P=1	1374	350	25%	58%	1.01	1.98

Analysis

All of these factors double or better the impact of a last out maiden winner. What I found most interesting is that late speed factors were far stronger than early speed indicators such as (E/P, PAC and FR1). To win again, the “just broke maiden” runner needs competitive speed figs (PER) and a little bit of late punch on top of it. This could be the result of many maiden winners having to stretch out in distance on the subsequent start. Bottom line is that early speed in maiden races does not translate well when the horse has to face better competition next out.

Notice the healthy ROI with the S/P=1 category. S/P or sustained pace is the top profit maker for returning maiden runners. S/P is calculated with a 50/50 balance between early and late speed and a key indicator for success when any horse is forced to step up in class.

Advanced Handicapping
Maiden Winners – “Just Broke Maiden”

Bottom 4 Negative Factors (1000 plays min)

Won* Last Start in a Maiden Race				5.5f-9.0f			Purse \$10,000+		
Item	Plays	Wins	Win%	ITM	WROI	I.V.			
K=7+	3451	132	04%	15%	0.66	0.36			
JKY<200	1846	123	07%	24%	0.69	0.57			
(\$)	1212	92	08%	26%	0.88	0.63			
RS= "S" or "R"	2580	236	09%	33%	0.70	0.74			

Analysis

Several other factors such as PED<200 and Layoff 166-999 had poor results, but the sample sizes were not big enough to make the chart.

Horses that have just broken their maiden are extremely bad bets if the K-rank is 7 or worse in the subsequent start. They have probably been placed over their heads in class and the competition will overwhelm them. A weak rider with a jockey rating (JKY) less than 200, rarely win either. Interesting that (\$) or *single factor longshots*, don't prove very successful if it is the start after the maiden win. Although it was noted that some closing ability was a high positive indicator for maiden winners in the previous chart, a late running *style* (S or R) rarely wins! The data showed that "P" (presser/stalker) as the most successful running style.

Broke Maiden in the Debut

Next we'll look at various nuances of last-out maiden winners. The first one is a test of maiden winners that won in their debut. It's a tall order for almost any first time starter (FTS) to win a race. The complete lack of experience and the likelihood of running "green" (awkward and unsure) means the rookie will have to have superior talent to beat its field. After accomplishing a win in the debut, how do these horses fare when they race again?

Next Start after Won Debut in a Maiden Race				5.5f-9.0f			Purse \$10,000+		
Item	Plays	Wins	Win%	ITM	WROI	I.V.			
All	1647	259	16%	42%	0.66	1.26			
K=1	213	74	35%	69%	0.80	2.64			
K=2	226	63	28%	64%	0.86	2.04			
PER=1	265	81	31%	63%	0.78	2.33			
S/P=1	260	74	28%	61%	0.81	2.11			

Analysis

There is one overriding factor about the debut winners when they return: *they are seriously over bet*. The public loves undefeated horses!

- After breaking their maiden in their debut, these horses return to the races beloved by the public. Incredibly, the average odds of a debut-winner returnee is under 4/1. No doubt the bettors credit the early win as something exceptional. However, they win just 16% of the time and the ROI is a disaster for the bankroll.
- Very few of these horses are longshots and just a fraction win at decent odds. From a sample of 1,647 horses only 16 of them won and paid \$20 or more. The highest win price was just \$50. So there is virtually no hope that you'll hit a bomb with these "just broke maiden" winners that won in their debut.
- K=1, 2 were huge at identifying winners from this group. Nearly half of the winners were ranked K=1 or 2 and the impact value is well above 2.00 (double their normal chances) and K=1 hits a whopping 35% with them. Despite surprisingly strong performance by the top-2 (K), the ROI was a significant loser. This indicates to us that the public bets too much on them. Top PER and S/P were also good predictive factors, but there was no money to be made.

Advanced Handicapping
Maiden Winners – “Just Broke Maiden”

Chronic Loser Breaks the Maiden

It took them 10 or more starts to finally break through. Many chronic losers in maiden class (*professional maidens, hangers, bridesmaids*, etc) have strong pace and final figures and have often been close at low odds. So the talent is there, but the issue is whether they have any heart or the nerve to poke their head in front of the competition. When they finally do break their maiden – is it a fluke in cheap company, or have they buried the jinx for good?

Chronic Loser (10+ Losses) Broke Mdn Last				5.5f-9.0f	Purse \$10,000+	
Item	Plays	Wins	Win%	ITM	WROI	I.V.
All	1112	100	09%	29%	0.78	0.78

Analysis

The opposite situation occurs with the public here as compared with the previous group that won in their debut start. The public does not trust the chronic loser after it breaks maiden and the average odds are over 10/1 with the average winner paying \$17. Longshot winners are far more common with this group.

- Success rate is just 9% in the return. 91% of the ‘chronic loser’ maiden winners will lose again when they return. So the question for the handicapper is = *when are they a good gamble?*
- Late speed is the key to success with the chronic loser repeating after it finally breaks maiden. There are large positive ROI with S/P=1, FR3=1, F/X=1 and VEL=1. Interesting that PER=1 was a big loser, while PER=2 showed a nice profit.
- Early speed is the kiss of death with these horses. Factors such as FR1, PAC and E/P had horrendous and surprising losses. RS=“F” (running style Front) did not get a single winner! RS=“E” (run style Early) were badly over bet and the ROI was just 0.66. RS=“S” (Sustained) was a strong performer with many longshot winners.
- Turf Routes are the *Achilles-heel* for the ‘chronic losers’ with almost no winners.

Summary

The public is justifiably skeptical when a chronic loser breaks their maiden and they tend to get tepid betting in their return. However, those that have strong late speed factors in their favor are excellent longshot bets despite the poor record. Those that used early speed to finally break their maiden are almost certain to lose when they return.

Two Strikes and Your Out?

Most maiden winners have to face two difficult obstacles after they win =

1. Step up in Class (facing other horses that have won before)
2. Race at a longer distance

Some even face the proverbial “third strike” if they have to change surface as well. All of this is very demanding on a young horse that may be inexperienced and previously only raced against non-winners.

On the next page, we’ll track these maiden winners and try to identify the key factors that signal when they can overcome the “strikes” against them.

*Advanced Handicapping***Maiden Winners – “Just Broke Maiden”****STRIKE-1 Stepping up in Class**

After the maiden score, the trainer must now decide where to place the horse vs. winners. There are many factors that go into this decision, including the pedigree, quality of the maiden win (speed figure) and the conditions available at the local track. Looking at the chart on page-2 the logical class level for a M32 winner would be to a C08 or C10. But most trainers with M32 winners will try a tougher level, some even moving way up to Nw1. It is very natural for the owners and trainers of maiden winners to enter their horses too high in class in their next start. They are ambitious and assertive with a winner. The window of opportunity and success with racehorses is usually very narrow - might as well take a shot.

I looked at the 11,899 maiden winners in this study and compared the EPR (par) in their return start with the SOR (strength of race) from the maiden victory. Although the SOR is also based on the quality of the previous start (performance figures), the class change chart shown below will give you excellent insights into the challenge that thoroughbreds face when they compete vs. winners for the first time.

Just Broke Maiden	5.5f-9.0f	Purse \$10,000+			
Class Change*	Plays	Wins	Win%	WROI	I.V.
0 or Drop	0812	221	27%	0.90	2.14
1	0416	98	24%	1.15	1.91
2	0504	104	21%	0.84	1.65
3	0628	117	19%	0.79	1.49
4	0729	116	16%	0.75	1.31
5	0846	118	14%	0.73	1.14
6	0840	110	13%	0.87	1.09
7	0899	106	12%	0.88	0.97
8	0914	098	11%	0.75	0.91
9	0920	086	09%	0.76	0.78
10+	4390	304	07%	0.64	0.59

Analysis

A couple of things struck me here. First, the large number of maidens that move 10 or more points from their winning SOR level. More than one-third of the sample maiden winners will enter a race next out that has an EPR that is 10 or more points higher than the SOR of the maiden win. This confirms very clearly that most barns place their new winner too high in the return start. The results are predictably weak for these horses with a terrible impact value and ROI and just 7% of them are able to win again.

The second impression was the near-perfect correlation from top to bottom with the impact and win percentage. The greater the difference in the SOR → EPR change, the tougher it is for the maiden grad to compete vs. winners. Those horses that remain within 3 levels of their maiden SOR perform very well and win a lot of races in their return. If the EPR is less than 2 levels higher than the SOR, profits can be made with “just broke maiden”.

Notes:

***Class Change**

Today's EPR – SOR (maiden win, last start). The EPR is subtracted from the SOR to determine the class change.

EPR (Estimated Performance Rating) is shown in the top header of every screen in HTR2.

SOR (Strength of Race) is found in the HTR2 PP screens (PPQ, PPS, FIG1, FIG2 and FPS). The number is always shown on the left side of the running lines preceding the class information. Example → **095 3up M32** The SOR in this case = 95

Advanced Handicapping

Maiden Winners – “Just Broke Maiden”**STRIKE-2 Stretching Out in Distance**

We can see a clear detriment to the maiden winner as they step up in class – often too far with negative consequences. *How far is too far* in terms of distance? Many maiden winners will find themselves trying a new distance next time out; the vast majority moving from a shorter sprint to a longer one, and many move right into a route. The table below reveals how our 11,889 maiden winners did in terms of additional furlongs after breaking their maiden. Surface is not considered in this test.

Strike-2 Added Distance	Just Broke Maiden	5.5f-9.0f	Purse \$10,000+		
Additional Furlongs	Plays	Wins	Win%	WROI	I.V.
0 or less	6758	849	13%	0.79	1.04
0.5	2242	311	14%	0.86	1.16
1.0	1166	133	11%	0.58	0.95
1.5	0569	056	10%	0.61	0.81
2.0 or more	1164	130	11%	0.68	0.92

Analysis

After breaking their maiden the horses that remain close to their winning distance are the best bets. Those that move into uncharted territory and extend a furlong or more, incur a slight disadvantage. What is more interesting about the stretch-outs is the decline in ROI. This indicates the public is probably not noticing the new burden and they don't take the extra furlong(s) into consideration when they bet on these horses. It is costly as you can see from the chart.

Next chart includes our “3rd Strike” along with the distance. I did not specify the exact surface change. Typically it will be Dirt/Artif → Turf, but Dirt <> Artificial happens all the time. Even the rare Turf to Dirt is included here. All surface changes are indicated in the stats chart below.

Strike-3 Changing Surface	Just Broke Maiden	5.5f-9.0f	Purse \$10,000+		
Additional Furlongs	Plays	Wins	Win%	WROI	I.V.
0 or less	2084	250	12%	0.81	1.00
0.5	0705	073	10%	0.69	0.87
1.0	0404	039	10%	0.44	0.80
1.5	0214	024	11%	0.79	0.97
2.0 or more	0406	038	09%	0.52	0.81

Analysis

This test was for maiden breakers that raced on a new surface in their subsequent start. The effect is slight on the impact value and win%, but the ROI hits some terrible bottoms in some cases. Again, we must conclude that the public is betting these maiden winners at a level that does not indicate the obstacles of surface switch and extra distance matter to them. At low odds, any horse facing two or more new challenges is at a disadvantage and should be bet against.

How difficult is it for a maiden winner when all three strikes: (1) Up in Class; (2) Stretching out; (3) and Changing surface at once? We'll define the *3-Strikes* with the following parameters →

1. Stepping Up at Least 4 Levels (see page 6)
2. Stretching out at least 1 furlong in distance further than the maiden win
3. Changing Surface (any combination)

3 Strikes	Just Broke Maiden	5.5f-9.0f	Purse \$10,000+		
Item	Plays	Wins	Win%	WROI	I.V.
3-Strikes	854	059	07%	0.52	0.60

Analysis

Predictably terrible results; taking on all three challenges is just too much for almost any horse.

*Handicapping with HTR***The (K) Rating – Top to Bottom**

The (K) rating is the venerable backbone of the HTR program. It weaves a comprehensive handicapping analysis for all horses into a single number for fast comparison. This month, we devote the next several pages to a total dissection of the (K) rating from the top numbers to the bottom. We have done this before, but there are some new statistics and a different perspective to increase your analysis power using the (K). Here is the data key to the chart →

(K)

The K-rating is numerated from a maximum of 115 to a low of 50. Below 60 is the true dungeon for thoroughbred racehorses, as you'll see on the chart, so they were lumped together. Otherwise, each individual (K) number is assessed to give you a sequential perspective. Note: The (K) has a decimal portion attached to it. For example: K= **100.93** and K=**101.39** would both be shown as **101** on the chart. However, the tie would be broken internally in HTR2 for ranking purposes and export users get the full decimal portion when they send the data out to a file.

AvgOdds

The first column gives the average off-odds (final tote) for every horse with their particular (K) rating. Note that this is different from the AvgWin (below), which is the average payoff for winners only. This column is the average odds for every horse in the sample.

Plays

Plays indicates the number of horses in the sample. It is labeled "plays" because we simulate a bet on each to compute the ROI. The overall totals for this sample = **306,143** horses from **37,562** races.

WinPc

The Win Percentage for that particular (K) level. Ties are fairly rare with the (K) so the win% is a viable statistic. The win% shown here contains the decimal portion for greater understanding, particularly at the lower levels where the result is often < 1%.

ITM

This is the In-the-Money percentage or the number of horses that finished 1-2-3 at that level. The 'sweet spot' would be the level at which the ITM is over 30% while the average odds are greater than 10/1. This occurs in the mid-90s on the chart – perfect for trifecta keys.

AvgWin

The average price paid by winners at this level on the chart.

High

The highest win price paid at this level.

I.V.

Impact value computation is added for statistical completeness, but it is not really necessary with the (K) rating because there are so few ties and rarely multiple qualifiers in the same race.

The complete chart takes up the entire space on page-9. Analysis is found on page-10. Additional data will be presented later in this text using the same chart format.

Date sample: Oct 1, 2006 – Sep 30, 2007. Purse \$10,000 or more only. PL-5.

The Complete Chart of the (K) Rating

(K)	AvgOdds	Plays	WinPc	ITM	WROI	AvgWin	High	I.V.
115	00.9	00572	52.1%	84%	0.92	\$3.5	\$9	3.59
114	01.1	00891	46.5%	82%	0.90	\$3.9	\$9	3.30
113	01.3	01545	43.7%	79%	0.90	\$4.1	\$18	3.18
112	01.5	02562	40.4%	77%	0.90	\$4.5	\$15	2.98
111	01.7	03465	35.5%	73%	0.85	\$4.8	\$16	2.64
110	02.0	04739	32.6%	70%	0.85	\$5.2	\$19	2.49
109	02.3	05946	29.7%	67%	0.83	\$5.6	\$39	2.27
108	02.7	07060	27.9%	65%	0.84	\$6.0	\$30	2.16
107	03.0	08169	25.0%	63%	0.83	\$6.6	\$29	1.96
106	03.4	09202	23.0%	60%	0.83	\$7.2	\$37	1.80
105	03.8	10041	22.0%	57%	0.83	\$7.6	\$29	1.75
104	04.2	10483	19.4%	55%	0.80	\$8.3	\$39	1.54
103	04.7	11016	18.5%	52%	0.83	\$9.0	\$48	1.49
102	05.2	11522	17.0%	51%	0.81	\$9.5	\$50	1.38
101	05.8	11812	15.7%	48%	0.80	\$10.2	\$63	1.28
100	06.5	11442	14.1%	45%	0.80	\$11.3	\$52	1.16
099	07.2	11614	12.6%	42%	0.77	\$12.2	\$68	1.04
098	07.9	11339	12.0%	40%	0.80	\$13.4	\$82	1.00
097	08.8	10688	11.0%	38%	0.79	\$14.3	\$107	0.92
096	09.9	10454	10.2%	36%	0.79	\$15.6	\$104	0.86
095	10.8	09896	09.8%	35%	0.84	\$17.1	\$93	0.84
094	11.8	09558	08.6%	33%	0.74	\$17.3	\$94	0.74
093	13.2	09125	08.1%	30%	0.75	\$18.5	\$103	0.71
092	14.3	08828	07.4%	30%	0.75	\$20.5	\$105	0.64
091	15.8	08496	07.4%	28%	0.83	\$22.6	\$83	0.65
090	17.0	08011	06.4%	26%	0.75	\$23.3	\$117	0.57
089	17.9	07537	05.8%	24%	0.76	\$26.0	\$111	0.52
088	19.4	06780	05.3%	23%	0.74	\$28.3	\$194	0.47
087	21.1	06665	05.1%	22%	0.73	\$28.4	\$139	0.46
086	22.2	06075	05.0%	22%	0.79	\$31.6	\$143	0.46
085	23.5	05638	04.5%	21%	0.72	\$32.0	\$98	0.41
084	25.1	05480	04.2%	19%	0.73	\$34.6	\$111	0.39
083	25.6	04656	04.1%	19%	0.66	\$32.1	\$123	0.38
082	27.4	04521	03.9%	18%	0.71	\$36.1	\$116	0.37
081	29.6	04210	03.8%	17%	0.72	\$38.5	\$225	0.35
080	31.4	03999	03.2%	16%	0.68	\$43.0	\$115	0.30
079	33.8	03858	03.2%	15%	0.79	\$49.4	\$182	0.30
078	36.3	03816	02.1%	13%	0.52	\$49.1	\$182	0.20
077	36.6	03288	02.8%	13%	0.72	\$52.3	\$226	0.27
076	37.6	02856	02.3%	13%	0.62	\$52.4	\$192	0.22
075	39.8	02628	02.4%	12%	0.71	\$58.0	\$210	0.23
074	41.4	02437	02.6%	12%	0.83	\$63.6	\$208	0.26
073	42.7	02159	01.8%	10%	0.63	\$72.0	\$266	0.17
072	43.1	02008	02.1%	11%	0.56	\$52.1	\$183	0.21
071	46.0	01858	01.8%	09%	0.55	\$59.9	\$125	0.18
070	47.2	01726	02.0%	09%	0.63	\$61.8	\$153	0.20
069	48.6	01459	01.8%	08%	0.67	\$75.7	\$147	0.18
068	50.5	01238	01.4%	08%	0.52	\$76.1	\$158	0.14
067	53.1	01298	01.4%	07%	0.67	\$96.3	\$215	0.14
066	55.4	01296	01.2%	06%	0.43	\$73.5	\$140	0.12
065	56.4	00991	01.1%	06%	0.43	\$78.0	\$170	0.11
064	55.7	00890	01.2%	07%	0.34	\$55.0	\$113	0.13
063	57.5	00820	00.9%	06%	0.39	\$90.4	\$149	0.09
062	59.7	00817	00.9%	05%	0.36	\$82.9	\$155	0.09
061	61.2	00793	00.8%	04%	0.39	\$104.2	\$219	0.08
060	62.3	00659	01.1%	06%	0.41	\$77.3	\$107	0.11
<60	68.8	05210	00.7%	04%	0.40	\$110.3	\$311	0.08

Handicapping with HTR
The (K) Rating – Top to Bottom

Analysis of K-Chart

The chart has a number of textbook observations for HTR handicappers. Important to remember that (K) is not like the MLO, scratches are removed and the rating instantly adjusted for every field.

- The Chart tops out at **K=115**. At that level, a horse completely dominates its competition. We used to go a bit higher on the scale, but there was a diminishing return and splitting it further means nothing. Achieving more than 50% winners with a mechanical top selection is a nearly impossible task. We have achieved it here although the average odds are less than 1/1 (0.9) and the sample size is less than 600 entrants. However, the ROI is the best on the chart.
- More than 40% winners can be achieved with **K=112** or higher and the sample size is considerable for those groups. The 112 rating also seems to be the dividing line with the (K) in terms of absolute strength vs. the field. Even the ROI separates at **112** and drops below 0.90 for all other numbers on the chart. The **K=112-115** group hit the board some 75% of the time.

An important lesson here = no matter how strongly positioned a thoroughbred runner looks vs. its field (K=112-115), the failure rate is still remarkable (more than 50% lose). But in terms of finding a 'single' for Pick-X bets, it is your most reliable identifier before the final odds are known.

- To determine the "bottom out" level with the (K), we need to look at the break in the win% and I.V. That occurs clearly at about the number **78**. At that point, horses are almost certain to lose - at least 97% of the time - and often much more as the K-numbers decrease. The drop in the ROI is so low below **78** as to never expect profits no matter how well we can handicap at those levels.
- The very lowest group has been lumped together at **K < 60**. Those horses mired between **50-59** on the scale, will assuredly lose more than 99% of the time. This means your fair odds for betting on them are at least 99/1! Despite a "high" winner that paid over \$300, obtaining a profit is unimaginable. Keep in mind that the data shown was for purse \geq \$10,000 and the number of horses at the bottom of the scale was 10 times the top level (**115**), so these horses are something you will encounter daily at major tracks.
- Impact values drop rapidly as the (K) ratings go below **95**. This suggests a negative correlation in terms of probability. More than 60% of entrants fall below the number **95**, so this is a reasonable place to begin a contender selection method. Although there may be many long shot winners below **95**, none of them have better than a 10% chance of winning and less than a 1 in 3 chance of even finishing in the trifecta.
- So where is the 'sweet-spot' on this chart? After studying all of the aspects, my theory is that the number **103** is the 'perfect' combination of all positive items. At **103**, the sample size is large, yet the I.V. comes close to the optimal 1.50 with a strong ITM of over 50%. This tells us that the majority of horses rated **K=103** are 'live' yet at the same time the average off-odds are nearly 5/1. The ROI is a loser because the average winner paid just \$9, but with such a large quantity of horses with **K=103**, we can assume there were plenty of live long shots and overlays.

On the next page I will display the (K) chart with favorites only.

BTW: this formatted K-Chart will be available in the 2008 versions of HTR2, in the Robot options.

Handicapping with HTR
The (K) Rating – Top to Bottom

Favorites

This chart restricts the test to the final betting favorite in each race. Most of the higher rated (K) become favorites anyway, but the list here may enlighten as to the weakness of the public choice as we go further down the scale.

<u>Tote</u>	<u>Favorites Only</u>	<u>All Races</u>	<u>Purse \$10,000+</u>	<u>PL-5</u>				
<u>(K)</u>	<u>AvgOdds</u>	<u>Plays</u>	<u>WinPc</u>	<u>ITM</u>	<u>WROI</u>	<u>AvgWin</u>	<u>High</u>	<u>I.V.</u>
115	00.8	00520	53.5%	84%	0.89	\$3.3	\$6	3.70
114	00.9	00764	48.7%	84%	0.88	\$3.6	\$7	3.46
113	01.0	01240	48.3%	81%	0.91	\$3.8	\$7	3.55
112	01.1	01902	46.0%	80%	0.91	\$3.9	\$8	3.44
111	01.2	02388	41.2%	77%	0.84	\$4.1	\$8	3.10
110	01.3	02893	38.9%	76%	0.83	\$4.3	\$10	3.01
109	01.4	03204	37.3%	73%	0.83	\$4.5	\$10	2.92
108	01.5	03251	37.1%	72%	0.85	\$4.6	\$8	2.94
107	01.5	03294	33.1%	71%	0.79	\$4.8	\$9	2.66
106	01.6	03069	32.7%	70%	0.81	\$4.9	\$9	2.64
105	01.7	02890	33.2%	67%	0.83	\$5.0	\$9	2.74
104	01.7	02545	30.2%	65%	0.78	\$5.1	\$9	2.53
103	01.8	02284	29.9%	64%	0.79	\$5.3	\$10	2.53
102	01.8	01951	29.8%	65%	0.80	\$5.3	\$10	2.54
101	01.9	01648	30.0%	63%	0.82	\$5.5	\$11	2.60
100	01.9	01173	26.9%	61%	0.77	\$5.7	\$10	2.38
099	02.0	00965	26.1%	57%	0.76	\$5.8	\$10	2.33
098	02.1	00739	24.8%	58%	0.75	\$6.0	\$10	2.24
097	02.1	00586	27.3%	58%	0.82	\$6.0	\$10	2.55
096	02.1	00441	22.9%	56%	0.67	\$5.9	\$9	2.14
095	02.2	00342	26.9%	53%	0.82	\$6.1	\$10	2.52
094	02.2	00265	23.8%	55%	0.74	\$6.2	\$9	2.27
093	02.3	00191	24.6%	50%	0.79	\$6.4	\$9	2.40
092	02.3	00175	17.7%	51%	0.56	\$6.3	\$11	1.72
091	02.4	00109	19.3%	54%	0.63	\$6.6	\$9	1.93
090	02.4	00086	26.7%	43%	0.85	\$6.4	\$8	2.66
089	02.5	00061	16.4%	43%	0.58	\$7.1	\$9	1.62
088	02.7	00044	13.6%	41%	0.47	\$6.9	\$13	1.41
087	02.5	00034	11.8%	38%	0.41	\$7.0	\$9	1.23
086	02.4	00031	22.6%	55%	0.71	\$6.3	\$7	2.39
085	02.8	00033	21.2%	61%	0.83	\$7.8	\$12	2.31

Analysis

Favorites won more than 34% overall in this sample – an upward winning trend for chalk that was fattened by some of the summer meets such as MTH that featured over 45% winning choices. If the favorite can hit at least **108** on the K-scale, it is a much better than normal bet. Those with K=**111** or higher win far above expectations.

At the **103 – 94** level the average odds are in the 2/1 range. These are what we might call the “tepid” favorites. They are not able to win more than 30% of the time and are more vulnerable than those with the higher (K) ratings. But the public rarely makes such distinctions in their exotic betting and wagering favorite will be used on almost all their tickets from the superfecta to the pick-6. This is the opportunity range for betting against the chalk. If the favorite has a K-rating less than 100, it is likely to lose at low odds.

The ITM benchmark is about 67% for all favorites. This means your chances of successfully tossing the chalk from the trifecta are about 1 in 3. But the lower the (K), the better the hope of seeing the favorite finishing out-of-the money and receiving a larger payoff. Any favorite with a (K)<**100** should be automatically bet-against in the trifecta.

HTR Software Updates
MaxVel Software Upgrade Nov 2007

Several new features, user-friendly additions and some new options highlight this first *MaxVel* software upgrade. Many thanks for the suggestions and feedback from users.

- **[Raw]** option (replaces **VAR2**). “Raw” means no adjustments, no variants, the feet-per-second (fps) ratings are just pure math = distance covered divided by time elapsed. This is how we did it in the early days of Sartin velocity, but I’m not sure of the value of using raw fps anymore as horses change distance/surface constantly and raw numbers are not very comparable. If thoroughbred races were run on invariable courses similar to Harness races, we could better utilize the raw numbers. Note: the ‘Raw’ fps are computed from the 1/100 sec. internal fractional times - while the screen displays the rounded 10ths of a second – so you’ll get slightly different ratings if computed from the visual.
- The default Past-Performance screen **[PPQ]** has been expanded with additional fractions and other details.
- **PL-6** now matches PL-6 in HTR2 – best effort at the exact surface in last 365-days.
- **PL-7** now matches PL-7 in HTR2 – all effective lines are selected together.
- **PL-8** best E/P rating last 365-days.
- **PL-9** best A/P rating if close to today’s distance and surface last 365-days.

[V4] This new screen option presents all the “figures” from HTR including TRN, JKY, PED and WK ratings, as well as the four Impact ratings: ESP, ATT, RES and TOT. If you are not familiar with the Impact ratings, please visit our website Help screens and user guides. You can sort all of them including the QP (Quirin speed points) with this new format.

[Filter1] / [Filter2]

Click these buttons to filter the horse’s running lines on the lower PP view for distance and surface. Similar to the “hot keys” found in HTR2. Choose **[Filter1]** to view running lines that match today’s surface (exact) and/or select **[Filter2]** to view only the lines within 1 furlong of today’s distance. You can choose both at the same time. The buttons turn the color green when activated. Important: these filters are for viewing only and do not change the selected PL (#) that may be hidden when the filters are applied.

Modeler

[Current Race] Click this button to immediately locate the race you were working with on the main screen. It will highlight it on the modeler track list and you’ll be ready to test it specifically.

[Full Stats] This readout was enhanced to include full rank ranges for TRN, JKY, PED, WK, and the Impact ratings: ESP, ATT, RES and TOT.

Modeler Race Readouts

All the model readouts now include the TRN, JKY, PED and WK ranks. I was just barely able to squeeze them onto the screen in some cases. There was not enough room to include the Impact ranks however, so they are *not* computed in the output, although they appear in various other aspects of *MaxVel*.

I sure appreciate the email and discussion group “suggestion box” on the *MaxVel*. If your idea was not used this time, it is because the mechanics of the program were just too intricate and complex to allow inclusion. From a programmer’s point of view, *not* being able to implement some of these good suggestions is frustrating for me as well, however this would require extensive re-coding and an overhaul of the existing modules. Remember that *MaxVel* is less than a year old. It took more than 10 years to put together the HTR2 program the way you see it now. So the future is unlimited for *MaxVel* and it will continue to expand.

Late Announcements and Reminders

MaxVel Upgrade

By the time you read this, the MaxVel update should be available for download from our website. I did not have time for the usual beta-testing, so I'll consider this first upgrade tentative and submit another one in December with any bug fixes or errors found by users. Many of the issues that crashed the program in the early edition of MaxVel have been fixed in this version.

Happy Holidays and big THANKS to our Subscribers

We had a tremendous year on HTR with our membership numbers growing nearly every month. This is primarily due to the positive word of mouth from our loyal (and winning) users. On behalf of HDW and Webmaster Rick, I thank you for subscribing with us and we will continue work hard to earn your patronage. Have a wonderful holiday season and we hope 2008 brings some hefty winnings to you and yours.

HTR Software

Voicemail: 714-366-1HTR

Fax: 714-693-3399

Email: kmssoft@earthlink.net

HTR website (software updates): www.htr2.com
www.homebased2.com/km

HTR Report is an on-line newsletter and is published bi-monthly, then placed on the HTR member (download) web site around the 5th of the month. Monthly subscribers to HTR can view the current newsletter for no charge on-line, Adobe Reader software (free) required. Past issues are available in our website archive library.

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