HANDICAPPING
with
COMPUTRAK HANDICAPPER 2005

by
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TABLE OFCONTENTS

CompuTrak Oddsline and Summary Report

Successful handicapping is now easier than ever. Now, for fast-and-efficient handicapping you need only CompuTrak's OddsLine and Summary. As you know, horses with lower odds have higher probabilities of winning. Using the OddsLine and Summary information, a handicapper can find these, and other very important occurrences, the very source of a successful handicapper's sought-after profits. Using CompuTrak you can find these occurrences with confidence.

CompuTrak provides answers to key questions like these:

- Which horses, based on the odds, have the higher probability of winning?
- Which of the previous pacelines predicts the best finish time for a particular race?
- What does the most recent paceline predict for a particular race's finish time?
- What are a horse's Early Speed, Closing Capability, and Present Form?

Always keep in mind the obvious: your most important goal as a handicapper is to earn a profit. This requires betting on horses only when the risk-to-reward is favorable, ignoring those races where, in your judgment, the risk-to-reward is not favorable. We designed CompuTrak to help you make these very important judgments—of when to wager, how much to wager, and when to skip the race!

How? Very often the winning horse will be the one with at least one of these attributes:
The lowest OddsLine odds.
The best Predicted Finish Time.
The Highest Early Speed.
The Lowest Friction
The Best Present Form.

Your confidence increases even more when a horse possesses more than one of these attributes simultaneously, all of which derive from solid engineering principles (fully described in CompuTrak documentation)
By simply scanning CompuTrak's OddsLine and Summary report and by considering the actual

odds of the horses, a handicapper will often find very favorable risk-to-reward scenarios.

Here again CompuTrak can serve you well.

Why? Because much of CompuTrak's analysis yields information not easily available to the general public. (The basis of such analysis we describe in the document, "Engineering Analysis of Thoroughbred Racing.")

Examples of Unique CompuTrak Information

One example of this is CompuTrak's Horse Friction value. The lower this value, the better the closing capability of the horse. CompuTrak obtains this as a true measure of the horse itself. Thus when the leading horse slows, CompuTrak—using this true measure--avoids erroneously classifying as a closer a "moving in" horse.

As another example you might come across a horse with high actual odds. Your first reaction might be not to consider it a contender. However, suppose this horse, not recently raced, has an extremely high Form number as a result of recent workouts. You might reason that the horse's high odds are mostly due to the way the horse has raced in the past, but the high Form number shows that it has improved greatly. Such a horse is worthy to consider a contender.

Similarly, previous high early speed with reasonable finish position can be enough to consider the horse for any type of race, but it can be especially important in a sprint race. You should also consider any horse with low friction and with reasonable finish in a previous race a contender in any race, but especially so in a route race.

From the early days of CompuTrak, Predicted Finish Time has proven itself a valuable pointer to winning horses, so the Summary includes it, showing the very best time from all a horse's pacelines. Because studies show that recent time often is more indicative of a horse's present capability, the recent predicted finish time is also in the Summary.

These are just a few examples of the power of the data to point you to the winning horses. As you gain experience, you will find that the choices, as mentioned before, will seem "to jump out of the page" for you.

CompuTrak Options

What else? You have the means easily to decide whether to include pacelines, the race distance of which is within a range (of your choosing) of today's distance, and similarly to include or exclude races that were run on a different surface, (dirt or turf), than today's. CompuTrak gives you the option to adjust weighting multipliers for the factors that go into creating the Oddsline; Speed, Form and Magic to match various real time race conditions that you observe. (Starting with the default values is recommended as they have been tested by experience over a range of tracks and track conditions.)

All this power is now at your fingertips. A Windows program, CompuTrak's program options are easily made with each of its reports just a mouse-click away.

We recommend starting with the default settings. Doing so creates an OddsLine and Summary Report, which includes all the pacelines regardless of the distance or surface., and the recommended values for the OddLine Multipliers. Experience has shown that these default settings lead to good handicapping decisions.

By doing that, the OddsLine and Summary will include all the pacelines, regardless of their distance or surface, and the nominal values for the various multipliers. Often, the OddsLine created by the default settings more accurately represents the overall winning probabilities of the horses. Each of the other data outputs, will, similarly, be based on all of the horse's previous pacelines.

Choosing Horses To Wager

You can fine-tune your choices by scanning the Odds column, and the best and recent times, while observing whether the races were at similar distances and surfaces as today's. Recent Early Speed is important in all races, but more so in short sprints, while low numbers for Recent Friction is valuable for closing capability and stamina, especially so in routes and turf races. (Negative Friction means the horse, on the average, sped up in the race. That happens more often in turf races.)

Most data are based on the previous races of horses, but it is also important to know about a horse's present condition. The Form number gives you that. Based on recent workouts and races, the higher the Form Number, better. A very high number, is often sufficient for choosing a horse. If the horse is a first time starter, (the data for first time starters and foreign shippers appear at the bottom of the OddsLine and Summary screen), its Form Number may provide the best information about him.

Depending on various factors, you can adjust the settings that produce the OddsLine and Summary. You may, for example, decide to limit the previous pacelines to those that are within a certain distance of today's race, and to exclude those that raced on a different surface. Sometimes you may notice that the track is favoring early speed. In that case you may want to increase the Speed Multiplier, or, if the track is favoring closers, you might decrease the Speed Multiplier, and/or increase the Magic Multiplier.

In summary, the key to profits is to bet when there is a good probability that your horse will win and the final odds for your choice is reasonably high. Some examples of where the OddsLine and Summary point to the winning horse can be these:

OddsLine odds are low.
Recent Predicted Time is the best.
Recent Early Speed is best with good finish position. (More important for sprints)
Recent Friction is best with good finish position. (More important for turf and routes.)
Form is high
Form is high due to workouts, after layoff, and Best Time is comparable, or better, than other horses.
Combinations of the above for the same horse.

CompuTrak Extensive and Charts Reports

Overview

There may be times when you wish to do more in-depth analysis to confirm, or modify your choices. For example this may happen you wish to use additional information to separate contenders when you believe those contenders are closely ranked. CompuTrak gives you the tools for this in the "Extensive" report, and by generating "Charts" to provide you with a picture of a horse's capability over time.

All the data and information that have proven to be so useful in previous versions of CompuTrak have been retained, and very important features have been added for those of you who wish to take your handicapping to deeper levels. Now they ar also much easier for you to use since only a few mouse clicks brings the information to you. so, by also making to the screen. (Viewing the Charts does need Microsoft Excel to be in your computer. While these Charts are not required for successful handicapping, they do provide a bit of the "icing on the cake.")

Thus, the CompuTrak® power resulting from the research reported in "Engineering Analysis of Thoroughbred Racing", and its "Addendum" is not only still available to you, but taken together with the new features you indeed have a powerful handicapping tool.. You now, for example, have the Boxer and Magic Number to provide you with an overall rating of hors capability; a Speed Rating, to let you know the horse ran a race in which he tried; a Form Rating to show you the present form, or condition of the horse,: and an Improve Rating which shows how a horse's performance changed from race to race. The Charts show you graphically how a horse's Early Speed, Friction and Boxer Number progressed, paceline-by-paceline.

All the CompuTrak output information, both the old and the new, are described in the User's Manual. The basis for the Boxer Number is shown in "Addendum to Engineering Analysis of Thoroughbred Racing."

There are some CompuTrak features working for you "behind-the-scenes." For example:

- Track Variant, used in internal calculations, is based on the BRIS Speed Rating. Since the BRIS Speed Rating is adjusted, i.e, normalized across tracks, variant and par times are taken into account for you. Thus, for example, you shouldn't have to adjust calculations for variant or par values when there are "shippers" coming from a different track than today's.

- Jockey weight changes from previous races to today's, are taken into account in the manner described in "Engineering Analysis of Thoroughbred Racing."

Sincr there is some useful auxiliary information contained in the BRIS DRF file, CompuTrak places them on the Extensive Report for your convenience.

Handicapping with the Extensive Report

Of all the information about horses, available to handicappers, one can argue that the most important is the horse's performance in previous races. Knowing this we are faced with the question as to which of the horse's previous should be considered when handicapping today's race. To answer this question, we first have to describe, more fully, the information that is generated by CompuTrak from a horse's previous pacelines. In all that follows, keep in mind that you use the various data with confidence, knowing that the basis for them is some engineering mathematics. One general rule holds true for all data outputs.. When examining pacelines, it is usually best to choose those that are at, or are close to today's distance, and where the racing surface is the same, except where the Oddsline, discussed above, is being examined, where experience shows that including all the types of races in a horse's history often presents a more accurate picture of horse capability.

Predicted Finish Time

Since a race is won by the horse with the best finish time, the Predicted Finish Time calculated by CompuTrak is evidently of prime importance.. Often the horse with the best Predicted Finish Time is sufficient for choosing the winner.
But always keep in mind, that there is no one factor that, by itself, will yield day in and day out handicapping success. Horse racing is too complex an activity for such simplicity

Since the early fractions of sprint races are faster than those of routes, if a sprint race is used to predict the finish time of a route, very often the Predicted Time for the route will be unrealistically fast. This is a characteristic common to handicapping techniques and is often dealt with in one of two ways. In some handicapping approaches, the horse that is going from a sprint to a route, is handicapped as if the race were still a sprint, and then a correction factor is added to account for the greater distance in the route. Some value, typically a correction factor of about 6.2 seconds or so, is added for each half furlong that today's route is longer than the previous sprint. The drawback to this approach is that it assumes that the particular horse you are handicapping will race this increased distance in a time that is based on a correction factor obtained from an average of many horses in many races, rather than being based on the actual capability of the particular horse in question to be able race the added distance.

The other approach, which is the one taken in CompuTrak, is to let the engineering mathematics extrapolate the Predicted Finish Time from the actual values of the previous sprint paceline. While this has the drawback of the Predicted Finish Time usually being too fast, there are advantages to this approach of using actual values, rather than averages, which can more than compensate for this.

First, since we can see why we would expect the Predicted Finish Time for a route race, that is based on sprint data, to appear to be better than if the data were taken from a route, we can just about eliminate the horse if the Predicted Finish Time turns out to be worse than the Predicted Finish Time of horses whose data were taken from routes.
This is usually a powerful elimination technique.

Second, when the Predicted Finish Time of a horse going from a sprint to a route, turns out to be better than what would be expected in a route, CompuTrak gives you additional clues to help you determine whether a horse may be capable of truly

performing that well. If the friction is low, the Boxer Number high, and the Boxer Speed Rating is within a reasonable range, consideration should be given to the horse even though the Predicted Finish Time looks suspiciously fast. A handicapper can, at times, find additional support for such a decision with knowledge of a horse's breeding. This is one reason CompuTrak passes on breeding information.

When the change in distance is from a route to a sprint, the handicapping task can be a bit easier because we can usually assume that the horse can run the shorter distance. Here the question revolves around whether or not the horse is capable of generating the Early Speed normally required in a sprint. If you find good Early Speed in route pacelines, it's a good indicator that the horse may do well in a sprint. This is especially true if, in addition, the horse has a good Predicted Finish Time for today's sprint.

Early Speed

Early Speed, at times, can determine the winner. The Early Speed output of CompuTrak is the speed right at the beginning of the race, the higher the number, the higher is the Early Speed.

Early Speed can often be the determining factor in certain cases. One such is when the race distance is short, say, 4.5, 5, 5.5, even 6 or 7 furlongs, Here Early Speed can outweigh other factors because there may not be enough distance remaining in the race, for a horse with less Early Speed, even with greater stamina, to overtake the Early Speed leader.

A second instance, where Early Speed can be dominant, is when the condition of the track is particularly fast. Although we may have a general idea about track condition before the day's races start, we, unfortunately do not really have a good grasp of track condition until after a few races have already taken place. We can try observe the first few races to make a judgment about it.

In these two cases, when the race distance is short, or when the track condition is very fast, we should put greater emphasis on Early Speed, but we should check to make sure that the overall Predicted Finish Time is among the fastest.

Typically, speed numbers greater than about 93 represent the start of the high end of the scale for the Early Speed of horses.

The Boxer Speed Rating is useful here. If this rating is much lower than that of other horses in the race, it's an indicator that the Early Speed did not last.

Friction

In general, the term friction refers to forces that operate on a moving body in a way that retards its motion. "Engineering Analysis if Thoroughbred Racing", considered the overall friction that consists of two components; the friction force caused by the interaction of the horse with the track surface, and internal friction due to physiological factors relating to horse muscle tiring, overall well being and the like. That report showed how it is possible to separate out this internal friction. The CompuTrak Friction output is this internal friction. For convenience, we will just call it Friction.

The Friction output, primarily, is a numerical measure of closing capability, and relates also to stamina.

Without CompuTrak, it is difficult to truly assess a horse's closing capability. Usually this is done by examining previous pacelines to see if the number of lengths behind the frontrunner was decreasing as the race progressed. While this does provide some indication that a horse is a closer, it can be an inaccurate conclusion. It may be that the lengths behind the leader are decreasing because the leading horse is slowing down and not because the horse in question is an inherent closer. Having a numerical measure such as Friction, which is based on the actual performance of the horse itself, independent of the other horses, is a far more effective way to compare closing ability, or stamina of horses
The higher the Friction value, the greater is the force tending to slow the horse. Friction can have negative values. This occurs when, on the average, the horse sped up. Negative values of Friction are relatively uncommon in dirt races, but are not at all unusual in turf races.

For a handicapper, Friction can be the determining factor in certain situations. Since a low Friction horse has closing ability, or stamina, this characteristic becomes more important for the longer race distances. Also, just as Early Speed becomes important when a track is very fast, Friction becomes even more important when we have an "off" track that is

slow. Horses with high closing ability, or stamina, can more readily overcome the effects of a slow track than can a high Early Speed, high Friction horse.

There are other instances where Friction can be the important factor even if the track is not slow and the race distance is not long. Suppose, for example, that we are dealing with a sprint race on a normal track, and we observe in the CompuTrak output that there are a few top horses that have almost equal Predicted Finish Times. For simplicity, let's say that there are three such horses. We may see that two of the three top horses have high Early Speed, while the remaining horse has low Friction. It is not unreasonable to conjecture that the two high speed horses will get out in front early, tire themselves in vying for the lead, and set up the race for the low Friction horse to come from behind and win.

There are cautions to observe when evaluating Friction. You should look at the DRF comments, the Predicted Finish Time and the Boxer Speed Rating, to ensure that the horse ran a serious race. If, for whatever reason, a horse "took it easy" in the race, it may appear, fictitiously, that the horse had a low Friction value. Such a horse, for example, may have started with an extremely low speed and kept that speed constant throughout the race., so its speed degradation would be low. As seen in the addendum to "Engineering Analysis of Thoroughbred Racing", such low degradation could lead to a low Friction value. Clearly, in such an instance, a low Friction value would not be an indicator of stamina or closing capability. As noted above, the Boxer Speed Rating can be of great help in evaluating this.

Boxer Number

The Boxer Number, (the derivation is described in the Addendum to the Engineering Report), is a measure that takes both Early Speed and Friction into account. A high rating implies that a horse has a combination of good speed and stamina. Since it is this overall combination of Early Speed and stamina that is being rated, there can, at times, be horses with higher Early Speed, or lower Friction, and yet have lower overall Boxer Numbers. Boxer Numbers tend to place more importance on stamina, without sacrificing too much in the way of Early Speed capability.

One important use of the Boxer Number is a means for separating contenders. If you have a few horses that you have evaluated as having a good chance to win, the Boxer Number may be the means for making one of them the horse of your choice.

The higher the Boxer Number, the more capable the horse in this combined, overall sense. As with the other parameters, caution should be observed. In this case it is especially important that the horse did not race in an unusual way, such as having a slow start, or being blocked by other horses during some part of the paceline race. Again, the Boxer Speed Rating can help you to assess this.

Magic Number

This rating provides more insight into horse capability. We have mentioned that the Boxer Speed Rating can be useful when assessing Boxer Numbers. By combining Boxer Number, and Boxer Speed Rating into a Magic Number rating, we find that we often find the contenders and race winners. The higher the number the beter.

Horse Readiness

One of the more important things to try to know about a horse is his readiness to race today. CompuTrak provides you with two powerful tools to aid in your assessment of readiness: Form and Improvement.

Form

CompuTrak uses the recent history of a horse's races to assess his present Form. It does this by taking into account both workout and race results. The data is presented such that you can see how much of the overall Form Rating is due to workouts, and how much to races. For a first time starter, the Form Rating may be the only numerical rating available.

Improvement, Stability, or Degradation

A horse may be ready to race, but can we expect the horse to race better today than he has recently, or can we expect some

degradation? This is one of the very difficult questions in handicapping. You can address this issue by examining Predicted Finish Time, Early Speed, Friction, Boxer Number and Boxer Speed rating, and noting any changes from one paceline to the next. Since the pacelines are shown in date order, starting from the earlier to the more recent races, a handicapper can see the changes in these core handicapping parameters. If a horse has raced regularly, this procedure can give you an idea of whether a horse's capability is improving, reached a stable level, or is degrading.

As an additional tool, to address this question, CompuTrak provides you with an Improvement Rating, measured from paceline to paceline. It is based on the fact that some horses may be able to achieve a particular finish time with a trade off between Early Speed and Friction (deceleration). The rating is shown for each paceline showing the improvement, (by a positive number), or the degradation, (by a negative number), in comparison to the immediately preceding paceline. A positive number is even more meaningful, when the horse raced at a longer distance than in the previous race.

CompuTrak also shows you graphs of Boxer Number, Early Speed and Friction for all pacelines. This gives you a visual picture of how horse capability is varying over time. This can be very useful. After all "a picture is worth a thousand words."

If you see, for example, that a horse, over time, is both increasing Early Speed and lowering Friction, it is a strong sign that the horse is improving. This is so because normally, even without any improvement in overall condition, a horse can trade-off Early Speed by sacrificing endurance. When a horse demonstrates that both Early Speed and endurance are improving, a handicapper should take special note of it.

Choosing Pacelines

Choosing which pacelines to emphasize has elements of both science and aart that improves with experience. We can offer some guidelines.

> Look at how many days have elapsed since a horse's most recent race. If it has been less than about 30 days, use the most recent paceline that was at, or close to, today's distance and was raced on today's type of surface.
>
> The idea behind this is to take advantage of the likely possibility, that if a horse has raced recently, that race more truly represents his capability than an earlier race. If the paceline you choose is his very last race, your paceline choice is of higher confidence than if you have to go back further into the past to find an appropriate race.
>
> Of course, if the last paceline, has an unusual trouble associated with it, a trouble that you judge to be a one time occurrence, then go back to the next earlier paceline that is appropriate, with, of course some corresponding decrease in confidence.
>
> If an very appropriate paceline does not exist, or you have to go back too far in time to find one, then use a more recent race where the surface was the same, but the distance was somewhat different than today's. As a last resort you can choose a paceline with a different surface than today's but that is close to today's distance. Of course, the more you have to compromise your choice of a paceline, the more you may want to consider skipping the race, an option that should always be considered when data are poor.
>
> If more than 30 days, or so, have elapsed since his very last race, you should examine his recent workouts. If there is nothing unusual in the workouts, in the sense, that the recent workouts seem to be of average capability, then feel free to choose any of the horse's more recent pacelines that seem to represent its typical performance. However, if you find that one or more of the more recent workouts are exceptional, then you might choose a paceline that represents the horse's best performance under the assumption that the superior workout may be an indication that the horse is capable of repeating his best performance.
>
> Sometimes, it may be possible to use a paceline for the purpose of eliminating a horse. You can do this by searching for a horse's best paceline, regardless of when it was raced, and comparing the Predicted Finish Time from that paceline, with the Predicted Finish Times of the other horses, where the pacelines for these other horses were chosen by the techniques described above, i.e., where they were not chosen by their necessarily representing a horse's historical best. If you find, that the best paceline of the horse you are examining is worse in Predicted Finish Time than the standard paceline races of the other horses, you can eliminate the horse with the

obvious argument that even the very best paceline of the horse probably isn't good enough.

The reverse of this technique is a bit more problematical to use. If you find that an old paceline, which is a horse's best paceline, to be better than more recent races of other horses, you cannot readily choose the horse because you have to first find some evidence that the horse can be expected to perform as well today. His Form, based on recent workouts, can, sometimes, prove useful for this.

Non-Engineering Aspects of Handicapping

We have argued that the most important element in predicting the winner of a horse race is past performance. Since CompuTrak derives its power from an engineering analysis of past performance data, we are fortunate that past performance data are, for the most part, compatible with engineering analysis. Time, position, weight, and track variant, (a measure of surface condition), are the essence of engineering data.

There are also other data that, at times, are important to consider in handicapping. These are the data that are known, but are not amenable to engineering analysis. We need only cite breeding, jockey and trainer capability, medication, the effects of equipment changes, and earnings history to make this point.

From a handicapping point of view we need to emphasize, however, that many of these "non-engineering", factors are accounted for in the overall results of past performances. Again, since past performances are the key to horse capability, and since such capability can be ascertained from the engineering analysis, a handicapper may not be at a disadvantage even without detailed knowledge of these types of "non-engineering" factors.. We can, for example, note in the past performances, that a horse has raced on Lasix, or raced with or without blinkers, or raced with today's jockey, and use CompuTrak in the standard way to make our horse capability assessments.

The times when such "non-engineering" data need to be considered more carefully are when there are changes, or when the engineering type of data are not available.. For example, horses may be put on medication, or blinkers are put on, or taken off, for the very first time. A handicapper should, at a minimum, be aware of such changes, so that a possible change in the horse's performance can be kept in mind during the handicapping process.

A horse may be a first time starter and thus have no racing history for CompuTrak to analyze. Similarly, a horse may be an overseas shipper, with sparse racing information available. In these cases, a handicapper needs try to asses a horse's chances from the data on workouts, breeding, jockey and trainer. When dealing with a foreign shipper, which has raced before, but where the data about those races are incomplete, similar examination of "non-engineering" factors is necessary. Sometimes it is possible to get an idea about the horse by observing his lifetime earnings and the class of race in which he previously raced.

The overall CompuTrak handicapping system recognizes that there are times when these types of "non-engineering" information are needed. For this reason, and to minimize the number of times that a handicapper would have to seek out the information elsewhere, much data of this type is included for each horse analyzed by CompuTrak When there is not enough paceline data available for CompuTrak to work with, CompuTrak provides special output sections for First Time Starters and Foreign Shippers showing some available information about them.

A Typical Extensive Step-by-Step Handicapping Approach

We have shown that CompuTrak provides key data and information necessary for handicapping success. How the program is used will, obviously, depend on the experience of the individual handicapper. The program is designed to be useful to handicappers of various skill levels, ranging from the novice to the more sophisticated.

Regardless of the handicapping skill level, those who want to have an approach that can be performed quickly and successfully can use the "black box" aspect of the OddsLine and Summary output.

To delve more deeply, CompuTrak provides enough data, derived from the engineering analysis, to suit the techniques and style of different handicappers. Among the many approaches available, the following is just one example.

Step 1. - Determining readiness. Note the number of days since the horse's last race. If it is about 14 days or less, and the horse has been regularly racing at such an interval or has had regular workouts, consider the horse to be ready. If the horse has had a layoff of more than 30 days or so, consider that the horse is not ready, unless you find a series of regular workouts. Examine the Chart Report, the horse's Form and Improvement Ratingto see if the horse's capability is increasing, remaining constant, or degrading. Eliminate all horses that do not show a readiness to race today.

Step 2. - Choosing pacelines. As discussed earlier.If the horse has raced regularly, and/or has had regular workout intervals, choose the most recent paceline if it was raced at the same distance and surface as today's race. If the distance is different from today, but was the same type of race as today, i.e., sprint or route, you can still use the paceline if the distance was within a furlong of today's distance. If these conditions are not met, go back to an earlier paceline that meets the distance and surface criteria.

Note the number of days between his most recent race and the prior one. If the number of days between the two races was more than 30 days, but the number of days since his most recent race is 14 days or less, then consider that the horse may have needed the recent race to get him in condition, and that he can be expected to do better today. If this is the situation, looking at earlier pacelines to see what performance the horse may be capable of returning to today.

Step 3. - Fine tuning the paceline choice. Examine each of the chosen pacelines for flaws. For example if the paceline has a high Boxer Number, but a low Boxer Speed Rating, it usually means the race was flawed. Sometimes the DRF trip comments will confirm this. Do not use such a paceline.

Step 4. - Establishing confidence level. After choosing the paceline for each horse, predicting the winner will have varying degrees of confidence associated with it. A very high confidence situation, for example occurs when the paceline of each horse meets the basic criteria of distance and surface, and you find that one of the horses has best Predicted Finish Time, highest Early Speed, lowest Friction, highest Boxer Number and Boxer Speed Rating. This combination rarely occurs in practice, but if it does, confidence is high. Lesser confidence levels range from situations where there are horses that have not raced on today's surface previously, or have never raced the distance before, to very low levels of confidence when there are first time starters or foreign shippers in the race. Confidence also increases if the spread in the values, such as Predicted Finish Time is large between the horse with the best value and the next best. With practice, after handicapping a race, you will develop a "feel" for the confidence level. If low, minimize your bets or skip the race entirely.

Step 5. - Choosing the predicted winner. Here we assume that the race has satisfied your confidence level criteria. This means that you have a number of horses with pacelines that you believe make them contenders. At this stage you are ready to choose the predicted winner. Start by choosing the horse with the best Predicted Finish Time and then consider modifying your choice based on the actual situation. Here are some factors to consider:

- If the race is a Sprint, and two or more horses are close in Predicted Finish Time, bias your choice to the horse with the highest Early Speed and Boxer Speed Rating and/or Magic Number
- If the race is a Route, and two or more horses are close in Predicted Finish Time, bias your choice to the horse with the lowest Friction, highest Boxer Number, while checking to see that the overall Boxer Speed Rating was within an acceptable range.
- If there are two or more horses with high Early Speed look to see if there is a low Friction horse that has good Predicted Finish Time and an acceptable Boxer Speed

Rating.

- If more than one horse still remain as contenders, look to other factors such as whether or not the horse is racing above his class level, whether the trainer has assigned a superior jockey to the horse today, and how the public previously evaluated the horse by observing what odds the horse went off at in its previous races.

We always have to keep in mind that all of the data at our disposal are only historical. We have very little information about the horse since his last race. Because of this, CompuTrak 's Charts can be especially helpful in attempting to predict how the horse's capability may be changing with time. Look, for example, at the graphs of Early Speed and Friction over time. If you find that Early Speed is decreasing while Friction is increasing, you should consider that the horse's performance is getting worse over time and you may decide to eliminate the horse from contention. If the opposite is true then the horse's performance has been improving.

Summary and Conclusion

CompuTrak is now extremely easy to use. It is Windows oriented and provides you with an OddsLine and Summary output that is efficient for successful handicapping.

In addition, for those who wish to delve more deeply into handicapping, this booklet provided much additional information describing the meaning of CompuTrak's specific output data and providing you with an overview of handicapping in general.

Handicapping is an intellectual challenge. The discussion in this booklet should have served to confirm that. We have shown that CompuTrak , by performing an engineering analysis and organizing the data and output presentation for you makes it possible for handicappers with different degrees of skill level to rise to the challenge to achieve success.

If, at times, the handicapping process seems overwhelming, it is helpful to remember, that you can do well by just using the OddsLine and Summary.