

Dealmaster Pro and Deep Finesse value the Tens?

by Banzai Jackson

In the Milton Work 4321 point count, the tens are assumed to have no value. In practice we all know this is not true. So what is a Ten worth?

Hand 1

♠ A 9 2
♥ K 8 2
♦ Q 5 4
♣ J 6 4 2

	N	
W		E
	S	

♠ J 7 3
♥ Q J 4
♦ A K 9 2
♣ A 8 5

Two balanced hands and 25 HCP, so just enough points to attempt 3NT. However, there are no tens and it is clear that on best defence you are unlikely to make nine tricks. An alternative way of analysing these hands is to use Dealmaster Pro to construct several thousand deals with these cards as N/S and the E/W cards chosen randomly and then to use Deep Finesse (DF) to analyse the deals. If it is possible for N/S to make 3NT on any of those thousands of deals, then DF will make it.

When I did this, DF told me that 3NT was a 'makeable' contract only 29% of the time and the expected number of 'makeable' tricks in NT was 8.18. Because DF plays double dummy, the percentage of 'makeable' 3NT contracts on best defence is an overestimate of the probability of actually making nine tricks on the same defence. However, while the probability of a competent declarer making 3NT on best defence may be low, finding the best defence may be difficult, and in reality 3NT may have a better chance of success than even the 29% of times that DF considers it to be a makeable contract.

Now let us add in the tens so the N/S hands are

Hand 1 with the four Tens

♠ A 10 9
♥ K 8 2
♦ Q 10 4
♣ J 6 4 2

	N	
W		E
	S	

♠ J 7 3
♥ Q J 10
♦ A K 9 2
♣ A 10 8

Exactly the same honour cards and distribution as before, but with four of the original spot cards replaced with the four tens. Now, for a competent declarer, nine tricks are much more likely in NT, perhaps as high as 70%.

The Dealmaster and DF approach suggests that nine tricks are 'makeable' 98% of the time. A surprisingly high figure at first glance, but there is much more scope on these cards for DF to make use of its double-dummy play. For instance, DF guarantees four tricks in diamonds. The expected number of 'makeable' tricks for DF was 9.3

OK, we already know that tens are valuable cards. In this case, having all the tens rather than no tens substantially increases the probability of making nine tricks in NT but it is far too subjective to be precise about the exact increase. However, as far as 'makeable' contracts are concerned, DF is never wrong (well hardly ever) and we can be extremely precise. Having all the tens rather than no tens increases the percentage of times that 3NT is a 'makeable' contract from 29% to 98%. The expected number of 'makeable' tricks is increased from 8.18 to 9.3

We are interested in different quantities here. Firstly, the probability that the contract succeeds when a good declarer is playing it, and secondly, the percentage of times the contract is 'makeable' when DF is the declarer (and defender). We can assess this second quantity and the expected number of tricks that are 'makeable' to a very high degree of accuracy.

Generalisation. We can generalise this result concerning the effect of the tens, from the one-off hand that I have used to introduce the topic, to 'any two balanced (4-3-3-3) hands with 25 points between them'.

Specifications. I used Dealmaster Pro to construct three sets of 500 deals as follows.

The North and South hands are both 4-3-3-3 shape and there is no 4-4 fit. The two hands contain exactly 25 points between them BUT, for Set 1, there are 'no tens', and for Set 2 there are exactly 'two tens', and for Set 3 there are 'four tens'.

It is time consuming to do an old fashioned analysis of so many deals to determine the probability of making say nine tricks in NT on each hand. And there would certainly be serious questions about how accurate such an analysis was. On the other hand, it is a simple matter for DF to analyse the 500 deals in each set to see how many tricks are 'makeable' on each deal.

The results were as follows for no tens

Tricks	<7	7	8	9	10	11
Frequency	5	77	260	138	15	5

Nine or more tricks were 'makeable' 158 times in the 500 deals, i.e. 32%

Average Number of 'makeable' tricks = 8.19 tricks

Two tens

Tricks	<7	7	8	9	10	11
Frequency	0	20	211	199	62	8

Nine or more tricks were 'makeable' 269 times in the 500 deals, i.e. 54%

Average Number of 'makeable' tricks = 8.65 tricks

Four tens

Tricks	<7	7	8	9	10	11
Frequency	0	17	112	230	128	13

Nine or more tricks were 'makeable' 371 times in the 500 deals, i.e. 74%

Average Number of 'makeable' tricks = 9.02 tricks

Comparisons. For the deals with 25 points combined, the DF analyses suggest that, in comparison to the 'no tens' cases, a couple of tens increases the expected number of tricks that are 'makeable' by nearly half a trick and having all four tens provides an increase of about 0.8 of a trick.

In the 4321 point count there are 40 points in the deck and a trick is worth about 3.07 points. Using that analogy one could say that if four tens as opposed to no tens provide an expected increase of 0.8 in the number of 'makeable' tricks then each ten is worth a little more than half a point.

Conclusion. Using DF, I have looked at the effect that the tens have on the number of tricks that are 'makeable' in NT when the declarer has 25 points between two balanced hands (both hands 4-3-3-3 and no eight-card fit). You can perform a similar analysis to calculate 'makeable' contracts for any given point count. Although this is not the same as looking at the probability that a given number of tricks will be made with or without the tens, I am tempted to suggest that for a competent declarer the increase in the expected number of tricks in NT that he will make with a particular point count when he has all four tens as against no tens is similar to the increase in the expected number of tricks for DF. The number of tricks may not be same as for DF but there is reason to believe that the difference (or the increase) will be similar. If that is true, it implies that in the real world, a ten in a balanced hand is worth just as much to a competent declarer as it is to DF. What is certain is that for DF a ten in a balanced hand is worth a little more than a half point and four tens is four times more valuable than one ten.

Closing Ceremony

The closing ceremony will include the prize giving at the Teatro Alfa followed by a dinner with a dance orchestra. Every delegation and teams participating in the Transnational Open Teams are invited, but they must register at the championship office (Caracas Room on the ground floor) by Friday, Sept. 11, at noon. If you do not register, there will be no table for you and probably no food.

Departures

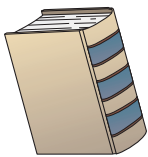


The organizing committee will provide buses at certain times on Sept. 12 and 13 from the Hotel Transamerica and the Transamerica flats to Sao Paulo-Guarulhos International Airport. For this, you must provide information about your departure – day, flight number and time – to the Hospitality Desk. If you do not, you risk having to pay an expensive taxi ride.

The deadline for providing the information is Tuesday, Sept. 8.

Departures in all other days can be organized by the Hospitality Desk, but at the expense of the traveller.

World Championship Book 2009



The Official book of these Championships in Sao Paulo will be available in March 2010, when the official price will be US\$34 plus postage. Advance orders can be made in Sao Paulo to Jan Swaan

in the Press Room at the discounted price of US\$30, Euros 20, or Reals 55 per copy, including postage.

The principal writers will be Brian Senior, Barry Rigal, John Carruthers and Geo Tislevoll. There will be a full listing of all participants and results and many photographs. Every board of the finals and semi-finals of the Bermuda Bowl and Venice Cup will be covered, along with the best of the action from the earlier stages, plus the Senior Bowl and Transnational Teams.

Money found



An envelope containing money has been left on Anna's desk in the WBF Secretariat downstairs. If you can tell Anna how much money and describe the envelope, she will gladly return it.

WBF Laws Committee

There will be a Laws Committee meeting in the WBF meeting room at 2 p.m. on Tuesday, Sept. 8.



WBF cards for sale



Packs of used WBF playing cards – with 5-bar codes – are for sale. If you are interested in buying some, please contact Christine Francin in the WBF Secretariat situated on the basement floor of the Hotel - Brasilia 2 room. The price is US\$0.60 per pack