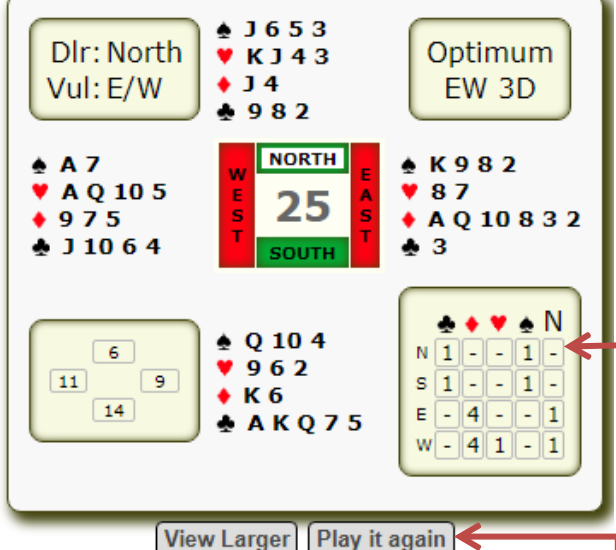


Bridge Solver Online (BSOL), written by John Goacher, is a free software application which allows you to replay a hand and analyze the results of that replay decision. It is integrated into the BridgeWebs software so any hand that was played at the North Alabama Club can be played again with the click of a button. You can change the contract, the lead, cards played, etc. If you have ever played a hand and thought you might have gotten another trick if you had taken a different line, this is exactly what you need. If you have ever looked at the Double Dummy (DD) analysis makeable contracts and been unable to figure out how you could possibly make that many tricks, BSOL is the answer. **This example was generated by the Vanderbilt Bridge Club webmaster, Rees Mitchell and is used with his permission.**



The interface shows a hand with North as dealer, EW vul. The cards are: North (♠ J 6 5 3, ♥ K J 4 3, ♦ J 4, ♣ 9 8 2) and South (♠ A 7, ♥ A Q 10 5, ♦ 9 7 5, ♣ J 10 6 4). The score is 25 tricks. The interface also shows a 'View Larger' button and a 'Play it again' button.

The best way to demonstrate how to use BSOL is to show an example. Here is a sample board that my partner and I played a couple of years. This is the hand and the traveler:

As you can see, this hand was played in many different contracts with many different results. We played 1NT by S and made 1. According to the DD analysis, we are not supposed to be able to make 1NT

Looking further, with perfect defense, we will only make 5 tricks and will be down 2. How do you know that?

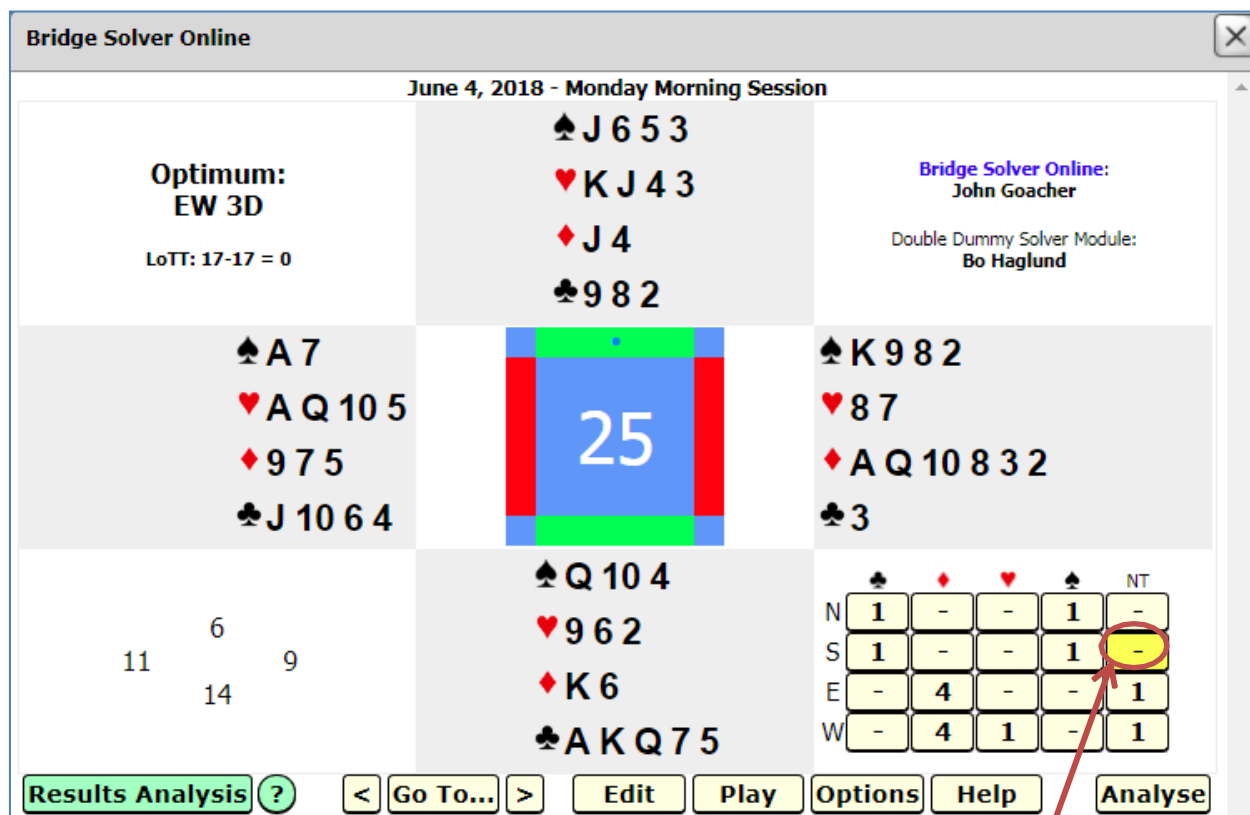
Click the Play it again button to invoke the Bridge Solver Online application.

Board No 25 E/W Vul Dealer North									
NS	EW	Bid	By	Ld	Tks	+Sc	-Sc	+	-
A20	A19	1NT	S	♣4	1	90		19.50	0.50
A15	A4	1NT	S	♣4	1	90		19.50	0.50
A17	A8	1NT	S	♦9	-1		50	17.00	3.00
A16	A6	2♥	N	♦A	-1		50	17.00	3.00
A9	A5	3♣	S	♦7	-1		50	17.00	3.00
A6	A20	2♥	N	♠2	-2	100		14.50	5.50
A4	A16	2♥	N	♣2	-2	100		14.50	5.50
A21	A21	3♣	E	♣A	3	110		10.50	9.50
A2	A12	2♦	E	♣A	3	110		10.50	9.50
A1	A10	3♦	E	♣A	3	110		10.50	9.50
A18	A15	2♦	E	♣A	3	110		10.50	9.50
A14	A2	3♦	E	♣A	3	110		10.50	9.50
A19	A17	2♦	E	♣A	3	110		10.50	9.50
A13	A13	3♦	E	♣A	4	130		6.00	14.00
A8	A3	3♦	E	♣A	4	130		6.00	14.00
A10	A7	3♦	E	♣A	4	130		6.00	14.00
A7	A1	2NT	W	♥3	3	150		3.00	17.00
A3	A14	2NT	N	♠2	-3	150		3.00	17.00
A5	A18	4♥	N	♣3	-3	150		3.00	17.00
A11	A9	2♦*	E	♣A	3	380		0.50	19.50
A12	A11	2♦*	W	♣8	3	380		0.50	19.50

When you click on the Play it again button the first time, you will see the following window:



For this documentation, I click on the BS Online button. BS Online can be used from a web browser on any mobile or desktop device without installation. That will bring up the following screen:



Start playing a contract interactively by clicking on an entry in the makeable contracts table (including entries shown as '-' or '*'). In this case, the board was played in Notrump by South so that box is highlighted. If you click on that box, the following screen will display

The contract is shown with the expected result assuming optimal play by declarer and the defenders.

Optimum Contract

North is the dealer

E/W Vulnerable

Bridge Solver Online

June 4, 2018 - Monday Morning Session

Optimum: EW 3D
LoTT: 17-17 = 0

Contract: 1NT-2 by S
(originally played in 1NT)

NS Tricks: 0
EW Tricks: 0

North's Hand (Dealer):
♠ J 6 5 3
♥ K J 4 3
♦ J 4
♣ 9 8 2

West's Hand:
♠ A 8 7 8
♥ A 7 Q 7 10 7 5 6
♦ 9 8 7 8 5 8
♣ J 7 10 7 6 5 *4 5

East's Hand:
♠ K 9 8 2
♥ 8 7
♦ A Q 10 8 3 2
♣ 3

South's Hand:
♠ Q 10 4
♥ 9 6 2
♦ K 6
♣ A K Q 7 5

Trick Count: 25

Trick Table:

	♠	♥	♦	♣	NT
N	1	-	-	1	-
S	1	-	-	1	-
E	-	4	-	-	1
W	-	4	1	-	1

Buttons: < Stop Options Help

The cards of the player on lead are highlighted. The small numbers (like the values on Scrabble tiles) indicate the number of tricks that can be made by that player if that card is selected. Cards highlighted in green give the best result for that player (assuming optimal play by all players from that point forward), the cards in yellow an inferior result. The number of possible tricks will update as each card is played.

A card value preceded by a blue asterisk indicates the lead card that was actually played by the defender on lead in the selected contract.

In this case, if West leads the C6 or C4, the defense can only make 5 tricks allowing declarer to make 2NT. If he leads the CJ or C10, they can make 7 tricks, setting declarer 1 trick. If he leads an optimal card, (any of the cards highlighted in green), the defenders will make 8 tricks and declarer will go down 2.

Click on a green or yellow card to play it. In this case I will click on the C4.

June 4, 2018 - Monday Morning Session

Optimum:
EW 3D
LoTT: 17-17 = 0

Contract: 1NT-2 by S
(originally played in 1NT)

NS Tricks: 0
EW Tricks: 0

♠ J 6 5 3
♥ K J 4 3
♦ J 4
♣ 9₈ 8₈ 2₈

♠ A 7
♥ A Q 10 5
♦ 9 7 5
♣ J 10 6 4

25

♠ K 9 8 2
♥ 8 7
♦ A Q 10 8 3 2
♣ 3

♠ Q 10 4
♥ 9 6 2
♦ K 6
♣ A K Q 7 5

11 6 9
14

	♣	♦	♥	♠	NT
N	1	-	-	1	-
S	1	-	-	1	-
E	-	4	-	-	1
W	-	4	1	-	1

< Stop Options Help

The C4 is now highlighted in blue, indicating it has already been played. You must now select one of the clubs in the North hand by clicking on it. Play continues by clicking the cards from each hand that you want to play.

If you make a mistake or would like to back up, click the "<" button.

June 4, 2018 - Monday Morning Session

Optimum:
EW 3D
LoTT: 17-17 = 0

Contract: 1NT-2 by S
(originally played in 1NT)

NS Tricks: 0
EW Tricks: 0

♠ J 6 5 3
♥ K J 4 3
♦ J 4
♣ 9 8 2

♠ A 7
♥ A Q 10 5
♦ 9 7 5
♣ J 10 6 4

25

♠ K 9 8 2
♥ 8 7
♦ A Q 10 8 3 2
♣ 3

♠ Q 10 4
♥ 9 6 2
♦ K 6
♣ A₆ K₆ Q₆ 7₈ 5₈

11 6 9
14

	♣	♦	♥	♠	NT
N	1	-	-	1	-
S	1	-	-	1	-
E	-	4	-	-	1
W	-	4	1	-	1

South can win the first trick with the C5 and with optimal play, can make 8 tricks.

June 4, 2018 - Monday Morning Session

Optimum:
EW 3D

LoTT: 17-17 = 0

♠ J 6 5 3

♥ K J 4 3

♦ J 4

♣ 9 8 2

Contract: 1NT-2 by S
(originally played in 1NT)

NS Tricks: 1
EW Tricks: 0

♠ A 7

♥ A Q 10 5

♦ 9 7 5

♣ J 10 6 4

25

♠ K 9 8 2

♥ 8 7

♦ A Q 10 8 3 2

♣ 3

11 6 9

14

♠ Q₆ 10₆ 4₆

♥ 9₈ 6₈ 2₈

♦ K₄ 6₄

♣ A₈ K₈ Q₈ 7₅ 5

	♣	♦	♥	♠	NT
N	1	-	-	1	-
S	1	-	-	1	-
E	-	4	-	-	1
W	-	4	1	-	1

Since South won the first trick, the trick count has been updated.

It's now time for South to play to the second trick and you can see that the choice of suits can make a big difference in timing and number of tricks possible. As an example, a spade lead at this point can cost you two tricks. The optimal "double dummy" line is to lead a heart or a big club.

June 4, 2018 - Monday Morning Session

Optimum:
EW 3D
LoTT: 17-17 = 0

Contract: 1NT-2 by S
(originally played in 1NT)

NS Tricks: 2
EW Tricks: 0

♠ J 6 5 3
♥ K J 4 3
♦ J 4
♣ 9 8 2

♠ A 7
♥ A Q 10 5
♦ 9 7 5
♣ J 10 6 4

25

♠ K 9 8 2
♥ 8 7
♦ A Q 10 8 3 2
♣ 3

11 6 9
14

♠ Q₆ 10₆ 4₆
♥ 9₈ 6₈ 2₈
♦ K₅ 6₅
♣ A K₇ Q₇ 7₅ 5

	♠	♥	♣	NT
N	1	-	-	1
S	1	-	-	1
E	-	4	-	1
W	-	4	1	1

< Stop Options Help

I chose to lead the CA and won that trick. Now I need to lead a heart to take the finesse.

June 4, 2018 - Monday Morning Session

Optimum:
EW 3D
LoTT: 17-17 = 0

Contract: 1NT-2 by S
(originally played in 1NT)

NS Tricks: 2
EW Tricks: 0

♠ J 6 5 3
♥ K J 4 3
♦ J 4
♣ 9 8 2

♠ A 7
♥ A₅ Q₅ 10₅ 5₅
♦ 9 7 5
♣ J 10 6 4

25

♠ K 9 8 2
♥ 8 7
♦ A Q 10 8 3 2
♣ 3

11 6 9
14

♠ Q 10 4
♥ 9 6 2
♦ K 6
♣ A K Q 7 5

	♠	♥	♣	NT
N	1	-	-	1
S	1	-	-	1
E	-	4	-	1
W	-	4	1	1

< Stop Options Help

I lead the H2 and assume West ducks with the 5.

June 4, 2018 - Monday Morning Session

Optimum:
EW 3D
LoTT: 17-17 = 0

Contract: 1NT-2 by S
(originally played in 1NT)

NS Tricks: 2
EW Tricks: 0

♠ J 6 5 3
♥ K₇ J₈ 4₆ 3₆
♦ J 4
♣ 9 8 2

♠ A 7
♥ A Q 10 5
♦ 9 7 5
♣ J 10 6 4

25

♠ K 9 8 2
♥ 8 7
♦ A Q 10 8 3 2
♣ 3

♠ Q 10 4
♥ 9 6 2
♦ K 6
♣ A K Q 7 5

	♠	♥	♦	♣	NT
N	1	-	-	1	-
S	1	-	-	1	-
E	-	4	-	-	1
W	-	4	1	-	1

11 6 9
14

< Stop Options Help

If I put in the HJ I can still make 8 tricks. If I put in the HK, I can only make 7 tricks.

June 4, 2018 - Monday Morning Session

Optimum:
EW 3D
LoTT: 17-17 = 0

Contract: 1NT-2 by S
(originally played in 1NT)

NS Tricks: 3
EW Tricks: 0

♠ J₇ 6₇ 5₇ 3₇
♥ K₆ J₈ 4₇ 3₇
♦ J₇ 4₇
♣ 9₈ 8 2

♠ A 7
♥ A Q 10 5
♦ 9 7 5
♣ J 10 6 4

25

♠ K 9 8 2
♥ 8 7
♦ A Q 10 8 3 2
♣ 3

♠ Q 10 4
♥ 9 6 2
♦ K 6
♣ A K Q 7 5

	♠	♥	♦	♣	NT
N	1	-	-	1	-
S	1	-	-	1	-
E	-	4	-	-	1
W	-	4	1	-	1

11 6 9
14

< Stop Options Help

Now if I lead anything but the C9, I will make fewer tricks than the optimal line

June 4, 2018 - Monday Morning Session

Optimum:
EW 3D
LoTT: 17-17 = 0

♠ J 6 5 3
♥ K J 4 3
♦ J 4
♣ 9 8 2

Contract: 1NT-2 by S
(originally played in 1NT)

NS Tricks: 4
EW Tricks: 0

♠ A 7
♥ A Q 10 5
♦ 9 7 5
♣ J 10 6 4

25

♠ K 9 8 2
♥ 8 7
♦ A Q 10 8 3 2
♣ 3

11 6 9
14

♠ Q₇ 10₇ 4₇
♥ 9₈ 6₈ 2
♦ K₅ 6₅
♣ A K Q₈ 7₆ 5

	♠	♥	♦	♣	NT
N	1	-	-	1	-
S	1	-	-	1	-
E	-	4	-	-	1
W	-	4	1	-	1

< Stop Options Help

Now I lead the H6 and win the HK

June 4, 2018 - Monday Morning Session

Optimum:
EW 3D
LoTT: 17-17 = 0

♠ J₇ 6₇ 5₇ 3₇
♥ K J 4₇ 3₇
♦ J₈ 4₈
♣ 9 8 2

Contract: 1NT-2 by S
(originally played in 1NT)

NS Tricks: 5
EW Tricks: 0

♠ A 7
♥ A Q 10 5
♦ 9 7 5
♣ J 10 6 4

25

♠ K 9 8 2
♥ 8 7
♦ A Q 10 8 3 2
♣ 3

11 6 9
14

♠ Q 10 4
♥ 9 6 2
♦ K 6
♣ A K Q 7 5

	♠	♥	♦	♣	NT
N	1	-	-	1	-
S	1	-	-	1	-
E	-	4	-	-	1
W	-	4	1	-	1

< Stop Options Help

Now, I'll lead the D4 towards my hand and show what happens if East wins with his DA.

June 4, 2018 - Monday Morning Session

Optimum:
EW 3D
LoTT: 17-17 = 0

Contract: 1NT-2 by S
(originally played in 1NT)

NS Tricks: 5
EW Tricks: 1

♠ A 7
♥ A Q 10 5
♦ 9 7 5
♣ J 10 6 4

♠ J 6 5 3
♥ K J 4 3
♦ J 4
♣ 9 8 2

♠ K 9 8 2
♥ 8 7
♦ A Q 10 8 3 2
♣ 3

♠ Q 10 4
♥ 9 6 2
♦ K 6
♣ A K Q 7 5

11 6 9
14

	♠	♥	♦	♣	NT
N	1	-	-	1	-
S	1	-	-	1	-
E	-	4	-	-	1
W	-	4	1	-	1

< Stop Options Help

East will lead his S2 towards partner's SA.

June 4, 2018 - Monday Morning Session

Optimum:
EW 3D
LoTT: 17-17 = 0

Contract: 1NT-2 by S
(originally played in 1NT)

NS Tricks: 5
EW Tricks: 2

♠ A 7₄
♥ A₅ Q₅ 10 5
♦ 9₅ 7₅ 5
♣ J₄ 10 6 4

♠ J 6 5 3
♥ K J 4 3
♦ J 4
♣ 9 8 2

♠ K 9 8 2
♥ 8 7
♦ A Q 10 8 3 2
♣ 3

♠ Q 10 4
♥ 9 6 2
♦ K 6
♣ A K Q 7 5

11 6 9
14

	♠	♥	♦	♣	NT
N	1	-	-	1	-
S	1	-	-	1	-
E	-	4	-	-	1
W	-	4	1	-	1

< Stop Options Help

Now West can cash his hearts and exit with a diamond. In this deal, you can see he could lead diamonds first, which will set up partner's diamond winners and E/W will still make 5 tricks. With BSOL you can try it either

way and see what happens. It is a great tool for improving your play of the hand, defense, end plays, squeezes, etc. Let's try the D7 and see what happens.

June 4, 2018 - Monday Morning Session

Optimum:
EW 3D
LoTT: 17-17 = 0

Contract: 1NT-2 by S
(originally played in 1NT)
NS Tricks: 6
EW Tricks: 2

♠ J 6 5 3
♥ K J 4 3
♦ J 4
♣ 9 8 2

♠ A 7
♥ A Q 10 5
♦ 9 7 5
♣ J 10 6 4

25

♠ K 9 8 2
♥ 8 7
♦ A Q 10 8 3 2
♣ 3

11 6 9
14

♠ Q₇ 10₇ 4
♥ 9₆ 6 2
♦ K 6
♣ A K Q₈ 7₆ 5

	♠	♥	♦	♣	NT
N	1	-	-	1	-
S	1	-	-	1	-
E	-	4	-	-	1
W	-	4	1	-	1

< Stop Options Help

South wins the DK and cashes his clubs from the top.

June 4, 2018 - Monday Morning Session

Optimum:
EW 3D
LoTT: 17-17 = 0

Contract: 1NT-2 by S
(originally played in 1NT)
NS Tricks: 7
EW Tricks: 2

♠ J 6 5 3
♥ K J 4 3
♦ J 4
♣ 9 8 2

♠ A 7
♥ A Q 10 5
♦ 9 7 5
♣ J 10 6 4

25

♠ K 9 8 2
♥ 8 7
♦ A Q 10 8 3 2
♣ 3

11 6 9
14

♠ Q₇ 10₇ 4
♥ 9₇ 6 2
♦ K 6
♣ A K Q₈ 7₈ 5

	♠	♥	♦	♣	NT
N	1	-	-	1	-
S	1	-	-	1	-
E	-	4	-	-	1
W	-	4	1	-	1

< Stop Options Help

June 4, 2018 - Monday Morning Session

Optimum:
EW 3D

LoTT: 17-17 = 0

♠ J 6 5 3

♥ K J 4 3

♦ J 4

♣ 9 8 2

Contract: 1NT-2 by S
(originally played in 1NT)

NS Tricks: 7
EW Tricks: 2

♠ A 7

♥ A Q 10 5

♦ 9 7 5

♣ J 10 6 4

25

♠ K₃ 9₅ 8 2

♥ 8 7

♦ A Q 10₅ 8₄ 3 2

♣ 3

6

11 14 9

♠ Q 10 4

♥ 9 6 2

♦ K 6

♣ A K Q 7 5

	♣	♦	♥	♠	NT
N	1	-	-	1	-
S	1	-	-	1	-
E	-	4	-	-	1
W	-	4	1	-	1

<
Stop
Options
Help

Here it is time for East to discard on South's final club. Suppose he has forgotten the count and chooses to discard a diamond. If he discards the D8, his side can only make 4 tricks because he will be thrown in with the SK and can win the D10 but will then have to lead the S9 to North's SQ. If he discards the D10, when he wins the SK he can lead his D8 to West's D9 who then has 2 good hearts to make their 5 tricks.