## Scoring following applying Law 15B2

In the 2017 Laws of Bridge if the wrong players start bidding on a board then Law 15 B 2 says that they should complete the board and the score obtained should count in the final results. Law 15 B 3 says that any pair deprived of an opportunity to play the board shall be given an artificial adjusted score. As they will not normally be responsible for the problem they will normally be awarded average plus.

Over $90 \%$ of the time when this occurs there will be two pairs in this position and it is easy to award these scores in the scoring software. Occasionally there is only one pair which requires the artificial adjusted score and this is more difficult. We will look at the easy case first. We will use EBUScore in this example, any differences using Scorebridge will be noted at the time. It is assumed that Bridgemates are being used. Other electronic scoring devices should produce the same results. If the scores are being entered manually essentially the steps set out here are done at the same time as the scores are entered.

For this example we will assume we have 6 tables playing 27 boards in a $3 / 4$ Howell. Here are the table cards.

| 6 Tables: <br> Table 1 |  |  |  | (Saffron <br> Table 2 |  |  | EBU24B T |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rd | NS | EW | Set |  |  | EW | Set |
| 1 | 5 | 8 | 1~3 | 1 | 3 | 2 | 7~9 |
| 2 | 6 | 9 | 4~6 | 2 | 4 | 3 | 10~12 |
| 3 | 7 | 1 | 7~9 | 3 | 5 | 4 | 13~15 |
| 4 | 8 | 2 | 10~12 | 4 | 6 | 5 | 16~18 |
| 5 | 9 | 3 | 13~15 | 5 | 7 | 6 | 19~21 |
| 6 | 1 | 4 | 16~18 | 6 | 8 | 7 | 22~24 |
| 7 | 2 | 5 | 19~21 | 7 | 9 | 8 | 25~27 |
| 8 | 3 | 6 | 22~24 | 8 | 1 | 9 | 1~3 |
| 9 | 4 | 7 | 25~27 | 9 | 2 | 1 | 4~6 |
|  | to |  |  |  | to |  |  |
|  | to | EW |  |  |  |  |  |


| Table |  |  |  |
| :--- | :--- | :--- | :--- |
| Rd | NS | EW | Set |
| 1 | 9 | 7 | $10 \sim 12$ |
| 2 | 1 | 8 | $13 \sim 15$ |
| 3 | 2 | 9 | $16 \sim 18$ |
| 4 | 3 | 1 | $19 \sim 21$ |
| 5 | 4 | 2 | $22 \sim 24$ |
| 6 | 5 | 3 | $25 \sim 27$ |
| 7 | 6 | 4 | $1 \sim 3$ |
| 8 | 7 | 5 | $4 \sim 6$ |
| 9 | 8 | 6 | $7 \sim 9$ |
| NS to | 1 EW |  |  |
| EW to | 4 EW |  |  |


| Table 4 |  |  |  |
| :--- | :--- | :--- | :--- |
| Rd | NS | EW | Set |
| 1 | 10 | 6 | $13 \sim 15$ |
| 2 | 10 | 7 | $16 \sim 18$ |
| 3 | 10 | 8 | $19 \sim 21$ |
| 4 | 10 | 9 | $22 \sim 24$ |
| 5 | 10 | 1 | $25 \sim 27$ |
| 6 | 10 | 2 | $1 \sim 3$ |
| 7 | 10 | 3 | $4 \sim 6$ |
| 8 | 10 | 4 | $7 \sim 9$ |
| 9 | 10 | 5 | $10 \sim 12$ |
| NS remain |  |  |  |
| EW | to 1 1NS |  |  |


| Table 5 |  |  |  |
| :--- | :--- | :--- | :--- |
| Rd | NS | EW | Set |
| 1 | 11 | 4 | $19 \sim 21$ |
| 2 | 11 | 5 | $22 \sim 24$ |
| 3 | 11 | 6 | $25 \sim 27$ |
| 4 | 11 | 7 | $1 \sim 3$ |
| 5 | 11 | 8 | $4 \sim 6$ |
| 6 | 11 | 9 | $7 \sim 9$ |
| 7 | 11 | 1 | $10 \sim 12$ |
| 8 | 11 | 2 | $13 \sim 15$ |
| 9 | 11 | 3 | $16 \sim 18$ |
| NS | remain |  |  |
| EW to | 2 NS |  |  |


| Table 6 |  |  |  |
| :--- | :--- | :--- | :--- |
| Rd | NS | EW | Set |
| 1 | 12 | 1 | $22 \sim 24$ |
| 2 | 12 | 2 | $25 \sim 27$ |
| 3 | 3 | 12 | $1 \sim 3$ |
| 4 | 12 | 4 | $4 \sim 6$ |
| 5 | 12 | 5 | $7 \sim 9$ |
| 6 | 6 | 12 | $10 \sim 12$ |
| 7 | 12 | 7 | $13 \sim 15$ |
| 8 | 12 | 8 | $16 \sim 18$ |
| 9 | 9 | 12 | $19 \sim 21$ |
| Sitter stay/switch |  |  |  |
| Mover to |  |  |  |

In Round 3 Pair 9 go to Table 4 instead of Table 3 and start bidding on Board 19. Pair 8 then arrive and say that they should be playing here. You determine what has happened, allow Pairs 10 and 9 to complete Board 19 then send Pair 9 to play Boards 16-18 at Table 3 against Pair 2. Any uncompleted boards are scored AV+ to Pair 2 AV- to Pair 9. Here I have assumed that they played them in time and that Pair 8 completed Boards 20 and 21 against Pair 10 at Table 4. Although Pair 9 played EW on Board 19 the Bridgemate will think it was Pair 8 but we do nothing with the Bridgemate.

On Round 9 Pair 9 arrive at Table 6 to play Boards 19-21 against Pair 12. Obviously they cannot play Board 19 so you get them to play 20 and 21 . You then need to enter something in the Bridgemate to get through the movement. I recommend 'No Play' i.e. Button 0 which should require TD authorisation but you can enter some kind of average and fix it in the scoring program. Having done this if you produced the results now they would look like the print out overleaf:

| Rank | Pair | Names [OVERALL RANKS] | Bds | Total | Max | \%Score | LPs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 8 | An Elimination \& A Ruff | 27 | 169.40 | 270 | 62.74 | 24 |
| 2 | 2 | A Defender \& A Declarer | 27 | 154.00 | 270 | 57.04 | 18 |
| 3 |  | A Squeeze \& A Pass | 26 | 146.00 | 260 | 56.15 | 12 |
| 4 |  | A Trick \& A Dummy | 27 | 146.00 | 270 | 54.07 |  |
| 5 |  | A Suit \& A Lead | 27 | 139.40 | 270 | 51.63 |  |
| 6 | 10 | A Revoke \& A Call | 27 | 135.20 | 270 | 50.07 |  |
| 7 | 7 | A Slam \& A Game | 27 | 135.00 | 270 | 50.00 |  |
| 8 | 12 | An Overcal \& A Deal | 26 | 127.00 | 260 | 48.85 |  |
| 9 |  | A Finnesse \& A Trump | 27 | 125.40 | 270 | 46.44 |  |
| 10 | 6 | A Bid \& A Denomination | 27 | 122.40 | 270 | 45.33 |  |
| 11 | 4 | An Overtrick \& An Undertrick | 27 | 109.80 | 270 | 40.67 |  |
| 12 | 1 | A Discard \& A Reverse | 27 | 102.40 | 270 | 37.93 |  |

(printed 15:54:52 29/09/2017 EBUScorePairs1.1.6 (c) 2015 English Bridge Union)
But we know our results on Board 19 are incorrect so we go to 'Enter Scores' (Scoresheets in Scorebridge) and select Board 19 which should look like this:


If you entered an average on Table 6 rather than 'No Play' then that will show on the line for Pairs 9 and 12. We need to make several changes here:

1. It was Pair 9 (not Pair 8) who played this Board against Pair 10 so we replace Pair 8 with Pair 9 on that line.
2. We need to award $A V+$ to Pairs 8 and 12 on this board as they were prevented from playing it. Therefore on the line on which 12 were playing it which has no score we change their opponents to Pair 8
3. Then we award $\mathrm{AV}+$ to both pairs.

Board 19 should now look like this:

and our final correct results look like this:

(printed 16:17:41 29/09/2017 EBUScorePairs1.1.6 (c) 2015 English Bridge Union)
We now move on to the more complicated situation. In this case we have $51 / 2$ tables. We are playing the same movement but Pair 12 is the missing pair so the moving pair sits out at Table 6. N.B. This is a different set of scores.

The same thing happens in Round 3, Pair 9 go to Table 4 instead of Table 3 and start bidding on Board 19. As before you allow Pairs 10 and 9 to complete Board 19 then send Pair 9 to play Boards $16-18$ at Table 3 against Pair 2 while Pairs 8 and 10 play boards 20 and 21 . However this time as Pair 9 were not due to play Board 19 because they would have played it against Pair 12 - the
missing pair it is only Pair 8 who have been denied the chance to play Board 19. The scoresheet for Board 19 currently looks like this:


The only change we need to make is Pair 10's opponents who were Pair 9. So we get this:


Our results look like this:

```
Law 15 B 2 Bridge Club Hard Example 29/09/2017
Session 1 Section A
51/2 Table 27 Board Howell Movement
Director: Paul Scorer: Paul Received 135 of 135 scores.
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline Rank & Pair & Names [OVERALL RANKS] & Bds & Total & Max & \%Score & LPs \\
\hline 1 & 1 & A Discard \& A Reverse & 24 & 116.00 & 192 & 60.42 & 24 \\
\hline 2 & 4 & An Overtrick \& An Undertrick & 24 & 111.00 & 192 & 57.81 & 18 \\
\hline 3 & 2 & A Defender \& A Declarer & 24 & 110.00 & 192 & 57.29 & 12 \\
\hline 4 & 6 & A Bid \& A Denomination & 24 & 102.00 & 192 & 53.13 & 6 \\
\hline 5 & 5 & A Finnesse \& A Trump & 24 & 101.00 & 192 & 52.60 & \\
\hline 6 & 9 & A Squeeze \& A Pass & 25 & 102.00 & 200 & 51.00 & \\
\hline 7 & 11 & A Suit \& A Lead & 27 & 110.00 & 216 & 50.93 & \\
\hline 8 & 10 & A Revoke \& A Call & 27 & 102.00 & 216 & 47.22 & \\
\hline 9 & 3 & A Trick \& A Dummy & 24 & 81.00 & 192 & 42.19 & \\
\hline 10 & 8 & An Elimination \& A Ruff & 23 & 77.00 & 184 & 41.85 & \\
\hline 11 & 7 & A Slam \& A Game & 24 & 68.00 & 192 & 35.42 & \\
\hline
\end{tabular}
```

(printed 22:33:36 29/09/2017 EBUScorePairs1.1.6 (c) 2015 English Bridge Union)

The first thing to note is that pairs have played different numbers of boards, highlighted in pink. Partly this is caused by not all pairs having to sit out. However Pair 9 should only have played 24 boards but they have played 25 because they played Board 19 which they were not down to play. The new laws say that the extra board good or bad counts in their score. Pair 10, although they correctly played 27 boards, actually played 4 boards against Pair 9 and only 2 against Pair 8 . Once again the new laws say that these scores count. The only bit of the new laws which we have not satisfied relates to Pair 8 who have only got 23 scores counting and Law 15 B 3 says they should get AV+ for the board they did not play. However you will find there is no line available on the scoresheet where we can enter this.

The first thing to note is that if the pair concerned have scored $60 \%$ or more on the boards they did play then you need to do nothing as AV+ will leave their score unaltered and you can use the result as is. Sadly that is not the case here. If algebra is not your strong suit you can ignore the next paragraph and just take the formula at the end on trust.

We need to give Pair 8 an adjustment (We will call it $X$ for now) so that they end up with the same percentage that they would have done if they had played another board and got $60 \%$ on it. The percentage they have at the moment is the result of dividing the matchpoints they have scored highlighted in yellow (we will call this A) by the maximum they could have scored highlighted in green (we will call this B). The other figure we need is the maximum matchpoints they could have scored on the board they did not play. If you look back to the screenshots of the scoresheets for Board 19 for this event you will see that near the top it says 'Top $=8$ '. This is the figure we need we will call it T. Scoring $60 \%$ on the board means that they would get $60 \%$ of T or 0.6 T matchpoints. Therefore the percentage with which we want to end up is found by adding 0.6 T to A then T to B and dividing the first result by the second. However we can only end up with this result by adding an adjustment to $A$, we have no way in the scoring program to alter $B$. Therefore we need an adjustment $X$ such that:

| $\frac{A+X}{B}=$ | $\frac{A+0.6 T}{B+T} \quad$We use this equation to calculate a <br> a formula for $X$ |
| :--- | :--- |
| $(A+X)(B+T)$ | $=(A+0.6 T) B$ |
| $A B+X B+A T+X T$ | $=A B+0.6 T B$ |
| $X B+X T$ | $=T(0.6 B-A)$ |
| $X(B+T)$ | $=\frac{T(0.6 B-A)}{(B+T)}$ |

The formula highlighted here is the one we use to calculate the adjustment required. Applying it to our results A was $77, B$ was 184 and $T$ was 8.

Therefore we get $X$

$$
\begin{array}{ll}
X & =\frac{8((0.6 \times 184)-77)}{(184+8)} \\
X & =\frac{8(110.4-77)}{192} \\
X & =\frac{267.2}{192} \\
X & =1.39 \text { (to } 2 \text { decimal places) }
\end{array}
$$

This is the adjustment we need to add to Pair 8's score to compensate them for the board they could not play through no fault of their own.

In EBUScore we do this using the 'Properties' button:


We then get this screen:

and we enter the adjustment of 1.39 against Pair 8 and click OK.


Our results now look like this:

```
Law 15 B 2 Bridge Club Hard Example 29/09/2017
Session 1 Section A
51/2 Table 27 Board Howell Movement
Director: Paul Scorer: Paul Received 135 of 135 scores.
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline Rank & Pair Names [OVERALL RANKS] & Adj & Bds & Total & Max & \%Score & LP \\
\hline 1 & 1 A Discard \& A Reverse & & 24 & 116.00 & 192 & 60.42 & 24 \\
\hline 2 & 4 An Overtrick \& An Undertrick & & 24 & 111.00 & 192 & 57.81 & 18 \\
\hline 3 & 2 A Defender \& A Declarer & & 24 & 110.00 & 192 & 57.29 & 12 \\
\hline 4 & 6 A Bid \& A Denomination & & 24 & 102.00 & 192 & 53.13 & 6 \\
\hline 5 & 5 A Finnesse \& A Trump & & 24 & 101.00 & 192 & 52.60 & \\
\hline 6 & 9 A Squeeze \& A Pass & & 25 & 102.00 & 200 & 51.00 & \\
\hline 7 & 11 A Suit \& A Lead & & 27 & 110.00 & 216 & 50.93 & \\
\hline 8 & 10 A Revoke \& A Call & & 27 & 102.00 & 216 & 47.22 & \\
\hline 9 & 8 An Elimination \& A Ruff & 1.39 & 23 & 78.39 & 184 & 42.60 & \\
\hline 10 & 3 A Trick \& A Dummy & & 24 & 81.00 & 192 & 42.19 & \\
\hline 11 & 7 A Slam \& A Game & & 24 & 68.00 & 192 & 35.42 & \\
\hline
\end{tabular}
(printed 00:32:39 30/09/2017 EBUScorePairs1.1.6 (c) 2015 English Bridge Union)
```

Adding the adjustment in Scorebridge is rather more tricky. We need to find any line in any scoresheet where Pair 8 played and in the 'Fine' column for them enter -1.39 , note the minus sign and this will achieve the desired result.

This seems very complicated but most times you have the two pairs to whom to give average plus and the solution almost drops into your lap.

If you are ever unlucky enough to have the one-pair problem if you have the formula

$$
X=\frac{T(0.6 B-A)}{(B+T)}
$$

in the back of your law book with:
A = actual match points
$B=$ maximum match points
$\mathrm{T}=$ top on the board concerned
plug in the numbers and give the pair the adjustment that comes out. If the change in their percentage is more than $1 \%$ check your calculations.

Paul Gibbons
Sept 2017

