Team Tie Breaks

As in all chess tournaments, there has to be a way to break ties in a team tournament. The usual way to this has been to use total game points as the tie breaker. However, it has been observed for some time that this is not a very good tie break system because it rewards the team that has faced the poorest opposition, rather than the team that has faced the best opposition. Even worse, it gives 4 tie break points to a team that gets a bye. This can often make a big difference in a small section. Consider this crosstable from a recent regional:

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No.            Name              Pts   TBrk1  TBrk2    Rnd1      Rnd2      Rnd3      Rnd4
    1 Edgewood MS                4.0   53.0   13.5   W6,3.5    W3,3.0    W2,3.0    W4,4.0
    2 Goshen MS A                3.0   32.0   13.0   W7,4.0    W5,4.0    L1,1.0    W6,4.0
    3 Goshen MS B                2.5   24.0   11.0   W5,4.0    L1,1.0    D6,2.0    -B-,4.0
    4 Goshen MS C                2.5    7.0    9.0   -B-,4.0   D6,2.0    W7,3.0    L1,0.0
    5 Bethany Christian MS       2.0    3.5    7.5   L3,0.0    L2,0.0    -B-,4.0   W7,3.5
    6 North Side MS              1.0   20.0    4.5   L1,0.5    D4,2.0    D3,2.0    L2,0.0
    7 Urey MS                    1.0    5.5    5.5   L2,0.0    -B-,4.0   L4,1.0    L5,0.5
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The column labeled TBrk2 is the games won. If we used games won, Urey would have finished ahead of North Side, but Urey did not win or draw any match – it lost all its matches played by lopsided margins. Meanwhile, North Side had some success over the board, drawing 2 matches. But Urey piled up games won by getting credit for 4 games won in its round 2 bye.

TBrk1 is the United States Amateur Team tie break score. To calculate it, you multiply the number of games won in each match times the opponent's adjusted final score, add them all together, and multiply by 2. To find the opponents adjusted final score, you subtract ½ point from its final match total for each bye that it had. So, to calculate Edgewood's USAT tie breaks: in round 1, they scored 3.5 points against North Side, which finished with one point and had no byes, so Edgewood gets 3.5 x 1 tie break points. In round 2 Edgewood scored 3 points against GMS B. GMS B had 2.5 points with one bye, so its adjusted final score is 2, and Edgewood gets 3 x 2 tie break points. In round 3, Edgewood scored 3 points against GMS A, who had no byes, so Edgewood gets 3 x 3 tie break points. In round 4, Edgewood gets 4 x 2 tie break points against GMS C. That gives them a total of (3.5 x 1 + 3 x 2 + 3 x 3 + 4 x 2) x 2 = 53.

USAT gives no weight to byes and games won against opponents who have gone winless. Games won still count, but games won against good opponents count more than games won against poor opponents. All in all, I think it is a much better system, and that is what we are going to use for the first tie break system from now on. Games won will be our second tie break, and after that will come the usual tie break systems used in individual tournaments. With USAT, though, there is seldom any need to go to a second tie break system.