

## 21 APPENDICES

### 21.1 Teams VP Scales from January 1<sup>st</sup> 2014

Teams VP Scales from January 1 <sup>st</sup> 2014									
	Boards per Match								
Margin	6	7	8	9	10	11	12	14	16
0	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
1	10.50	10.47	10.44	10.41	10.39	10.37	10.36	10.33	10.31
2	10.99	10.92	10.86	10.81	10.77	10.74	10.71	10.66	10.61
3	11.46	11.35	11.27	11.20	11.14	11.09	11.05	10.97	10.91
4	11.90	11.77	11.67	11.58	11.50	11.43	11.38	11.28	11.20
5	12.33	12.18	12.05	11.94	11.85	11.77	11.70	11.58	11.48
6	12.75	12.57	12.42	12.29	12.18	12.09	12.01	11.87	11.76
7	13.15	12.94	12.77	12.63	12.51	12.41	12.31	12.16	12.03
8	13.53	13.31	13.12	12.96	12.83	12.71	12.61	12.43	12.29
9	13.90	13.65	13.45	13.28	13.14	13.01	12.90	12.71	12.55
10	14.25	13.99	13.78	13.59	13.43	13.30	13.18	12.97	12.80
11	14.59	14.32	14.09	13.89	13.72	13.58	13.45	13.23	13.04
12	14.92	14.63	14.39	14.18	14.00	13.85	13.71	13.48	13.28
13	15.24	14.93	14.68	14.46	14.28	14.11	13.97	13.72	13.52
14	15.54	15.22	14.96	14.74	14.54	14.37	14.22	13.96	13.74
15	15.83	15.50	15.23	15.00	14.80	14.62	14.46	14.19	13.97
16	16.11	15.78	15.50	15.26	15.05	14.86	14.70	14.42	14.18
17	16.38	16.04	15.75	15.50	15.29	15.10	14.93	14.64	14.39
18	16.64	16.29	16.00	15.74	15.52	15.33	15.15	14.85	14.60
19	16.89	16.53	16.23	15.97	15.75	15.55	15.37	15.06	14.80
20	17.12	16.77	16.46	16.20	15.97	15.76	15.58	15.26	15.00
21	17.35	16.99	16.68	16.42	16.18	15.97	15.79	15.46	15.19
22	17.58	17.21	16.90	16.63	16.39	16.18	15.99	15.66	15.38
23	17.79	17.42	17.11	16.83	16.59	16.37	16.18	15.85	15.56
24	17.99	17.62	17.31	17.03	16.78	16.57	16.37	16.03	15.74
25	18.19	17.82	17.50	17.22	16.97	16.75	16.55	16.21	15.92
26	18.38	18.01	17.69	17.41	17.16	16.93	16.73	16.38	16.09
27	18.56	18.19	17.87	17.59	17.33	17.11	16.91	16.55	16.25
28	18.73	18.36	18.04	17.76	17.51	17.28	17.08	16.72	16.42
29	18.90	18.53	18.21	17.93	17.67	17.45	17.24	16.88	16.58
30	19.06	18.69	18.37	18.09	17.84	17.61	17.40	17.04	16.73
31	19.22	18.85	18.53	18.25	17.99	17.77	17.56	17.19	16.88
32	19.37	19.00	18.68	18.40	18.15	17.92	17.71	17.34	17.03
33	19.51	19.15	18.83	18.55	18.30	18.07	17.86	17.49	17.17
34	19.65	19.29	18.97	18.69	18.44	18.21	18.00	17.63	17.31
35	19.78	19.43	19.11	18.83	18.58	18.35	18.14	17.77	17.45
36	19.91	19.56	19.24	18.97	18.71	18.48	18.28	17.90	17.59
37	20.00	19.68	19.37	19.10	18.84	18.62	18.41	18.04	17.72
38		19.80	19.50	19.22	18.97	18.74	18.54	18.16	17.84
39		19.92	19.62	19.34	19.10	18.87	18.66	18.29	17.97
40		20.00	19.73	19.46	19.22	18.99	18.78	18.41	18.09
41			19.85	19.58	19.33	19.11	18.90	18.53	18.21
42			19.95	19.69	19.44	19.22	19.01	18.65	18.33
43			20.00	19.80	19.55	19.33	19.13	18.76	18.44
44				19.90	19.66	19.44	19.23	18.87	18.55
45				20.00	19.76	19.54	19.34	18.98	18.66

46					19.86	19.64	19.44	19.08	18.76
47					19.96	19.74	19.54	19.18	18.87
48					20.00	19.84	19.64	19.28	18.97
49						19.93	19.73	19.38	19.06
50						20.00	19.83	19.47	19.16
51							19.92	19.56	19.25
52							20.00	19.65	19.34
53								19.74	19.43
54								19.83	19.52
55								19.91	19.60
56								19.99	19.69
57								20.00	19.77
58									19.85
59									19.92
60									20.00

21.2 ABF Butler VP scales from 01/10/2019

IMP diff	# boards					
	14	12	10	9	8	7
0	10.00	10.00	10.00	10.00	10.00	10.00
1	10.30	10.33	10.35	10.36	10.39	10.41
2	10.60	10.66	10.70	10.72	10.78	10.82
3	10.90	10.99	11.05	11.08	11.17	11.23
4	11.20	11.32	11.40	11.44	11.56	11.64
5	11.50	11.65	11.75	11.80	11.95	12.05
6	11.80	11.98	12.10	12.16	12.34	12.46
7	12.10	12.31	12.45	12.52	12.73	12.87
8	12.40	12.64	12.80	12.88	13.12	13.28
9	12.70	12.97	13.15	13.24	13.51	13.69
10	13.00	13.30	13.50	13.60	13.90	14.10
11	13.30	13.63	13.85	13.95	14.29	14.51
12	13.60	13.96	14.20	14.30	14.58	14.82
13	13.90	14.29	14.45	14.65	14.87	15.13
14	14.20	14.62	14.70	15.00	15.16	15.44
15	14.42	14.84	14.95	15.25	15.45	15.75
16	14.64	15.06	15.20	15.50	15.74	16.06
17	14.86	15.28	15.44	15.75	16.03	16.37
18	15.08	15.50	15.68	16.00	16.32	16.68
19	15.30	15.72	15.92	16.25	16.61	16.99
20	15.52	15.94	16.16	16.50	16.90	17.30
21	15.74	16.16	16.40	16.75	17.19	17.60

22	15.96	16.38	16.64	17.00	17.48	17.90
23	16.18	16.60	16.88	17.25	17.76	18.20
24	16.40	16.82	17.12	17.50	18.04	18.50
25	16.62	17.04	17.36	17.75	18.32	18.80
26	16.84	17.26	17.60	18.00	18.60	19.10
27	17.06	17.48	17.84	18.25	18.88	19.40
28	17.27	17.69	18.08	18.50	19.16	19.70
29	17.48	17.90	18.32	18.75	19.44	20.00
30	17.69	18.11	18.56	19.00	19.72	
31	17.90	18.32	18.80	19.25	20.00	
32	18.11	18.53	19.04	19.50		
33	18.32	18.74	19.28	19.75		
34	18.53	18.95	19.52	20.00		
35	18.74	19.16	19.76			
36	18.95	19.37	20.00			
37	19.16	19.58				
38	19.37	19.79				
39	19.58	20.00				
40	19.79					
41	20.00					

### 21.3 Six Board Teams Matches

Margin	VPS	Margin	VPS	Margin	VPS	Margin	VPS	Margin	VPS
0	10.00	8	13.53	16	16.11	24	17.99	32	19.37
1	10.50	9	13.90	17	16.38	25	18.19	33	19.51
2	10.99	10	14.25	18	16.64	26	18.38	34	19.65
3	11.46	11	14.59	19	16.89	27	18.56	35	19.78
4	11.90	12	14.92	20	17.12	28	18.73	36	19.91
5	12.33	13	15.24	21	17.35	29	18.90	37	20.00
6	12.75	14	15.54	22	17.58	30	19.06		
7	13.15	15	15.83	23	17.79	31	19.22		

### 21.4 Seven Board Teams

Margin	VPS	Margin	VPS	Margin	VPS	Margin	VPS	Margin	VPS
0	10.00	9	13.65	18	16.29	27	18.19	36	19.56
1	10.47	10	13.99	19	16.53	28	18.36	37	19.68
2	10.92	11	14.32	20	16.77	29	18.53	38	19.80
3	11.35	12	14.63	21	16.99	30	18.69	39	19.92
4	11.77	13	14.93	22	17.21	31	18.85	40	20.00
5	12.18	14	15.22	23	17.42	32	19.00		
6	12.57	15	15.50	24	17.62	33	19.15		
7	12.94	16	15.78	25	17.82	34	19.29		
8	13.31	17	16.04	26	18.01	35	19.43		

### 21.5 Eight Board Teams

Margin	VPS	Margin	VPS	Margin	VPS	Margin	VPS	Margin	VPS
0	10.00	9	13.45	18	16.00	27	17.87	36	19.24
1	10.44	10	13.78	19	16.23	28	18.04	37	19.37
2	10.86	11	14.09	20	16.46	29	18.21	38	19.50
3	11.27	12	14.39	21	16.68	30	18.37	39	19.62
4	11.67	13	14.68	22	16.90	31	18.53	40	19.73
5	12.05	14	14.96	23	17.11	32	18.68	41	19.85
6	12.42	15	15.23	24	17.31	33	18.83	42	19.95
7	12.77	16	15.50	25	17.50	34	18.97	43	20.00
8	13.12	17	15.75	26	17.69	35	19.11		

### 21.6 Nine Board Teams

Margin	VPS	Margin	VPS	Margin	VPS	Margin	VPS	Margin	VPS
0	10.00	10	13.59	20	16.20	30	18.09	40	19.46
1	10.41	11	13.89	21	16.42	31	18.25	41	19.58
2	10.81	12	14.18	22	16.63	32	18.40	42	19.69
3	11.20	13	14.46	23	16.83	33	18.55	43	19.80
4	11.58	14	14.74	24	17.03	34	18.69	44	19.90
5	11.94	15	15.00	25	17.22	35	18.83	45	20.00
6	12.29	16	15.26	26	17.41	36	18.97		
7	12.63	17	15.50	27	17.59	37	19.10		
8	12.96	18	15.74	28	17.76	38	19.22		
9	13.28	19	15.97	29	17.93	39	19.34		

### 21.7 Ten Board Teams

Margin	VPS	Margin	VPS	Margin	VPS	Margin	VPS	Margin	VPS
0	10.00	10	13.43	20	15.97	30	17.84	40	19.22
1	10.39	11	13.72	21	16.18	31	17.99	41	19.33
2	10.77	12	14.00	22	16.39	32	18.15	42	19.44
3	11.14	13	14.28	23	16.59	33	18.30	43	19.55
4	11.50	14	14.54	24	16.78	34	18.44	44	19.66
5	11.85	15	14.80	25	16.97	35	18.58	45	19.76
6	12.18	16	15.05	26	17.16	36	18.71	46	19.86
7	12.51	17	15.29	27	17.33	37	18.84	47	19.96
8	12.83	18	15.52	28	17.51	38	18.97	48	20.00
9	13.14	19	15.75	29	17.67	39	19.10		

### 21.8 11 Board Teams Matches

Margin	VPS	Margin	VPS	Margin	VPS	Margin	VPS	Margin	VPS
0	10.00	11	13.58	22	16.18	33	18.07	44	19.44
1	10.37	12	13.85	23	16.37	34	18.21	45	19.54
2	10.74	13	14.11	24	16.57	35	18.35	46	19.64
3	11.09	14	14.37	25	16.75	36	18.48	47	19.74
4	11.43	15	14.62	26	16.93	37	18.62	48	19.84
5	11.77	16	14.86	27	17.11	38	18.74	49	19.93
6	12.09	17	15.10	28	17.28	39	18.87	50	20.00
7	12.41	18	15.33	29	17.45	40	18.99		
8	12.71	19	15.55	30	17.61	41	19.11		
9	13.01	20	15.76	31	17.77	42	19.22		
10	13.30	21	15.97	32	17.92	43	19.33		

### 21.9 Twelve Board Teams

Margin	VPS	Margin	VPS	Margin	VPS	Margin	VPS	Margin	VPS
0	10.00	11	13.45	22	15.99	33	17.86	44	19.23
1	10.36	12	13.71	23	16.18	34	18.00	45	19.34
2	10.71	13	13.97	24	16.37	35	18.14	46	19.44
3	11.05	14	14.22	25	16.55	36	18.28	47	19.54
4	11.38	15	14.46	26	16.73	37	18.41	48	19.64
5	11.70	16	14.70	27	16.91	38	18.54	49	19.73
6	12.01	17	14.93	28	17.08	39	18.66	50	19.83
7	12.31	18	15.15	29	17.24	40	18.78	51	19.92
8	12.61	19	15.37	30	17.40	41	18.90	52	20.00
9	12.90	20	15.58	31	17.56	42	19.01		
10	13.18	21	15.79	32	17.71	43	19.13		

### 21.10 Fourteen Board Teams Matches, Twenty Board Butler VP Scale

Margin	VPS	Margin	VPS	Margin	VPS	Margin	VPS	Margin	VPS
0	10.00	12	13.48	24	16.03	36	17.90	48	19.28
1	10.33	13	13.72	25	16.21	37	18.04	49	19.38
2	10.66	14	13.96	26	16.38	38	18.16	50	19.47
3	10.97	15	14.19	27	16.55	39	18.29	51	19.56
4	11.28	16	14.42	28	16.72	40	18.41	52	19.65
5	11.58	17	14.64	29	16.88	41	18.53	53	19.74
6	11.87	18	14.85	30	17.04	42	18.65	54	19.83
7	12.16	19	15.06	31	17.19	43	18.76	55	19.91
8	12.43	20	15.26	32	17.34	44	18.87	56	19.99
9	12.71	21	15.46	33	17.49	45	18.98	57	20.00
10	12.97	22	15.66	34	17.63	46	19.08		
11	13.23	23	15.85	35	17.77	47	19.18		

### 21.11 Fifteen Board Teams Matches VP Scale

Margin	VPS	Margin	VPS	Margin	VPS	Margin	VPS	Margin	VPS
0	10.00	12	13.38	24	15.88	36	17.74	48	19.12
1	10.32	13	13.61	25	16.06	37	17.87	49	19.22
2	10.63	14	13.85	26	16.23	38	18.00	50	19.31
3	10.94	15	14.07	27	16.40	39	18.12	51	19.40
4	11.24	16	14.29	28	16.56	40	18.25	52	19.49
5	11.53	17	14.51	29	16.72	41	18.36	53	19.58
6	11.81	18	14.72	30	16.88	42	18.48	54	19.67
7	12.09	19	14.93	31	17.03	43	18.59	55	19.75
8	12.36	20	15.13	32	17.18	44	18.70	56	19.83
9	12.62	21	15.32	33	17.33	45	18.81	57	19.91
10	12.88	22	15.51	34	17.47	46	18.92	58	19.99
11	13.13	23	15.70	35	17.60	47	19.02	59	20.00

### 21.12 Sixteen Board Teams Matches VP Scale

Margin	VPS	Margin	VPS	Margin	VPS	Margin	VPS	Margin	VPS
0	10.00	13	13.52	26	16.09	39	17.97	52	19.34
1	10.31	14	13.74	27	16.25	40	18.09	53	19.43
2	10.61	15	13.97	28	16.42	41	18.21	54	19.52
3	10.91	16	14.18	29	16.58	42	18.33	55	19.60
4	11.20	17	14.39	30	16.73	43	18.44	56	19.69
5	11.48	18	14.60	31	16.88	44	18.55	57	19.77
6	11.76	19	14.80	32	17.03	45	18.66	58	19.85
7	12.03	20	15.00	33	17.17	46	18.76	59	19.92
8	12.29	21	15.19	34	17.31	47	18.87	60	20.00
9	12.55	22	15.38	35	17.45	48	18.97		
10	12.80	23	15.56	36	17.59	49	19.06		
11	13.04	24	15.74	37	17.72	50	19.16		
12	13.28	25	15.92	38	17.84	51	19.25		

### 21.13 Matchpoint Swiss Pairs VP Scales

<b>VP scales for pairs matches: normally only used in Swiss pairs VP</b>								
<b>Matches of 4 boards or fewer</b>	<b>5-6 boards</b>	<b>7-9 boards</b>	<b>10-13 boards</b>	<b>14-19 boards</b>	<b>20-27 boards</b>	<b>28-39 boards</b>	<b>40-55 boards</b>	<b>boards</b>
% of available match points not exceeding								
<b>10 – 10</b>	50.92	50.78	50.65	50.54	50.45	50.38	50.32	50.27
<b>11 – 9</b>	52.80	52.39	51.98	51.65	51.38	51.16	50.97	50.81
<b>12 – 8</b>	54.71	54.02	53.33	52.78	52.32	51.94	51.63	51.37
<b>13 – 7</b>	56.70	55.72	54.74	53.95	53.30	52.77	52.32	51.95
<b>14 – 6</b>	58.80	57.51	56.23	55.19	54.34	53.63	53.04	52.56
<b>15 – 5</b>	61.08	59.45	57.83	56.53	55.45	54.57	53.83	53.21
<b>16 – 4</b>	63.63	61.62	59.64	58.04	56.71	55.62	54.71	53.95
<b>17 – 3</b>	66.61	64.17	61.75	59.80	58.18	56.85	55.74	54.82
<b>18 – 2</b>	70.36	67.37	64.40	62.01	60.03	58.40	57.04	55.91
<b>19 – 1</b>	75.95	72.13	68.35	65.30	62.78	60.71	58.97	57.53
<b>20 – 0</b>	More than 75.95	More than 72.13	More than 68.35	More than 65.30	More than 62.78	More than 60.71	More than 58.97	More than 57.53