

Aviation Climate Assessment Report Supplement – TRACON Summary Tables

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July 2004

Introduction

This is a supplement to the Aviation Climatology Assessment Report. Please read that report for details. This supplement contains only summary tables for the 30 airports served by TRACON (fig. 1). Algorithms for the tables are included below table 19.

Differences in the reports:

1. This report only has CONUS stations. Consequently, lightning data was used exclusively to determine thunderstorm frequencies based on grids within approximately 50 nm of the airport.
2. Summed frequencies include all eight weather elements.
3. Air traffic factors are different. Updated 2003 air traffic statistics provided by the FAA (July 19, 2004) were used and normalized for the 30 airports (instead of 68 in the full report).
4. Correlation (among the 30 TRACON sites) between rankings in table 23 of the full Climatology Assessment Report and table 19 of this supplement was +0.99.

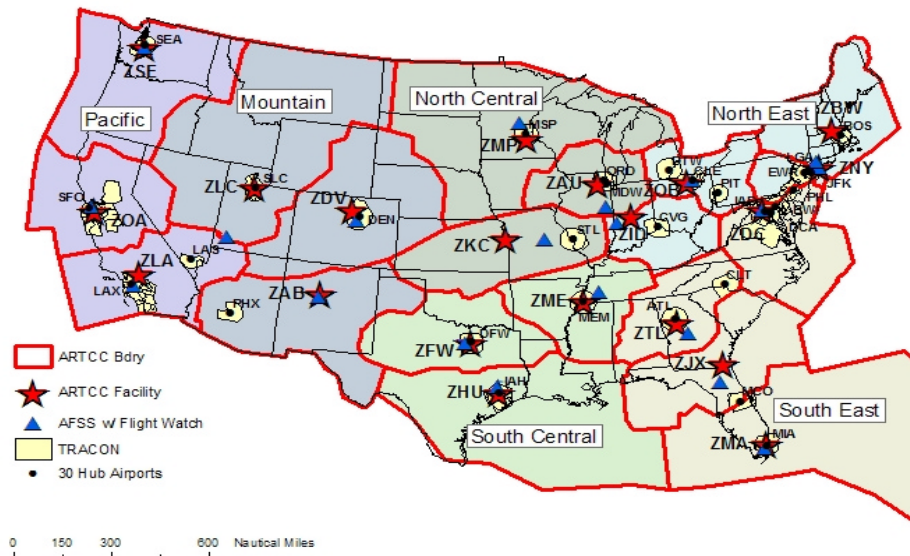


Figure 1.

Table 1. Rankings by Air Traffic for TRACON sites

CY2003 Traffic Rank	Airport	Airport Name	Air Traffic Factor
1	ATL	The William B Hartsfield Atlanta International	2.45
2	ORD	Chicago O'Hare International	1.81
3	DFW	Dallas / Fort Worth International	1.62
4	LAX	Los Angeles International	1.36
5	MSP	Minneapolis - St Paul International / Wold - Chamberlain /	1.36
6	PHX	Phoenix Sky Harbor International	1.33
7	DTW	Detroit Metropolitan Wayne County	1.33
8	DEN	Denver International	1.21
9	LAS	McCarran International	1.21
10	MIA	Miami International	1.17
11	IAH	George Bush Intercontinental	1.14
12	EWR	Newark Liberty International	1.04
13	JFK	John F Kennedy International	1.00
14	PHL	Philadelphia International	0.96
15	SFO	San Francisco International	0.87
16	MEM	Memphis International	0.85
17	MCO	Orlando International	0.83
18	BWI	Baltimore - Washington International	0.79
19	SEA	Seattle - Tacoma International	0.78
20	STL	Lambert – St. Louis International	0.78
21	CLT	Charlotte/Douglas International	0.77
22	LGA	La Guardia – New York	0.77
23	BOS	Logan International	0.69
24	MDW	Chicago Midway International	0.65
25	SLC	Salt Lake City International	0.54
26	DCA	Ronald Reagan Washington National	0.53
27	CVG	Cincinnati / Northern Kentucky International	0.53
28	CLE	Cleveland - Hopkins International	0.49
29	PIT	Pittsburg International	0.47
30	IAD	Washington – Dulles International	0.44

Table 1 (cont.)

Results

Summary Tables

Table 2. Frequency Ranking and Significant Weather Factor Ranking for Wind

Rank	Site ID	Frequency	Rank	Site ID	Weighted Frequency
1	BOS	58.16	1	ORD	73.58
2	MDW	45.07	2	BOS	40.13
3	LGA	43.01	3	JFK	38.46
4	CLT	42.60	4	ATL	35.84
5	ORD	40.65	5	LGA	33.12
6	JFK	40.06	6	CLT	32.80
7	MEM	24.86	7	MDW	29.30
8	DEN	21.16	8	DEN	25.60
9	EWR	17.40	9	MEM	21.13
10	ATL	14.63	10	EWR	17.40
11	STL	10.02	11	STL	7.82
12	SFO	5.19	12	DFW	5.82
13	IAH	5.06	13	IAH	5.26
14	BWI	4.59	14	DTW	4.76
15	DTW	3.93	15	SFO	4.52
16	DFW	3.59	16	PHL	4.07
17	PHL	3.06	17	BWI	3.63
18	LAS	3.05	18	LAS	3.57
19	SEA	0.81	19	LAX	1.03
20	LAX	0.76	20	SEA	0.63
21	DCA	0.62	21	MSP	0.50
22	MSP	0.37	22	DCA	0.33
23	SLC	0.35	23	SLC	0.19
24	CLE	0.20	24	CLE	0.10
25	IAD	0.19	25	IAD	0.08
26	CVG	0.03	26	CVG	0.02
27	PHX	0.01	27	PHX	0.01
27	MIA	0.01	27	MIA	0.01
29	MCO	0	29	MCO	0.00
29	PIT	0	29	PIT	0.00

Table 2 (cont.)

Table 3. Frequency Ranking and Significant Weather Factor Ranking for Thunderstorms (based on lightning data within 50 miles of airport)

Rank	Site ID	Frequency	Rank	Site ID	Weighted Frequency
1	MIA	3.13	1	ATL	4.36
2	MCO	2.50	2	MIA	3.57
3	IAH	2.10	3	DFW	2.51
4	ATL	1.78	4	IAH	2.18
5	MEM	1.73	5	MCO	2.08
6	DFW	1.55	6	ORD	1.99
7	STL	1.43	7	DEN	1.61
8	CVG	1.38	8	MEM	1.47
9	CLT	1.35	9	MSP	1.36
10	DEN	1.33	10	STL	1.12
11	ORD	1.10	11	DTW	1.06
11	MDW	1.10	12	PHX	1.06
13	PIT	1.03	13	CLT	1.04
14	MSP	1.00	14	PHL	1.00
15	SLC	0.93	15	CVG	0.73
16	CLE	0.90	16	MDW	0.72
17	DTW	0.88	17	LAS	0.70
18	BWI	0.85	18	EWR	0.68
19	DCA	0.80	19	BWI	0.67
19	IAD	0.80	20	JFK	0.65
19	PHX	0.80	21	LGA	0.52
22	PHL	0.75	22	SLC	0.50
23	JFK	0.68	23	PIT	0.48
23	LGA	0.68	24	CLE	0.44
23	EWR	0.68	25	DCA	0.42
26	LAS	0.60	26	IAD	0.35
27	BOS	0.43	27	BOS	0.30
27	SEA	0.15	28	LAX	0.14
29	SFO	0.10	29	SEA	0.12
29	LAX	0.10	30	SFO	0.09

Table 3 (cont.)

Table 4. Frequency Ranking and Significant Weather Factor Ranking for Ceilings

Rank	Site ID	Frequency	Rank	Site ID	Weighted Frequency
1	SEA	50.13	1	ATL	61.52
2	DTW	34.54	2	ORD	53.58
3	ORD	29.60	3	DTW	41.79
4	STL	25.90	4	SEA	39.10
5	ATL	25.11	5	LAX	33.78
6	LAX	24.84	6	MSP	31.62
7	MEM	24.07	7	DFW	29.97
8	SFO	23.85	8	SFO	20.75
9	MSP	23.25	9	MEM	20.46
10	BWI	22.67	10	STL	20.20
11	SLC	19.90	11	PHL	19.55
12	BOS	19.45	12	BWI	17.91
13	DFW	18.50	13	IAH	17.46
14	IAH	16.79	14	BOS	13.42
15	CLT	15.59	15	DEN	12.52
16	PHL	14.70	16	CLT	12.00
17	MCO	14.38	17	MCO	11.94
18	IAD	12.27	18	EWR	11.34
19	EWR	11.34	19	SLC	10.75
20	DEN	10.35	20	MIA	9.64
21	JFK	9.24	21	JFK	8.87
22	LGA	8.62	22	LGA	6.64
23	MIA	8.46	23	LAS	6.24
24	PIT	8.37	24	IAD	5.40
25	LAS	5.33	25	PIT	3.93
26	CLE	2.86	26	PHX	3.18
27	PHX	2.39	27	CLE	1.40
28	MDW	1.51	28	MDW	0.98
29	CVG	1.24	29	CVG	0.66
30	DCA	0.83	30	DCA	0.44

Table 4 (cont.)

Table 5. Frequency Ranking and Significant Weather Factor Ranking for Visibility

Rank	Site ID	Frequency	Rank	Site ID	Weighted Frequency
1	LAX	32.13	1	LAX	43.70
2	CLE	28.64	2	ORD	42.37
3	STL	24.47	3	ATL	36.77
4	ORD	23.41	4	EWR	20.74
5	CLT	20.80	5	STL	19.09
6	EWR	20.74	6	IAH	16.42
7	IAD	15.88	7	CLT	16.02
8	IAH	15.79	8	CLE	14.03
9	ATL	15.01	9	DFW	10.55
10	BOS	13.51	10	PHL	10.33
11	SLC	11.75	11	BOS	9.32
12	BWI	9.24	12	DEN	9.08
13	PHL	7.77	13	BWI	7.30
14	DEN	7.50	14	IAD	6.99
15	MEM	7.40	15	JFK	6.58
15	LGA	7.40	16	SLC	6.35
17	SFO	7.13	17	MEM	6.29
18	JFK	6.85	18	SFO	6.20
19	DFW	6.51	19	LGA	5.70
20	SEA	4.47	20	MSP	4.16
21	MSP	3.06	21	SEA	3.49
22	DTW	1.99	22	DTW	2.41
23	PIT	1.79	23	MCO	0.85
24	MCO	1.02	24	PIT	0.84
25	MDW	0.90	25	PHX	0.64
26	CVG	0.81	26	MDW	0.59
27	DCA	0.60	27	LAS	0.56
28	LAS	0.48	28	MIA	0.51
28	PHX	0.48	29	CVG	0.43
30	MIA	0.45	30	DCA	0.32

Table 5 (cont.)

Table 6. Frequency Ranking and Significant Weather Factor Ranking for Snow

Rank	Site ID	Frequency	Rank	Site ID	Weighted Frequency
1	MSP	7.51	1	MSP	10.21
2	DEN	6.22	2	ORD	9.10
3	ORD	5.03	3	DEN	7.53
4	CLE	4.92	4	DTW	5.52
5	DTW	4.56	5	MDW	2.68
6	MDW	4.12	6	BOS	2.42
7	PIT	4.02	7	CLE	2.41
8	SLC	3.51	8	PHL	2.25
9	BOS	3.50	9	EWR	2.04
10	CVG	3.29	10	STL	1.95
11	STL	2.50	11	SLC	1.90
12	EWR	2.04	12	PIT	1.89
13	LGA	1.95	13	CVG	1.74
14	PHL	1.69	14	JFK	1.61
15	JFK	1.68	15	LGA	1.50
16	BWI	1.52	16	BWI	1.20
17	IAD	1.41	17	DCA	0.68
18	DCA	1.29	18	ATL	0.66
19	SEA	0.83	19	SEA	0.65
20	MEM	0.64	20	IAD	0.62
21	CLT	0.40	21	DFW	0.60
22	DFW	0.37	22	MEM	0.54
23	ATL	0.27	23	CLT	0.31
24	IAH	0.07	24	LAS	0.08
24	LAS	0.07	25	IAH	0.07
26	MCO	0.01	26	PHX	0.01
26	PHX	0.01	26	MCO	0.01
28	LAX	0	28	LAX	0.00
28	SFO	0	28	SFO	0.00
28	MIA	0	28	MIA	0.00

Table 6 (cont.)

Table 7. Frequency Ranking and Significant Weather Factor Ranking for Freezing Precipitation

Rank	Site ID	Frequency	Rank	Site ID	Weighted Frequency
1	MSP	0.56	1	MSP	0.76
2	IAD	0.51	2	ATL	0.69
3	BOS	0.46	3	ORD	0.63
4	DTW	0.45	4	DTW	0.54
4	EWR	0.45	5	PHL	0.45
6	STL	0.43	5	EWR	0.45
6	LGA	0.43	7	DFW	0.39
8	DCA	0.39	8	DEN	0.34
8	CLT	0.39	8	STL	0.34
10	PIT	0.38	10	LGA	0.33
11	CLE	0.37	10	JFK	0.33
12	ORD	0.35	12	BOS	0.32
12	BWI	0.35	13	CLT	0.30
14	MDW	0.34	14	BWI	0.28
14	PHL	0.34	15	MEM	0.24
14	CVG	0.34	16	IAD	0.22
14	JFK	0.34	16	MDW	0.22
18	DEN	0.28	18	DCA	0.21
18	ATL	0.28	19	CLE	0.18
18	MEM	0.28	19	CVG	0.18
21	DFW	0.24	19	PIT	0.18
22	IAH	0.12	22	IAH	0.12
23	SLC	0.03	23	SEA	0.02
23	SEA	0.03	23	SLC	0.02
25	LAS	0	25	LAS	0.00
25	PHX	0	25	PHX	0.00
25	MCO	0	25	MCO	0.00
25	LAX	0	25	LAX	0.00
25	SFO	0	25	SFO	0.00
25	MIA	0	25	MIA	0.00

Table 7 (cont.)

Table 8. Frequency Ranking and Significant Weather Factor Ranking for Turbulence

Rank	Site ID	Score	Rank	Site ID	Weighted Score
1	DEN	62	1	PHL	2.07
2	EWR	61	2	ORD	2.05
3	PHL	59	3	DEN	1.97
4	LGA	58	4	ATL	1.74
4	JFK	58	5	EWR	1.61
4	BOS	58	6	DTW	1.50
7	PIT	55	7	JFK	1.47
8	BWI	50	8	DFW	1.36
9	IAD	49	9	LAX	1.32
9	DCA	49	10	LGA	1.18
11	CLE	48	11	LAS	1.17
12	DTW	47	12	MSP	1.15
13	STL	46	13	BOS	1.05
14	ORD	43	14	BWI	1.04
14	MDW	43	15	PHX	0.95
14	SEA	43	16	STL	0.94
17	SLC	42	17	SEA	0.88
18	CVG	40	18	MDW	0.74
19	LAS	38	19	MEM	0.72
20	LAX	37	20	DCA	0.68
21	CLT	33	20	PIT	0.68
22	MSP	32	22	CLT	0.67
22	DFW	32	23	CLE	0.62
22	MEM	32	24	SLC	0.60
25	ATL	27	25	IAH	0.57
25	PHX	27	25	IAD	0.57
27	IAH	21	27	CVG	0.56
27	SFO	21	28	SFO	0.48
29	MCO	8	29	MCO	0.17
30	MIA	4	30	MIA	0.12

Table 8 (cont.)

**Table 9. Frequency Ranking and Significant Weather Factor Ranking for Icing
(based on airmet-sounding composite score)**

Rank	Site ID	Score	Rank	Site ID	Weighted Score
1	ORD	15	1	ORD	27.15
1	DTW	15	2	ATL	22.05
1	SEA	15	3	DTW	18.15
1	MDW	15	4	MSP	17.68
1	PIT	15	5	PHL	17.29
1	CLE	15	6	DFW	12.96
7	PHL	13	7	DEN	12.10
7	MSP	13	8	SEA	11.70
9	JFK	12	9	JFK	11.52
9	LGA	12	10	EWR	11.00
9	BOS	12	11	MDW	9.75
9	CVG	12	12	LAX	9.52
13	EWR	11	13	LAS	9.36
13	BWI	11	14	PHX	9.31
13	STL	11	15	LGA	9.24
13	SLC	11	16	SFO	8.70
17	DEN	10	17	BWI	8.69
17	DCA	10	18	STL	8.58
17	IAD	10	19	BOS	8.28
17	SFO	10	20	MEM	7.65
21	ATL	9	21	CLE	7.35
21	MEM	9	22	IAH	7.28
23	DFW	8	23	PIT	7.05
23	LAS	8	24	CVG	6.36
23	CLT	8	25	CLT	6.16
26	LAX	7	26	SLC	5.94
26	PHX	7	27	MIA	5.70
26	IAH	7	28	DCA	5.30
29	MIA	5	29	IAD	4.40
30	MCO	4	30	MCO	3.32

Table 9 (Cont.)

**Table 10. Composite Ranking for all Weather Elements
(average air traffic weighted frequency)**

Rank	Site ID	Average Weighted Frequency
1	ORD	26.31
2	ATL	20.45
3	LAX	11.19
4	DTW	9.47
5	BOS	9.40
6	DEN	8.84
7	JFK	8.69
8	CLT	8.66
9	MSP	8.43
10	EWR	8.16
11	DFW	8.02
12	STL	7.50
13	MEM	7.31
14	LGA	7.28
15	PHL	7.13
16	SEA	7.07
17	IAH	6.17
18	MDW	5.62
19	SFO	5.09
19	BWI	5.09
21	CLE	3.32
22	SLC	3.28
23	LAS	2.71
24	MIA	2.45
25	IAD	2.33
26	MCO	2.30
27	PHX	1.90
28	PIT	1.88
29	CVG	1.33
30	DCA	1.05

Table 10 cont.)

Table 11. Significant Wind Rankings Weighted by Weather Factor Impacts and Air Traffic (Significant wind frequency weighted for air traffic and impact factor)

Rank	Site ID	Weighted Wind Impact Factor
1	ORD	94.52
2	BOS	93.13
3	CLT	91.74
4	LGA	90.35
5	MDW	88.96
6	ATL	87.57
7	JFK	86.18
8	DEN	84.79
9	MEM	83.40
10	EWR	80.62
11	STL	76.45
12	DFW	75.06
13	IAH	72.28
14	DTW	69.50
15	SFO	66.72
16	LAS	62.55
17	BWI	61.16
18	PHL	59.77
19	LAX	51.43
20	SEA	48.65
21	MSP	45.87
22	DCA	43.09
23	SLC	41.70
24	IAD	40.31
25	CLE	37.53
26	CVG	30.58
27	PHX	27.80
28	MIA	26.41
29	MCO	22.24
29	PIT	22.24

Table 11 (cont.)

Table 12. Thunderstorm Rankings Weighted by Weather Factor Impacts and Air Traffic (thunderstorm frequency weighted for air traffic and impact factor)

Rank	Site ID	Weighted Thunderstorm Impact Factor
1	ATL	152.32
2	MIA	149.94
3	DFW	147.56
4	ORD	145.18
5	IAH	142.80
6	MCO	138.04
7	CVG	135.66
8	MEM	133.28
9	DEN	130.90
10	CLT	126.14
11	STL	121.38
12	MSP	116.62
13	PHX	114.24
14	DTW	111.86
15	SLC	104.72
16	PIT	97.58
17	MDW	95.20
18	PHL	90.44
19	LAS	83.30
20	IAD	80.92
21	EWR	76.16
22	BWI	69.02
22	LGA	69.02
24	CLE	57.12
25	DCA	52.36
26	JFK	49.98
27	BOS	45.22
28	LAX	33.32
29	SEA	28.56
30	SFO	19.04

Table 12 (cont.)

Table 13. Significant Ceiling Rankings Weighted by Weather Factor Impacts and Air Traffic (Significant ceiling frequency weighted for air traffic and impact factor)

Rank	Site ID	Weighted Ceiling Impact Factor
1	ORD	93.16
2	ATL	91.79
3	SEA	90.42
4	DTW	89.05
5	LAX	87.68
6	DFW	86.31
7	MSP	84.94
8	STL	83.57
9	MEM	82.20
10	IAH	80.83
11	SFO	79.46
12	SLC	78.09
13	BOS	76.72
14	CLT	75.35
15	BWI	73.98
16	PHL	72.61
17	DEN	67.13
18	EWR	65.76
19	IAD	64.39
20	MCO	63.02
21	MIA	57.54
22	LGA	54.80
23	PIT	53.43
24	JFK	47.95
25	LAS	46.58
26	PHX	42.47
27	CLE	30.14
28	CVG	27.40
29	MDW	24.66
30	DCA	16.44

Table 13 (cont.)

**Table 14. Significant Visibility Rankings Weighted by Weather Factor Impacts and Air Traffic
(Significant visibility frequency weighted for air traffic and impact factor)**

Rank	Site ID	Weighted Visibility Impact Factor
1	ORD	110.16
2	LAX	108.54
3	ATL	106.92
4	STL	105.30
5	CLT	103.68
6	EWR	102.06
7	IAH	100.44
8	CLE	98.82
9	IAD	97.20
10	BOS	95.58
11	DFW	93.96
12	SLC	90.72
13	DEN	89.10
14	PHL	87.48
15	MEM	84.24
16	LGA	82.62
17	BWI	81.00
18	SFO	76.14
19	JFK	74.52
20	SEA	69.66
21	MSP	68.04
22	DTW	61.56
23	PIT	56.70
24	CVG	51.84
25	MCO	48.60
26	MDW	46.98
27	PHX	45.36
28	LAS	37.26
29	MIA	27.54
30	DCA	22.68

Table 14 (cont.)

Table 15. Snow Event Rankings Weighted by Weather Factor Impacts and Air Traffic (Snow event frequency weighted for air traffic and impact factor)

Rank	Site ID	Weighted Snow Event Impact Factor
1	ORD	57.12
2	MSP	56.28
3	DEN	55.44
4	DTW	54.60
5	CVG	52.92
6	PIT	52.08
7	SLC	51.24
8	MDW	50.40
9	BOS	49.56
10	CLE	47.88
11	STL	46.20
12	EWR	44.52
13	PHL	42.00
14	LGA	41.16
15	IAD	39.48
16	JFK	38.64
17	BWI	36.96
18	DCA	33.60
19	SEA	32.76
20	DFW	31.08
21	MEM	30.24
22	ATL	29.40
23	CLT	26.88
24	IAH	22.68
24	LAS	22.68
26	PHX	18.48
27	MCO	16.80
28	LAX	13.44
28	SFO	13.44
28	MIA	13.44

Table 15 (cont.)

Table 16. Freezing Precipitation Event Rankings Weighted by Weather Factor Impacts and Air Traffic (Freezing rain/drizzle/ice pellet frequency weighted for air traffic and impact factor)

Rank	Site ID	Weighted Freezing Precipitation Impact Factor
1	ORD	50.32
2	MSP	49.58
3	ATL	48.84
4	DTW	48.10
5	IAD	47.36
6	EWR	46.62
6	DFW	46.62
8	BOS	45.14
9	CVG	44.40
9	CLT	44.40
11	STL	42.92
12	LGA	42.18
13	PHL	41.44
14	DEN	40.70
15	PIT	39.96
16	MDW	39.22
16	MEM	39.22
18	BWI	37.00
19	JFK	35.52
19	DCA	35.52
21	CLE	34.04
22	IAH	25.16
23	SLC	20.72
24	SEA	19.24
25	LAS	14.80
25	PHX	14.80
25	MCO	14.80
25	LAX	14.80
25	SFO	14.80
25	MIA	14.80

Table 16 (cont.)

Table 17. Turbulence Rankings Weighted by Weather Factor Impacts and Air Traffic (Turbulence frequency weighted for air traffic and impact factor)

Rank	Site ID	Weighted Turbulence Impact Factor
1	ORD	42.24
2	DEN	41.58
3	PHL	40.92
4	EWR	40.26
5	DFW	39.60
6	ATL	38.94
7	DTW	38.28
7	LAX	38.28
9	BOS	36.96
9	LGA	36.96
11	CVG	35.64
12	PIT	34.98
13	LAS	34.32
14	STL	33.66
15	IAD	33.00
16	JFK	32.34
17	SLC	31.68
18	MSP	31.02
19	PHX	30.36
20	SEA	29.70
21	BWI	29.04
22	CLT	28.38
23	MDW	27.72
24	MEM	26.40
25	DCA	25.08
25	CLE	25.08
27	IAH	22.44
28	SFO	16.50
29	MCO	4.62
30	MIA	2.64

Table 17 (cont.)

**Table 18. Icing Rankings Weighted by Weather Factor Impacts and Air Traffic
(Icing frequency weighted for air traffic and impact factor)**

Rank	Site ID	Weighted Icing Impact Factor
1	ORD	46.24
2	ATL	45.56
3	DTW	44.88
4	MSP	44.20
5	DFW	43.52
6	CVG	42.84
7	PHL	42.16
8	PIT	41.48
9	SEA	40.80
10	DEN	40.12
11	MDW	39.44
12	BOS	38.76
12	LGA	38.76
14	EWR	37.40
15	SLC	36.72
16	LAX	35.36
17	STL	34.68
18	PHX	34.00
19	LAS	33.32
20	CLE	31.96
21	IAD	31.28
22	MEM	30.60
23	CLT	29.92
24	JFK	29.24
25	IAH	27.88
26	SFO	27.20
27	BWI	25.84
28	DCA	23.80
29	MIA	21.08
30	MCO	6.80

Table 18 (cont.)

**Table 19. Ranking of Summed Weighted Frequencies
(by impact and air traffic)**

Rank	Site ID	Summed Weighted Impact Factor
1	ORD	638.94
2	ATL	601.34
3	DFW	563.71
4	DEN	549.76
5	STL	544.16
6	CLT	526.49
7	DTW	517.83
8	MEM	509.58
9	MSP	496.55
10	IAH	494.51
11	EWR	493.40
12	BOS	481.07
13	PHL	476.82
14	LGA	455.85
15	SLC	455.59
16	IAD	433.94
17	CVG	421.28
18	BWI	414.00
19	MDW	412.58
20	PIT	398.45
21	JFK	394.37
22	LAX	382.85
23	CLE	362.57
24	SEA	359.79
25	LAS	334.81
26	PHX	327.51
27	MCO	314.92
28	MIA	313.39
29	SFO	313.30
30	DCA	252.57

Table 19 (cont.)

**Table 19b. Ranking of Summed Weighted Frequencies
(by impact and air traffic not using reverse rankings)**

Rank	Site ID	Summed Weighted Impact Factor
1	ORD	275.63
2	ATL	220.12
3	LAX	125.30
4	BOS	97.87
5	CLT	95.13
6	DTW	87.68
7	JFK	87.25
8	DEN	86.08
9	EWR	84.47
10	DFW	81.81
11	STL	79.84
12	MEM	76.93
13	MSP	75.16
14	LGA	73.59
15	SEA	68.89
16	IAH	68.14
17	PHL	65.54
18	MDW	53.76
19	SFO	50.88
20	BWI	50.12
21	CLE	33.00
22	SLC	32.10
23	MIA	26.44
24	MCO	24.93
25	IAD	23.35
26	LAS	22.52
27	PIT	14.42
28	PHX	14.28
29	CVG	9.28
30	DCA	6.91

Table 19b.

Algorithms for tables 2-19

(refer to *TRACON_sites_Aviation_Weather_Factor_Summary.xls*)

Table 2 weighted frequency = significant wind frequency * air traffic factor ($F=E*D$)

Table 3 weighted frequency = thunderstorm frequency * air traffic factor ($BB=BA*D$)

Table 4 weighted frequency = significant ceiling frequency * air traffic factor ($R=Q*D$)

Table 5 weighted frequency = significant visibility frequency * air traffic factor ($W=V*D$)

Table 6 weighted frequency = snow event frequency * air traffic factor ($AB=AA*D$)

Table 7 weighted frequency = freezing precipitation event frequency * air traffic factor ($AG=AF*D$)

Table 8 weighted frequency = turbulence score * air traffic factor ($AL=AK*D/(AK$ average)

Table 9 weighted frequency = icing score * air traffic ($AQ=AP*D$)

Table 10 Average weighted (by air traffic) frequency = Sum of 8 weighted frequencies/8 ($F+BB+R+W+AB+AG+AL+AQ/8$)

Table 11 weighted wind impact factor = wind impact factor (based on CWSU poll) * significant wind factor reverse ranking ($I= G*H$)

Table 12 weighted thunderstorm impact factor = thunderstorm impact factor (based on CWSU poll) * thunderstorm factor reverse ranking ($BD = BC*N$)

Table 13 weighted ceiling impact factor = ceiling impact factor (based on CWSU poll) * ceiling factor reverse ranking ($U = S*T$)

Table 14 weighted visibility impact factor = visibility impact factor (based on CWSU poll) * visibility factor reverse ranking ($Z = X*Y$)

Table 15 weighted snow impact factor = snow impact factor (based on CWSU poll) * snow factor reverse ranking ($AE = AC*AD$)

Table 16 weighted freezing precipitation impact factor = freezing precipitation impact factor (based on CWSU poll) * freezing precipitation factor reverse ranking ($AJ = AH*AI$)

Table 17 weighted turbulence impact factor = turbulence impact factor (based on CWSU poll) * turbulence factor reverse ranking ($AO = AM*AN$)

Table 18 weighted icing impact factor = icing impact factor (based on CWSU poll) * icing factor reverse ranking ($AT = AR*AS$)

Table 19 Ranking of summed weighted (by air traffic and impact) frequencies = weighted wind impact factor + weighted thunderstorm impact factor + weighted ceiling impact factor + weighted visibility impact factor + weighted snow impact factor + weighted freezing precipitation impact factor + weighted turbulence impact factor + weighted icing impact factor ($BE = I + BD + U + Z + AE + AJ + AO + AT$)

Table 19b Ranking of summed weighted (by air traffic and impact) = $(F*G)+(BB*N)+(R*S)+(W*X)+(AB*AC)+(AG*AH)+(AQ*AR)$. There is no use of reverse rankings for this table.