

FAIRCHILD AFB WA

Latitude = 47.62 N

Longitude = 117.60 W

Period of Record = 1967 to 1996

WMO No. 727855

Elevation = 2461 feet

Average Pressure = 27.39 inches Hg

Design Criteria Data

	Design Value	Mean Coincident (Average) Values			
		Wet Bulb Temperature (°F)	Humidity Ratio (gr/lb)	Wind Speed (mph)	Prevailing Direction (NSEW)
Dry Bulb Temperature (T)	(°F)				
Median of Extreme Highs	97	64	47	6.1	WSW
0.4% Occurrence	92	63	46	6.5	SW
1.0% Occurrence	88	62	47	6.2	SW
2.0% Occurrence	85	61	47	6.2	SW
Mean Daily Range	18	-	-	-	-
97.5% Occurrence	16	15	11	5.2	NNE
99.0% Occurrence	9	8	7	5.2	NNE
99.6% Occurrence	3	2	5	5.8	NNE
Median of Extreme Lows	-1	-2	4	6.5	NNE
	Design Value	Mean Coincident (Average) Values			
		Dry Bulb Temperature (°F)	Humidity Ratio (gr/lb)	Wind Speed (mph)	Prevailing Direction (NSEW)
Wet Bulb Temperature (T_{wb})	(°F)				
Median of Extreme Highs	67	86	75	6.1	S
0.4% Occurrence	65	85	67	5.7	S
1.0% Occurrence	63	83	61	6.0	SW
2.0% Occurrence	62	81	59	6.0	SSW
	Design Value	Mean Coincident (Average) Values			
		Dry Bulb Temperature (°F)	Vapor Pressure (in. Hg)	Wind Speed (mph)	Prevailing Direction (NSEW)
Humidity Ratio (HR)	(gr/lb)				
Median of Extreme Highs	91	70	0.56	4.6	S
0.4% Occurrence	79	68	0.49	5.0	S
1.0% Occurrence	74	68	0.45	5.5	S
2.0% Occurrence	68	66	0.42	5.7	S
Air Conditioning/ Humid Area Criteria	# of Hours	T ≥ 93°F	T ≥ 80°F	T _{wb} ≥ 73°F	T _{wb} ≥ 67°F
		27	393	0	12

Other Site Data

Weather Region	Rain Rate 100 Year Recurrence (in./hr)	Basic Wind Speed 3 sec gust @ 33 ft 50 Year Recurrence (mph)	Ventilation Cooling Load Index (Ton-hr/cfm/yr) Base 75°F-RH 60% Latent + Sensible
5	1.0	85	0.0 + 0.4
Ground Water Temperature (°F) 50 Foot Depth *	Frost Depth 50 Year Recurrence (in.)	Ground Snow Load 50 Year Recurrence (lb/ft ²)	Average Annual Freeze-Thaw Cycles (#)
49.8	64	42	70

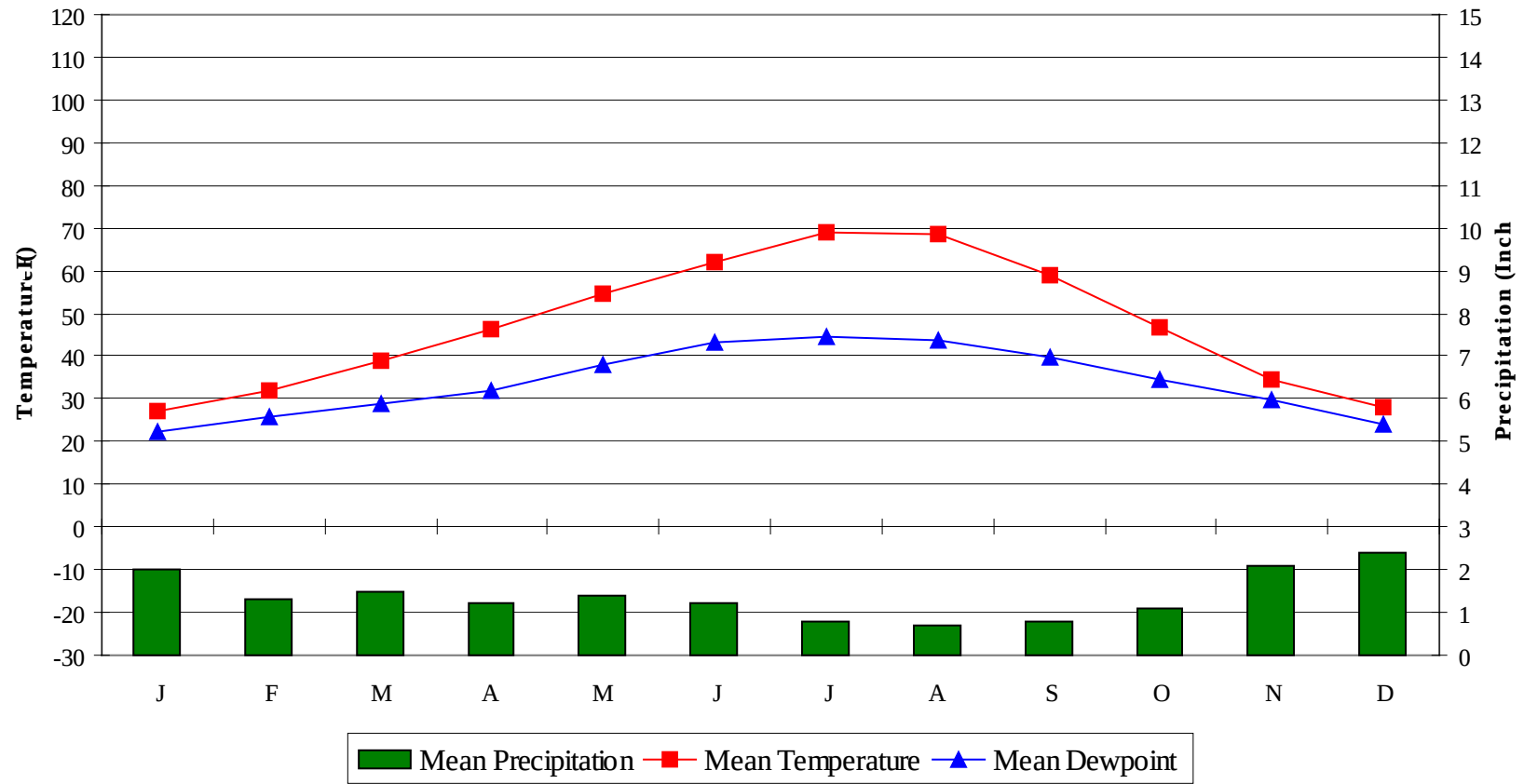
*Note: Temperatures at greater depths can be estimated by adding 1.5°F per 100 feet additional depth.

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Average Annual Climate

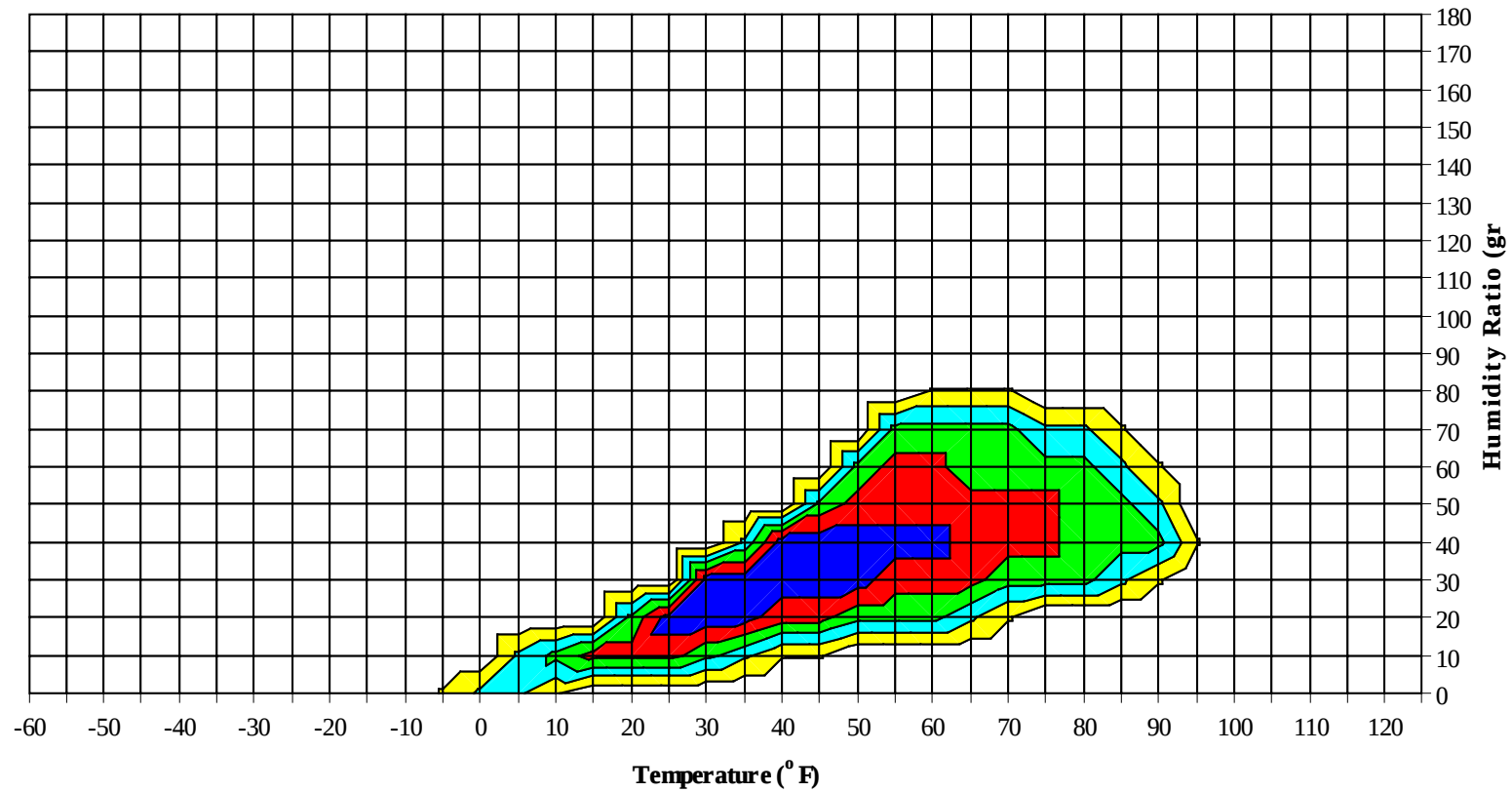


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Long Term Psychrometric Summary

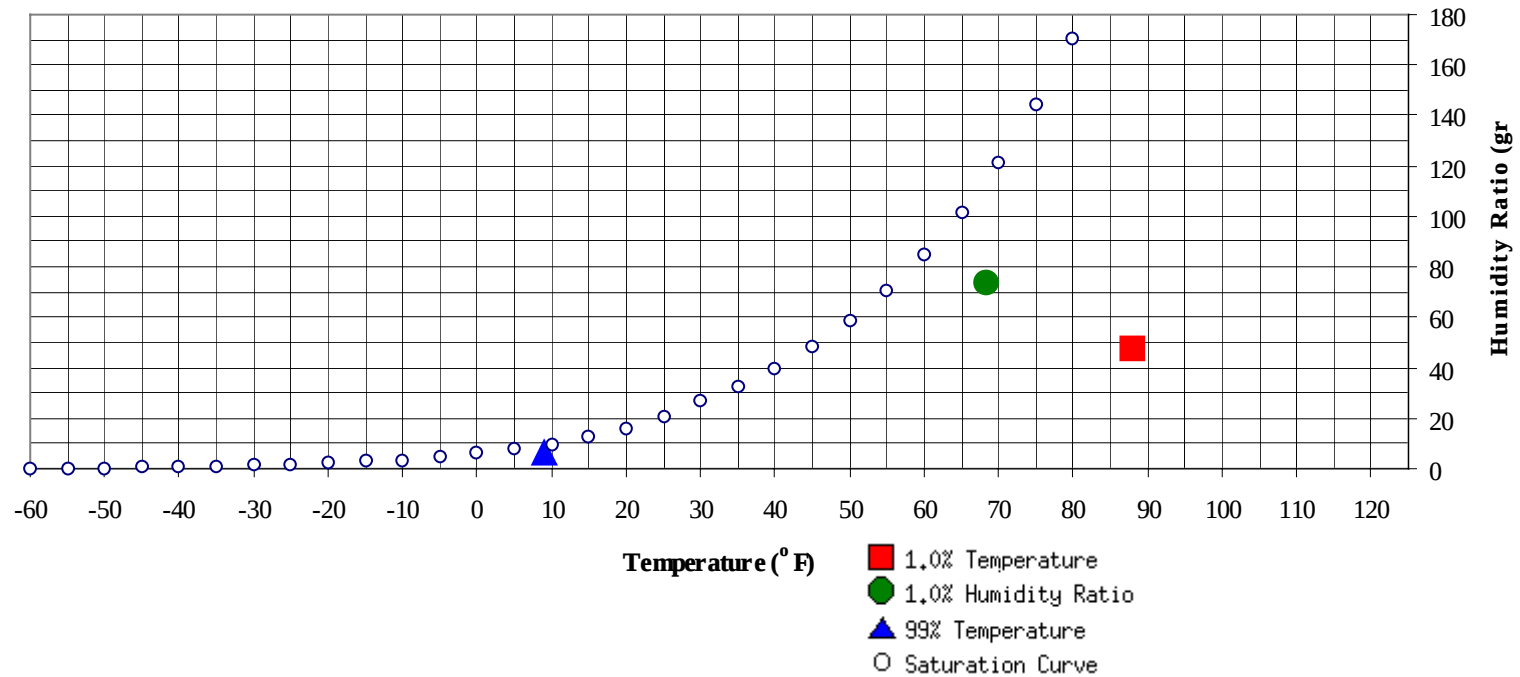


- 50% of all observations
- 80% of all observations
- 95% of all observations
- 97.5% of all observations
- 99% of all observations

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Psychrometric Summary of Peak Design Values

	(°F)	MCHR	Enthalpy	1.0% Humidity	(gr/lb)	MCDB	MCWB	MC Dewpt	Enthalpy
		(gr/lb)	(btu/lb)			(°F)	(°F)	(°F)	(btu/lb)
99% Dry Bulb	9	6.7	3.2	Ratio	73.5	68.4	60.4	56	27.9

1.0% Dry Bulb	(°F)	MCHR	MCWB	Enthalpy
		(gr/lb)	(°F)	(btu/lb)
	88	47.3	61.6	28.6

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Dry-Bulb Temperature Hours For An Average Year (Sheet 1 of 5)

Period of Record = 1967 to 1996

Temperature Range (°F)	January					February					March				
	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00		
100 / 104															
95 / 99															
90 / 94															
85 / 89															
80 / 84															
75 / 79															
70 / 74															
65 / 69												1	0	1	50.1
60 / 64							0		0	52.0		4	1	5	48.9
55 / 59		0		0	51.0		1	0	2	48.1	0	12	5	17	46.3
50 / 54	0	1	0	2	46.8	0	7	2	10	44.9	0	29	13	43	43.6
45 / 49	1	4	1	6	42.9	3	19	9	31	41.9	7	57	36	100	40.7
40 / 44	8	19	13	40	39.0	10	35	28	73	38.4	35	66	65	165	37.6
35 / 39	29	47	43	119	34.8	37	59	56	153	34.3	68	48	70	186	33.7
30 / 34	61	59	60	181	30.7	75	50	67	191	30.1	88	22	41	150	29.8
25 / 29	50	45	48	142	25.7	50	28	30	108	25.6	34	6	13	53	25.1
20 / 24	37	33	34	105	21.0	24	13	17	53	20.6	11	2	3	16	20.5
15 / 19	25	18	22	65	16.0	11	6	7	24	15.3	3	1	1	5	15.8
10 / 14	17	12	14	42	10.9	8	3	4	14	10.8	1	0	0	1	10.8
5 / 9	11	7	8	26	6.0	2	1	2	5	6.2	1			1	6.4
0 / 4	5	3	3	11	1.3	1	1	1	3	1.0	0			0	2.0
-5 / -1	1	0	1	2	-3.5	1	0	1	2	-3.6					
-10 / -6	1	0	0	2	-7.6	1	0	0	1	-7.6					
-15 / -11	0	0	0	0	-11.0	0	0	0	0	-11.6					
-20 / -16	0			0	-16.0	0	0	0	0	-17.1					
-25 / -21						0			0	-21.4					

Caution: This summary reflects the typical distribution of temperature in a typical year. It does not reflect the typical moisture distribution. Because wet bulb temperatures are averaged, this summary understates the annual moisture load. For accurate moisture load data, see the long-term humidity summary and the ventilation and infiltration load pages in this manual.

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Dry-Bulb Temperature Hours For An Average Year (Sheet 2 of 5)**Period of Record = 1967 to 1996**

Temperature Range (°F)	April					May					June				
	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00		
100 / 104															
95 / 99												0	0	1	63.2
90 / 94							1	0	1	63.4		3	1	4	63.3
85 / 89		0	0	0	58.0		2	1	2	61.0		10	5	15	62.1
80 / 84		1	0	1	58.5		6	2	9	59.0	0	23	11	35	60.0
75 / 79		1	1	2	57.0	0	12	6	18	56.9	1	31	18	49	58.3
70 / 74	0	5	2	7	54.8	1	24	12	36	54.9	6	40	29	75	56.3
65 / 69	0	13	5	18	51.8	3	34	21	59	52.5	17	42	36	96	54.3
60 / 64	1	22	12	35	49.1	11	44	34	89	50.3	36	41	46	123	52.2
55 / 59	4	37	23	64	46.4	27	52	46	125	47.9	54	32	42	128	50.1
50 / 54	16	53	39	108	43.4	51	43	52	146	45.5	60	15	33	108	47.3
45 / 49	36	62	54	151	40.6	68	24	46	138	42.6	47	4	14	64	43.8
40 / 44	62	36	57	155	37.5	54	6	21	82	38.9	17	0	3	20	39.8
35 / 39	67	10	37	114	33.7	27	0	5	32	34.7	3		0	3	35.9
30 / 34	46	2	9	56	29.8	6	0	0	7	30.6	0			0	32.3
25 / 29	8		1	9	25.6	0			0	26.0					
20 / 24	0			0	21.6										
15 / 19															
10 / 14															
5 / 9															
0 / 4															
-5 / -1															
-10 / -6															
-15 / -11															
-20 / -16															
-25 / -21															

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WMO No. 727855

Dry-Bulb Temperature Hours For An Average Year (Sheet 3 of 5)**Period of Record = 1967 to 1996**

Temperature Range (°F)	July					August					September				
	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00		
100 / 104		1	0	1	66.6		0		0	64.5					
95 / 99		5	2	6	65.1		4	1	6	63.0		0	0	0	63.8
90 / 94		18	8	27	62.7		16	6	22	62.5		1	0	2	62.4
85 / 89		34	17	51	61.3		28	14	42	60.8		6	2	7	60.4
80 / 84	1	42	28	71	59.8	0	42	24	67	59.3		18	6	24	58.5
75 / 79	5	43	35	84	58.3	4	46	33	83	57.7	0	28	11	39	56.8
70 / 74	21	43	44	107	56.5	16	46	45	107	55.8	1	39	21	60	54.9
65 / 69	43	31	43	117	54.8	40	32	45	117	54.3	5	40	33	78	52.8
60 / 64	63	20	33	116	52.9	63	21	40	123	52.4	19	43	45	107	50.6
55 / 59	58	10	23	90	50.7	66	9	27	102	50.5	52	34	48	134	48.7
50 / 54	41	3	11	54	47.9	44	2	10	56	47.5	68	22	43	133	46.4
45 / 49	14	1	2	17	44.3	13	0	2	15	43.8	56	8	24	87	43.0
40 / 44	2		0	2	40.0	2	0	0	3	40.2	28	1	8	36	38.7
35 / 39	0			0	35.0	0		0	0	36.5	10	0	1	11	34.1
30 / 34											2		0	2	30.7
25 / 29											0			0	27.0
20 / 24															
15 / 19															
10 / 14															
5 / 9															
0 / 4															
-5 / -1															
-10 / -6															
-15 / -11															
-20 / -16															
-25 / -21															

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WMO No. 727855

Dry-Bulb Temperature Hours For An Average Year (Sheet 4 of 5)**Period of Record = 1967 to 1996**

Temperature Range (°F)	October					November					December				
	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00		
100 / 104															
95 / 99															
90 / 94															
85 / 89		0		0	60.0										
80 / 84		1		1	59.0										
75 / 79		4	1	4	57.2										
70 / 74		9	2	11	54.6										
65 / 69	0	15	5	19	52.4		0		0	53.4					
60 / 64	0	29	11	41	49.8		1		1	50.5					
55 / 59	7	43	25	74	47.2		3	0	3	49.6					
50 / 54	19	55	46	120	44.8	2	13	4	20	46.3	0	1	1	2	47.5
45 / 49	47	47	61	155	42.2	12	30	20	62	43.3	2	6	3	12	43.6
40 / 44	69	29	55	153	38.6	25	51	36	112	39.2	11	23	15	49	39.5
35 / 39	64	12	30	105	34.5	54	56	61	171	35.1	31	41	37	109	35.1
30 / 34	31	3	11	45	30.2	72	51	67	189	30.6	58	64	63	185	30.5
25 / 29	8	1	2	11	25.7	43	21	31	95	26.1	58	51	55	163	25.9
20 / 24	2	0	1	3	20.1	18	7	12	37	20.9	38	30	33	100	21.2
15 / 19	1	0		1	15.3	7	3	4	14	16.3	22	16	21	59	16.2
10 / 14	0			0	13.0	3	2	2	6	10.9	15	8	10	32	11.3
5 / 9						2	2	1	5	6.2	5	3	5	14	6.2
0 / 4						1	1	1	3	1.5	3	3	3	9	1.4
-5 / -1						0	0	0	1	-3.0	2	1	1	4	-2.9
-10 / -6						0	0	0	0	-8.0	1	1	1	3	-7.5
-15 / -11						0			0	-11.0	1	0	0	1	-11.9
-20 / -16											0	0	0	1	-16.7
-25 / -21															

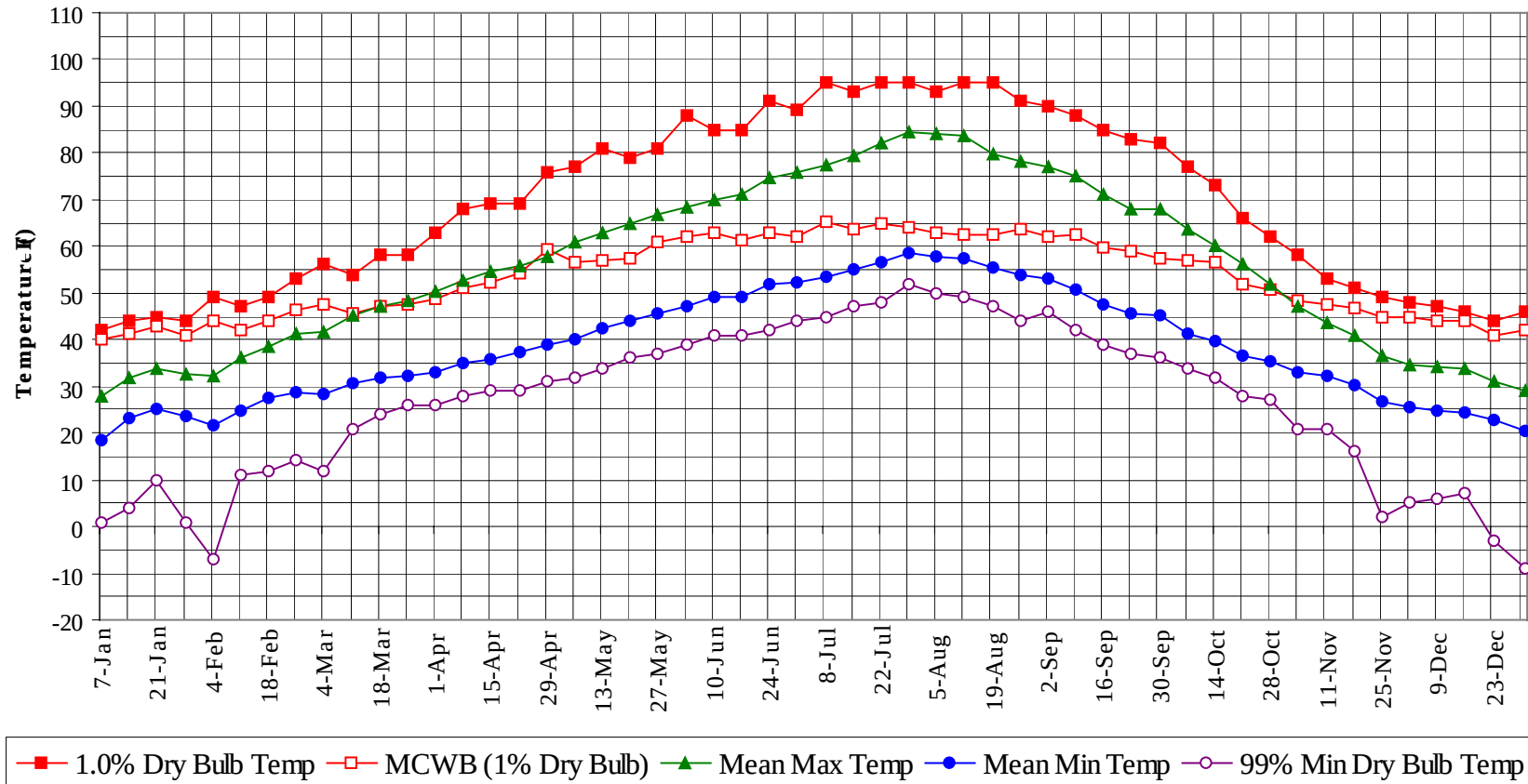
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FAIRCHILD AFB WA WMO No. 727855
Dry-Bulb Temperature Hours For An Average Year (Sheet 5 of 5)
Period of Record = 1967 to 1996

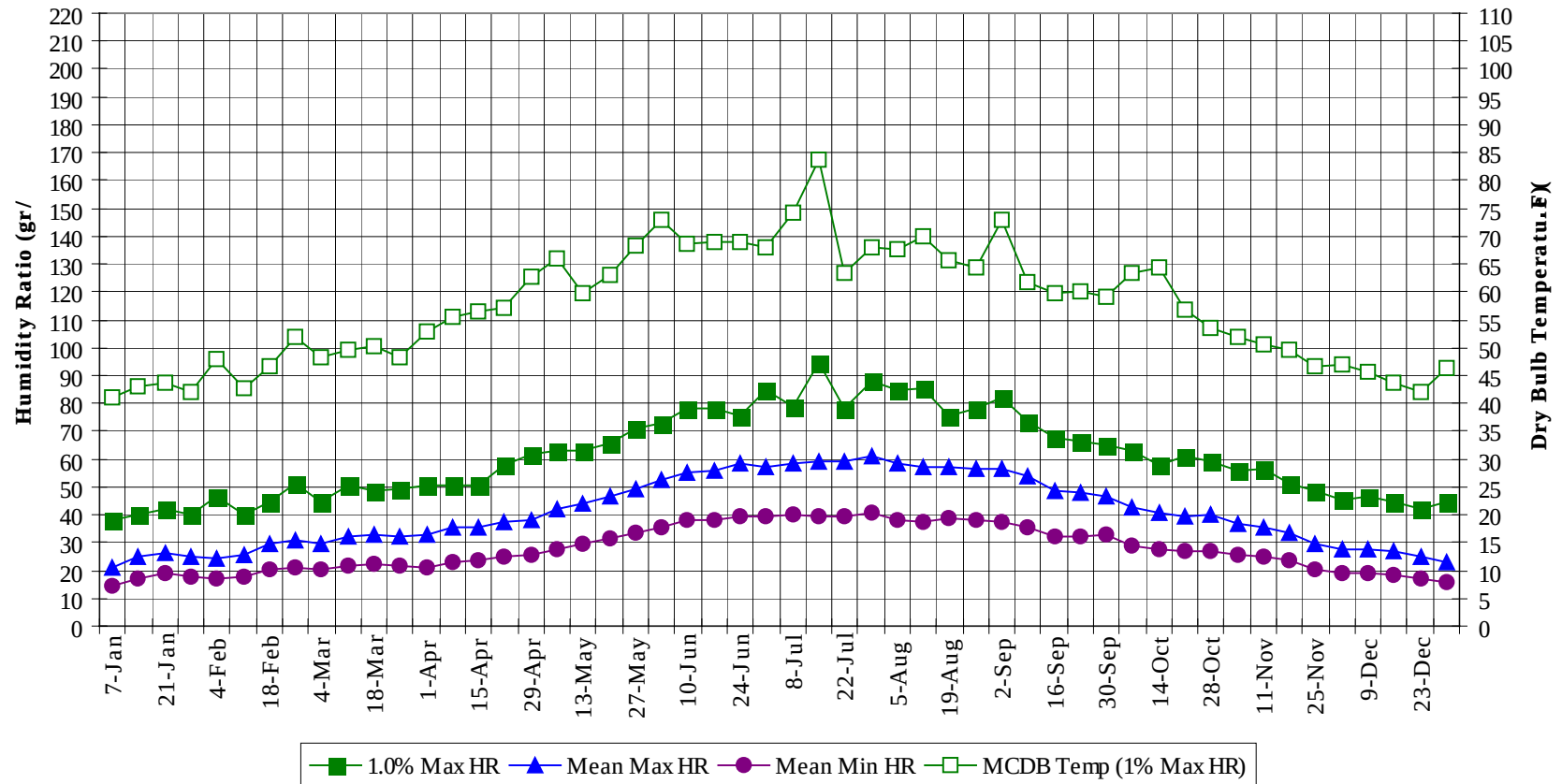
Temperature Range (°F)	Annual Totals				
	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00		
100 / 104		1	0	1	66.4
95 / 99		10	3	13	64.1
90 / 94		40	16	56	62.6
85 / 89		79	38	117	61.1
80 / 84	1	134	71	206	59.5
75 / 79	10	164	105	280	57.8
70 / 74	44	205	154	403	55.8
65 / 69	109	208	188	505	53.8
60 / 64	194	225	222	641	51.5
55 / 59	266	231	239	736	48.9
50 / 54	301	244	254	799	45.7
45 / 49	305	260	270	835	42.2
40 / 44	322	267	301	890	38.4
35 / 39	390	274	340	1005	34.4
30 / 34	440	252	319	1012	30.3
25 / 29	252	152	180	585	25.7
20 / 24	132	85	100	316	20.9
15 / 19	69	45	56	169	16.0
10 / 14	43	24	30	97	11.0
5 / 9	22	13	16	50	6.1
0 / 4	11	7	8	26	1.3
-5 / -1	5	2	3	10	-3.2
-10 / -6	3	1	2	6	-7.6
-15 / -11	1	0	1	2	-11.7
-20 / -16	0	0	0	1	-16.8
-25 / -21	0			0	-21.4

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Annual Summary of Temperatures



Long Term Humidity and Dry Bulb Temperature Summary



FAIRCHILD AFB**WA****WMO No. 727855****Long Term Dry Bulb Temperature and Humidity Summary**

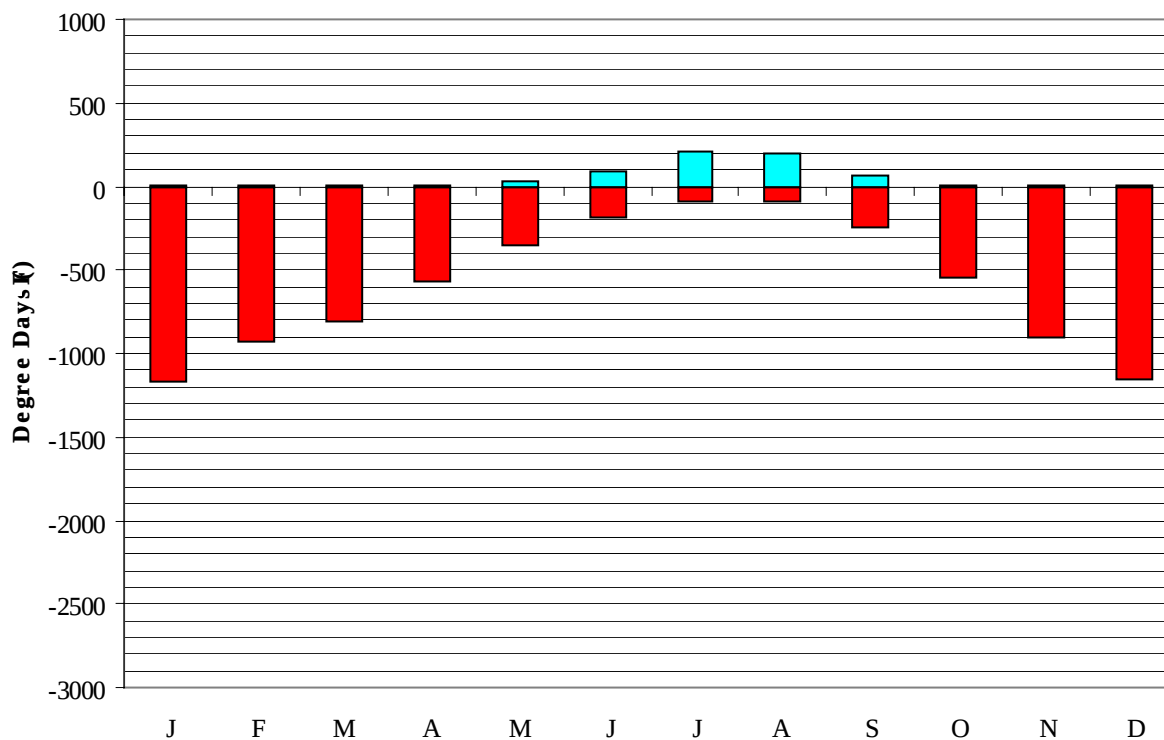
Week Ending	1.0% Temp (°F)	MCWB @ 1% Temp (°F)	Mean Max Temp (°F)	Mean Min Temp (°F)	99% Temp (°F)	1.0% HR (gr/lb)	MCDB @ 1% HR (°F)	Mean Max HR (gr/lb)	Mean Min HR (gr/lb)
7-Jan	42.0	40.1	27.9	18.7	1.0	37.8	41.2	21.0	14.2
14-Jan	44.0	41.2	31.8	23.1	4.0	39.9	43.0	24.7	17.3
21-Jan	45.0	42.8	34.0	25.1	10.0	42.0	43.8	26.3	18.8
28-Jan	44.0	41.0	32.6	23.6	1.0	39.9	42.2	25.1	17.8
4-Feb	49.0	44.0	32.3	21.7	-7.0	46.9	47.8	24.5	16.8
11-Feb	47.0	41.9	36.0	24.9	11.0	39.9	42.8	25.6	17.8
18-Feb	49.0	43.9	38.5	27.6	12.0	44.8	46.5	29.7	20.4
25-Feb	53.0	46.2	41.3	28.8	14.0	51.1	52.0	30.6	21.1
4-Mar	56.0	47.6	41.8	28.2	12.0	44.8	48.2	29.7	20.2
11-Mar	54.0	45.6	45.1	30.6	21.0	50.4	49.6	32.1	21.7
18-Mar	58.0	47.3	47.1	32.0	24.0	48.3	50.3	33.1	22.5
25-Mar	58.0	47.4	48.4	32.1	26.0	49.0	48.1	32.1	21.4
1-Apr	63.0	48.6	50.2	33.1	26.0	50.4	52.9	32.7	21.2
8-Apr	68.0	51.2	52.9	34.8	28.0	50.4	55.6	35.3	23.1
15-Apr	69.0	52.4	54.5	35.7	29.0	50.4	56.4	35.6	23.7
22-Apr	69.0	54.4	55.9	37.2	29.0	58.1	57.2	37.5	24.9
29-Apr	76.0	59.2	57.8	38.8	31.0	61.6	62.9	38.1	25.4
6-May	77.0	56.6	60.8	40.2	32.0	63.0	66.1	41.9	27.8
13-May	81.0	57.1	63.0	42.6	34.0	63.0	59.7	44.0	29.3
20-May	79.0	57.5	64.8	44.1	36.0	65.8	63.1	46.8	31.5
27-May	81.0	60.9	66.7	45.6	37.0	70.7	68.3	49.0	33.4
3-Jun	88.0	62.2	68.2	47.3	39.0	72.8	72.8	52.2	35.5
10-Jun	85.0	63.1	70.1	49.1	41.0	78.4	68.7	55.5	37.9
17-Jun	85.0	61.3	71.1	49.2	41.0	78.4	69.0	55.7	38.0
24-Jun	91.0	62.9	74.8	51.9	42.0	75.6	68.9	58.4	39.2
1-Jul	89.0	62.1	75.7	52.5	44.0	84.7	67.8	57.2	39.1
8-Jul	95.0	65.1	77.5	53.6	45.0	79.1	74.4	58.1	40.2
15-Jul	93.0	63.8	79.3	54.9	47.0	94.5	83.7	58.9	39.7
22-Jul	95.0	64.8	82.1	56.6	48.0	78.4	63.5	59.2	39.4
29-Jul	95.0	63.9	84.6	58.5	52.0	88.2	68.1	61.4	40.4
5-Aug	93.0	62.8	84.0	57.8	50.0	84.7	67.5	58.7	38.4
12-Aug	95.0	62.6	83.8	57.4	49.0	85.4	69.9	57.3	37.4
19-Aug	95.0	62.4	79.8	55.4	47.0	75.6	65.6	57.1	38.4
26-Aug	91.0	63.6	78.1	54.0	44.0	78.4	64.4	56.6	38.1
2-Sep	90.0	62.0	77.0	53.1	46.0	81.9	72.8	56.4	37.4
9-Sep	88.0	62.3	74.9	50.7	42.0	73.5	61.9	53.7	35.8
16-Sep	85.0	59.6	71.1	47.5	39.0	67.9	59.8	48.3	32.2
23-Sep	83.0	59.0	67.9	45.8	37.0	66.5	60.0	47.8	32.4
30-Sep	82.0	57.5	68.1	45.1	36.0	65.1	59.2	46.9	32.5
7-Oct	77.0	57.1	63.7	41.4	34.0	63.0	63.3	42.6	28.9
14-Oct	73.0	56.8	60.2	39.7	32.0	58.1	64.3	40.6	27.9
21-Oct	66.0	51.7	56.4	36.4	28.0	60.9	56.9	39.6	26.7
28-Oct	62.0	50.7	52.0	35.4	27.0	58.8	53.5	39.7	27.2
4-Nov	58.0	48.5	47.0	32.9	21.0	56.0	51.8	37.0	25.5
11-Nov	53.0	47.5	43.8	32.1	21.0	56.7	50.5	35.3	25.0
18-Nov	51.0	46.7	41.0	30.2	16.0	51.1	49.5	33.5	23.5
25-Nov	49.0	44.8	36.5	26.7	2.0	48.3	46.8	29.7	20.5
2-Dec	48.0	44.7	34.5	25.6	5.0	45.5	47.0	27.4	19.3
9-Dec	47.0	44.2	34.1	24.7	6.0	46.9	45.5	27.7	18.8
16-Dec	46.0	43.9	33.9	24.3	7.0	44.8	43.8	26.7	18.3
23-Dec	44.0	40.8	31.1	22.7	-3.0	42.0	42.0	24.7	17.3
31-Dec	46.0	41.9	29.1	20.3	-9.0	44.8	46.1	23.0	15.9

FAIRCHILD AFB

WA

WMO No. 727855

Degree Days, Heating and Cooling
(Base 65°F)



■ Mean Cooling Degree Days
 ■ Mean Heating Degree Days

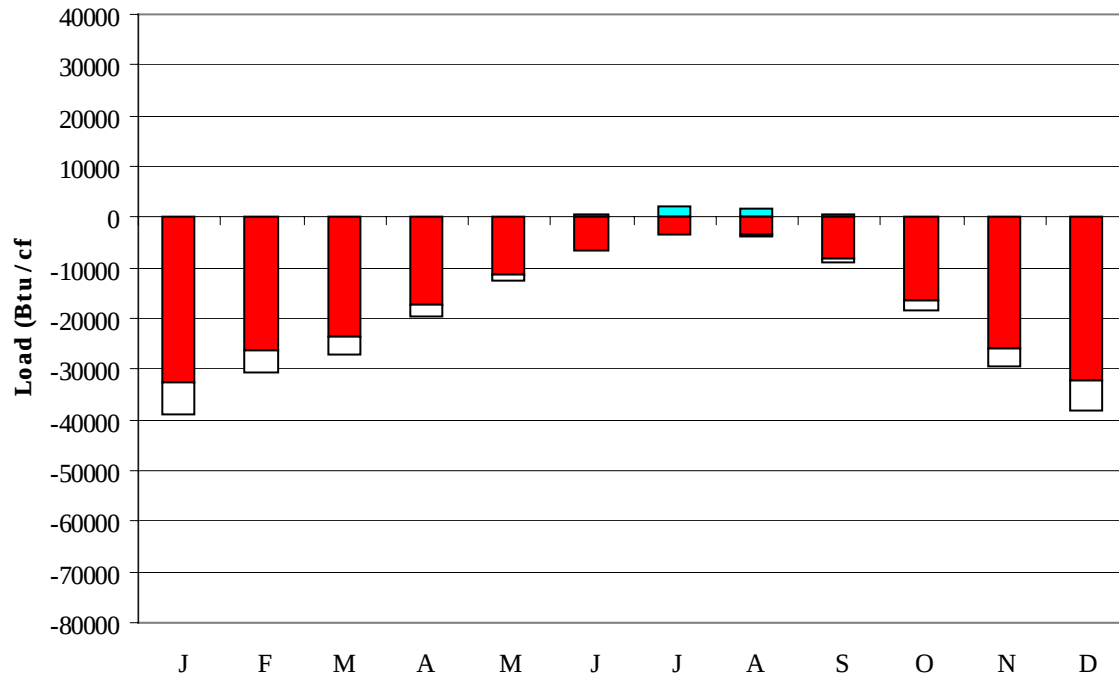
	Mean Cooling Degree Days (°F)	Mean Heating Degree Days (°F)
JAN	0	1173
FEB	0	930
MAR	0	814
APR	5	571
MAY	33	359
JUN	94	186
JUL	215	87
AUG	198	92
SEP	68	244
OCT	7	550
NOV	0	909
DEC	0	1152
ANN	619	7067

FAIRCHILD AFB

WA

WMO No. 727855

Average Ventilation and Infiltration Loads
(Outside Air vs. 75°F, 60% RH summer; 68°F, 30% RH winter)



■ Average Sensible Cooling Load	■ Average Sensible Heating Load
■ Average Latent Cooling (Drying) Load	■ Average Latent Heating (Humidifying) Load

	Average Sensible Cooling Load (Btu/cfm)	Average Sensible Heating Load (Btu/cfm)	Average Latent Cooling Load (Btu/cfm)	Average Latent Heating Load (Btu/cfm)
JAN	0	-32806	0	-6052
FEB	0	-26309	0	-4476
MAR	0	-23513	0	-3730
APR	12	-17078	0	-2568
MAY	135	-11390	0	-984
JUN	608	-6405	5	-270
JUL	1960	-3330	31	-177
AUG	1726	-3507	7	-232
SEP	377	-8095	2	-714
OCT	12	-16511	0	-1860
NOV	0	-25896	0	-3430
DEC	0	-32260	0	-5729
ANN	4830	-207100	45	-30222

Average Annual Solar Radiation – Nearest Available Site

(Source: National Renewable Energy Laboratory, Golden CO, 1995)

City: SPOKANE
 State: WA
 WBAN No: 24157
 Lat(N): 47.63
 Long(W): 117.53
 Elev(ft): 2366

Stn Type: Secondary
 SHADING GEOMETRY IN DIMENSIONLESS UNITS

Window: 1
 Overhang: 0.754
 Vert Gap: 0.326

AVERAGE INCIDENT SOLAR RADIATION (Btu/sq.ft./day), Percentage Uncertainty = 9		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
HORIZ	Global	410	650	1030	1460	1830	2070	2210	1880	1390	860	430	330	1220
	Std Dev	38	81	102	119	159	158	131	161	133	80	38	34	36
	Minimum	330	470	840	1190	1520	1800	1860	1580	1160	710	370	260	1160
	Maximum	500	790	1330	1680	2070	2360	2450	2140	1650	1020	500	430	1300
	Diffuse	290	390	500	660	750	770	630	550	440	340	280	240	490
Clear Day	Global	610	970	1510	2110	2540	2710	2610	2230	1680	1100	670	510	1610
NORTH	Global	160	220	310	420	560	660	630	470	330	230	160	130	360
	Diffuse	160	220	310	410	490	530	500	430	330	230	160	130	330
Clear Day	Global	130	190	270	400	600	740	670	460	300	210	140	110	350
EAST	Global	280	430	700	970	1140	1240	1350	1200	950	600	290	230	780
	Diffuse	190	270	380	510	590	630	600	530	420	290	190	160	400
Clear Day	Global	560	810	1120	1420	1590	1650	1610	1460	1200	870	600	490	1120
SOUTH	Global	680	900	1090	1090	1010	980	1100	1240	1350	1190	680	580	990
	Diffuse	320	380	460	550	580	590	560	530	470	380	290	270	450
Clear Day	Global	1810	2000	1980	1670	1360	1210	1260	1510	1820	1950	1810	1700	1670
WEST	Global	290	460	680	900	1100	1230	1330	1200	930	610	310	240	780
	Diffuse	200	280	390	510	600	640	600	540	420	300	200	170	400
Clear Day	Global	560	810	1120	1420	1590	1650	1610	1460	1200	870	600	490	1120

Average Annual Solar Heat and Illumination – Nearest Available Site

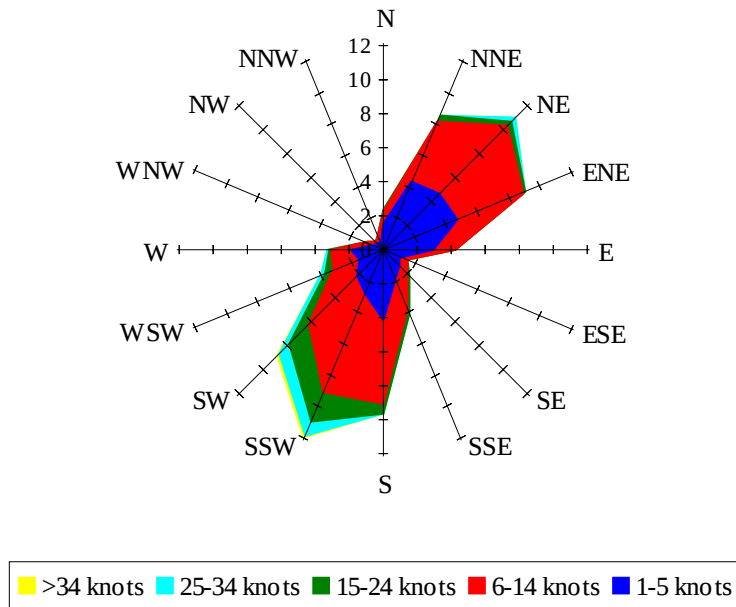
(Source: National Renewable Energy Laboratory, Golden CO, 1995)

AVERAGE TRANSMITTED SOLAR RADIATION (Btu/sq.ft./day) FOR DOUBLE GLAZING, Percentage Uncertainty = 9		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
HORIZ	Unshaded	260	430	710	1040	1320	1500	1600	1350	980	570	280	210	860
NORTH	Unshaded	110	150	210	290	370	430	400	310	230	160	110	91	240
	Shaded	84	120	170	240	310	360	350	270	200	140	86	70	200
EAST	Unshaded	190	300	500	690	820	890	970	860	680	420	200	160	560
	Shaded	160	240	400	550	640	690	760	690	550	350	160	130	450
SOUTH	Unshaded	510	660	770	740	650	620	690	810	940	870	510	440	690
	Shaded	480	590	570	400	330	340	330	370	590	730	470	410	470
WEST	Unshaded	200	320	480	640	790	880	960	860	670	430	210	160	550
	Shaded	160	260	390	510	620	690	750	680	550	360	180	140	440

AVERAGE INCIDENT ILLUMINANCE (klux-hr) FOR MOSTLY CLEAR AND MOSTLY CLOUDY CONDITIONS, Percentage Uncertainty = 9		March					June				
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm
HORIZ.	M.Clear	38	63	68	52	18	54	84	97	90	65
	M.Cloudy	23	41	43	34	13	36	57	70	66	46
NORTH	M.Clear	9	12	13	11	6	12	15	16	15	13
	M.Cloudy	9	14	14	12	6	12	16	18	18	14
EAST	M.Clear	74	49	13	11	6	84	68	24	15	13
	M.Cloudy	29	28	14	12	6	45	44	23	18	14
SOUTH	M.Clear	48	81	89	67	23	13	44	59	51	25
	M.Cloudy	21	40	44	33	11	13	32	44	39	20
WEST	M.Clear	9	12	26	67	56	12	15	16	55	82
	M.Cloudy	9	14	20	34	22	12	16	18	41	50
M.Clear	(% hrs)	25	24	20	17	20	41	39	32	31	34

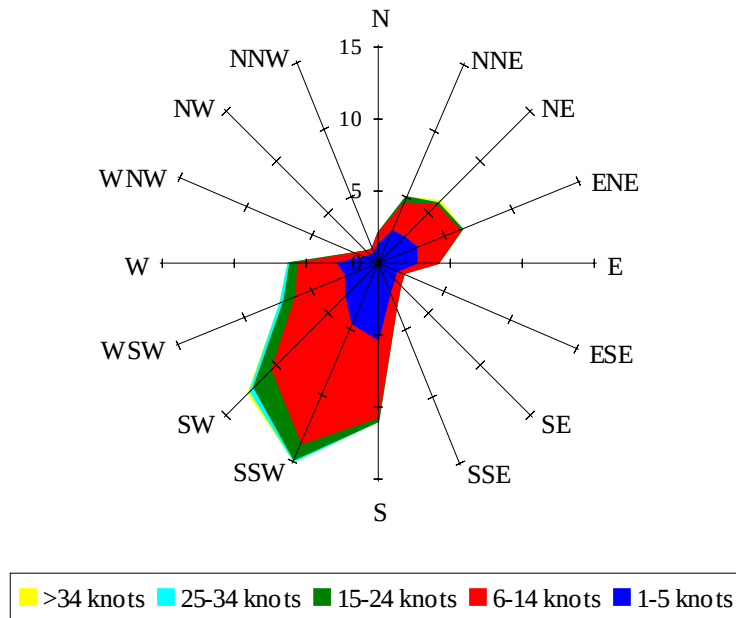
		Sept					Dec				
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm
HORIZ.	M.Clear	31	63	77	68	40	9	29	31	15	0
	M.Cloudy	19	41	52	47	26	6	18	19	10	0
NORTH	M.Clear	8	12	14	13	9	4	8	8	5	0
	M.Cloudy	8	13	15	14	9	3	8	8	5	0
EAST	M.Clear	73	66	21	13	9	30	30	8	5	0
	M.Cloudy	30	37	19	14	9	8	12	8	5	0
SOUTH	M.Clear	29	67	84	74	39	30	75	80	46	0
	M.Cloudy	15	38	52	45	22	8	21	23	13	0
WEST	M.Clear	8	12	14	56	76	4	8	22	37	0
	M.Cloudy	8	13	15	36	38	3	8	11	11	0
M.Clear	(% hrs)	52	52	47	46	46	13	14	15	15	17

Wind Summary - December, January, and February **Labels of Percent Frequency on North Axis**



Percent Calm = 17.77

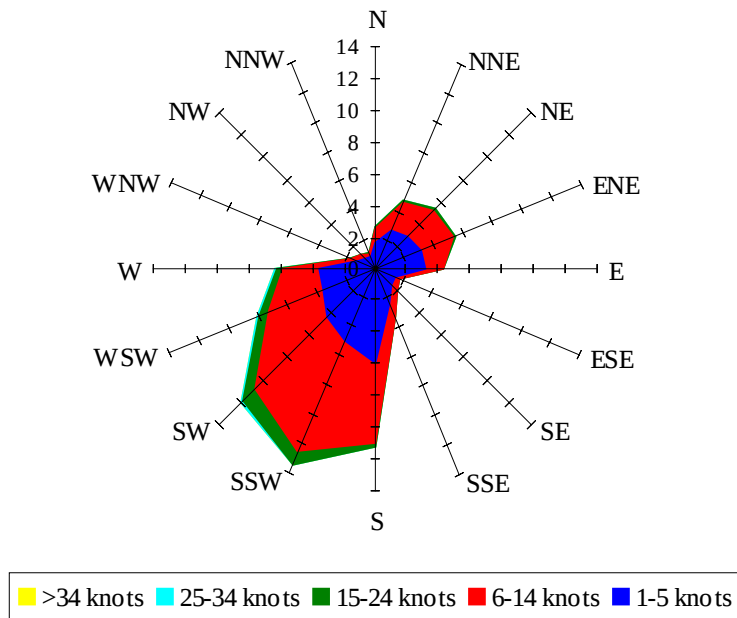
Wind Summary - March, April, and May **Labels of Percent Frequency on North Axis**



Percent Calm = 13.18

Wind Summary - June, July, and August

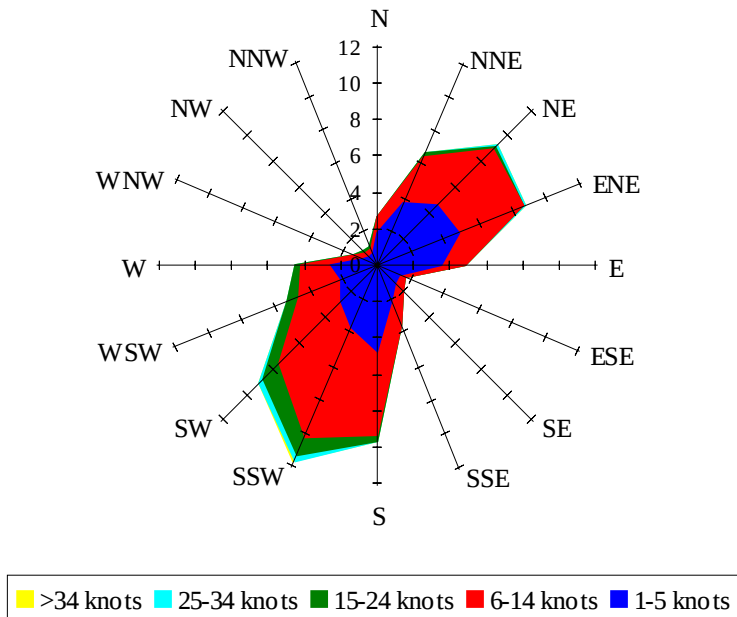
Labels of Percent Frequency on North Axis



Percent Calm = 15.88

Wind Summary - September, October, and November

Labels of Percent Frequency on North Axis



Percent Calm = 17.01