LATE REPORTS FOR HAVANA, CUBA

[For levels of constant height. Observations taken at 1400 G. C. T.]

TABLE 1.—*Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidity in percent, obtained by radiosondes during the period September 1944 through December 1945*

STATIONS AND ELEVATIONS IN METERS ABOVE SEA LEVEL

Altitude (meters) m. s. l.	September 1944 (50 m.)				October 1944 (50 m.)				November 1944 (50 m.)				December 1944 (50 m.)			
	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity
Surface	22	1,013.2	28.8	74	17	1,007.8	27.1	77	28	1,012.6	24.8	67	20	1,015.4	22.3	68
500	22	962.7	24.7	76	17	957.8	22.7	81	28	962.2	19.6	72	20	963.8	17.4	74
1,000	22	909.5	21.2	74	17	904.6	19.4	80	28	908.3	16.2	80	20	908.9	13.2	79
1,500	22	859.4	18.4	71	17	854.2	16.8	78	28	856.8	14.1	68	20	856.6	9.8	77
2,000	22	809.9	15.5	68	17	804.6	14.6	69	28	806.9	13.3	40	20	806.2	8.7	----
2,500	22	763.5	13.0	63	17	758.2	12.0	61	28	759.6	11.7	30	20	759.1	8.4	----
3,000	22	719.4	10.7	53	17	714.2	9.4	----	28	715.6	9.1	----	20	714.6	7.6	----
4,000	22	637.6	5.4	41	17	632.7	4.7	----	28	633.9	4.0	----	20	631.8	2.7	----
5,000	22	563.7	−0.1	36	17	558.7	−0.7	----	28	559.7	−1.9	----	20	557.8	−3.0	----
6,000	22	496.6	−6.1	31	17	492.6	−6.5	----	27	492.8	−8.2	----	20	490.6	−9.4	----
7,000	22	436.5	−12.1	----	17	433.0	−12.8	----	26	432.5	−15.0	----	20	430.4	−16.2	----
8,000	22	381.5	−18.5	----	17	378.4	−19.4	----	26	377.7	−22.3	----	20	376.2	−23.5	----
9,000	22	333.1	−25.6	----	17	329.8	−26.4	----	25	328.3	−30.0	----	19	327.0	−30.7	----
10,000	22	289.3	−33.4	----	17	287.0	−34.0	----	25	285.1	−37.1	----	19	283.7	−38.5	----
11,000	22	250.7	−40.7	----	17	248.8	−41.9	----	25	246.5	−44.7	----	19	244.5	−46.4	----
12,000	21	216.3	−48.2	----	17	213.9	−49.6	----	24	211.8	−52.1	----	19	210.1	−53.5	----
13,000	21	185.1	−55.9	----	17	182.8	−57.2	----	23	180.7	−58.2	----	19	179.1	−58.6	----
14,000	19	157.7	−62.7	----	17	155.8	−64.1	----	19	154.1	−62.6	----	16	152.9	−62.7	----
15,000	17	133.9	−68.7	----	15	132.4	−69.9	----	16	130.8	−66.3	----	16	129.8	−65.9	----
16,000	17	113.0	−72.1	----	13	111.8	−73.3	----	15	110.9	−70.3	----	15	109.9	−68.6	----
17,000	9	95.3	−72.0	----	10	94.4	−72.6	----	12	93.0	−72.0	----	12	93.5	−70.9	----
18,000	----	----	----	----	5	79.0	−66.5	----	7	78.7	−71.4	----	7	79.0	−69.9	----
19,000	----	----	----	----	----	----	----	----	5	66.8	−69.9	----	----	----	----	----

Altitude (meters) m. s. l.	January 1945 (50 m.)				February 1945 (50 m.)				March 1945 (50 m.)			
	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity
Surface	20	1,014.2	23.1	67	27	1,014.9	25.3	63	31	1,013.5	27.1	57
500	20	963.2	18.0	73	27	963.7	20.8	68	31	963.3	22.7	62
1,000	20	908.2	14.7	64	27	909.9	17.3	60	31	909.4	18.8	59
1,500	20	857.0	13.2	49	27	858.3	14.6	56	31	858.0	16.2	49
2,000	20	806.6	11.4	----	27	808.4	12.0	49	31	808.4	14.5	35
2,500	20	759.2	9.6	----	26	760.9	10.1	33	31	761.7	13.2	----
3,000	20	714.9	7.0	----	26	717.0	9.2	----	31	717.5	11.2	----
4,000	20	632.8	2.0	----	26	635.1	4.4	----	31	636.2	5.7	----
5,000	20	558.0	−3.9	----	26	560.8	−1.4	----	31	562.3	−0.7	----
6,000	20	490.8	−10.5	----	26	494.1	−7.8	----	31	495.3	−6.8	----
7,000	20	430.3	−17.3	----	25	433.5	−14.9	----	31	435.0	−13.9	----
8,000	19	376.4	−24.2	----	23	379.0	−22.1	----	30	380.1	−21.2	----
9,000	18	327.0	−31.4	----	23	330.2	−29.4	----	29	330.9	−28.7	----
10,000	17	283.7	−38.9	----	23	286.9	−36.3	----	29	287.5	−35.7	----
11,000	16	245.5	−46.1	----	22	247.5	−43.5	----	29	249.1	−42.3	----
12,000	15	210.5	−53.0	----	21	213.0	−49.5	----	28	214.5	−48.3	----
13,000	12	179.5	−58.2	----	17	182.9	−53.7	----	27	183.4	−53.8	----
14,000	9	153.2	−61.9	----	14	156.1	−59.5	----	23	157.0	−58.3	----
15,000	8	129.9	−65.8	----	12	132.8	−64.2	----	22	133.5	−62.4	----
16,000	6	109.7	−71.3	----	10	112.0	−69.1	----	19	112.9	−66.9	----
17,000	----	----	----	----	7	95.6	−72.1	----	15	95.5	−69.4	----
18,000	----	----	----	----	5	81.2	−73.3	----	9	81.1	−70.0	----
19,000	----	----	----	----	----	----	----	----	----	----	----	----

Altitude (meters) m. s. l.	April 1945 (50 m.)				May 1945 (50 m.)				June 1945 (50 m.)				July 1945 (50 m.)			
	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity
Surface	28	1,011.0	28.7	58	29	1,010.2	28.8	57	29	1,010.4	29.8	65	18	1,011.4	29.6	69
500	28	960.9	24.1	63	29	960.3	24.0	62	29	960.8	25.5	67	18	961.8	25.7	70
1,000	28	910.3	20.2	64	29	906.7	20.2	60	29	907.6	22.0	65	18	908.6	22.6	66
1,500	28	856.7	17.5	57	29	855.8	17.5	51	29	856.9	19.5	57	18	857.4	19.9	62
2,000	28	807.4	14.7	46	29	806.4	15.0	46	29	808.1	17.2	49	18	809.1	16.8	59
2,500	28	760.4	13.1	31	29	759.9	12.6	34	29	761.9	14.5	44	18	763.4	14.5	52
3,000	28	717.0	10.9	27	29	715.9	10.3	30	29	718.0	11.8	41	18	718.9	11.8	42
4,000	28	635.7	6.1	----	29	633.9	5.0	27	29	636.8	5.5	36	18	637.8	6.1	39
5,000	28	561.7	0.4	----	29	560.1	−0.7	----	28	562.9	0.0	38	18	563.3	0.2	----
6,000	28	495.2	−6.0	----	29	493.8	−7.1	----	27	496.2	−5.5	37	17	496.8	−5.6	----
7,000	28	435.5	−12.9	----	29	433.7	−13.6	----	27	436.5	−11.2	36	17	437.3	−11.3	----
8,000	28	380.7	−20.3	----	27	378.4	−20.5	----	27	382.1	−17.5	----	17	382.7	−17.7	----
9,000	28	331.6	−27.8	----	27	330.2	−27.2	----	27	333.4	−24.4	----	16	334.1	−24.8	----
10,000	28	287.9	−35.6	----	27	287.2	−34.5	----	27	290.1	−31.8	----	16	290.1	−32.6	----
11,000	27	249.2	−42.8	----	27	248.1	−41.9	----	26	251.4	−39.3	----	16	251.2	−40.4	----
12,000	27	214.7	−49.6	----	26	214.0	−48.7	----	24	216.9	−46.6	----	15	216.6	−48.1	----
13,000	27	183.5	−54.7	----	26	183.4	−55.0	----	23	186.0	−53.2	----	15	184.5	−55.5	----
14,000	27	156.7	−59.8	----	26	156.3	−60.1	----	23	159.2	−59.4	----	15	157.9	−61.9	----
15,000	27	133.6	−64.2	----	25	133.2	−62.7	----	22	135.7	−63.8	----	15	134.5	−65.6	----
16,000	27	112.9	−68.1	----	22	113.0	−64.9	----	21	114.6	−67.7	----	15	114.1	−67.2	----
17,000	19	95.7	−70.2	----	18	96.0	−66.4	----	20	97.2	−69.2	----	15	96.7	−65.5	----
18,000	8	80.7	−67.9	----	8	81.6	−65.4	----	17	82.1	−68.0	----	14	81.9	−62.6	----
19,000	5	68.8	−65.9	----	6	69.2	−63.5	----	13	70.0	−62.2	----	11	69.8	−59.5	----
20,000	----	----	----	----	----	----	----	----	6	58.7	−57.9	----	8	59.4	−55.6	----
21,000	----	----	----	----	----	----	----	----	----	----	----	----	5	51.2	−53.1	----

Altitude (meters) m. s. l.	August 1945 (50 m.)				September 1945 (50 m.)				October 1945 (50 m.)			
	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity
Surface	30	1,009.6	29.6	71	30	1,009.6	29.0	74	25	1,009.5	28.3	75
500	30	960.5	25.6	72	30	960.2	24.7	76	25	959.7	23.9	79
1,000	30	907.4	22.4	69	30	906.6	21.3	74	25	906.2	20.4	78
1,500	30	856.2	19.7	64	30	855.8	18.6	70	25	854.9	17.5	73
2,000	30	807.5	17.1	58	30	807.0	16.0	68	25	805.9	14.8	67
2,500	30	761.7	14.5	54	30	761.2	13.6	65	25	760.2	12.7	61
3,000	30	717.5	11.8	49	30	716.9	11.2	58	25	716.1	10.4	50
4,000	30	636.4	6.1	47	30	635.7	5.8	55	25	635.0	5.4	40
5,000	30	562.3	0.6	43	30	561.8	0.1	52	24	560.7	−0.8	----
6,000	30	495.8	−5.1	43	29	495.5	−5.5	47	24	494.0	−6.8	----
7,000	29	436.6	−10.8	42	29	436.0	−11.2	41	24	434.3	−12.8	----
8,000	28	382.6	−17.4	46	29	381.8	−17.8	40	22	380.0	−19.5	----
9,000	28	333.5	−24.6	47	28	333.2	−24.9	----	22	331.1	−26.8	----
10,000	28	289.9	−32.2	----	28	289.5	−32.9	----	22	287.9	−34.8	----
11,000	28	251.1	−40.7	----	28	250.8	−41.0	----	22	248.6	−42.7	----
12,000	28	216.4	−48.4	----	27	215.7	−48.9	----	22	213.9	−50.3	----
13,000	28	184.9	−56.2	----	27	184.5	−57.2	----	22	182.9	−57.8	----
14,000	27	158.0	−62.5	----	27	157.2	−64.1	----	21	155.8	−64.3	----
15,000	27	134.3	−66.6	----	25	133.3	−69.2	----	21	132.3	−69.4	----
16,000	27	113.9	−68.9	----	24	112.8	−72.2	----	21	111.6	−73.0	----
17,000	25	96.0	−66.4	----	24	95.2	−69.9	----	18	94.5	−72.8	----
18,000	21	81.5	−63.9	----	19	80.4	−66.4	----	17	79.4	−68.4	----
19,000	18	69.6	−60.4	----	15	68.2	−62.1	----	13	67.5	−64.3	----
20,000	11	58.7	−59.1	----	9	57.8	−59.7	----	9	57.7	−59.6	----
21,000	----	----	----	----	----	----	----	----	----	----	----	----

Altitude (meters) m. s. l.	November 1945 (50 m.)				December 1945 (50 m.)			
	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity
Surface	27	1,011.4	25.0	70	17	1,012.2	23.9	75
500	27	960.9	20.8	74	17	961.4	19.8	77
1,000	27	906.5	16.8	77	17	907.0	16.6	74
1,500	27	854.9	14.1	73	17	854.9	14.3	67
2,000	27	805.2	12.1	60	17	805.4	12.3	----
2,500	27	758.9	11.6	40	17	759.1	11.1	----
3,000	27	714.4	9.4	----	17	714.3	9.6	----
4,000	26	633.1	3.8	----	17	632.8	4.4	----
5,000	26	558.8	−2.3	----	17	559.1	−1.0	----
6,000	25	491.9	−8.4	----	17	492.4	−7.6	----
7,000	25	432.2	−15.3	----	17	432.8	−13.5	----
8,000	24	377.4	−22.9	----	16	378.1	−20.7	----

Altitude (meters) m. s. l.	November 1945 (50 m.)				December 1945 (50 m.)			
	Number of observations	Pressure	Temperature	Relative humidity	Number of observations	Pressure	Temperature	Relative humidity
9,000	23	328.3	−30.5	----	15	329.3	−28.1	----
10,000	22	284.8	−38.0	----	15	286.1	−35.5	----
11,000	21	245.8	−45.6	----	15	247.4	−43.0	----
12,000	21	210.7	−52.9	----	15	212.5	−50.7	----
13,000	21	179.8	−60.0	----	14	182.1	−58.1	----
14,000	20	152.9	−65.8	----	13	154.8	−63.3	----
15,000	20	129.5	−69.6	----	13	131.5	−65.8	----
16,000	19	109.4	−71.8	----	13	111.5	−68.4	----
17,000	14	92.3	−73.8	----	9	93.9	−70.3	----
18,000	12	77.8	−71.4	----	7	79.4	−72.5	----
19,000	10	66.2	−67.2	----	----	----	----	----
20,000	6	56.2	−62.0	----	----	----	----	----

TABLE 2.—*Free-air resultant winds based on pilot balloon observations made near 5 p. m., E. S. T. (2200 G. C. T.) during March 1946. Directions given in degrees from north (N=360°, E=90°, S=180°, W=270°). Velocities in meters per second*

Altitude (meters) m. s. l.	Abilene, Tex. (534 m.)			Albuquerque, N. Mex. (1,630 m.)			Atlanta, Ga. (299 m.)			Billings, Mont. (1,095 m.)			Bismarck, N. Dak. (512 m.)			Boise, Idaho (868 m.)			Brownsville, Tex. (7 m.)			Buffalo, N. Y. (220 m.)			Burlington, Vt. (100 m.)			Charleston, S. C. (16 m.)			Cincinnati, Ohio (150 m.)			Denver, Colo. (1,627 m.)			El Paso, Tex. (1,198 m.)		
	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity
Surface	31	228	2.3	31	255	3.0	28	235	2.5	30	270	2.3	31	349	0.9	30	95	1.7	31	124	4.7	31	229	1.5	30	284	2.4	30	245	1.0	30	169	0.6	30	21	1.7	26	241	2.7
500	---	---	---	---	---	---	28	232	2.0	---	---	---	---	---	---	---	---	---	31	133	5.2	31	228	3.3	30	267	3.9	30	238	3.5	30	198	2.5	---	---	---	---	---	---
1,000	31	229	3.9	---	---	---	28	240	3.9	---	---	---	31	299	1.0	30	101	1.9	25	159	2.4	25	225	5.2	30	264	5.9	27	242	5.7	27	209	3.8	---	---	---	---	---	---
1,500	31	236	5.0	---	---	---	27	251	5.1	30	258	3.6	24	284	5.0	30	193	1.4	22	252	1.5	22	245	6.2	28	272	8.1	26	247	6.2	24	230	5.5	---	---	---	26	246	4.1
2,000	31	244	5.3	31	260	3.4	25	251	6.0	29	253	4.6	22	277	8.0	29	240	4.2	22	267	3.2	20	254	7.2	25	292	11.0	26	255	6.8	22	245	6.6	30	15	1.3	26	252	3.8
2,500	30	265	6.8	30	261	4.6	22	260	7.5	28	258	5.9	22	276	10.0	28	256	5.6	21	253	4.9	17	264	7.6	21	278	10.0	24	269	7.3	18	243	6.1	28	286	1.5	26	248	4.7
3,000	28	268	9.1	29	268	6.3	18	266	9.4	25	254	7.5	21	272	11.1	24	272	5.0	21	261	7.0	15	285	8.4	18	300	12.0	24	270	8.1	15	264	8.4	27	278	2.4	26	255	6.9
4,000	24	259	12.9	27	276	10.1	13	287	11.5	18	255	8.4	19	269	12.9	21	273	8.2	19	256	10.2	13	301	10.4	17	298	17.4	18	259	13.5	10	286	9.1	26	271	6.5	23	268	11.0
5,000	18	270	16.2	23	282	11.2	10	280	13.8	16	253	11.4	17	267	14.1	18	277	12.4	18	267	12.9	10	317	9.1	15	302	18.3	14	271	16.8	---	---	---	23	269	9.3	19	258	13.8
6,000	16	278	17.6	21	290	10.9	---	---	---	15	252	12.7	15	267	17.4	13	281	12.6	16	276	16.9	---	---	---	12	287	20.0	12	275	19.6	---	---	---	20	271	10.8	11	261	21.1
8,000	---	---	---	18	296	12.9	---	---	---	11	251	14.8	---	---	---	---	---	---	---	---	---	---	---	---	10	289	10.1	---	---	---	---	---	---	14	271	13.4	---	---	---
10,000	---	---	---	14	300	22.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	10	256	15.8	---	---	---

Altitude (meters) m. s. l.	Ely, Nev. (1,910 m.)			Grand Junction, Colo. (1,413 m.)			Greensboro, N. C. (271 m.)			Havre, Mont. (767 m.)			Jacksonville, Fla. (16 m.)			Joliet, Ill. (178 m.)			Las Vegas, Nev. (573 m.)			Little Rock, Ark. (88 m.)			Medford, Oreg. (416 m.)			Miami, Fla. (12 m.)			Mobile, Ala. (66 m.)			Nashville, Tenn. (194 m.)			New York, N. Y. (15 m.)		
	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity
Surface	30	180	1.7	30	250	2.0	27	212	1.4	30	268	2.3	31	93	0.8	28	189	1.2	31	161	0.8	27	198	2.1	29	299	1.1	31	134	2.9	27	207	1.2	28	218	3.1	29	245	0.9
500	---	---	---	---	---	---	27	227	2.5	---	---	---	31	226	1.1	28	155	2.0	---	---	---	27	217	3.5	29	291	1.2	31	138	3.0	27	205	2.2	28	205	4.5	29	220	2.4
1,000	---	---	---	---	---	---	27	231	3.1	30	272	3.3	27	241	2.4	21	208	5.6	31	173	0.5	26	233	5.2	29	249	1.4	31	159	2.2	23	256	3.3	26	204	4.7	26	267	3.7
1,500	---	---	---	30	254	2.1	27	239	4.9	30	666	4.6	27	257	3.2	17	232	9.7	31	205	1.8	25	241	6.8	27	227	3.0	31	224	1.5	21	295	4.9	24	215	4.9	24	297	5.4
2,000	30	191	1.4	20	246	1.7	24	254	5.7	28	264	6.7	26	259	4.7	16	239	10.9	31	223	3.0	21	260	9.8	24	227	4.8	28	252	2.4	16	298	8.1	22	237	7.1	23	300	6.7
2,500	30	212	3.6	29	224	2.7	21	274	6.8	25	253	7.2	23	277	6.4	16	247	10.1	29	230	3.7	18	271	10.8	18	233	4.7	23	273	3.0	12	292	7.9	22	245	7.3	19	300	7.7
3,000	27	219	4.3	27	225	5.0	20	278	9.0	19	255	7.5	20	283	7.2	13	267	8.8	28	251	3.5	18	273	12.1	15	256	5.0	23	281	3.2	11	301	9.8	21	246	7.0	17	297	9.4
4,000	20	253	7.8	22	244	7.7	17	288	11.4	12	237	3.8	15	282	10.7	---	---	---	25	273	4.2	16	278	17.9	13	274	8.1	17	295	5.7	---	---	---	18	256	8.4	13	300	9.6
5,000	14	277	9.2	16	247	10.3	14	290	11.6	---	---	---	13	283	15.6	---	---	---	24	281	5.6	14	285	20.1	11	285	10.2	16	298	8.1	---	---	---	15	271	13.4	---	---	---
6,000	14	285	12.0	13	264	12.4	13	288	15.6	---	---	---	---	---	---	---	---	---	22	262	8.6	---	---	---	10	263	12.3	14	289	11.5	---	---	---	12	266	13.4	---	---	---
8,000	11	290	15.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	15	310	14.2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
10,000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Altitude (meters) m. s. l.	Oakland, Calif. (8 m.)			Oklahoma City, Okla. (396 m.)			Omaha, Nebr. (306 m.)			Phoenix, Ariz. (338 m.)			Rapid City, S. Dak. (982 m.)			St. Louis, Mo. (181 m.)			St. Paul, Minn. (225 m.)			San Antonio, Tex. (240 m.)			San Diego, Calif. (15 m.)			Sault Ste. Marie, Mich. (225 m.)			Seattle, Wash. (116 m.)			Spokane, Wash. (603 m.)			Washington, D. C. (24 m.)		
	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity
Surface	29	248	4.4	29	215	2.6	29	154	0.7	31	175	1.0	31	334	2.9	29	184	2.7	29	219	0.4	31	179	1.3	30	249	3.4	30	246	1.9	30	193	2.5	30	230	2.7	28	208	1.9
500	29	281	4.2	29	216	3.4	29	178	1.4	31	202	2.0	---	---	---	29	204	3.9	29	231	0.7	31	184	1.3	30	239	3.0	30	245	2.5	30	210	4.9	---	---	---	28	225	3.2
1,000	27	308	2.8	29	214	4.5	27	193	2.9	31	219	2.9	31	334	2.9	27	207	5.2	26	212	1.9	31	192	2.5	27	194	1.9	29	244	2.9	28	205	5.5	30	224	3.6	27	242	2.9
1,500	24	330	2.4	27	232	5.6	22	218	3.0	31	214	3.3	31	312	3.6	25	216	7.7	24	252	4.1	27	207	3.4	25	188	1.9	27	259	5.9	21	210	5.4	27	236	4.3	25	259	4.5
2,000	23	334	1.9	26	242	7.2	19	249	5.9	30	208	3.6	28	278	4.0	25	223	8.7	21	282	6.1	25	226	3.9	22	218	1.9	26	272	6.4	18	222	4.7	22	235	4.0	23	273	7.1
2,500	21	337	4.4	24	245	8.9	18	263	6.1	29	210	3.7	25	266	4.7	22	237	8.1	20	285	6.9	23	248	7.0	21	253	2.9	24	278	8.3	13	241	6.0	16	234	6.0	21	278	9.8
3,000	21	329	6.4	21	263	10.2	18	274	7.7	28	225	5.8	23	266	5.8	18	251	7.3	19	283	8.9	23	268	10.1	21	280	4.0	21	281	9.1	13	240	6.5	11	259	5.4	21	274	11.4
4,000	19	314	8.6	19	270	14.3	16	289	7.4	27	253	9.2	21	264	8.9	15	270	10.9	18	282	11.0	22	269	13.8	19	272	7.9	17	284	7.2	10	254	4.5	---	---	---	20	284	13.5
5,000	14	311	10.6	12	281	17.2	14	290	9.5	24	258	11.0	17	269	13.1	15	273	12.7	17	273	12.0	21	271	17.0	16	270	8.3	15	292	9.6	10	223	6.6	---	---	---	16	286	13.5
6,000	12	328	14.0	10	286	21.9	11	284	9.9	23	270	12.3	16	254	15.2	10	294	20.1	13	271	14.4	19	275	19.5	16	270	8.3	12	285	9.0	---	---	---	---	---	---	13	288	14.3
8,000	---	---	---	---	---	---	---	---	---	13	292	15.6	---	---	---	---	---	---	---	---	---	16	278	23.0	10	270	10.7	---	---	---	---	---	---	---	---	---	10	290	16.6
10,000	---	---	---	---	---	---	---	---	---	10	290	20.2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

TABLE 3.—*Maximum free-air wind velocities (m. p. s.) for different sections of the United States based on pilot balloon observations during March 1946*

Section	Surface to 2,500 meters (m. s. l.)					Above 2,500 to 5,000 meters (m. s. l.)					Above 5,000 meters (m. s. l.)				
	Maximum velocity	Direction	Altitude (m.) m. s. l.	Date	Station	Maximum velocity	Direction	Altitude (m.) m. s. l.	Date	Station	Maximum velocity	Direction	Altitude (m.) m. s. l.	Date	Station
Northeast [1]	47.3	WNW.	1,917	14	Portland, Maine	53.0	W.	4,927	10	Portland, Maine	64.0	W.	6,622	30	Caribou, Maine.
East-Central [2]	42.5	W.	2,341	9	Greensboro, N. C.	50.4	WSW.	2,910	26	Knoxville, Tenn	118.0	W.	7,782	9	Huntington, W. Va.
Southeast [3]	34.7	WSW.	1,782	9	Spartanburg, S. C.	46.5	NW.	5,000	2	Birmingham, Ala	57.0	N.	11,021	31	Charleston, S. C.
North-Central [4]	42.6	SW.	1,618	12	Madison, Wis	48.3	WNW.	5,000	26	Sault Ste. Marie, Mich.	72.0	NW.	14,492	20	Milwaukee, Wis.
Central [5]	40.6	SW.	2,303	3	Dodge City, Kans	48.4	NW.	4,983	9	Goodland, Kans	86.4	WNW.	15,388	10	Goodland, Kans.
South-Central [6]	41.0	WNW.	1,867	8	Dallas, Tex	57.1	WNW.	4,020	29	Little Rock, Ark	79.0	W.	10,000	16	Big Spring, Tex.
Northwest [7]	36.0	WNW.	1,935	1	Glasgow, Mont	55.2	NW.	5,000	6	Burns, Oreg	83.0	NW.	8,446	6	Ellensburg, Wash.
West-Central [8]	33.5	S.	2,500	28	Ely, Nev	55.1	NW.	5,000	6	Winnemucca, Nev	80.0	NW.	11,860	15	Oakland, Calif.
Southwest [9]	34.9	NNW.	2,114	14	Burbank, Calif	60.0	WSW.	4,557	31	Raton, N. Mex	64.0	NW.	10,600	16	Albuquerque, N. Mex.

[1] Maine, Vermont, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, and northern Ohio.
[2] Delaware, Maryland, Virginia, West Virginia, southern Ohio, Kentucky, eastern Tennessee, and North Carolina.
[3] South Carolina, Georgia, Florida, and Alabama.
[4] Michigan, Wisconsin, Minnesota, North Dakota, and South Dakota.
[5] Indiana, Illinois, Iowa, Nebraska, Kansas, and Missouri.
[6] Mississippi, Arkansas, Louisiana, Oklahoma, Texas (except El Paso), and western Tennessee.
[7] Montana, Idaho, Washington, and Oregon.
[8] Wyoming, Colorado, Utah, northern Nevada, and northern California.
[9] Southern California, southern Nevada, Arizona, New Mexico, and extreme west Texas.