TABLE 2.—*Free-air resultant winds (meters per second) based on pilot-balloon observations made near 5 a. m. (E. S. T.) during October 1935*

[Wind from N=360°, E=90°, etc.]

Altitude (m) m. s. l.	Albuquerque, N. Mex. (1,554 m)		Atlanta, Ga. (309 m)		Billings, Mont. (1,088 m)		Boston, Mass. (15 m)		Cheyenne, Wyo. (1,873 m)		Chicago, Ill. (192 m)		Cincinnati, Ohio (153 m)		Detroit, Mich. (204 m)		Fargo, N. Dak. (274 m)		Houston, Tex. (21 m)		Key West, Fla. (11 m)		Medford, Oreg. (410 m)		Murfreesboro, Tenn. (180 m)	
	Direction	Velocity	Direction	Velocity	Direction	Velocity	Direction	Velocity	Direction	Velocity	Direction	Velocity	Direction	Velocity	Direction	Velocity	Direction	Velocity	Direction	Velocity	Direction	Velocity	Direction	Velocity	Direction	Velocity
	°		°		°		°		°		°		°		°		°		°		°		°		°	
Surface	18	0.7	21	0.9	267	2.3	296	1.4	289	3.4	248	1.1	68	0.6	245	2.0	265	1.0	50	1.7	60	3.9	180	0.7	165	0.1
500	-----	-----	102	2.5	-----	-----	284	6.0	-----	-----	238	5.0	212	2.5	254	5.1	243	3.6	147	4.6	70	9.1	198	0.7	177	3.1
1,000	-----	-----	118	2.7	-----	-----	290	6.3	-----	-----	255	5.7	261	4.9	268	6.6	258	4.8	162	3.1	84	8.6	196	1.1	206	3.6
1,500	-----	-----	209	1.7	259	5.0	289	8.4	-----	-----	264	6.7	268	6.8	273	7.4	279	5.3	194	2.1	82	7.3	161	2.0	235	4.3
2,000	250	2.7	252	1.2	283	4.5	282	9.2	281	4.7	265	7.8	262	8.0	271	8.0	292	7.6	221	1.0	80	5.2	238	0.9	258	3.7
2,500	257	4.9	261	1.3	288	5.9	277	8.8	273	5.9	269	7.2	274	9.6	275	7.7	301	8.4	263	1.5	74	4.3	48	0.2	270	4.3
3,000	260	6.6	279	2.5	291	7.3	278	9.6	278	5.0	283	10.1	284	7.6	278	9.4	292	9.7	272	1.5	88	2.5	309	1.1	282	4.3
4,000	264	10.2	276	4.7	292	6.9	-----	-----	275	6.1	339	8.0	-----	-----	303	7.8	-----	-----	285	2.6	-----	-----	336	3.6	298	2.6
5,000	270	11.0	-----	-----	284	5.9	-----	-----	268	6.1	-----	-----	-----	-----	-----	-----	-----	-----	277	5.0	-----	-----	297	5.7	-----	-----

Altitude (m) m. s. l.	Newark, N. J. (14 m)		Oakland, Calif. (8 m)		Oklahoma City, Okla. (402 m)		Omaha, Nebr. (306 m)		Pearl Harbor, Territory of Hawaii [1] (68 m)		Pensaccla, Fla.[1] (24 m)		St. Louis, Mo. (170 m)		Salt Lake City, Utah (1,294 m)		San Diego, Calif. (15 m)		Sault Ste. Marie, Mich. (198 m)		Seattle, Wash. (14 m)		Spokane, Wash. (603 m)		Washington, D. C. (10 m)	
	Direction	Velocity	Direction	Velocity	Direction	Velocity	Direction	Velocity	Direction	Velocity	Direction	Velocity	Direction	Velocity	Direction	Velocity	Direction	Velocity	Direction	Velocity	Direction	Velocity	Direction	Velocity	Direction	Velocity
	°		°		°		°		°		°		°		°		°		°		°		°		°	
Surface	314	1.3	36	0.8	143	2.6	149	1.7	13	1.9	52	3.9	180	0.8	151	3.3	70	1.5	104	0.8	164	0.7	82	1.9	325	0.9
500	295	5.3	353	2.1	174	7.3	204	3.1	71	2.3	102	5.6	193	3.9	-----	-----	2	0.7	229	2.6	214	2.4	-----	-----	288	2.7
1,000	295	5.6	344	2.8	202	12.2	233	4.9	64	1.5	126	2.6	247	5.3	-----	-----	357	1.3	259	7.1	205	2.5	198	2.6	294	4.3
1,500	288	7.8	340	2.9	225	9.6	260	6.0	357	0.5	147	1.7	259	5.6	158	4.5	354	1.9	275	7.1	220	4.1	232	3.9	291	4.9
2,000	286	7.4	333	2.3	247	8.7	294	6.3	254	1.0	49	0.9	270	7.2	195	4.0	358	1.6	293	7.3	238	4.5	262	4.4	286	5.6
2,500	290	6.2	334	3.1	262	7.9	299	7.2	279	0.6	21	1.9	285	9.2	228	3.2	296	2.0	286	7.8	254	6.8	273	5.1	275	6.2
3,000	-----	-----	325	2.1	281	6.1	291	8.3	252	1.2	7	1.7	293	11.4	259	3.1	314	3.4	280	4.6	268	8.4	277	6.6	278	8.2
4,000	-----	-----	-----	-----	286	5.6	293	8.5	-----	-----	321	2.9	298	9.7	279	4.0	297	5.5	-----	-----	-----	-----	281	8.5	-----	-----
5,000	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	305	3.7	294	4.3	-----	-----	-----	-----	-----	-----	-----	-----

[1] Navy stations.

RIVERS AND FLOODS

[River and Flood Division, MONTROSE W. HAYES, in charge]

By RICHMOND T. ZOCH

Except for a flood in the Chenango River in New York, there were no floods in the United States during October 1935; the damage from this flood was about $90,000.

Table of flood stages in October 1935

[All dates in October]

River and station	Flood stage	Above flood stages—dates		Crest	
		From—	To—	Stage	Date
ATLANTIC SLOPE DRAINAGE					
Chenango: Sherburne, N. Y.	*Feet* 8	31	31	*Feet* 9.7	31

WEATHER OF THE ATLANTIC AND PACIFIC OCEANS

[The Marine Division, W. F. MCDONALD in charge]

NORTH ATLANTIC OCEAN, OCTOBER 1935

By H. C. HUNTER

Atmospheric pressure.—The mean pressure was somewhat above normal over most of the North Atlantic area, notably near the Azores, where at Horta it averaged almost a quarter inch higher than normal. The northeastern portion, however, had pressure lower than normal; Lerwick, in the Shetland Islands, reported one-third of an inch below. There were also very small deficiencies at Bermuda and Turks Island.

The highest barometer reading so far reported from the open North Atlantic was 30.76 inches, on the American steamship *Afoundria*, near 43° N., 21° W., during the forenoon of the 28th. On the 30th the station on Belle Isle noted 30.80 inches; and a vessel in the Gulf of St. Lawrence, 30.83 inches. The lowest reading was 28.03 inches, on the Danish motorship *Oregon*, the afternoon of the 18th, near 60° N., 20° W. No vessel within the influence of any of this month's storms of tropical origin has reported a reading below 28.70 inches.