

## WEATHER OF THE ATLANTIC AND PACIFIC OCEANS

[The Marine Division, W. F. McDONALD in Charge]

## NORTH ATLANTIC OCEAN, FEBRUARY 1935

By H. C. HUNTER

*Atmospheric pressure.*—Pressure averaged considerably above normal over the south-central and southeastern portions of the North Atlantic, and slightly above normal over the Gulf of Mexico. The western portion of the ocean had pressure slightly below normal. The Icelandic low was unusually strong, especially from the 15th onward, and as a result the monthly average pressure over the northern portion of the ocean east of the fiftieth meridian was much below normal.

Between the 16th and 21st, the pressure gradient from Horta to Reykjavik was as a rule more than double the seasonal average. From the 22d onward, while Reykjavik pressure was not so low as before, the pressure at Lerwick, in the Shetland Islands, was generally very low.

The highest barometer reading reported was 30.74 inches, by the American steamship *Yaka*, on the forenoon of the 2d, near latitude 44° N., longitude 24° W. Readings almost as high were noted close to the North and Middle Atlantic coasts of the United States on the 1st and 7th, and again in the northern Gulf of Mexico on the last day of the month.

The lowest reading so far reported from a vessel was 28.33 inches, on the American steamship *President Harding* at 10 a. m., the 24th, near 51° N., 20° W. During the first 2 days of the month there was very low pressure between Iceland and Norway, one shore station of the latter country reporting a reading of 27.94 inches on the 2d.

TABLE 1.—Averages, departures, and extremes of atmospheric pressure (sea level) at selected stations for the North Atlantic Ocean and its shores, February 1935

Stations	Average pressure	Departure	Highest	Date	Lowest	Date
	<i>Inches</i>	<i>Inch</i>	<i>Inches</i>		<i>Inches</i>	
Julianehaab, Greenland.....	29.28		29.68	10	28.68	6
Reykjavik, Iceland.....	29.27	-0.27	29.83	5	28.66	1
Lerwick, Shetland Islands.....	29.33	-0.39	30.29	8	28.37	21
Valencia, Ireland.....	29.72	-0.18	30.46	7	28.81	25
Lisbon, Portugal.....	30.20	+0.10	30.47	2	29.82	25
Madeira.....	30.25	+0.18	30.40	28	29.99	7
Horta, Azores.....	30.27	+0.12	30.54	1	30.01	10
Belle Isle, Newfoundland.....	29.68	-0.07	30.22	24	29.34	5, 25
Halifax, Nova Scotia.....	29.92	+0.01	30.54	23	29.46	3, 4
Nantucket.....	29.99	-0.05	30.78	1	29.42	3
Hatteras.....	30.07	-0.04	30.56	1	29.50	3
Bermuda.....	30.12	.00	30.40	22	29.76	4
Turks Island.....	30.06	-0.02	30.16	21	29.93	3
Key West.....	30.10	+0.03	30.43	28	29.87	11
New Orleans.....	30.14	+0.05	30.71	28	29.78	15

NOTE.—All data based on a. m. observations only, with departures compiled from best available normals related to time of observations, except Hatteras, Key West, Nantucket, and New Orleans, which are 24-hour corrected means.

*Cyclones and gales.*—While the first half of February was relatively quiet over the North Atlantic Ocean, the second half was marked by intense gales. In all, there have been received 12 reports of force 12, and 17 of force 11. All except 3 of these occurred during the last 11 days of the month.

An intense low was central near Norway early in the month; and one encounter with a gale of force 11 on the 1st was noted by the Swedish steamship *Braheholm* in the waters near Scotland. Thereafter there were very few reports of gales until the 6th, and not many afterward until the 15th.

During the 15th and 16th a well-developed storm traveled northeastward past the Gulf of St. Lawrence, and the first February report of hurricane intensity (12) relates to this storm; the British motor ship *Laganbank* encountered it when about 400 miles east-southeast of Nantucket. This storm had merged with the Icelandic low by the 18th; and a later storm, which was near New Jersey on the 17th, had by the 19th become the southwestern portion of the more widespread low, and showed great intensity, the center on the 19th being near 55° N., 35° W., as appears on chart IX. The German steamship *New York* noted hurricane force that day, when located southeast of the position just mentioned.

During the several days following, there was widespread storminess over the northern routes; and violent winds were almost constantly met in the region from midocean to the Bay of Biscay and the English Channel. The reports of winds reaching forces 11 and 12 were numerous until late on the 26th, when the pressure increased somewhat and there was a slow eastward displacement of the depression. After the 26th, therefore, the winds became less intense over the northeastern North Atlantic. The conditions of the 24th are presented in chart X, as typical of the most stormy period.

Although conditions were abnormally severe along the eastern portion of the steamship routes, there was less storminess than February normally brings in the Grand Banks region and thence westward and southwestward to the coast of North America.

The British steamship *Blairgowrie* reported, when near latitude 48° N., longitude 27° W., on the 26th, that her steering gear was disabled and she called for assistance. Several vessels responded but found no trace of the ship.

On the British steamship *Montclare*, bound from Glasgow for Halifax, a large derrick snapped during this storm period; two men were killed and ten injured. There appear to have been no other casualties at sea involving loss of life, but several vessels suffered such damage as to result in their limping into port or having to be towed in.

The Dutch steamship *Beemsterdijk*, bound westward out of the English Channel during the night of the 15-16, had a typical experience, meeting a series of intense westerly gales in quick succession, and emerging into better sailing only on the 27th, after reaching the fortieth meridian. The after wheelhouse was wrecked, cabins were damaged, and the fuel supply was so depleted by the long struggle that the ship had to put into Halifax for refueling instead of making directly for Boston, as scheduled.

Similar instances of delay, or damage to superstructures and gear, on vessels that encountered the North Atlantic storms of the latter part of February were numerous.

The trade winds of the central Caribbean are reported to have been of more than usual strength about the 26th. Over the western Caribbean and that part of the Gulf of Mexico near the Yucatan Channel there were notable northers about the 18th and the 27th.

*Fog.*—Fog was practically absent over the area from the Bay of Biscay and the English Channel westward to the thirtieth meridian. Near the Grand Banks and thence westward to the vicinity of Nova Scotia fog was

a little more prevalent than average, and in this region the period 3d to 5th was notably foggy. In the 5° square, 40° to 45° N., 60° to 65° W., fog was reported on 8 days.

From Nova Scotia to Chesapeake Bay, about the normal amount of 5 days' fog was noted. The Ches-

apeake Bay region, however, had 8 days with fog, an unusually large amount for February in this locality.

The southern Atlantic and west Gulf coast regions had very little fog, but the east Gulf coast experienced more than normal, mostly on scattered dates between the 7th and 15th.

OCEAN GALES AND STORMS, FEBRUARY 1935

Vessel	Voyage		Position at time of lowest barometer		Gale began February—	Time of lowest barometer February—	Gale ended February—	Lowest barometer	Direction of wind when gale began	Direction and force of wind at time of lowest barometer	Direction of wind when gale ended	Direction and highest force of wind	Shifts of wind near time of lowest barometer
	From—	To—	Latitude	Longitude									
<b>NORTH ATLANTIC OCEAN</b>													
Braheholm, Swed. S. S.	Newcastle	Norfolk	57 50 N.	14 40 W.	1 30	Noon, 1.	2	29.36	W	W, 9	W	W, 11	
City of Bagdad, Br. S. S.	North Shields	St. John N. B.	51 30 N.	44 00 W.	2	6p, 2	3	29.73	WSW	WSW, 9	WSW	WSW, 9	
Boston City, Br. S. S.	Fowey	Philadelphia	47 39 N.	39 05 W.	5	6a, 6	6	29.41	SSE	SSE, 10	W	S, 10	SSE-SW-W.
Makala, Belg. S. S.	Matadi	Antwerp	46 42 N.	6 43 W.	6	4p, 8	8	29.60	N	NNE, 10	NE	NNE, 10	NNE-NE.
Stakesby, Br. S. S.	Madeira	Hull	37 45 N.	12 55 W.	8	8a, 9	9	29.93	N	N, 8	NNE	N, 9	N-NNE.
Independence Hall, Am. S. S.	New York	Havre	42 00 N.	55 16 W.	9	Mdt, 9	9	29.71	SSE	SSW, 4	SSW	SE, 9	SSE-SSW-WSW
Laganbank, Br. M. S.	Algiers	Boston	36 40 N.	55 32 W.	13	1a, 14	14	29.86	WNW	NW, 10	N	NW, 11	WNW-NW-NNW.
Gateway City, Am. S. S.	Mobile	Bremen	48 01 N.	29 40 W.	14	4p, 14	16	29.30	SSW	SSW, 9	NW	SW, 10	Steady.
Steel Mariner, Am. S. S.	Gibraltar	New York	37 35 N.	70 35 W.	15	5a, 15	15	29.70	S	SSW, 10	SW	SSW, 10	S-SSW-WNW.
Black Gull, Am. S. S.	New York	Rotterdam	41 02 N.	63 06 W.	15	2p, 15	15	29.44	SSW	SW, 8	WSW	SSW, 9	SSW-SW-W.
Laganbank, Br. M. S.	Algiers	Boston	39 32 N.	61 48 W.	15	4p, 15	15	29.67	SW	SW, 11	WSW	SW, 12	SW-SW-W.
Leerdam, Du. S. S.	Rotterdam	New York	45 40 N.	44 46 W.	16	4p, 16	16	29.58	SSW	S, 9	S	SSW, 9	SSW-S.
Evchoroda, Am. S. S.	Gibraltar	Boston	38 40 N.	47 50 W.	17	2p, 17	17	29.77	SSW	WNW, 7	WNW	SW, 10	SW-WNW.
Leerdam, Du. S. S.	Rotterdam	New York	43 36 N.	54 10 W.	18	5a, 18	19	29.26	SSE	S, 10	W	S, 11	SSE-S-WSW.
Lord Kelvin, Br. S. S.	Cable grounds out from Halifax	New York	43 27 N.	55 00 W.	18	6a, 18	18	29.30	SE	SW, 6	W	S, 10	S-SW.
Caledonia, Br. S. S.	Belfast	Halifax	54 00 N.	20 20 W.	18	2p, 18	18	28.98	N	N, 9	NNW	N, 9	SW-N.
Sinaloa, Hond. S. S.	Bluefields, Nicaragua	New Orleans	15 40 N.	83 30 W.	18	do	19	30.04	NNW	NNW, 6	NNW	NNW, 7	None.
Frode, Dan. S. S.	Immingham	Halifax	50 40 N.	16 53 W.	18	4p, 18	18	29.31	SW	SW, 10	NW	SW, 10	SW-NW.
Duquesne, Am. S. S.	Houston	Havre	43 42 N.	41 21 W.	18	4a, 19	19	29.56	SW	W, 7	NNW	SW, 9	None.
New York, Ger. S. S.	Cherbourg	New York	48 30 N.	30 00 W.	18	8a, 19	20	28.87	SW	SW, 12	WNW	SW, 12	SW-WNW.
Frode, Dan. S. S.	Immingham	Halifax	50 40 N.	20 21 W.	19	2p, 19	20	28.84	SSW	SW, 10	NW	SW, 10	SSW-W-NW.
Caledonia, Br. S. S.	Belfast	do	51 53 N.	28 35 W.	19	3p, 19	19	28.41	SSE	W, 10	NW	W, 11	S-W.
American Shipper, Am. S. S.	do	New York	52 52 N.	26 58 W.	19	4p, 19	20	28.44	SSE	SW, 9	NW	SW, 11	SW-W.
Caledonia, Br. S. S.	do	Halifax	49 25 N.	37 05 W.	21	2a, 21	22	28.83	SW	WSW, 11	W	WSW, 11	SSE-WSW-W.
Beemsterdijk, Du. S. S.	Rotterdam	Boston	48 43 N.	29 14 W.	21	6a, 21	21	28.98	WSW	WNW, 11	NW	WNW, 11	WSW-WNW-NW.
Black Gull, Am. S. S.	New York	Rotterdam	49 13 N.	19 04 W.	21	4p, 21	21	28.71	SSW	W, 6	W	S, 10	W-NW.
Pres. Harrison, Am. S. S.	Gibraltar	New York	42 54 N.	39 30 W.	21	5p, 21	22	29.56	SSW	SW, 10	W	SW, 10	SSW-SW-WNW.
Lobos, Br. M. S.	Liverpool	Colon	45 00 N.	14 00 W.	21	8p, 21	22	29.32	SW	WSW, 10	NW	WNW, 11	SW-WNW.
Duquesne, Am. S. S.	Houston	Havre	45 54 N.	26 06 W.	21	4a, 22	22	29.32	W	WSW, 7	W	WNW, 10	SW-NW.
Camito, Br. S. S.	Avonmouth	Jamaica	47 28 N.	12 05 W.	22	3p, 22	23	28.62	SSW	WSW, 10	NW	W, 10	SSW-WSW-NW.
City of Joliet, Am. S. S.	Rotterdam	Houston	46 10 N.	11 30 W.	22	4p, 22	22	28.96	SW	WSW, 12	WNW	WSW, 12	SW-WSW-W.
Delfshaven, Du. S. S.	Antwerp	Baltimore	44 22 N.	12 36 W.	22	do	23	29.59	WSW	WNW, 8	WNW	WNW, 11	WSW-WNW.
Samala, Br. S. S.	Southampton	Puerto Cortez	43 43 N.	20 27 W.	22	1a, 23	24	29.30	W	W, 9	W	W, 12	W.
Lobos, Br. M. S.	Liverpool	Colon	42 50 N.	16 30 W.	23	6a, 23	25	29.44	SW	W, 9	NW	WNW, 12	SW-WNW.
General Gassouin, Fr. S. S.	New York	Antwerp	45 51 N.	36 55 W.	23	2p, 23	24	29.46	W	W, 12	NW	W, 12	None.
Beemsterdijk, Du. S. S.	Rotterdam	Boston	47 42 N.	34 39 W.	23	4p, 23	24	29.28	W	WNW, 9	WNW	WNW, 11	W-WNW.
Eglantine, Am. S. S.	New Orleans	Avonmouth	48 10 N.	32 47 W.	22	10p, 23	25	29.12	W	NW, 9	NW	NW, 11	W-NW.
Seanyork, Am. S. S.	Copenhagen	New York	57 42 N.	21 48 W.	24	11p, 23	25	28.95	NNW	W, 4	NW	NW, 10	ESE-S-W.
Pres. Harding, Am. S. S.	Cobh	do	50 53 N.	19 55 W.	24	10a, 24	25	28.33	N	NNW, 7	WNW	NNW, 10	SSW-NNW-N.
City of Joliet, Am. S. S.	Rotterdam	Houston	46 20 N.	15 00 W.	23	3p, 24	27	29.08	SW	WSW, 12	WNW	WSW, 12	W-WSW-WNW.
Belgian Gulf, Belg. M. S.	Manchester	Baytown, Tex.	47 46 N.	15 47 W.	23	do	25	28.66	W	WSW, 10	NW	WNW, 11	WSW-WNW.
Argosy, Am. S. S.	Copenhagen	Baltimore	45 30 N.	50 18 W.	24	9p, 24	25	29.31	SE	S, 7	W	WSW, 10	SE-WSW.
Bockenheim, Ger. S. S.	Rotterdam	Rotterdam	42 16 N.	44 41 W.	24	1a, 25	26	29.56	SW	WSW, 10	WNW	WNW, 11	SW-W.
American Merchant, Am. S. S.	London	Boston	44 18 N.	46 24 W.	25	do	25	29.43	WSW	W, 11	W	W, 11	SE-W.
Elsa, Nor. M. S.	Ghent	Philadelphia	48 29 N.	38 02 W.	25	10a, 25	26	29.08	SW	SW, 10	WNW	W, 11	SW-W.
Strabon, Fr. S. S.	Tenerife	Dunkirk	48 30 N.	7 20 W.	23	Noon, 25	26	28.94	NNW	WSW, 12	NW	WSW, 12	WSW-NW.
Frode, Dan. S. S.	Immingham	Halifax	49 08 N.	32 00 W.	25	10p, 25	26	28.88	SSE	WSW, 12	W	W, 12	SSE-SW-W.
Seanyork, Am. S. S.	Copenhagen	New York	53 55 N.	36 35 W.	26	Mdt, 25	26	28.71	WNW	WSW, 4	WNW	WNW, 12	SE-SW-WSW.
Adria, Ger. M. S.	Port Arthur	Bordeaux	44 13 N.	34 00 W.	24	4a, 26	27	29.56	NW	W, 11	WNW	W, 11	W-WNW.
Pres. Harding, Am. S. S.	Cobh	New York	49 58 N.	33 08 W.	25	8a, 26	27	28.53	S	W, 12	WNW	W, 12	None.
General Gassouin, Fr. S. S.	New York	Antwerp	48 10 N.	22 14 W.	25	8p, 26	27	28.95	SW	W, 12	WNW	W, 12	WSW-WNW.
Frederik VIII, Dan. S. S.	Oslo	New York	57 00 N.	22 30 W.	27	do	27	28.50	WNW	WNW, 4	WNW	WNW, 10	SE-WNW-N.
Eglantine, Am. S. S.	New Orleans	Avonmouth	48 25 N.	18 30 W.	26	10p, 26	27	29.01	WSW	W, 10	W	W, 10	WSW-W.
Chickasaw City, Am. S. S.	Cristobal	New Orleans	19 20 N.	83 50 W.	27	4p, 27	28	30.07	NNW	NNW, 4	NNE	NNW, 7	SE-NNW.
Jean Jadot, Belg. S. S.	New York	Antwerp	48 51 N.	30 44 W.	27	10p, 28	28	29.33	WSW	WSW, 10	WNW	WSW, 10	WSW-WNW.

<sup>1</sup> January.

<sup>2</sup> Barometer uncorrected.

<sup>3</sup> Position approximate.

<sup>4</sup> March.