

WEATHER OF THE ATLANTIC AND PACIFIC OCEANS

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

NORTH ATLANTIC OCEAN

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Atmospheric pressure.—The pressure during July 1934 averaged remarkably near normal in all parts of the North Atlantic Ocean. Pressure was comparatively high during part of the first decade over most northern sections, and the final decade was a period of rather high pressure over middle and lower latitudes. On the 26th the French steamship *Eliane L. D.* noted a reading of 30.72 inches near latitude 47° north, longitude 25° west, the highest so far reported during the month.

In general the lowest pressures occurred about the middle of the month. The lowest reading so far reported, 28.94 inches, was observed on the 15th, by the German motorship *Skagerrak*, as described below.

TABLE 1.—Averages, departures, and extremes of atmospheric pressure (sea level) at selected stations for the North Atlantic Ocean and its shores, July 1934

Stations	Average pressure	Departure	Highest	Date	Lowest	Date
	<i>Inches</i>	<i>Inch</i>	<i>Inches</i>		<i>Inches</i>	
Julianehaab, Greenland.....	29.78	—	30.00	26	29.49	10
Reykjavik, Iceland.....	29.80	—0.04	30.07	8	29.35	31
Lerwick, Shetland Islands.....	29.90	+ .10	30.35	8	29.46	28
Valencia, Ireland.....	30.04	+ .06	30.40	2	29.45	31
Lisbon, Portugal.....	30.01	— .01	30.11	25	29.94	6, 16
Madeira.....	30.08	+ .03	30.17	25	29.96	16
Horta, Azores.....	30.27	.00	30.52	25, 26	30.05	30
Belle Isle, Newfoundland.....	29.80	— .07	30.12	10	29.26	1
Halifax, Nova Scotia.....	29.95	— .00	30.46	10	29.74	17, 22
Hatteras.....	29.95	— .03	30.37	10	29.74	16
Nantucket.....	30.00	— .01	30.22	9	29.75	14
Bermuda.....	30.14	— .04	30.30	28, 29	29.94	14
Turks Island.....	30.05	— .02	30.12	28	29.98	25
Key West.....	30.02	— .01	30.13	28	29.91	18
New Orleans.....	30.01	+ .01	30.14	16	29.79	23

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

Cyclones and gales.—To the northward of the 44th parallel a few vessels encountered fresh gales (force 8) in different parts of the ocean on scattered dates, but none of these gales was of general importance. For the other portions of the Atlantic, interest is concentrated on two well-marked storms. These were not felt, as far as can be ascertained, anywhere south of the 25th parallel of latitude; yet they exhibited many features characteristic of the severe storms which often start in North Atlantic tropical waters during the summer, and move thence into temperate waters.

On the 10th, there were signs of a small Low, centered not far eastward of Jacksonville, Fla. During the next 3 days moderate increase in energy, and gradual progress to northeastward were indicated, and during the late hours of the 13th, 2 vessels bound from New York to Puerto Rico met fresh to whole gales in latitude about 32° north, longitude 71° west. During the 14th, moderately strong southerly winds prevailed at Bermuda.

The storm continued to northeastward and became the southeastward prolongation of a large Low area that extended over regions adjacent to Hudson Bay. On the 15th, winds of great strength were noted on the chief

steamship lanes south and east of Sable Island. The German motorship *Skagerrak* recorded force 12 on the forenoon of the 15th, near 40° N., 60° W., the only instance of winds of hurricane force reported by any ship during the whole month in Atlantic waters. Later in the day the American S.S. *City of Hamburg* and the French liner *Paris* encountered gales of force 11 at locations to northeastward of the *Skagerrak's* position. The barometric minimum of the *Skagerrak*, was 28.94 inches, considerably lower than any other report received from the Atlantic during July. (Chart VIII presents the weather conditions on the 15th.)

The following morning the storm was centered not far from Cape Race, and the intensity seemed considerably diminished; after the morning of the 16th it no longer stood out distinctly as a feature of the weather situation over the Atlantic.

The other noteworthy storm may be recognized in development on the evening of the 21st, when pressure was low at and near Savannah, Ga. This disturbance pursued an extraordinary course southwestward across Florida into the Gulf. The progress at first was slow, the center still being near Jacksonville on the evening of the 22d, with intensity more marked than the day before; but later movement was more rapid. When well out from the coast of the Gulf, the storm turned to a westward course.

The morning of the 25th found this storm centered not far east of Corpus Christi, Tex., with further increase of energy (see chart IX). Thereafter further westward movement brought the center inland across the Texas coast between Corpus Christi and Galveston, with high tide and destructive winds.

The highest wind reported from the Gulf of Mexico during this storm was of force 10, noted a short distance to westward of the 90th meridian during the afternoon of the 24th. No marine casualty of consequence has come to notice as occurring on the open Gulf because of this storm; but in Galveston Bay one steamship and a barge were reported swept aground, though each was later readily refloated. The effects of this storm on the coast and inland are discussed elsewhere in this issue.

No storm whatever was reported from the western Atlantic waters south of the Tropic of Cancer during the month.

Fog.—There was considerably more fog over most of the North Atlantic steamship lanes between our northern ports and northwestern Europe than there had been during June. As a result the amount during July was not far from normal near mid-ocean, but usually a little less than normal in the eastern portion. On the Grand Banks there was more fog than normal, notably in the 5° square between 40° and 45° north, 45° and 50° west, where fog was noted during 25 days, including every day save one from the 11th to the last day of the month, inclusive.

In the waters adjacent to the North and Middle Atlantic States fog during July 1934 was less prevalent than it had been during the preceding month, and for the most part was a little less frequent than is normally the case during July.