

WEATHER OF NORTH AMERICA AND ADJACENT OCEANS

NORTH ATLANTIC OCEAN

By F. A. YOUNG

The following table shows the average sea-level pressure for the month, as well as the highest and lowest barometric readings at a number of land stations on the coast and islands of the North Atlantic. The readings are for 8 a. m. 75th meridian time, and the departures are only approximate, as the normals are taken from the Pilot Chart and are based on Greenwich mean noon observations, which correspond to those taken at 7 a. m., 75th meridian time.

| Station | Highest pressure | Date | Lowest pressure | Date | Average pressure | Departure |
|--------------------------------|------------------|--------|-----------------|----------|------------------|-----------|
| | Inches | July | Inches | July | Inches | |
| St. Johns, Newfoundland..... | 30.26 | 22 | 29.68 | 14 | 29.94 | -0.04 |
| Nantucket..... | 30.18 | 6 | 29.66 | 17 | 29.95 | -0.03 |
| Hatteras..... | 30.18 | 1 | 29.72 | 17 | 29.89 | -0.03 |
| Key West..... | 30.10 | 16, 17 | 29.98 | 14, 21 | 30.01 | +0.03 |
| New Orleans..... | 30.14 | 12 | 29.82 | 15 | 30.04 | +0.04 |
| Swan Island..... | 29.96 | 18 | 29.86 | 4, 5, 7, | 29.90 | -0.02 |
| Turks Island..... | 30.14 | 31 | 30.02 | 20, 21 | 30.07 | +0.06 |
| Bermuda..... | 30.36 | 23 | 30.04 | 27 | 30.18 | +0.07 |
| Horta, Azores..... | 30.56 | 5 | 30.06 | 24 | 30.36 | +0.09 |
| Lerwick, Shetland Islands..... | 30.33 | 13 | 29.55 | 31 | 29.91 | +0.13 |
| Valencia, Ireland..... | 30.40 | 11 | 29.35 | 19 | 29.97 | -0.01 |
| London..... | 30.30 | 13 | 29.48 | 27 | 29.93 | -0.05 |

It will be noticed that the average pressure was not far from the normal at most of the stations, while the daily changes were, for the most part, comparatively slight. According to the normals shown on the Pilot Chart, the number of days with winds of gale force on the North Atlantic is less for July than for any other month. Judging from reports received up to date, the number of gales during July, 1925, was less than usual over practically the entire ocean. Gales were reported on 3 days in the square between the thirty-fifth and fortieth parallels and the 5th and 10th meridians, and this was the maximum. In mid-ocean winds of gale force were reported on from 1 to 2 days only. No storm logs have been received as yet from vessels west of the 60th meridian, with the exception of the report of unusually strong trade winds on the 27th and 28th that will be referred to later. In view of the absence of any series of marked disturbances no ocean charts are presented for this month.

Taking the ocean as a whole more fog reports were received than in many years, and they were unusually evenly distributed. The number of days with fog was above normal over all the region north of the fortieth parallel; the maximum for any 5-degree square occurred between the 40th and 45th parallels and the 65th and 70th meridians, where fog was observed on 23 days; over the steamer lanes and off the European coast it was reported on from 10 to 15 days.

On the 1st, generally high pressure prevailed over the ocean, accompanied by light to moderate winds. On the

2d there was a *low* near Newfoundland, although no heavy winds were reported. At the time of observation on the 3d the conditions were practically the same as on the 2d, although later in the day a disturbance developed over the region between the thirty-fifth and fortieth parallels and forty-eighth and sixtieth meridians, and on the 4th southerly winds of gale force were encountered near 40° N., 50° W., accompanied by comparatively high barometric readings. On the 3d there was also a depression central near London with winds of force 7 in the westerly quadrants and also in the vicinity of the Straits of Gibraltar.

On the 5th and 6th high pressure with light to moderate winds was almost universal. On the 7th Belle Isle was near the center of a *low* that moved but little during the next 24 hours, and on the 7th and 8th moderate gales prevailed between the forty-fifth meridian and Newfoundland.

Mr. F. Krastin, observer on board the American S. S. *Comus*, Capt. H. F. Boyd, from New Orleans to New York, reports as follows:

At 11.40 a. m. on July 9 sighted waterspout in 27° 40' N., 87° 20' W., which moved in NW. direction about one-quarter of a mile off ship.

From the 9th to 17th the Icelandic *low* was apparently well developed, with comparatively high pressure in the British Isles until the 15th, when it began to fall. On different days during this period reports of southerly to westerly gales were received from vessels on the eastern section of the steamer lanes.

From the 17th to 19th a well-developed *low* over the British Isles remained nearly stationary until the 20th, when it began to fill in. It reached its greatest intensity on the 19th, causing northwesterly gales between the twentieth meridian and the European coast.

From the 20th to 25th there ensued another period of inactivity, with slight pressure gradients and light to moderate winds.

On the 25th there was a depression over Scotland that afterwards developed into the most severe disturbance of the month, and lasted until the 28th. This depression moved but little and the storm area covered only a limited region of the ocean east of the fifteenth meridian.

On the 27th and 28th unusually strong trade winds were encountered in the vicinity of the Canal Zone, as shown by report in table from the Japanese S. S. *Havana Maru*.

On the 30th an area of low pressure was central near Lerwick, and, moving slowly eastward, was over the North Sea on the 31st. No heavy winds were reported near its center on either day, although westerly gales prevailed between the forty-fifth and fiftieth parallels and the fifth and twenty-fifth meridians.