

Moderate weather conditions prevailed over the ocean during most of the final week.

Typhoon of November 10-20, 1935.—One typhoon occurred in waters of the Far East during the month. An account of the storm, prepared by the Rev. Bernard F. Doucette, S. J., of the Manila Observatory, is subjoined. From ships' reports, it appears that on the 13th, in 14°20' N., 137°40' E., the American steamship *Steel Traveler*, Penang to Honolulu, came within the influence of the disturbance, reporting a barometer reading of 29.58, closely preceded by a northeast gale of force 8. During the 15th the storm had increased considerably in intensity as it neared the Philippines. On this day the Dutch motorship *Tosari* encountered a west-southwest gale of force 11, with pressure down to 29.21 inches, near 12° N., 126° E.

A few days prior to the appearance of this typhoon in the Philippines, the one important marine casualty of the month occurred, when the British motorship *Silverhazel* on the 11th, amid heavy seas, broke in two on a rock in San Bernardino Straits. Four were lost in this wreck, including the master of the ship, Capt. H. A. Lennard. The surviving crew and passengers were rescued from a precarious position on the rock by the U. S. destroyers *Peary* and *Bulmer*. The *Silverhazel* for many years had been a regular and valued cooperating ship with the Marine Division of this Bureau, and her loss is deeply regretted.

Tehuantepecers.—Gales of the norther type were reported in the Gulf of Tehuantepec, as follows: On the 23d, force 9; on the 25th, force 8; on the 29th, force 10.

Monsoon winds.—Strong northeast monsoon winds occurred in the China Sea on the 7th and 8th, and during the middle of the month.

Fog.—Fog was reported on 5 days near the mouth of the Columbia River; on 7 days off the California coast; and on 3 days in and near the Gulf of Tehuantepec. Scattered fogs were reported during the first decade of the month to the eastward of the 180th meridian along the northern steamship routes.

Trans-Pacific aviation.—On the afternoon of November 22 the Pan American Airways' giant air liner *China Clipper* left Alameda, Calif., bound for Manila with nearly 2 tons of mail, thus inaugurating a commercial trans-Pacific air service. The entire flight of 8,602 miles, via Hawaii, Midway Island, Wake Island, and Guam, was made with favorable weather in 59 hours and 47 minutes, or in 13 minutes less time than was estimated for the voyage.

TYPHOON AND DEPRESSION OVER THE FAR EAST NOVEMBER 1935

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Depression, October 31 to November 3.—A depression formed during the afternoon of October 31, about 250

miles SSW. of Guam, and moved NW. until the next morning when it sharply recurved to the NE. and moved beyond the region of observation November 3. It seemed to be of little importance during this time.

Typhoon, November 10 to 20.—The morning of November 10, a depression appeared about 330 miles SSE. of Guam. It developed into a typhoon as it moved W. by N. for about 36 hours and then changed to the W., threatening the island of Yap. On the morning of the 12th, when about 120 miles to the east of this island, it began to move WNW., passing about 50 miles NE. of the station. The next day, it shifted its course to the W., moved thus for one day, and then changed to the WNW. It kept this course until it crossed Luzon, passing close to and N. of Baler, Tayabas Province, the morning of November 17. The next day it was located in the China Sea about 60 miles WSW. of Vigan, Ilocos Sur. During the forenoon it inclined to the N., and the next day it recurved to the NE. and E., moving along the Balintang Channel and filling up over the Pacific Ocean regions.

This typhoon is of interest inasmuch as it threatened to interfere with the ceremonies connected with the inauguration of the new Commonwealth Government on November 15. The typhoon was about 400 miles to the ESE. of Manila on that day.

Barometric minima reported are as follows: Yap recorded 742.6 mm (29.237 in.), with SW. winds, force 3 to 4, on November 12, 4 p. m. Baler, Tayabas Province, P. I., had 735.22 mm (28.946 in.) on November 17, 5 a. m., together with WSW. winds, force 9. Vigan reported 738.53 mm (29.076 in.), November 17, 4 p. m., with NNW. winds, force 7.

The typhoon entered the China Sea at a time when the NE. monsoon was quite strong, and thus was prevented from taking a westerly course.

Newspaper reports (published Nov. 24 and 25) give the total of deaths due to this typhoon as 31, most of which were caused by drowning. It is interesting to note the remark of the Weather Bureau observer at Baler, who reported that none of the light material houses in his locality were damaged, nor were there any heavy rains. The previous typhoons of this season which passed near his station caused great damage to property; yet, from the viewpoint of the meteorologists, the later typhoon was much more extensive than the preceding disturbances. This is evident because great damage to property during the passage of this typhoon was reported in the Provinces of Isabela and Nueva Vizcaya.