



POLLY

While Mary was accelerating toward central Honshu, satellite data revealed another disturbance, induced from an upper level low, was showing signs of development 400 nm east of the northern Marianas. Midday on the 26th, the circulation system intensified into Tropical Storm Polly about 40 nm northeast of Saipan. Development was rapid thereafter, as the storm's central pressure dropped 25 mbs in a period of a day after an aircraft reconnaissance reading of 989 mb late on 26th (2056Z).

Polly's movement in the central Marianas was erratic as the storm was impeded by a high pressure cell located to the southwest near Yap. By the 27th, however, the flow about a strong high east of Japan dominated, and Polly departed the "col" region between the two anticyclones increasing in forward speed to 12 knots.

Veering northward late on the 28th, the typhoon took aim on the Volcano Islands. Polly's central pressure continued to fall terminating at a minimum value of 948 mb 170 nm south of Iwo Jima. Twelve hours later the typhoon passed abeam of Iwo Jima and later on the 29th passed about 70 nm west of Chichi Jima. Iwo Jima reported peak gusts of 108 knots from the south (29/0705Z) after the eastern edge of Polly's 20 nm diameter eye passed the island. A minimum pressure of 951.5 mb was registered while in the eye. Later, Chichi Jima recorded a peak gust of 88 knots from the east-northeast (29/1240Z) and a minimum pressure of 989.8 mb (29/1900Z) during passage.

During Polly's advancement northward from the Marianas, Tropical Storm Rose generated east of Taiwan. Late on the 29th, Rose had moved to a position just north of Okinawa, and become quasistationary. The proximity of Tropical Storm Rose 700 nm west of Polly and a blocking high north and northeast of Polly resulted in the beginning of a Fujiwara interaction on the 30th. Polly began to turn northwest to westward during the next day and a half, as Rose sped around the south side of Polly's circulation (Figure 4-13).

With a long wave trough over eastern China, and Rose weakening significantly on Polly's eastern periphery, the typhoon veered abruptly on a northward track late on the 31st. Increasing in forward speed to 15 knots, Polly's center struck the Japanese islands of Shikoku and southwestern Honshu, emerging six hours later in the Sea of Japan late on the 1st. Diminishing to tropical storm force in the Sea of Japan, Polly continued a poleward movement crossing the Russian coast east of Vladivostak as an extratropical low on the 2nd.

As Polly's eye moved ashore on Shikoku, the Kochi City meteorological station 20 nm east of center, measured a minimum pressure of 976.3 mb (01/0920Z), and a peak gust from the east at 78 knots (01/0930Z). The Ashizuri station (20 nm west of the center), however, reported the lowest pressure on the coast--966.5 mb (01/0740Z). Murotomisaki

(elev. 745 ft, 70 nm northeast of the center) reported the highest gust--95 knots from the east (01/0310Z)--several hours before Polly's landfall. Maximum 24-hour rainfall measured on Shikoku Island due to Polly was 11.8 inches at the coastal station of Ashizuri.

During the typhoon's passage across Japan, Polly's circulation intensified a stationary front over east central Honshu bringing excessively heavy rains to the mountainous area west of the Kanto plain. Ogochi, Tokyo prefecture reported a total of 19.7 inches during the typhoon's passage while stations in Saitama and Yamanashi prefectures received totals as high as 19.5 inches and 14.4 inches respectively. These heavy rains set off one of the worst floods in Tokyo since World War II. The swollen Tama River washed over its embankment at Komae, Tokyo prefecture flooding many homes and causing 7600 inhabitants to be evacuated from their homes.

Elsewhere, electrical power was cut off in Kochi and Hiroshima in the path of Polly's center due to the high winds and landslides downing power lines. On the coast, two 10,000 ton freighters, berthed under construction at Urato Bay near Kochi, were washed out to sea when the water level went up some 9 feet. In the typhoon's wake, Polly left over 10,000 homes destroyed or inundated and a casualty toll of 45 injured and 9 dead or missing.



FIGURE 4-13. Typhoon Polly 250 nm south of Nagoya, Japan. Tropical Storm Rose appears further southwest of Polly centered 230 nm east of Naha, Okinawa. 30 August 1974, 2300Z. [DMSP imagery]