

THERESE

Near the end of the first week in July a tropical disturbance was detected by satellite near 9N-160E, moving slowly westward. At 2322Z on the 9th a formation alert was issued when satellite data indicated that the system was beginning to organize. During the next 24 hours the disturbance intensified rapidly, and aircraft observed winds of tropical storm intensity. At 0000Z on the 11th the first warning was issued on Tropical Storm Therese with winds of 40 kt near the center. For the next 24 hours Therese continued to intensify while accelerating slowly on a west-northwest course south of a well established subtropical ridge. By 0000Z on the 12th Therese had reached typhoon intensity. As the subtropical ridge to the north of the storm shifted northward, the typhoon reacted by slowing and moving toward the northwest. Near 1200Z on the 12th explosive deepening began to occur in response to enhanced outflow resulting from a cold-core, upper tropospheric low northwest of Therese. Reconnaissance aircraft indicated that from 0805Z on the 12th until 0537Z on the 13th, the storm's central pressure plummeted 66 mb, a rate of 3.1 mb per hour (Fig. 4-23). Therese had become the 2nd super typhoon of the season, attaining a minimum surface pressure of 903 mb and maximum winds of 135 kt at 0600Z on the 13th. Therese maintained super typhoon intensity for the next 18 hours, and at 2100Z on the 13th passed 30 nm northeast of Saipan with 130 kt winds near the center. Saipan sustained only minor damage with observed winds estimated at 75 to 100 kt.

Typhoon Therese began to accelerate along the southwestern periphery of the subtropical ridge heading toward a weakness near 130E. The system continued to weaken

slowly as it tracked farther north, still maintaining good outflow in all quadrants. At 1800Z on the 16th Therese passed 25 nm southwest of Minamidaito Jima where maximum sustained winds of 50 kt and a minimum sea level pressure of 966.9 mb were recorded. By the morning of the 17th Therese had slowed to 9 kt, and began to recurve toward the north in response to a long wave trough at the 200 mb level. At 0900Z the typhoon, still possessing 90 kt winds, passed 60 nm northeast of Okinawa where 41 kt gusts were recorded at Kadena AB. Directly ahead of the storm, Tokuno-Shima was reporting 50 kt winds. At 1200Z the island experienced eye passage with a recorded central pressure of 958 mb (Fig. 4-24).

For the next 24 hours Therese continued moving northward along the western edge of the subtropical ridge maintaining typhoon intensity. At 1200Z on the 18th Meshima (47842) reported sustained winds of 65 kt and minimum sea level pressure of 971.2 mb. Shortly thereafter Therese passed 10 nm east of the island as it turned to the northeast toward the west coast of Kyushu. By 1200Z on the 19th Therese had made landfall on the coast of Kyushu with 40 kt winds. After crossing the coast, the storm continued to dissipate over the mountainous terrain. The final warning was issued at 0000Z on the 20th as Therese became quasi-stationary over southern Japan.

Prior to dissipation, Therese brought nearly 20 inches of rain to the island of Kyushu. The storm flooded more than 1000 homes and sank 12 ships. During the onslaught, 3 persons were killed, more than 1300 were rendered homeless, and damage to crops was estimated in the millions of dollars.

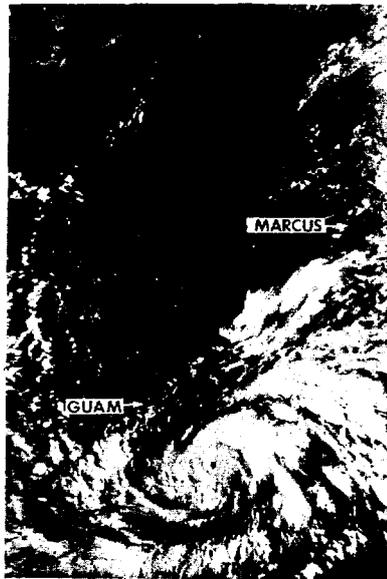


FIGURE 4-23. Typhoon Therese near 115 kt undergoing explosive deepening 260 nm southeast of Guam, 12 July 1976, 2104Z. (DMSP imagery)



FIGURE 4-24. Infrared photograph of Typhoon Therese at 90 kt intensity 90 nm northeast of Kadena AB, Okinawa, 17 July 1976, 1042Z. (DMSP imagery)