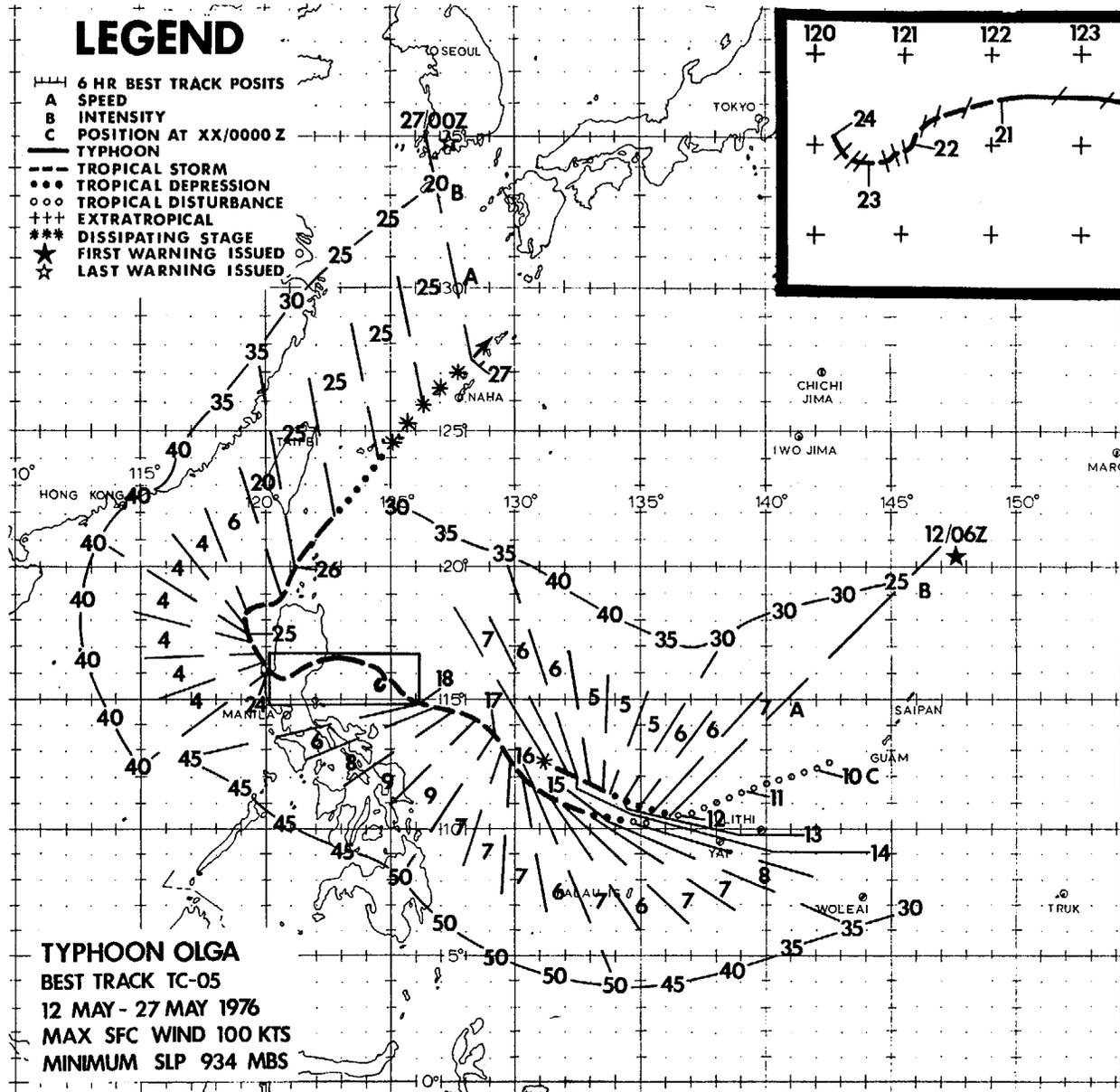
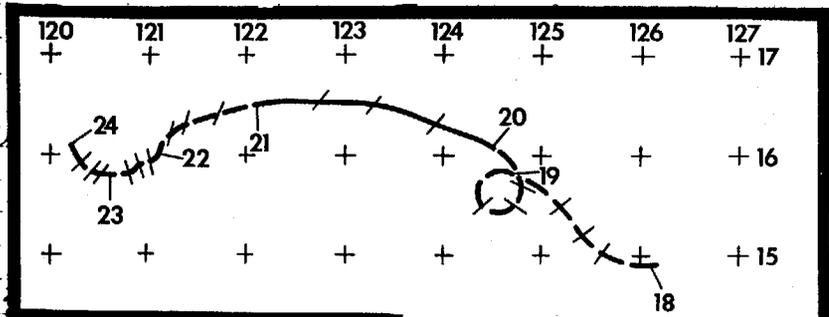


LEGEND

- 6 HR BEST TRACK POSITS
- A SPEED
- B INTENSITY
- C POSITION AT XX/0000 Z
- TYPHOON
- TROPICAL STORM
- TROPICAL DEPRESSION
- TROPICAL DISTURBANCE
- +++ EXTRATROPICAL
- *** DISSIPATING STAGE
- ★ FIRST WARNING ISSUED
- ☆ LAST WARNING ISSUED



TYPHOON OLGA
 BEST TRACK TC-05
 12 MAY - 27 MAY 1976
 MAX SFC WIND 100 KTS
 MINIMUM SLP 934 MBS



DTC	SPEED	INTENSITY
18/00Z		45
18/06Z	5	50
18/12Z	3	50
18/18Z	3	50
19/00Z	7	50
19/06Z	6	50
19/12Z	4	55
19/18Z	2	55
20/00Z	5	60
20/06Z	6	65
20/12Z	6	70
20/18Z	6	85
21/00Z	6	100
21/06Z	4	50
21/12Z	3	45
21/18Z	2	40
22/00Z	2	35
22/06Z	2	35
22/12Z	2	35
22/18Z	2	35
23/00Z	2	35
23/06Z	1	35
23/12Z	1	35
23/18Z	1	35
24/00Z	2	40
	4	

Typhoon Olga originated within a very active trough near 10N and between 130 and 155E. As early as 4 May, several surface circulations were evident throughout this zone. By the 12th, a center analyzed near 10N - 140E showed indications that it would be the dominant circulation, and the first warning was issued at 0600Z on the 12th. From the onset, Olga was a unique system, having diffuse characteristics which it maintained throughout its life. One such trait was the lack of vertical stacking, observed when comparing satellite and aircraft positions. The low level circulation was often ill defined, and on several occasions multiple circulations could be identified.

Originally, Olga was tracked by satellite as a tropical disturbance moving toward the southwest, following the center of the upper level anticyclone. After 1200Z on the 12th a more climatological track toward the west-northwest was observed, but at half the speed normal for this time of year. This movement, along the southern edge of the subtropical ridge, persisted through the afternoon of the 13th when Olga was upgraded to a tropical storm. Later that night satellite data indicated the presence of a second circulation 120 nm to the east of the storm center. By the 14th the original center had dissipated and the convective energy had consolidated around this second center. The relocated system then proceeded toward the west-northwest while it slowly intensified, and attained tropical storm intensity for the second time. On the 16th Olga responded to a short wave trough in the westerlies and moved toward the north. However, on the 17th the storm resumed its west-northwest heading as the short wave progressed rapidly toward the east. It was at this point that satellite data indicated Olga was entering an unfavorable upper level shearing environment provided by a 200 mb ridge over Southeast Asia, which persisted

throughout the remainder of Olga's life.

On the 18th Olga began to slow its forward movement in response to a long wave trough moving off the east coast of China. At this point it was expected that the storm would recurve ahead of the trough, but instead, Olga began a counterclockwise loop, and slowly intensified despite the unfavorable upper level shear. On the 20th Olga completed its loop and attained typhoon intensity. After completing the loop the storm tracked toward the west at 6 kt, continuing to intensify. Between aircraft reports at 0330Z and 1947Z on the 20th, there was a drop in the central pressure of 44 mb (from 978 to 934 mb), a rate of 2.7 mb per hour (Fig. 4-5). With this rapid deepening, Olga made landfall on the east side of Luzon near 16.5N at approximately 0000Z on the 21st with winds estimated at 100 kt.

After landfall the small core of high winds subsided quickly (Fig. 4-6). For the next 24 hours Olga's center meandered toward the southwest along the east coast of Luzon passing near Bayler Bay with winds of 45 kt at storm center. Seeking the path of least resistance, Olga tracked through the Luzon lowlands during the next 48 hours exiting the island through Lingayen Gulf on the 24th. During its slow journey across Luzon, at 2 to 4 kt, Olga enhanced the southwest monsoon over southern Luzon, bringing rains in excess of 50 inches at Cubi Point and perhaps higher at other areas. The resulting floods contributed to over 200 deaths and thousands of homeless. For the next 24 hours Olga tracked toward the northwest through the Gulf reintensifying to 40 kt. On the 25th, the low level circulation separated from the hard core convection and tracked toward the northeast at an accelerated rate. Olga dissipated to the west of Okinawa on the 27th as it was absorbed into a subtropical disturbance west of the island.

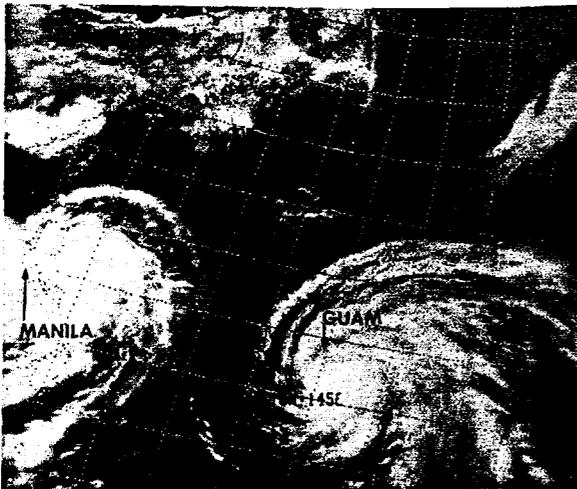


FIGURE 4-5. Typhoon Olga (left) at 70 kt intensity 85 nm east of Luzon begins rapid deepening as Typhoon Pamela moves toward Guam, 20 May 1976, 1109Z. (NOAA-4 imagery)

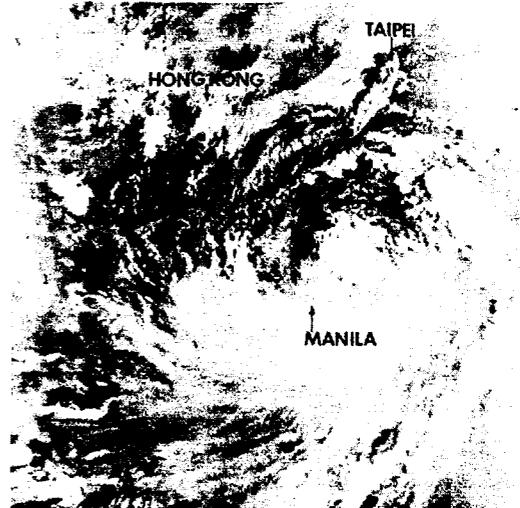


FIGURE 4-6. Olga at 40 kt intensity 95 nm north of Manila some 18 hours after moving inland over Luzon, 21 May 1976, 2304Z. (DMSP imagery)