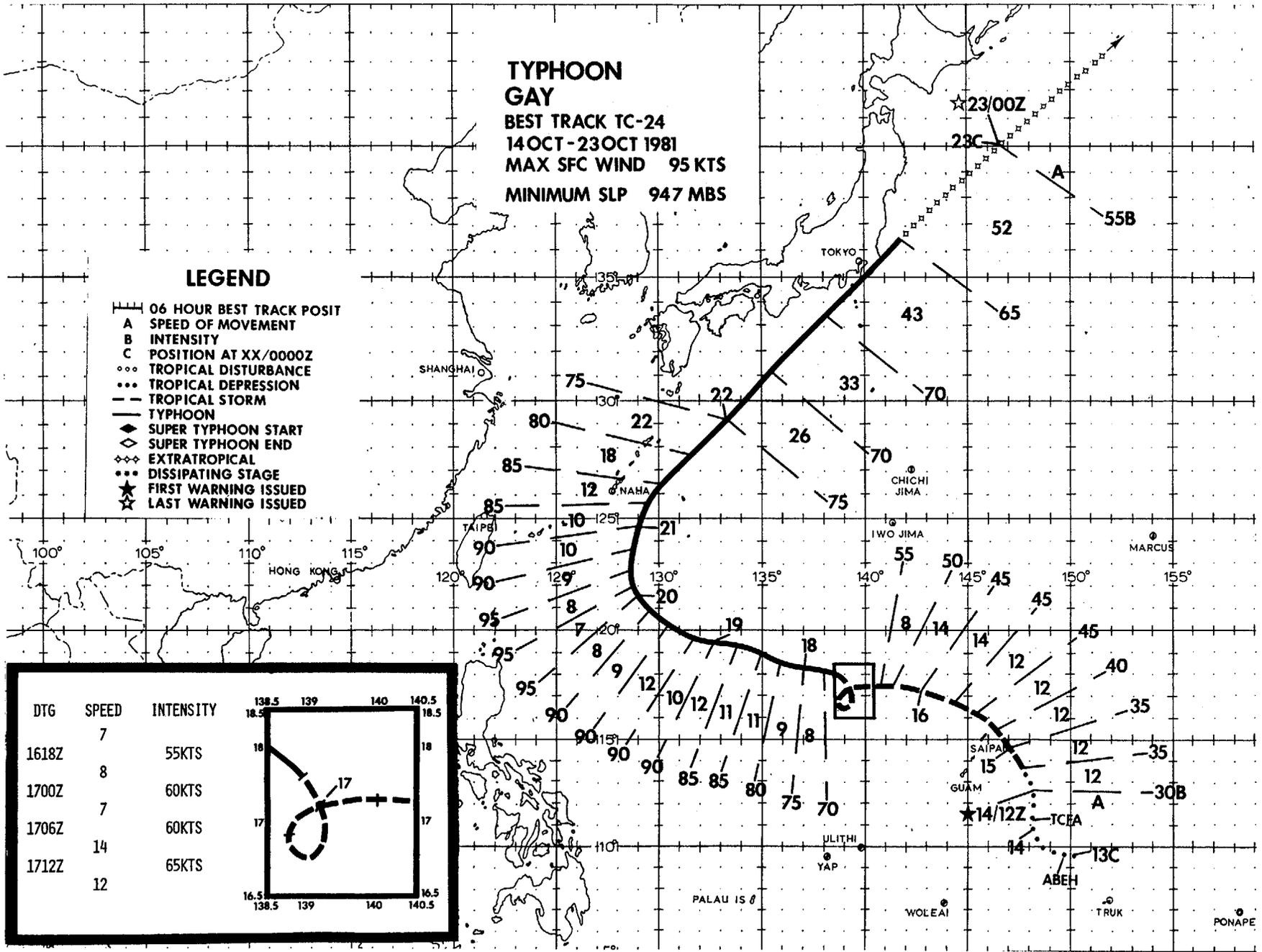


**TYPHOON
GAY**
BEST TRACK TC-24
14 OCT - 23 OCT 1981
MAX SFC WIND 95 KTS
MINIMUM SLP 947 MBS

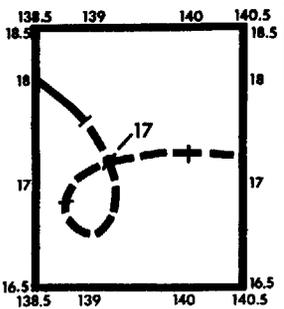
LEGEND

- 06 HOUR BEST TRACK POSIT
- A SPEED OF MOVEMENT
- B INTENSITY
- C POSITION AT XX/0000Z
- TROPICAL DISTURBANCE
- TROPICAL DEPRESSION
- TROPICAL STORM
- TYPHOON
- ◆ SUPER TYPHOON START
- ◇ SUPER TYPHOON END
- ◇◇ EXTRATROPICAL
- DISSIPATING STAGE
- ★ FIRST WARNING ISSUED
- ★ LAST WARNING ISSUED



06

DTG	SPEED	INTENSITY
1618Z	7	55KTS
1700Z	8	60KTS
1706Z	7	60KTS
1712Z	14	65KTS
	12	



TYPHOON GAY (24)

Typhoon Gay was a harbinger of good tidings for the island of Okinawa, providing 5.89 inches (14.96 cm) of rain as she passed some 95 nm (176 km) to the southeast. Locked in a severe drought, Okinawa residents had been suffering under strict water rationing.

From its inception within an abnormally

large convective area Gay was far from a straight forward system. Early satellite fixes were very unreliable, resulting in the vectoring of aircraft reconnaissance to the wrong portion of the convective area. Post-analysis has shown the actual "center" of the developing system was far to the west-southwest of where it was believed to be. Figure 3-24-1 shows the system shortly after initial warning.

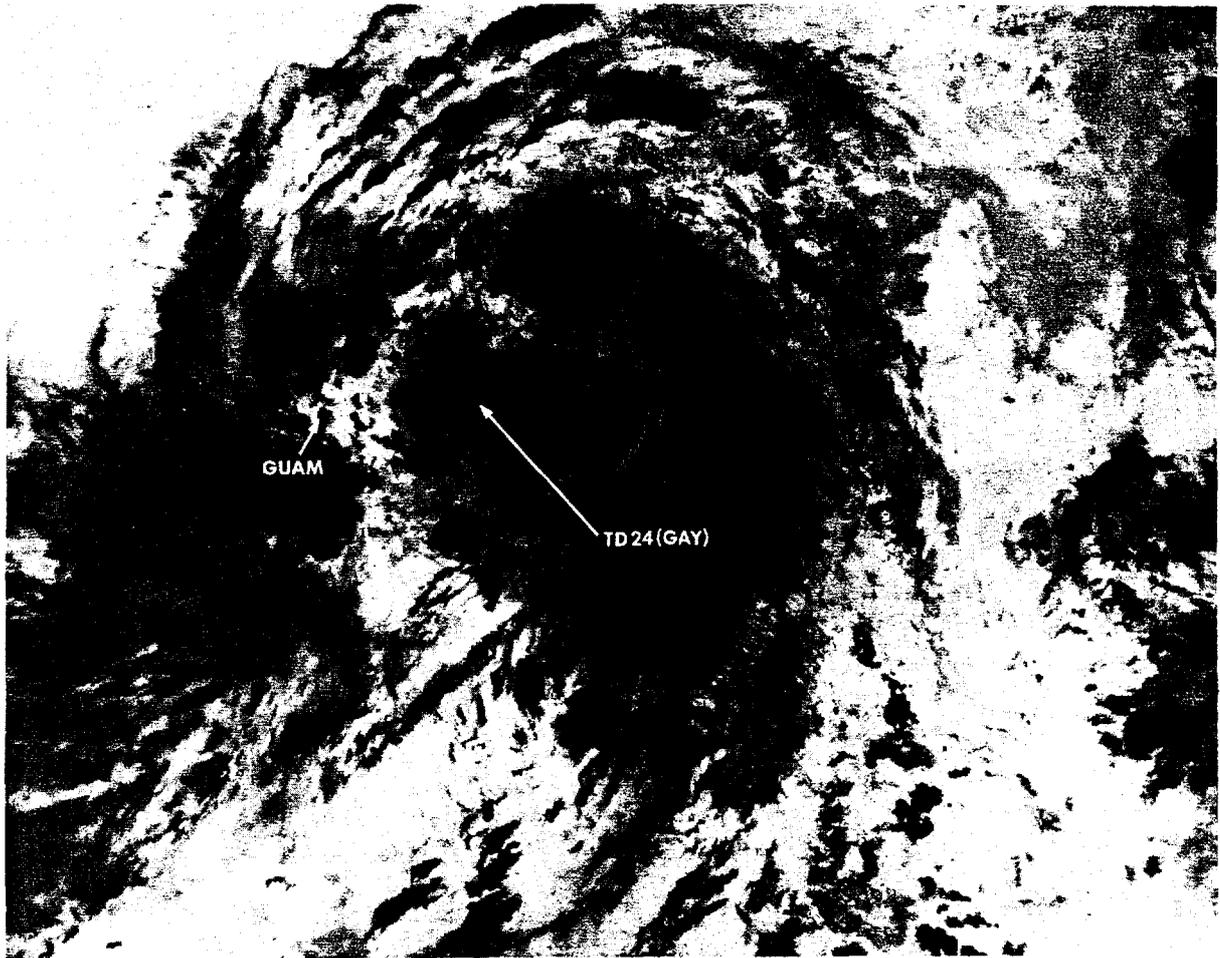


Figure 3-24-1. Tropical Depression 24 (Gay), 14 October 1981, 1614Z. At this time the initial warning with winds of 30 kt (15 m/sec) had been issued. The system was quickly upgraded to tropical storm status. The circulation center was approximately 100 nm (185 km) east of Guam. (NOAA 7 infrared imagery)

As Gay became better organized she became somewhat more predictable, with a forecast for a generally westward track and for an eventual recurvature around the west side of the prevailing mid-tropospheric anticyclone. Figure 3-24-2 shows Gay during a period when she took the slight southwest jog and loop shown on the best track in response to an eastward building

anticyclone upstream from Gay's location.

Typhoon Gay remained a fickle system until reaching maximum intensity (Fig. 3-24-3) when a large eye finally developed. Until this time, the center of Gay was characterized by an unusually large area of light and variable winds, further contributing to the problems of accurate location.



Figure 3-24-2. Tropical Storm Gay, 17 October 1981, 0503Z when she began the slight southwestward movement and eventually looped. (NOAA 7 visual imagery)

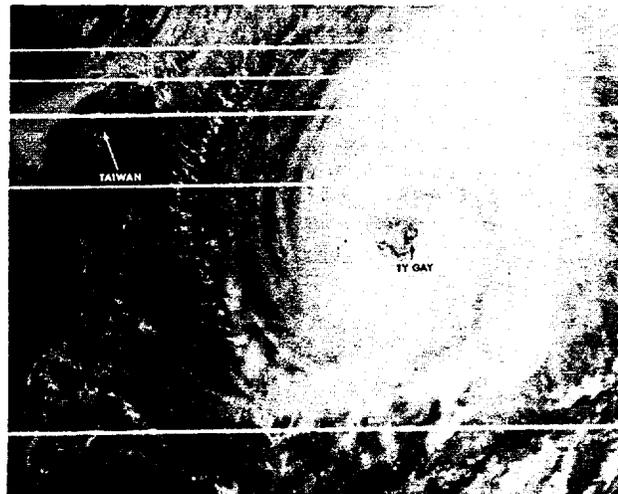


Figure 3-24-3. Typhoon Gay, 20 October 1981, 0610Z at maximum intensity of 95 kt (49 m/sec), located approximately 420 nm (778 km) east-southeast of Taiwan. (NOAA 7 visual imagery)

Following recurvature and passage to the east of Okinawa (Fig. 3-24-4), Gay continued around the western side of the mid-Pacific anticyclone and accelerated toward Japan. Eventually passing within 30 nm (56 km) of Tokyo, Gay brought extensive rainfall to the central regions of Japan. Yokosuka Naval Facility reported peak gusts of 60 kt

(31 m/sec) and 9.38 inches (23.8 cm) of rain over the 24 hour period of Gay's passage.

A low pressure system north of Japan rapidly drew Gay northward and quickly initiated an extratropical transition with Gay merging completely with the existing low center.

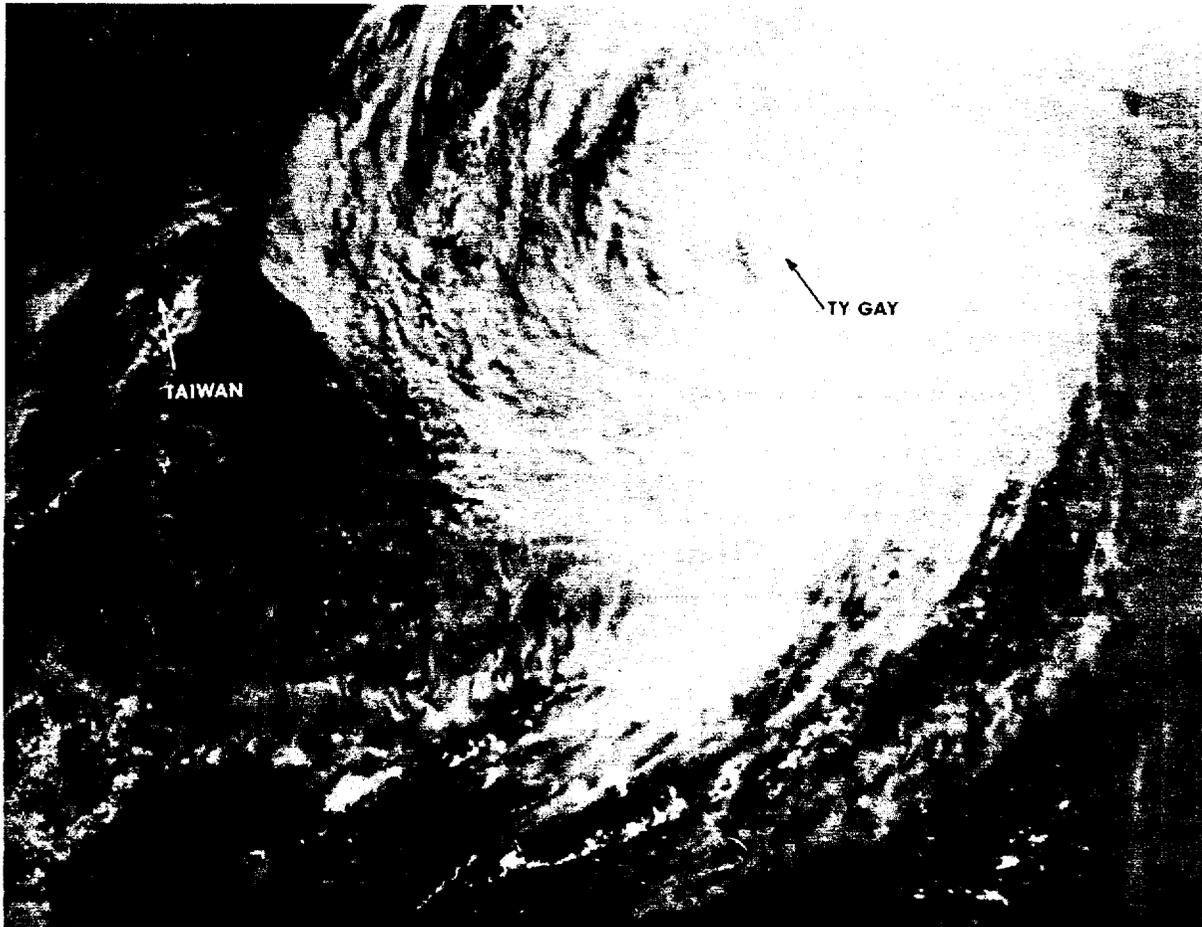


Figure 3-24-4. Typhoon Gay, 21 October 1981, 0559Z breaking the drought on Okinawa; center location is some 120 nm (185 km) east-southeast of the island. (NOAA 7 visual imagery)