TYPHOON ELSIE - 131800Z to 181800Z JULY

I. DATA

A. Statistics

1. Calendar days of tropical warning - 5¼

2. Calendar days of typhoon intensity - 1¼

3. Total distance traveled during tropical warning period - 1632 mi

B. Characteristics as a typhoon

1. Minimum observed SLP - 992mb, 171000Z

2. Minimum observed 700mb height - 3097m, 170400Z

3. Maximum surface wind - 100 kts

4. Max radius of surface circulation - 350 mi

II. DEVELOPMENT

A. Initial impetus - Fracture of Polar Trough

B. Initial surface vortex

1. Embedded vortex at 130000Z

2. Surface pressure less than 1012mb

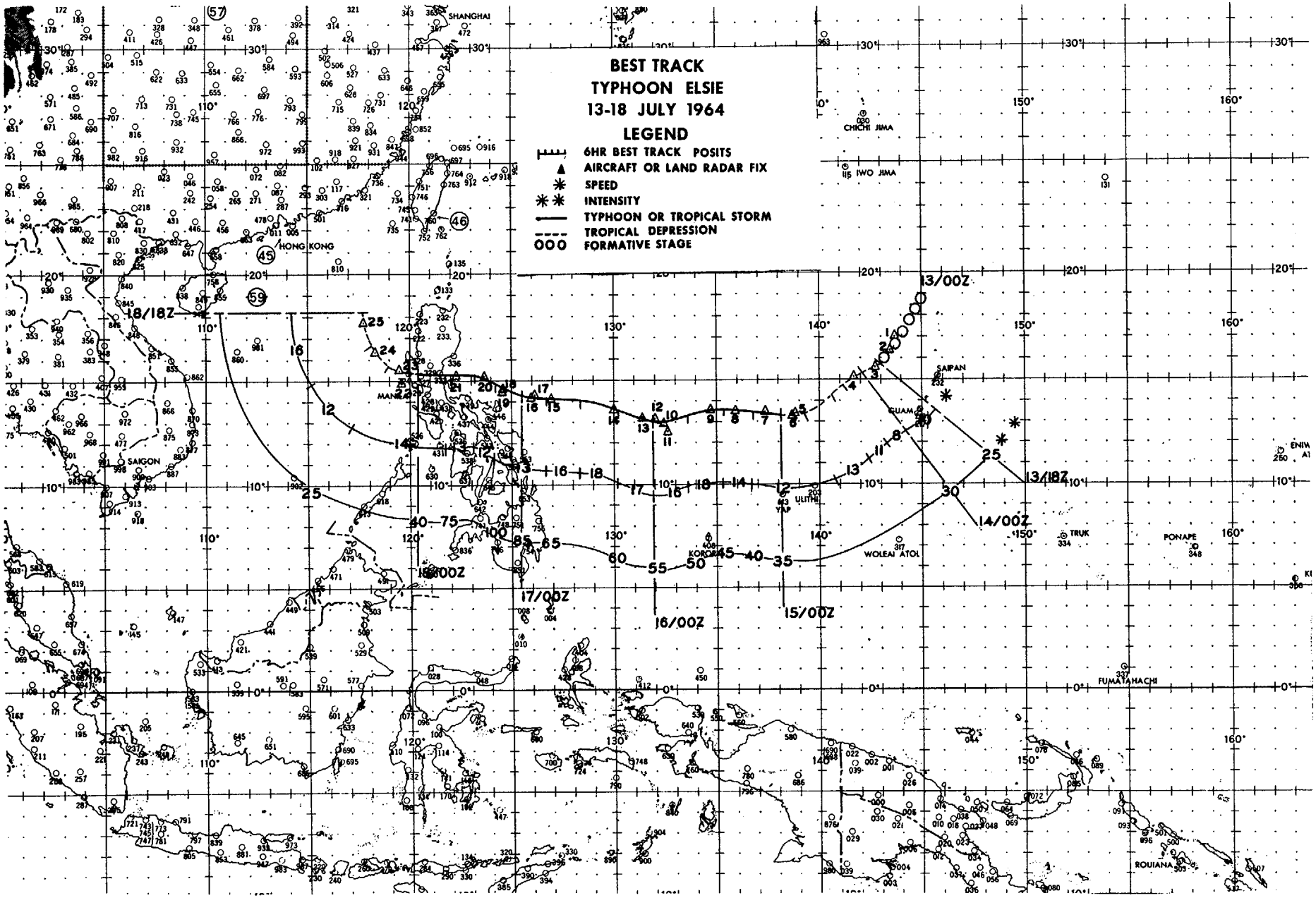
C. 200mb flow above surface vortex

1. Initial - SE quad of anticyclone

2. Upon reaching typhoon intensity - SE quad of anticyclone

III. FINAL DISPOSITION

A. Dissipated over water


BEST TRACK
TYPHOON ELSIE
13-18 JULY 1964
LEGEND
6HR BEST TRACK POSITS
AIRCRAFT OR LAND RADAR FIX
SPEED
INTENSITY
TYPHOON OR TROPICAL STORM
TROPICAL DEPRESSION
FORMATIVE STAGE
SHANGHAI
HONG KONG
SAIGON
CHICHI JIMA
IWO JIMA
SAIPAN
GUAM
YAP
ULITHI
KOROR
WOLEAI ATOL
TRUK
PONAPE
FUMATAHACHI
ROUIANA
18/18Z
13/00Z
13/18Z
14/00Z
15/00Z
16/00Z
17/00Z
18/00Z

EYE FIXES TYPHOON ELSIE

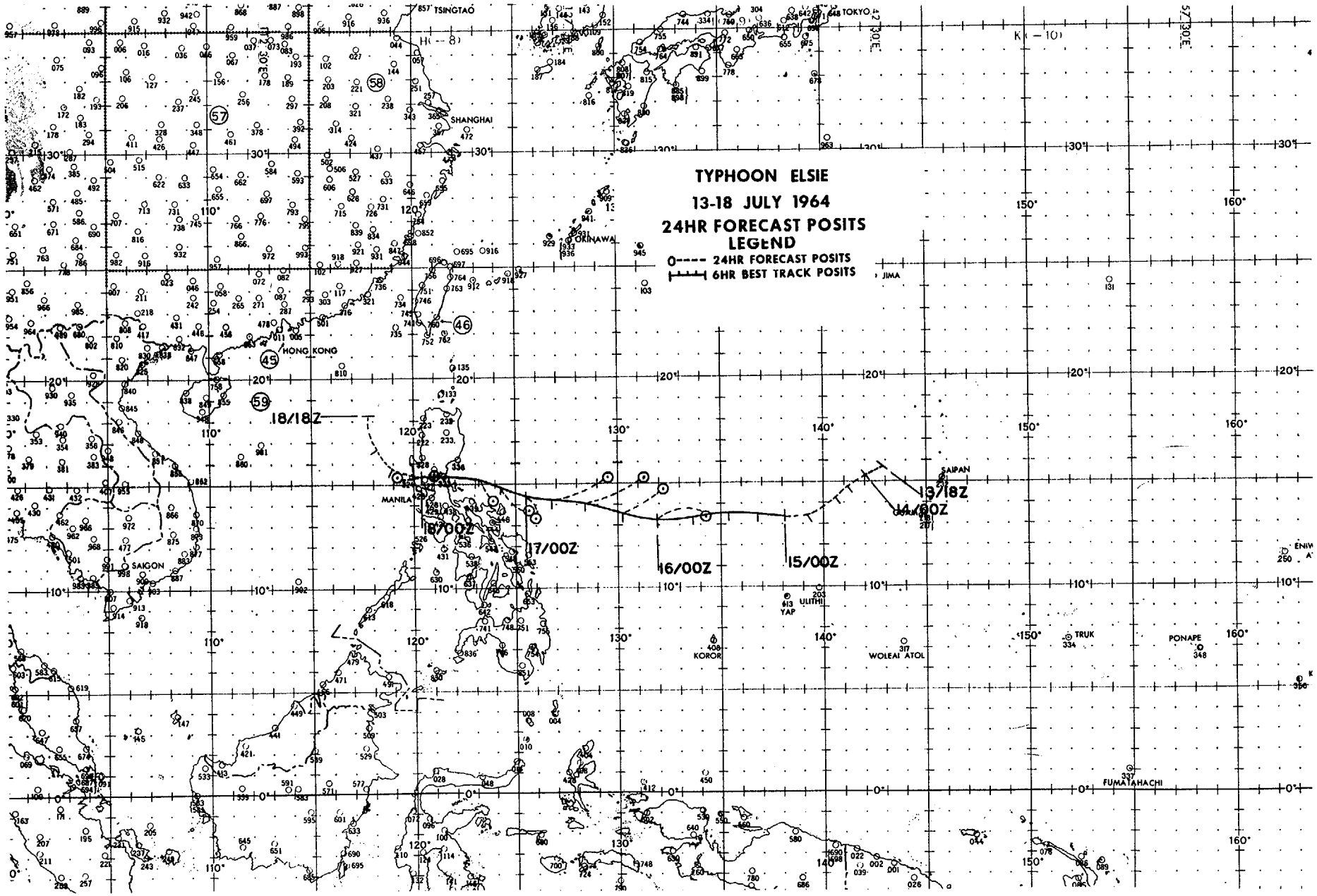
FIX NO.	TIME	POSIT	UNIT-METHOD-ACCY	FLT LVL	FLT LVL WND	OBS SFC WND	OBS MIN SLP	MIN 700MB HGT	FLT LVL TT/TD	REMARKS
1	131030Z	17.0N 143.8E	C-97	---	--	--	---	---	--/--	FEEDER BANDS FORMING
2	131350Z	16.4N 143.6E	VW1-P-5	1700ft	--	--	1007	---	27/22	EYE DIA 34 MI CHANGING RAPIDLY
3	131835Z	15.6N 142.8E	56-P-U	10466ft	45	--	---	3161	11/10	OVAL 20 MI E/W 15 MI N/S CLSD
4	140343Z	15.2N 141.8E	VW1-P-3	800ft	--	30	1005	---	25/--	NO FEEDER BANDS OR WALL CLDS
5	141912Z	13.4N 138.8E	54-R-10	30000ft	--	--	---	---	--/--	
6	142215Z	13.4N 138.8E	56-P-5	685mb	20	35	1013	3164	10/6	CIRC 18 MI DIA OPEN SE
7	150350Z	13.6N 137.4E	56-P-2	682mb	30	40	1004	3133	11/7	CIRC 20 MI DIA OPEN E & SE
8	150945Z	13.6N 136.0E	VW1-P-10	1500ft	--	22	1006	---	28/24	ILL DEFINED
9	151426Z	13.6N 134.8E	VW1-P-5	5000ft	--	--	---	---	19/--	CIRC CLSD TOPS 40000FT
10	152200Z	13.0N 132.4E	54-R-3	30000ft	--	50	---	---	--/--	CIRC 15 MI DIA BRKN NW
11	152220Z	12.7N 132.6E	56-P-10	700mb	--	55	1006	3118	10/8	CIRC 10 MI DIA CLSD WEAK N
12	160400Z	13.2N 132.1E	54-R-5	30000ft	--	50	---	---	--/--	CIRC 40 MI DIA OPEN NE SEMI
13	160345Z	13.1N 131.5E	56-P-5	700mb	26	50	1005	3115	12/1	CIRC 10 MI DIA OPEN N THRU E
14	161000Z	13.6N 130.1E	VW1-P-3	1500ft	--	80	991	---	26/21	CIRC 30 MI DIA WALL CLD SW QUAD ONLY 8 MI THICK TOPS 41000+
15	161645Z	14.1N 127.0E	VW1-P-10	1500ft	--	--	1005	---	26/21	CIRC 37 MI DIA WALL CLDS 12 MI THICK S QUAD

FIX NO.	TIME	POSIT	UNIT-METHOD-ACCY	FLT LVL	FLT LVL WND	OBS SFC WND	OBS MIN SLP	MIN 700MB HGT	FLT LVL TT/TD	REMARKS
16	162200Z	14.2N 126.0E	54-R-5	31000ft	--	65	---	---	--/--	CIRC 20 MI DIA
17	162214Z	14.2N 126.2E	56-P-3	683mb	40	85	994	3115	16/7	CIRC 20 MI DIA OPEN N
18	170400Z	14.6N 124.7E	54-R-5	30000ft	--	100	---	---	--/--	WALL CLDS SE ONLY
19	170400Z	14.6N 124.7E	56-P-3	682mb	45	100	998	3097	15/10	CIRC 20 MI DIA OPEN N QUAD
20	171000Z	15.2N 123.8E	VW1-P-5	1500ft	--	60	992	---	27/26	CIRC 22 MI DIA OPEN NE WALL CLD 13 MI THICK TOPS 45000FT+
21	171545Z	15.2N 122.3E	VW1-R-5	5000ft	--	--	---	---	--/--	CIRC 14 MI DIA OPEN N SEMI
22	172200Z	14.9N 119.7E	54-R-3	30000ft	--	--	---	---	--/--	ILL DEFINED
23	180400Z	15.6N 119.5E	54-R-5	30000ft	--	20	---	---	--/--	OVAL 50X40 MI DIFFUSED
24	181115Z	16.3N 118.2E	VW1-P-5	1000ft	--	25	1005	---	25/--	CNTR VERY DIFFUSED
25	181600Z	17.7N 117.9E	VW1-R-5	10000ft	--	--	---	---	--/--	CIRC 42 MI DIA OPEN NW WALL CLD 13 MI THICK SE SEMI

TYPHOON ELSIE 13 JUL-18 JUL 1964
POSITION AND FORECAST VERIFICATION DATA

DTG	STORM POSITION LAT.	LONG.	24 HOUR ERROR DEG. DISTANCE	48 HOUR ERROR DEG. DISTANCE
131800Z	15.7N	143.0E	------	------
140000Z	15.3N	142.1E	------	------
140600Z	14.8N	141.3E	------	------
141200Z	14.1N	140.5E	------	------
141800Z	13.5N	139.3E	------	------
150000Z	13.4N	138.1E	------	------
150600Z	13.5N	136.9E	------	------
151200Z	13.6N	135.4E	------	------
151800Z	13.3N	133.7E	------	------
160000Z	13.0N	132.0E	080-134	------
160600Z	13.5N	130.3E	051-133	------
161200Z	14.0N	128.5E	066-170	------
161800Z	14.1N	126.8E	067-166	------
170000Z	14.2N	125.5E	150-62	085-276
170600Z	14.8N	124.3E	133-112	055-236
171200Z	15.2N	123.2E	148-80	059-255
171800Z	15.2N	121.8E	283-48	052-255
180000Z	15.3N	120.4E	266-70	015-43
180600Z	15.7N	119.0E	------	------
181200Z	16.5N	118.2E	------	------
181800Z	18.2N	117.8E	------	------

AVERAGE 24 HOUR ERROR 108 MI
AVERAGE 48 HOUR ERROR 213 MI


TYPHOON ELSIE
13-18 JULY 1964
24HR FORECAST POSITS
LEGEND
0---- 24HR FORECAST POSITS
6HR BEST TRACK POSITS
TSINGTAO
TOKYO
SHANGHAI
OKINAWA
HONG KONG
MANILA
SAIGON
SAIPAN
YAP
ULITHI
KOROR
WOLEAI ATOL
TRUK
PONAPE
FUMATAHACHI
18/18Z
18/00Z
17/00Z
16/00Z
15/00Z
14/00Z
13/18Z