TROPICAL CYCLONE 12 - 07/28/0000Z TO 08/02/1800Z

I. DATA

A. STATISTICS

1. NUMBER OF WARNINGS ISSUED - 23
2. NUMBER OF WARNINGS WITH TYPHOON INTENSITY - 05
3. TOTAL DISTANCE TRAVELED DURING TROPICAL WARNING PERIOD - 1380 MI

B. CHARACTERISTICS AS A TYPHOON

1. MINIMUM OBSERVED SLP - 969MBS AT 310325Z
2. MINIMUM OBSERVED 700MB HEIGHT - 2832M. AT 310325Z
3. MAXIMUM SURFACE WIND - 080 KTS (FROM BEST TRACK)
4. MAXIMUM RADIUS OF SURFACE CIRCULATION - 400 MI

II. DEVELOPMENT

A. INITIAL IMPETUS - FRACTURE OF A POLAR TROUGH AND AN EASTERLY WAVE

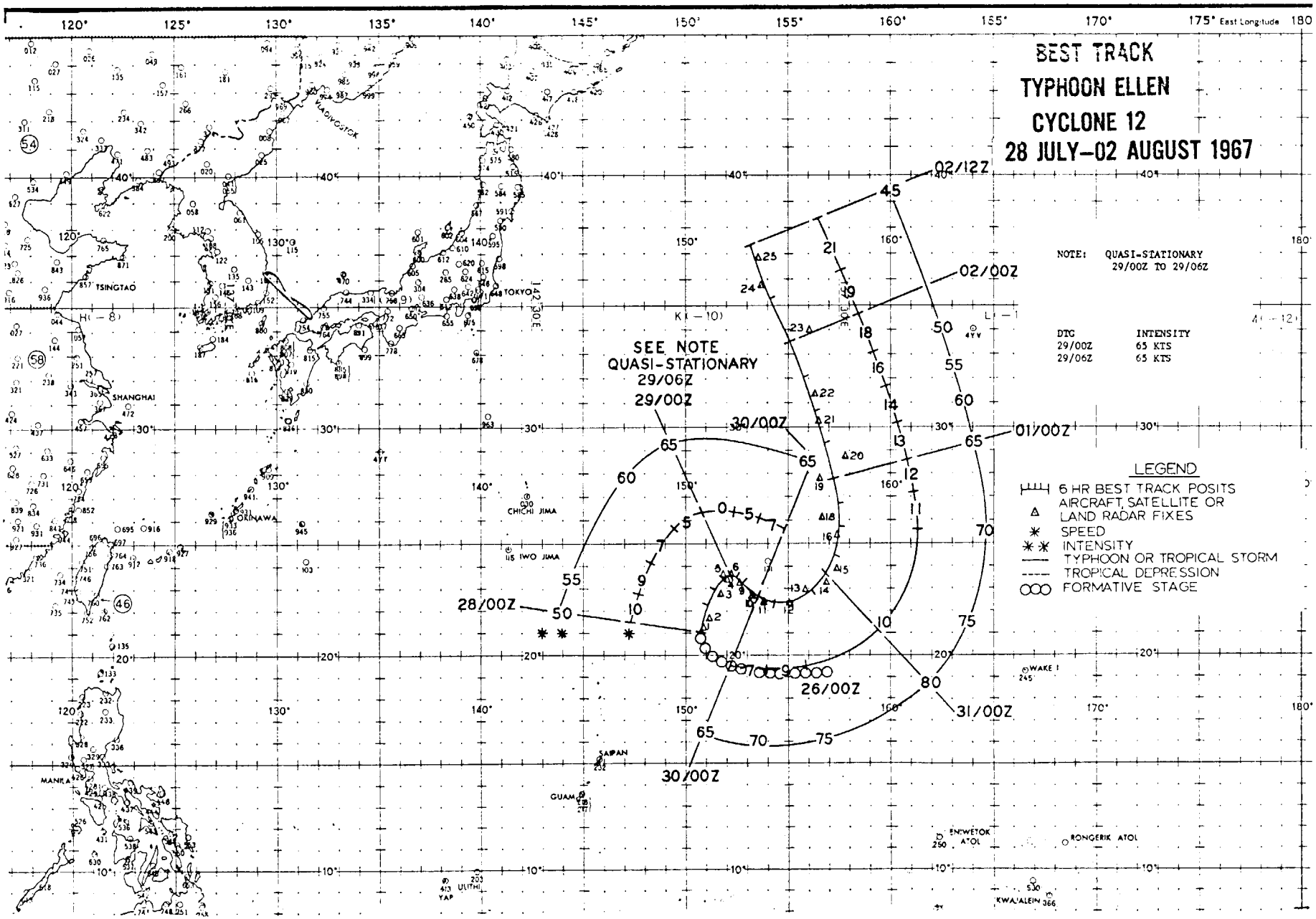
B. INITIAL SURFACE VORTEX

1. EMBEDDED VORTEX AT 260000Z
2. SURFACE PRESSURE LESS THAN 1006MB

C. 200MB FLOW ABOVE SURFACE VORTEX

1. INITIAL - SOUTH
2. UPON REACHING TYPHOON INTENSITY - SOUTH

III. FINAL DISPOSITION - BECAME EXTRATROPICAL

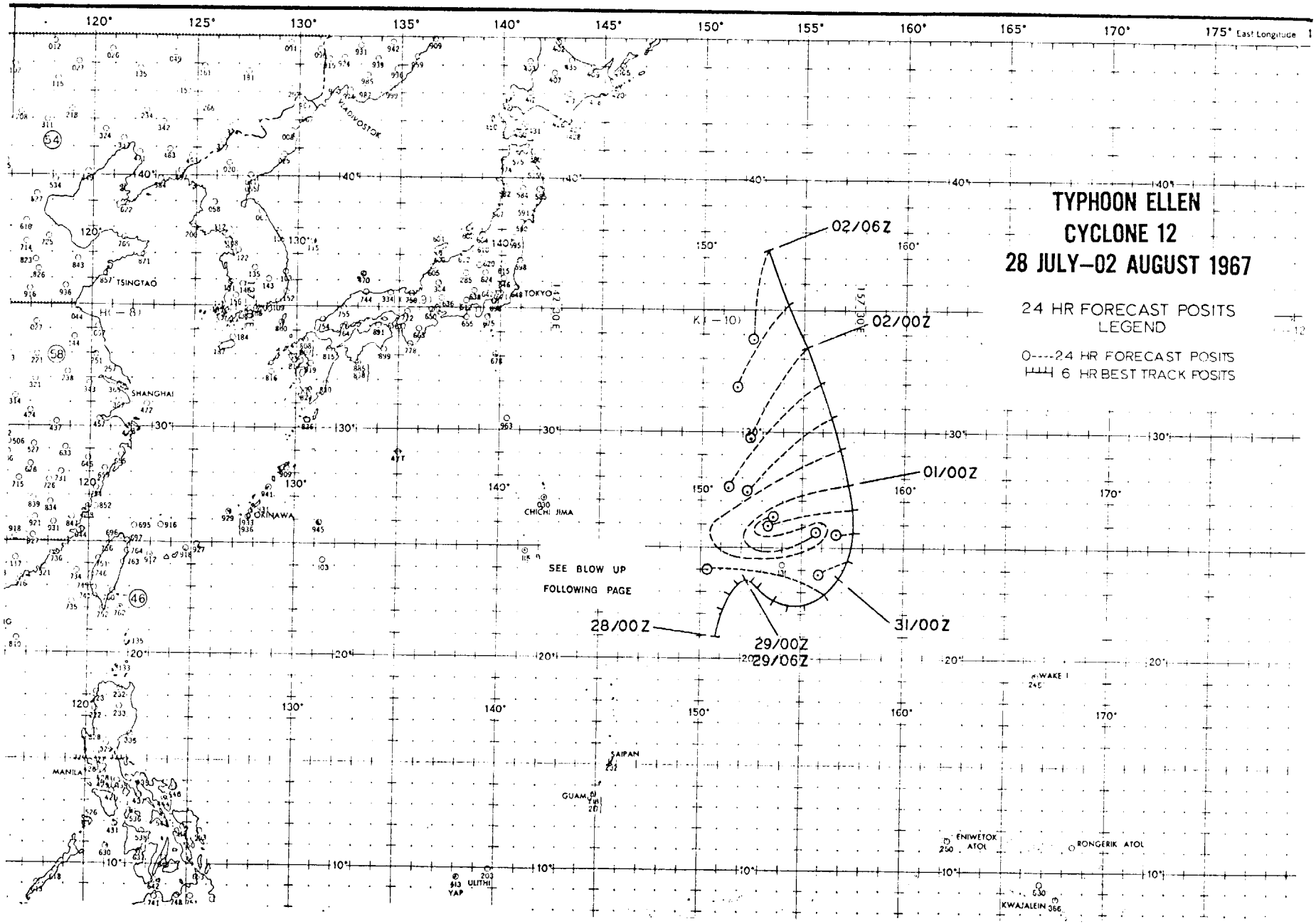

BEST TRACK
TYPHOON ELLEN
CYCLONE 12
28 JULY–02 AUGUST 1967
NOTE: QUASI-STATIONARY 29/00Z TO 29/06Z
DTG INTENSITY
29/00Z 65 KTS
29/06Z 65 KTS
SEE NOTE
QUASI-STATIONARY
29/06Z
29/00Z
30/00Z
02/12Z
02/00Z
01/00Z
28/00Z
26/00Z
31/00Z
30/00Z
LEGEND
6 HR BEST TRACK POSITS
AIRCRAFT, SATELLITE OR LAND RADAR FIXES
SPEED
INTENSITY
TYPHOON OR TROPICAL STORM
TROPICAL DEPRESSION
FORMATIVE STAGE
175° East Longitude
VLADIVOSTOK
TSINGTAO
TOKYO
SHANGHAI
OKINAWA
CHICHI JIMA
IWO JIMA
SAIPAN
GUAM
MANILA
WAKE I
ENIWETOK ATOL
RONGERIK ATOL
KWAJALEIN
YAP
ULITHI

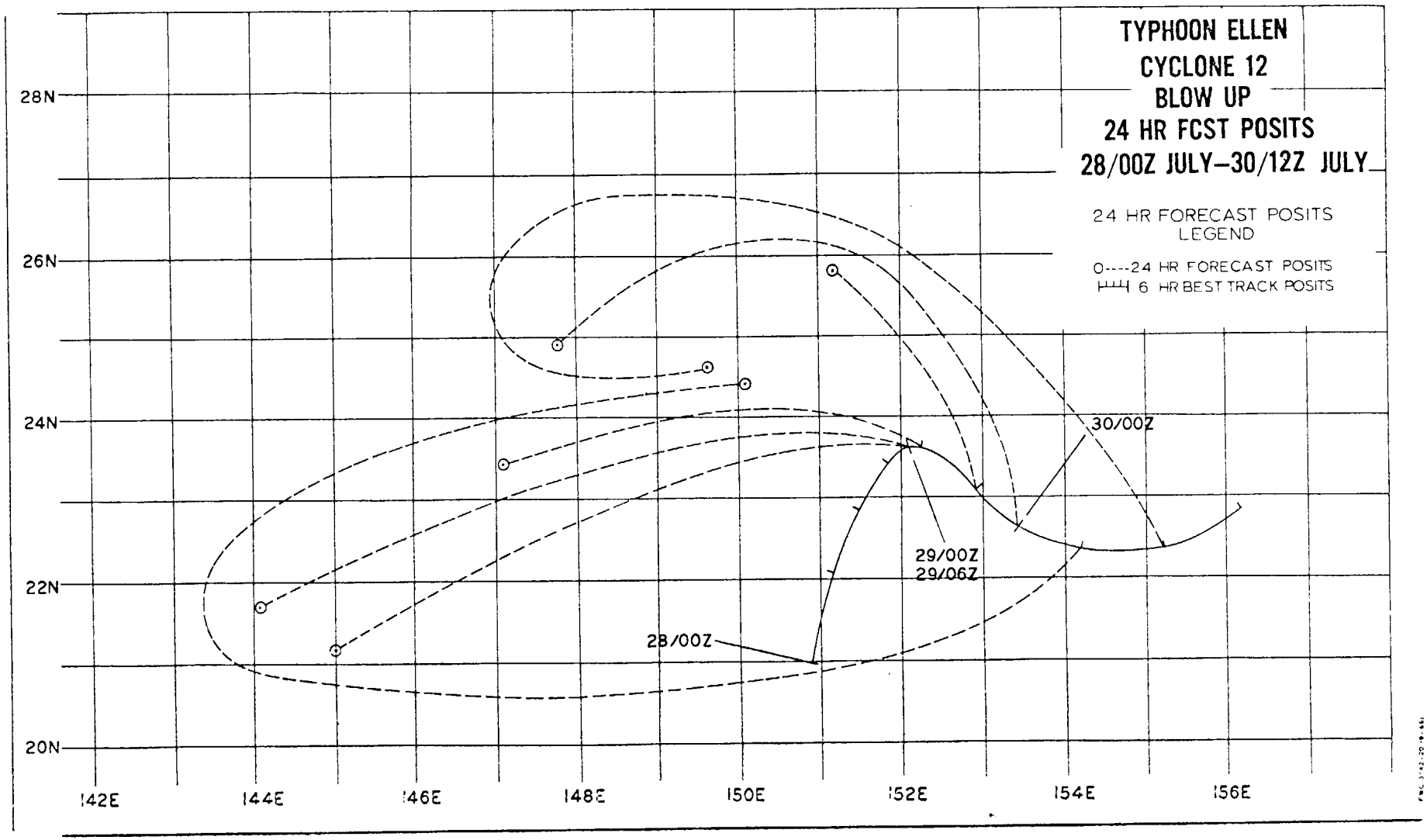
EYE FIXES CYCLONE 12

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	EYE FORM	ORIEN-TATION	EYE DIA	THKNS WALL CLOUD
1	280130Z	21.2N 150.9E	54-P-L--		---	050	---	---	--/--	----			--
2	280400Z	21.6N 151.1E	54-P-P05	0460M	050	050	984	---	--/--	CIRC	----	20	--
3	281115Z	22.7N 151.6E	VW-P-P02	0350M	---	050	988	---	--/--	ELIP	NW-SE	38X20	--
4	281615Z	23.4N 152.0E	VW-R-P03	0400M	056	065	988	---	--/--	ELIP	N-S	30X25	--
5	282200Z	23.6N 151.8E	54-P-P08	700MB	038	045	985	2972	14/--	CIRC	----	12	--
6	290400Z	23.6N 152.1E	54-P-P03	700MB	035	045	983	2941	15/--	----			--
7	290925Z	23.7N 152.2E	VW-P-P05	0340M	---	045	986	---	--/--	CIRC	----	20	--
8	291230Z	23.5N 152.3E	VW-R-P--	0550M	---	---	---	---	--/--	----			--
9	291525Z	23.3N 152.7E	VW-P-P05	0240M	064	055	983	---	--/--	CIRC	----	18	--
10	292200Z	22.7N 153.2E	54-P-P05	700MB	058	060	983	2929	17/--	----			F.B.
11	300400Z	22.4N 153.8E	54-P-P03	700MB	055	060	978	2943	17/--	----			F.B.
12	300931Z	22.3N 155.0E	VW-P-P05	0300M	---	060	976	---	--/--	CIRC	----	12	--
13	301515Z	22.9N 155.8E	VW-P-P02	700MB	---	---	975	2869	16/--	CIRC	----	21	06
14	302207Z	23.2N 156.9E	54-P-P10	700MB	060	065	971	2832	15/--	CIRC	----	10	--
15	310325Z	23.9N 157.3E	54-P-P04	700MB	065	070	969	2832	16/--	CIRC	----	15	15
16	310509Z	25.0N 157.0E	SLTLS	STG X	DIA 05	BNDS 1							
17	311021Z	25.4N 157.4E	VW-P-P02	0260M	045	030	977	---	--/--	ELIP	NE-SW	50X20	12
18	311554Z	26.1N 156.6E	VW-P-P05	700MB	070	040	973	2914	--/--	ELIP	NW-SE	40X15	--
19	010000Z	27.8N 156.5E	54-P-P05	700MB	040	040	975	2911	22/--	CIRC	----	08	--
20	010322Z	28.7N 157.8E	54-P-P05	700MB	040	045	978	2914	19/--	----			F.B.
21	011025Z	30.2N 156.5E	VW-P-P05	0310M	038	035	978	---	--/--	----			F.B.
22	011526Z	31.4N 156.2E	VW-P-P05	0310M	050	038	979	---	--/--	----			F.B.
23	012106Z	34.0N 156.0E	SLTLS	STG -	DIA --	BNDS -							
24	020851Z	36.7N 153.6E	VW-P-F01	0230M	---	040	982	---	--/--	----			--

EYE FIXES CYCLONE 12

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	EYE FORM	ORIEN-TATION	EYE DIA	THKNS WALL CLOUD
25	021000Z	36.8N 153.4E	VW-R-F01	0410M	066	050	985	---	--/--	----			F.B.


TYPHOON ELLEN
CYCLONE 12
28 JULY–02 AUGUST 1967
24 HR FORECAST POSITS
LEGEND
0----24 HR FORECAST POSITS
6 HR BEST TRACK POSITS
02/06Z
02/00Z
01/00Z
31/00Z
29/00Z
29/06Z
28/00Z
SEE BLOW UP
FOLLOWING PAGE
175° East Longitude
VLADIVOSTOK
TSINGTAO
TOKYO
SHANGHAI
OKINAWA
CHICHI JIMA
MANILA
SAIPAN
GUAM
YAP
ULITHI
WAKE I
ENIWETOK ATOL
RONGERIK ATOL
KWAJALEIN


TYPHOON ELLEN
CYCLONE 12
BLOW UP
24 HR FCST POSITS
28/00Z JULY–30/12Z JULY
24 HR FORECAST POSITS
LEGEND
O----24 HR FORECAST POSITS
6 HR BEST TRACK POSITS
28N
26N
24N
22N
20N
142E
144E
146E
148E
150E
152E
154E
156E
30/00Z
29/00Z
29/06Z
28/00Z

TROPICAL CYCLONE 12 -- 07/28/0000Z TO 08/02/1200Z

POSITION AND FORECAST VERIFICATION DATA

DTG	STORM POSITION LAT.	LONG.	24 HR. ERROR DEG. DIST.	48 HR. ERROR DEG. DIST.	72 HR. ERROR DEG. DIST.
280000Z	21.0N	150.9E	--------	--------	--------
280600Z	22.1N	151.2E	--------	--------	--------
281200Z	22.8N	151.5E	--------	--------	--------
281800Z	23.4N	151.9E	--------	--------	--------
290000Z	23.6N	152.1E	250-0414	--------	--------
290600Z	23.6N	152.1E	255-0456	--------	--------
291200Z	23.6N	152.3E	268-0282	--------	--------
291800Z	23.1N	152.9E	330-0180	--------	--------
300000Z	22.6N	153.4E	294-0330	265-0816	--------
300600Z	22.3N	154.2E	299-0252	268-0852	--------
301200Z	22.3N	155.2E	294-0330	277-0684	--------
301800Z	22.8N	156.2E	282-0330	289-0588	--------
310000Z	23.5N	157.0E	258-0210	280-0804	--------
310600Z	24.4N	157.4E	252-0090	275-0624	263-1320
311200Z	25.6N	157.5E	262-0042	272-0696	--------
311800Z	26.7N	157.5E	260-0228	263-0606	270-0900
010000Z	27.8N	157.3E	214-0138	234-0330	--------
010600Z	29.2N	157.0E	226-0258	233-0342	264-0786
011200Z	30.6N	156.5E	229-0294	224-0372	--------
011800Z	32.0N	155.9E	223-0360	233-0504	248-0750
020000Z	33.5N	155.3E	215-0264	211-0486	--------
020600Z	35.2N	154.1E	212-0228	215-0594	217-0636
021200Z	37.3N	153.3E	191-0204	212-0534	--------

AVERAGE 24 HOUR ERROR - 0257 MI.
AVERAGE 48 HOUR ERROR - 0588 MI.
AVERAGE 72 HOUR ERROR - 0878 MI.