TROPICAL CYCLONE 37 - 10/31/0000Z TO 11/08/0000Z

I. DATA

A. STATISTICS

1. NUMBER OF WARNINGS ISSUED - 33
2. NUMBER OF WARNINGS WITH TYPHOON INTENSITY - 18
3. TOTAL DISTANCE TRAVELED DURING TROPICAL WARNING PERIOD - 2184 MI

B. CHARACTERISTICS AS A TYPHOON

1. MINIMUM OBSERVED SLP - 908MBS AT 022200Z
2. MINIMUM OBSERVED 700MB HEIGHT - 5204M. AT 021520Z
3. MAXIMUM SURFACE WIND - 140 KTS (FROM BEST TRACK)
4. MAXIMUM RADIUS OF SURFACE CIRCULATION - 550 MI

II. DEVELOPMENT

A. INITIAL IMPETUS - 200MB ANTICYCLONE OVER THE SURFACE CYCLONE

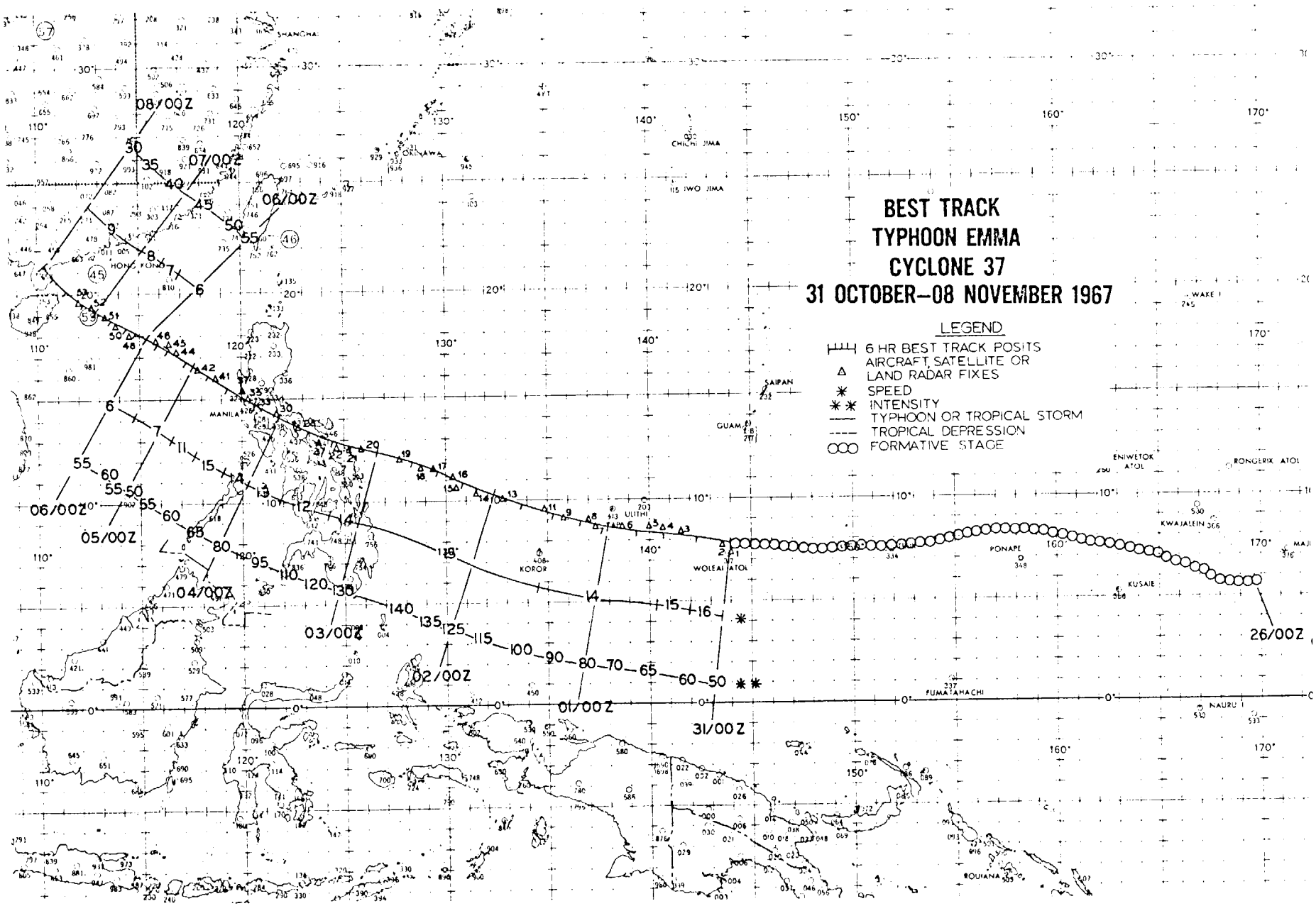
B. INITIAL SURFACE VORTEX

1. JUNCTION VORTEX AT 260000Z
2. SURFACE PRESSURE LESS THAN 1008MB

C. 200MB FLOW ABOVE SURFACE VORTEX

1. INITIAL - SOUTHEAST
2. UPON REACHING TYPHOON INTENSITY - NORTH

III. FINAL DISPOSITION - DISSIPATED OVER LAND


BEST TRACK
TYPHOON EMMA
CYCLONE 37
31 OCTOBER–08 NOVEMBER 1967
LEGEND
6 HR BEST TRACK POSITS
AIRCRAFT, SATELLITE OR LAND RADAR FIXES
SPEED
INTENSITY
TYPHOON OR TROPICAL STORM
TROPICAL DEPRESSION
FORMATIVE STAGE
08/00Z
07/00Z
06/00Z
05/00Z
04/00Z
03/00Z
02/00Z
01/00Z
31/00Z
26/00Z
SHANGHAI
OKINAWA
CHICHI JIMA
IWO JIMA
HONG KONG
MANILA
SAIPAN
GUAM
ULITHI
KOROR
WOLEAI ATOL
ENIWETOK ATOL
RONGERIK ATOL
KWAJALEIN
PONAPE
KUSAIE
WAKE I
FUMATAMACHI
NAURU I
ROUIANA

EYE FIXES CYCLONE 37

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	302150Z	07.5N 144.0E	SLTLS	STG -	DIA --	BNDS -							
2	310100Z	07.8N 143.6E	VW-P-P03	0230M	055	050	991	---	--/--	CIRC	----	20	03
3	310920Z	08.4N 141.5E	VW-P-P05	0290M	050	045	990	---	--/--	CIRC	----	25	15
4	311230Z	08.5N 140.7E	VW-R-P--		---	---	---	---	--/--	----			--
5	311545Z	08.6N 140.0E	VW-P-P05	0300M	060	060	983	2980	11/--	CIRC	----	25	10
6	312131Z	08.6N 138.6E	54-P-P03	700MB	060	065	975	2883	15/--	CIRC	----	25	--
7	010315Z	08.7N 137.3E	54-P-P03	700MB	080	075	978	2847	15/--	CIRC	----	30	--
8	010346Z	09.0N 137.0E	SLTLS	STG X	DIA 06	BNDS 2							
9	010900Z	09.0N 136.1E	VW-R-P--	0380M	---	---	---	---	--/--	CIRC	----	35	--
10	010950Z	09.0N 135.7E	VW-P-P02	0370M	100	100	971	---	--/--	CIRC	----	30	--
11	011400Z	09.5N 134.9E	VW-R-P--	700MB	---	---	---	---	--/--	----			--
12	011520Z	09.8N 134.7E	VW-P-P02	700MB	085	---	960	2743	16/--	CIRC	----	20	--
13	012230Z	10.0N 132.9E	54-P-P05	700MB	105	080	939	2585	20/--	CIRC	----	20	--
14	020307Z	10.3N 131.4E	54-P-P02	700MB	095	130	---	2521	23/--	CIRC	----	25	--
15	020900Z	10.6N 130.5E	VW-R-P--	0330M	---	---	---	---	--/--	----			--
16	021015Z	11.1N 130.3E	VW-P-P10	700MB	095	100	942	2603	22/13	CIRC	----	16	05
17	021345Z	11.5N 129.2E	VW-R-P--	700MB	---	---	---	---	--/--	----			--
18	021520Z	11.6N 128.8E	VW-P-P10	700MB	095	---	916	2204	24/--	CIRC	----	14	05
19	022200Z	12.0N 127.7E	54-P-P02	700MB	112	100	908	2252	24/--	ELIP	N-S	20X15	--
20	030330Z	12.5N 125.8E	54-P-P05	700MB	110	100	938	2576	20/--	CIRC	----	15	--
21	030800Z	12.6N 125.1E	LND RDR		---	---	---	---	--/--	----			--
22	030900Z	12.6N 124.9E	LND RDR		---	---	---	---	--/--	----			--
23	031000Z	12.7N 124.5E	VW-R-P--	700MB	---	---	---	---	--/--	----			--
24	031000Z	12.6N 124.8E	LND RDR		---	---	---	---	--/--	----			--

EYE FIXES CYCLONE 37

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	031130Z	12.8N 124.4E	VW-R-P01	700MB	090	---	956	2695	15/15	CIRC	----	12	08
26	031300Z	12.8N 124.2E	VW-R-P02	700MB	---	---	---	---	--/--	----			--
27	031530Z	12.9N 123.9E	VW-R-P02	700MB	---	---	---	---	--/--	CIRC	----	18	05
28	032100Z	13.7N 122.7E	LND RDR		---	---	---	---	--/--	----			--
29	032215Z	13.9N 122.4E	54-P-P02	500MB	080	---	---	---	--/--	----			--
30	040117Z	14.3N 121.7E	LND RDR		---	---	---	---	--/--	----			--
31	040325Z	14.3N 121.3E	54-P-P03	500MB	075	---	---	---	--/--	----			--
32	040400Z	14.1N 121.3E	LND RDR		---	---	---	---	--/--	----			--
33	040630Z	14.8N 120.6E	LND RDR		---	---	---	---	--/--	----			--
34	040730Z	14.9N 120.5E	LND RDR		---	---	---	---	--/--	----			--
35	040830Z	15.0N 120.2E	LND RDR		---	---	---	---	--/--	----			--
36	040900Z	15.0N 120.2E	LND RDR		---	---	---	---	--/--	----			--
37	040930Z	15.3N 120.0E	LND RDR		---	---	---	---	--/--	----			--
38	040947Z	15.2N 119.9E	LND RDR		---	---	---	---	--/--	----			--
39	041004Z	15.5N 119.9E	VW-R-P05	2300M	035	045	---	---	--/--	CIRC	----	20	--
40	041100Z	15.5N 119.6E	LND RDR		---	---	---	---	--/--	----			--
41	041531Z	16.0N 118.8E	VW-R-P05	700MB	070	---	---	---	--/--	CIRC	----	18	--
42	042219Z	16.2N 117.7E	54-P-P02	700MB	057	050	980	2919	14/--	----			--
43	050300Z	16.2N 117.2E	54-P-P02	700MB	047	055	983	2932	12/--	----			--
44	050935Z	17.1N 116.8E	VW-P-P03	0310M	070	070	982	---	--/--	CIRC	----	10	--
45	051615Z	17.6N 116.4E	VW-R-P03	0440M	056	035	---	---	--/--	CIRC	----	12	--
46	052101Z	17.8N 115.9E	VW-R-P02	0400M	073	045	---	---	--/--	CIRC	----	22	--
47	060420Z	17.9N 115.1E	54-P-P02	700MB	070	040	976	2899	14/--	CIRC	----	30	--
48	060413Z	18.0N 114.5E	SLTLS	STG X	DIA 02	BNDS 4							

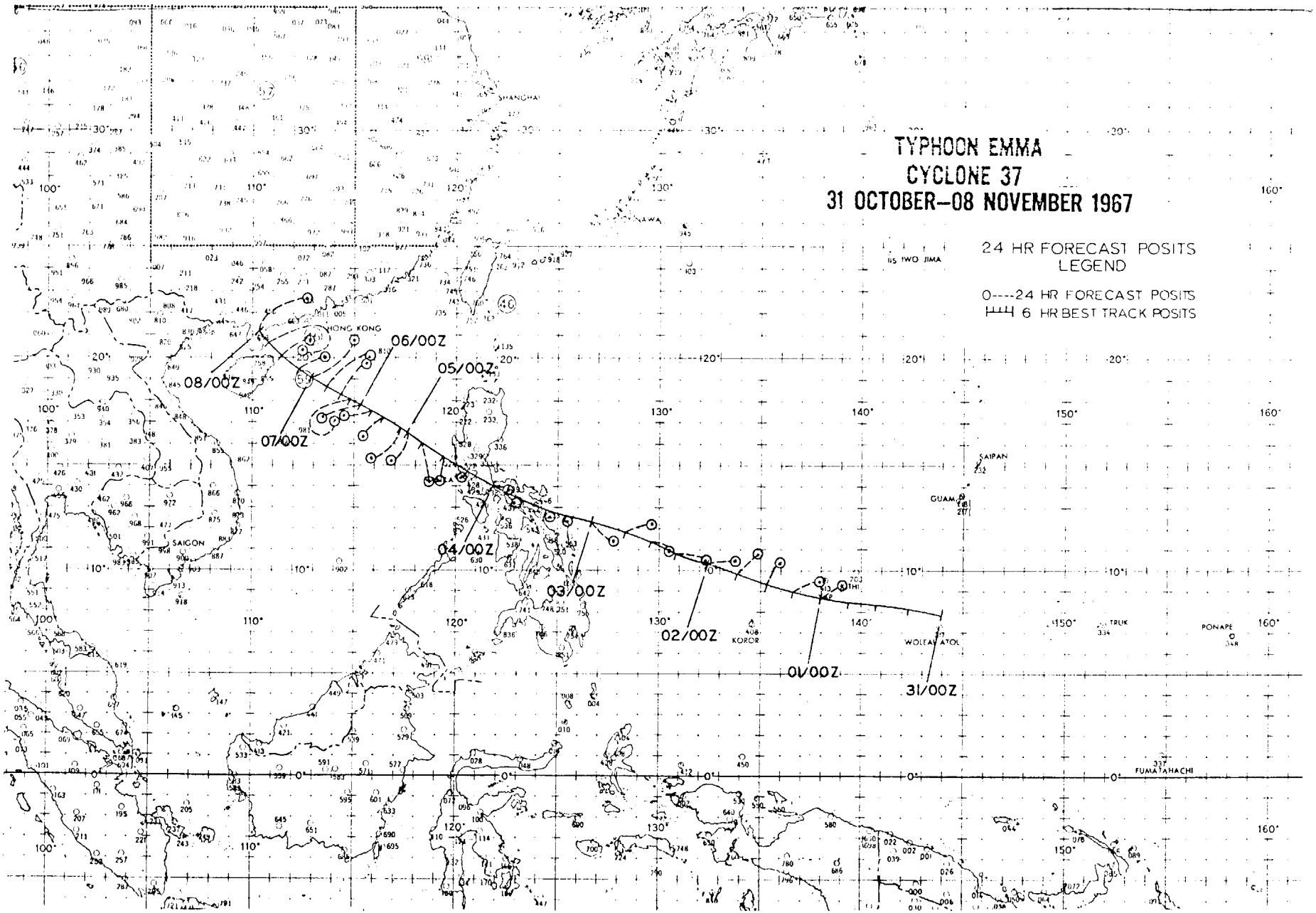
EYE FIXES CYCLONE 37

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
49	060907Z	18.2N 114.5E	54-P-P02	700MB	080	050	976	2862	14/--	CIRC	----	30	--
50	061628Z	18.4N 113.9E	VW-P-P10	700MB	090	---	---	2904	13/--	ELIP	NE-SW	45X25	03
51	062135Z	19.0N 113.2E	VW-R-P10	700MB	060	---	---	---	--/--	ELIP	NE-SW	30X15	--
52	070400Z	19.4N 112.5E	54-P-P10	700MB	085	---	---	2862	13/--	CIRC	----	30	--
53	070503Z	19.5N 112.0E	SLTLS	STG X	DIA 03	BNDS 4							

TROPICAL CYCLONE 37 -- 10/31/0000Z TO 11/06/0000Z
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.
310000Z	07.8N	143.9E	--------	--------	--------
310600Z	08.1N	142.2E	--------	--------	--------
311200Z	08.3N	140.7E	--------	--------	--------
311800Z	08.4N	139.3E	--------	--------	--------
010000Z	08.6N	137.9E	064-0066	--------	--------
010600Z	09.0N	136.6E	072-0072	--------	--------
011200Z	09.3N	135.2E	031-0066	--------	--------
011800Z	09.7N	133.7E	046-0084	--------	--------
020000Z	10.2N	132.3E	086-0072	084-0156	--------
020600Z	10.7N	130.9E	109-0066	082-0168	--------
021200Z	11.3N	129.5E	113-0054	070-0132	--------
021800Z	11.8N	128.1E	075-0084	073-0162	--------
030000Z	12.1N	126.6E	120-0066	087-0204	--------
030600Z	12.6N	125.3E	180-0018	099-0186	085-0270
031200Z	12.9N	124.2E	146-0018	106-0102	--------
031800Z	13.4N	123.1E	252-0018	096-0108	069-0222
040000Z	14.0N	121.9E	111-0030	126-0108	--------
040600Z	14.7N	120.6E	234-0030	174-0060	100-0252
041200Z	15.5N	119.3E	189-0084	166-0102	--------
041800Z	16.1N	118.3E	171-0120	193-0108	131-0204
050000Z	16.4N	117.6E	209-0084	176-0096	--------
050600Z	16.7N	117.1E	219-0102	231-0132	191-0132
051200Z	17.2N	116.4E	229-0072	223-0192	--------
051800Z	17.4N	115.9E	270-0090	205-0168	228-0228
060000Z	17.7N	115.4E	259-0114	241-0228	--------
060600Z	18.0N	114.8E	218-0066	237-0228	244-0276
061200Z	18.3N	114.3E	037-0108	248-0174	--------
061800Z	18.7N	113.7E	053-0126	269-0192	223-0264
070000Z	19.2N	113.0E	049-0144	257-0204	--------
070600Z	19.6N	112.3E	071-0066	222-0126	233-0354
071200Z	20.1N	111.5E	058-0078	051-0396	--------
071800Z	20.7N	110.8E	102-0084	056-0378	257-0258

AVERAGE 24 HOUR ERROR - 0074 MI.
AVERAGE 48 HOUR ERROR - 0171 MI.
AVERAGE 72 HOUR ERROR - 0246 MI.


TYPHOON EMMA
CYCLONE 37
31 OCTOBER–08 NOVEMBER 1967
24 HR FORECAST POSITS
LEGEND
0----24 HR FORECAST POSITS
6 HR BEST TRACK POSITS
08/00Z
07/00Z
06/00Z
05/00Z
04/00Z
03/00Z
02/00Z
01/00Z
31/00Z
HONG KONG
SAIGON
SHANGHAI
IWO JIMA
SAIPAN
GUAM
KOROR
WOLEAI ATOL
TRUK
PONAPE
FUMATAHACHI