TROPICAL CYCLONE 40 - 11/17/0000Z TO 11/24/0000Z

I. DATA

A. STATISTICS

1. NUMBER OF WARNINGS ISSUED - 29
2. NUMBER OF WARNINGS WITH TYPHOON INTENSITY - 15
3. TOTAL DISTANCE TRAVELED DURING TROPICAL WARNING PERIOD - 2028 MI

B. CHARACTERISTICS AS A TYPHOON

1. MINIMUM OBSERVED SLP - 953MBS AT 202100Z
2. MINIMUM OBSERVED 700MB HEIGHT - 2691M. AT 202100Z
3. MAXIMUM SURFACE WIND - 110 KTS (FROM BEST TRACK)
4. MAXIMUM RADIUS OF SURFACE CIRCULATION - 275 MI

II. DEVELOPMENT

A. INITIAL IMPETUS - LOW LEVEL SURGE INTO CYCLONIC CIRCULATION FROM THE SOUTH WITH SUBSEQUENT DIVERGENCE AT 200MB LEVEL

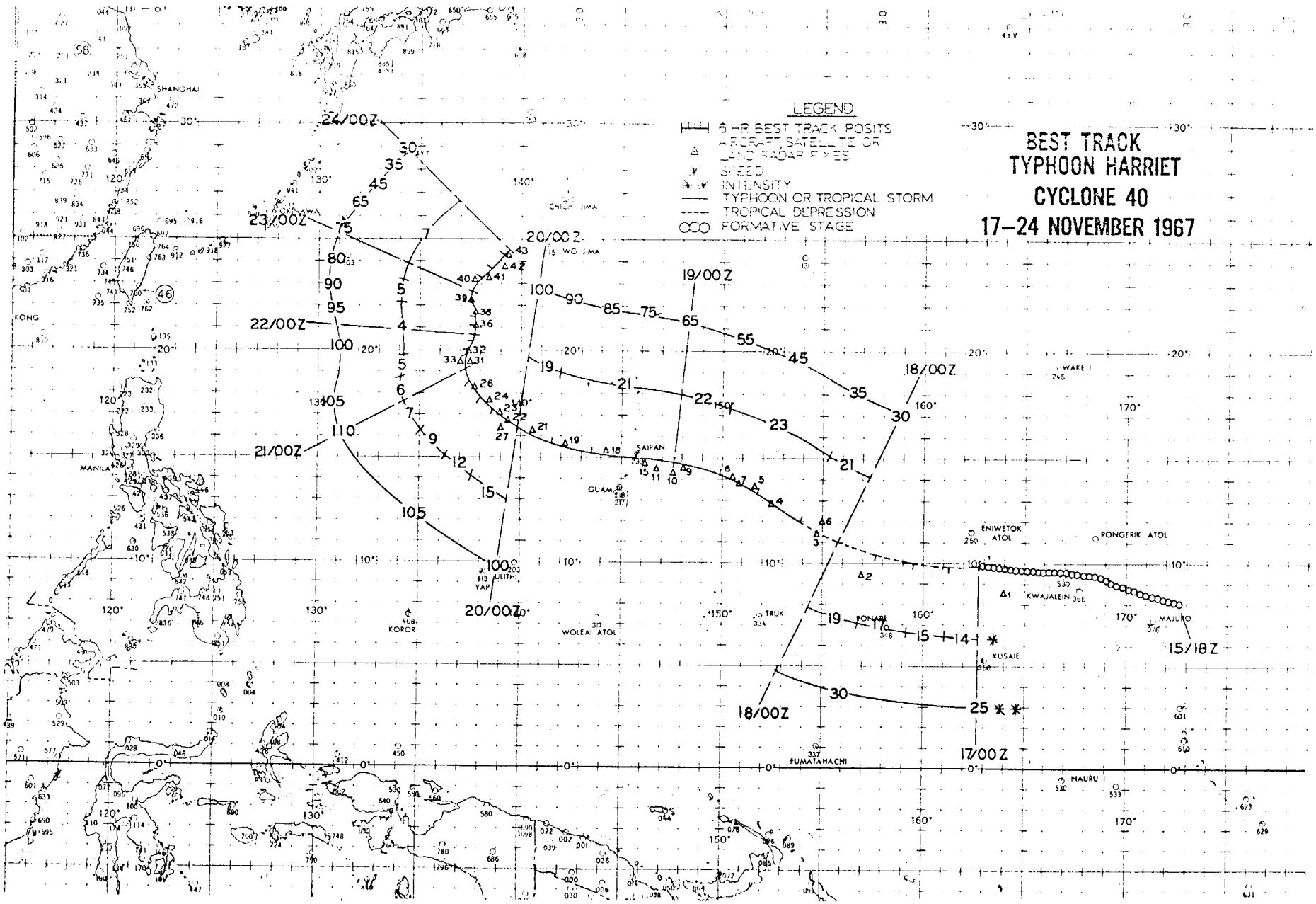
B. INITIAL SURFACE VORTEX

1. JUNCTION VORTEX AT 151800Z
2. SURFACE PRESSURE LESS THAN 1007MB

C. 200MB FLOW ABOVE SURFACE VORTEX

1. INITIAL - FAST
2. UPON REACHING TYPHOON INTENSITY - NORTHEAST

III. FINAL DISPOSITION - DISSIPATED [illegible] WATER


BEST TRACK
TYPHOON HARRIET
CYCLONE 40
17–24 NOVEMBER 1967
LEGEND
6 HR BEST TRACK POSITS
AIRCRAFT, SATELLITE OR LAND RADAR FIXES
SPEED
INTENSITY
TYPHOON OR TROPICAL STORM
TROPICAL DEPRESSION
FORMATIVE STAGE
24/00Z
23/00Z
22/00Z
21/00Z
20/00Z
19/00Z
18/00Z
17/00Z
15/18Z
SHANGHAI
MANILA
SAIPAN
GUAM
YAP
ULITHI
KOROR
WOLEAI ATOL
TRUK
PONAPE
KUSAIE
FUMATAHACHI
ENIWETOK ATOL
RONGERIK ATOL
KWAJALEIN
MAJURO
NAURU
WAKE I

EYE FIXES CYCLONE 40

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	170155Z	08.5N 164.0E	SLTLS	STG C	DIA --	BNDS -							
2	172113Z	09.5N 157.0E	SLTLS	STG -	DIA --	BNDS -							
3	180245Z	12.0N 155.0E	SLTLS	STG C	DIA 02	BNDS -							
4	180316Z	11.4N 154.8E	54-P-P03	0400M	026	025	004	---	--/--	----			--
5	180915Z	12.8N 152.2E	VW-P-P10	0320M	---	045	992	---	--/--	CIRC	----	10	05
6	181300Z	13.6N 151.6E	VW-R-P10	0810M	---	---	---	---	--/--	----			--
7	181521Z	13.9N 150.9E	VW-P-P05	0400M	---	050	982	---	--/--	ELIP	NE-SW	14X10	03
8	181815Z	14.1N 150.5E	VW-R-F08	0400M	---	---	---	---	--/--	ELIP	NW-SE	14X12	06
9	182245Z	14.5N 148.0E	54-P-P05	700MB	---	065	985	2954	12/--	CIRC	----	20	--
10	190015Z	14.3N 147.5E	LND RDR		---	---	---	---	--/--	----			--
11	190100Z	14.7N 146.8E	LND RDR		---	---	---	---	--/--	----			--
12	190100Z	14.7N 147.4E	54-P-P05	700MB	---	070	982	2920	13/--	CIRC	----	10	--
13	190200Z	14.7N 146.8E	LND RDR		---	---	---	---	--/--	----			--
14	190230Z	14.7N 146.6E	LND RDR		---	---	---	---	--/--	----			--
15	190336Z	15.0N 146.0E	SLTLS	STG C	DIA --	BNDS -							
16	190400Z	14.9N 146.1E	54-P-P01	700MB	068	070	978	2908	15/--	CIRC	----	10	--
17	190500Z	14.9N 145.7E	LND RDR		---	---	---	---	--/--	----			--
18	190600Z	15.0N 145.6E	LND RDR		---	---	---	---	--/--	----			--
19	191017Z	15.3N 144.1E	VW-P-P05	0240M	---	090	979	---	--/--	----			--
20	191601Z	15.7N 142.1E	VW-P-P05	700MB	---	---	970	2914	15/--	CIRC	----	18	04
21	192147Z	16.3N 140.6E	54-P-P02	700MB	085	075	963	2777	14/--	CIRC	----	20	--
22	200400Z	16.9N 139.4E	54-P-P01	700MB	082	080	977	2893	15/--	CIRC	----	25	--
23	200237Z	16.5N 139.0E	SLTLS	STG X	DIA 03	BNDS 4							
24	200500Z	17.1N 139.0E	54-R-P--		---	---	---	---	--/--	----			--

EYE FIXES CYCLONE 40

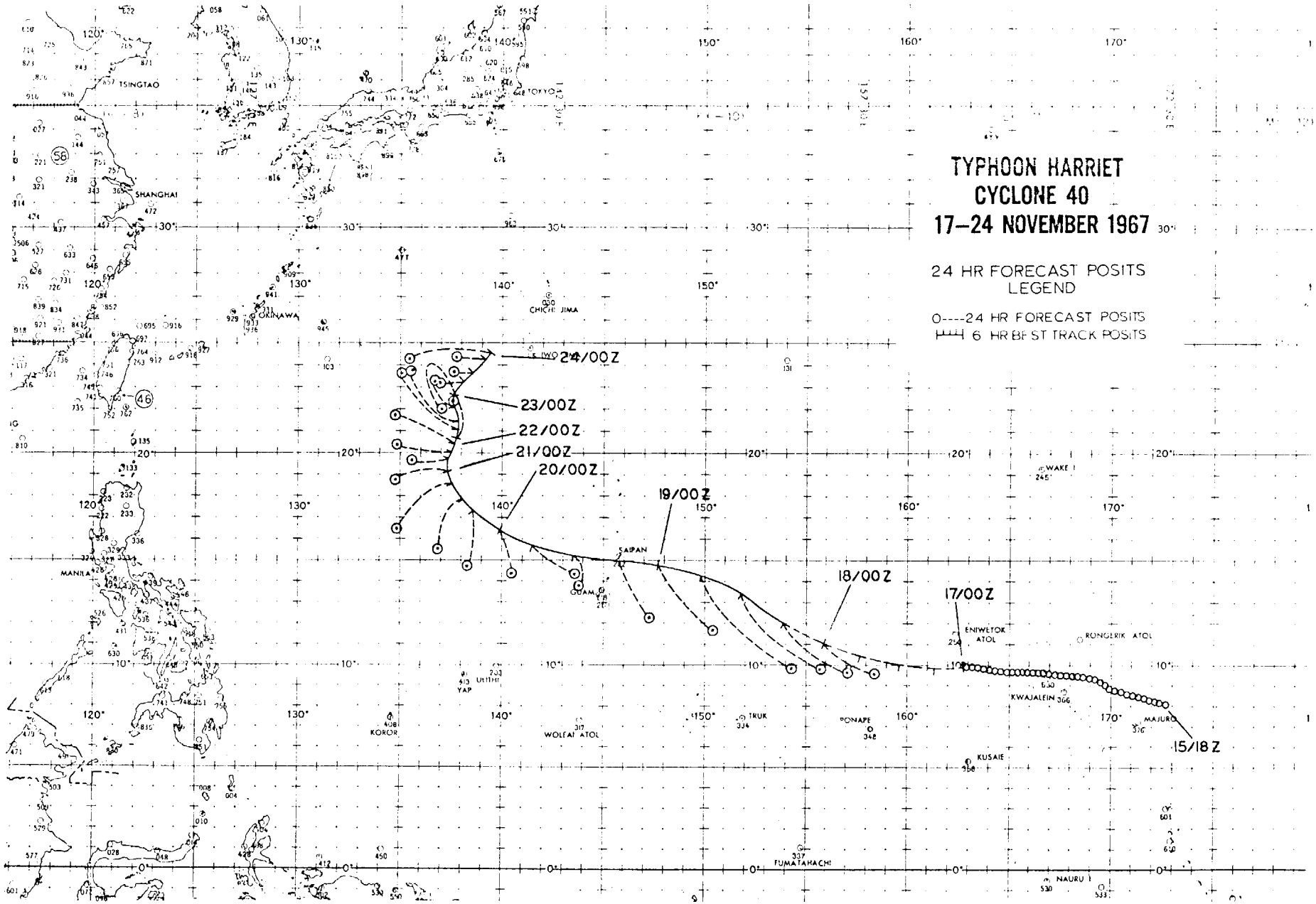
FIX NO.	TIME	POSIT	UNIT-METHOD -ACCY	FLT LVL	FLT LVL WND	OBS SFC WND	OBS MIN SLP	MIN 700MB HGT	FLT LVL TT/TD	EYE FORM	ORIEN-TATION	EYE DIA	THKNS WALL CLOUD
25	200930Z	17.8N 138.3E	VW-R-F15	0440M	---	---	---	---	--/--	----			--
26	200945Z	17.6N 138.5E	VW-R-P05	0440M	---	---	---	---	--/--	CIRC	----	15	--
27	201250Z	18.4N 137.8E	VW-R-P--	0380M	---	---	---	---	--/--	----			--
28	201500Z	18.2N 138.0E	ACFT RDR	6400M	---	---	---	---	--/--	----			--
29	201600Z	18.4N 137.6E	VW-R-P05	700MB	043	035	---	---	--/--	CIRC	----	12	05
30	202100Z	18.6N 137.4E	54-P-P03	700MB	040	100	953	2691	21/--	CIRC	----	15	--
31	210238Z	19.5N 137.3E	54-P-P03	700MB	103	110	953	2732	22/--	CIRC	----	10	05
32	210326Z	19.5N 137.0E	SLTLS	STG X	DIA 04	BNDS 4							
33	210900Z	20.0N 137.3E	VW-P-P05	0240M	---	080	967	---	--/--	CIRC	----	20	11
34	211500Z	20.3N 137.6E	VW-P-P05	0310M	072	080	972	---	--/--	CIRC	----	32	07
35	212200Z	20.2N 138.1E	54-P-P02	700MB	095	100	967	2847	22/--	CIRC	----	40	--
36	220400Z	21.1N 137.7E	54-P-P05	700MB	080	120	962	2841	18/--	CIRC	----	30	08
37	221030Z	21.3N 137.7E	VW-P-P03	700MB	---	---	980	2879	10/--	CIRC	----	25	08
38	221535Z	21.9N 137.8E	VW-R-P05	700MB	---	---	---	---	--/--	CIRC	----	25	05
39	222130Z	22.4N 137.5E	54-P-P05	700MB	085	080	974	2859	19/--	CIRC	----	30	--
40	230330Z	23.1N 137.7E	54-P-P05	700MB	100	120	975	2874	20/--	CIRC	----	30	--
41	230946Z	23.4N 138.3E	VW-P-P05	700MB	---	---	998	3048	21/--	ELIP	NE-SW	40X20	10
42	231624Z	23.9N 139.1E	VW-P-P05	0310M	035	---	002	3086	15/00	CIRC	----	30	08
43	232148Z	24.3N 139.3E	54-P-P02	700MB	027	030	006	3149	13/--	CIRC	----	40	--

TROPICAL CYCLONE 40 -- 11/17/0000Z TO 11/24/0000Z

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.
180600Z	11.9N	153.9E	127-0222	--------	--------
181200Z	13.3N	151.9E	133-0300	--------	--------
181800Z	14.2N	149.9E	135-0360	--------	--------
190000Z	14.5N	147.7E	140-0234	--------	--------
190600Z	15.0N	145.7E	155-0180	--------	--------
191200Z	15.4N	143.5E	172-0096	--------	--------
191800Z	15.9N	141.5E	130-0156	--------	--------
200000Z	16.6N	140.0E	172-0138	--------	--------
200600Z	17.3N	138.8E	191-0156	--------	--------
201200Z	17.9N	138.0E	202-0156	174-0234	--------
201800Z	18.6N	137.6E	230-0204	170-0252	--------
210000Z	19.1N	137.3E	258-0138	207-0282	--------
210600Z	19.7N	137.3E	270-0102	225-0360	--------
211200Z	20.0N	137.4E	274-0144	234-0402	--------
211800Z	20.3N	137.5E	299-0168	251-0468	209-0360
220000Z	20.7N	137.6E	352-0090	270-0402	--------
220600Z	21.0N	137.7E	038-0204	283-0264	246-0582
221200Z	21.4N	137.8E	046-0198	282-0282	--------
221800Z	22.0N	137.7E	073-0228	345-0186	264-0702
230000Z	22.8N	137.5E	101-0246	058-0354	--------
230600Z	23.3N	138.0E	089-0204	075-0636	324-0180
231200Z	23.5N	138.7E	090-0186	074-0630	--------
231800Z	24.1N	139.2E	087-0186	082-0642	044-0294

AVERAGE 24 HOUR ERROR - 0186 MI.
AVERAGE 48 HOUR ERROR - 0385 MI.
AVERAGE 72 HOUR ERROR - 0423 MI.


TYPHOON HARRIET
CYCLONE 40
17–24 NOVEMBER 1967
24 HR FORECAST POSITS
LEGEND
0----24 HR FORECAST POSITS
6 HR BEST TRACK POSITS
24/00Z
23/00Z
22/00Z
21/00Z
20/00Z
19/00Z
18/00Z
17/00Z
15/18Z
TSINGTAO
SHANGHAI
TOKYO
OKINAWA
CHICHI JIMA
MANILA
SAIPAN
GUAM
YAP
ULITHI
KOROR
WOLEAI ATOL
TRUK
PONAPE
KUSAIE
ENIWETOK ATOL
RONGERIK ATOL
KWAJALEIN
MAJURO
WAKE I
FUMATAHACHI
NAURU I