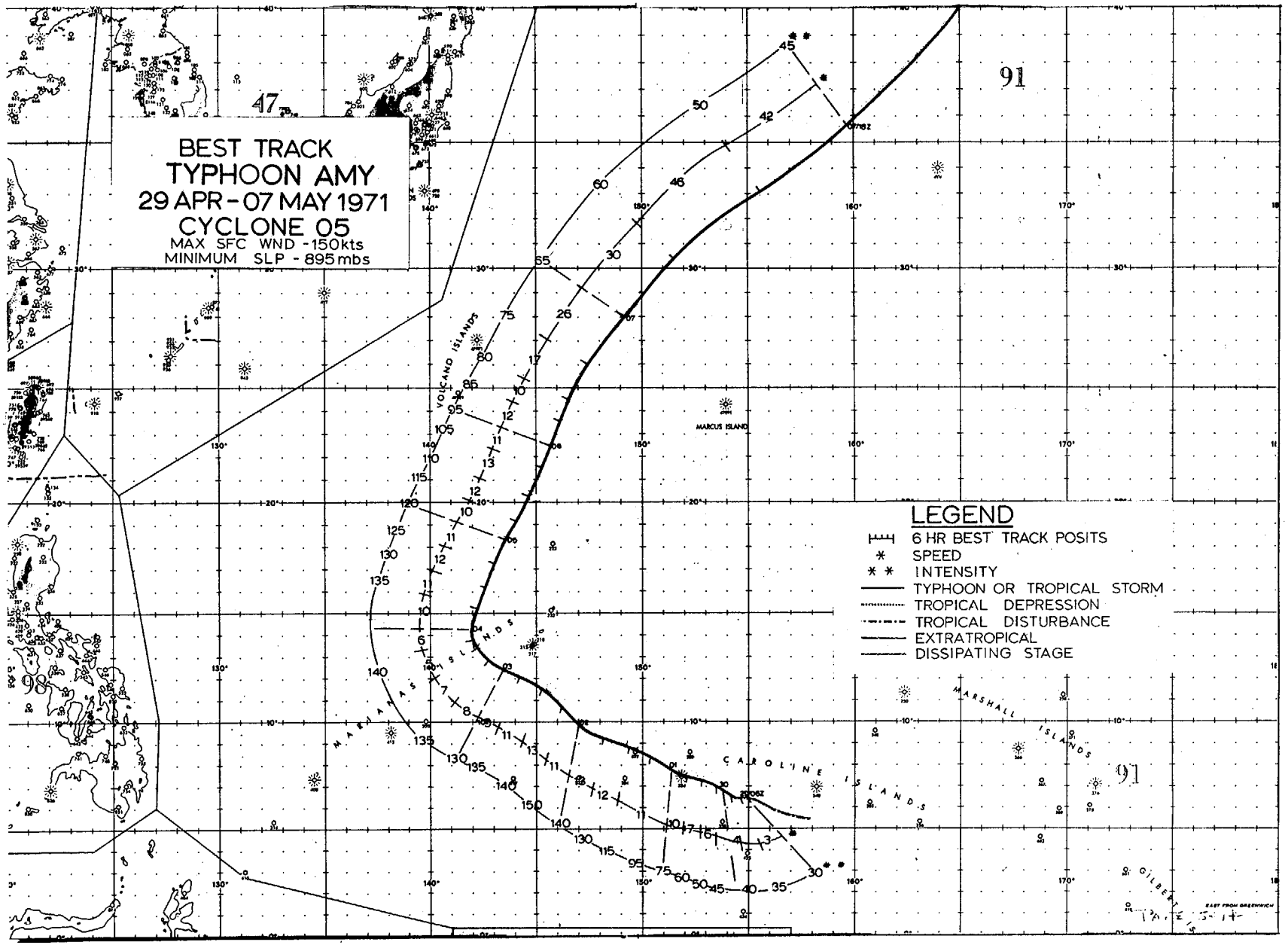
BEST TRACK
TYPHOON AMY
29 APR - 07 MAY 1971
CYCLONE 05
MAX SFC WND - 150kts
MINIMUM SLP - 895mbs
LEGEND
6 HR BEST TRACK POSITS
SPEED
INTENSITY
TYPHOON OR TROPICAL STORM
TROPICAL DEPRESSION
TROPICAL DISTURBANCE
EXTRATROPICAL
DISSIPATING STAGE
VOLCANO ISLANDS
MARIANAS ISLANDS
CAROLINE ISLANDS
MARSHALL ISLANDS
MARCUS ISLAND
GILBERT IS.
EAST FROM GREENWICH

As Wanda was emerging from the central Philippines, synoptic reports and NOAA-1 satellite pictures began to show the embryo of Amy becoming evident on the 26th in the Truk-Ponape area of the central Carolines. The system remained quasi-stationary for three days and, during the evening of the 29th, attained tropical storm strength. The storm commenced to drift toward the Truk Islands while aircraft reconnaissance during late afternoon of the 30th detected evidence of an eye on their radar screens (Figure 5-5).

By daybreak of the 1st, the eye crossed Moen in the Truk Islands with the weather station reporting 65 kt with peak gusts to 98 kt and a minimum pressure of 974.8 mb. The storm continued to intensify as it crossed Namonuito Atoll on a west-northwest track completely destroying the weather station on the atoll (Figure 5-6).

To illustrate the gradient which existed at this time, the last report from Namonuito on the 1st at 0700 GMT indicated a sustained wind of 45 kt from the northeast and sea level pressure of 989.7 mb. A reconnaissance aircraft in the eye of Amy at that time, some 30 n mi southeast of the station, measured 958 mb and maximum winds of 115 kt. In other words, a 32 mb difference existed between the two points or approximately 1 mb per mile.

There was 80% damage in the Truk district including the Hall Islands and Namonuito Atoll as well as equal damage to all structures in the Truk Islands with over 2,250 homes demolished and thousands made homeless (Figures 5-7 and 5-8). A total of 4.5 million dollars damage was sustained in the private and public sectors. One death and several injuries were reported. An additional one million dollars was lost in damage to crops, small businesses, boats, equipment, etc. Hardest hit of the Truk district was Namonuito Atoll. Inspection of damage at Namonuito depicted a scene as if the atoll had been struck by fire. Little foilage was left and bark was stripped from the few remaining trees.

On request of the High Commissioner of the Trust Territories, the Truk district was declared a disaster area by President Nixon.

After a 1000 GMT aircraft fix of the storm over Namonuito Atoll on the 1st, a period of 15 hours elapsed without an aircraft penetration of the eye. On the next penetration fix at 0100 GMT on the 2nd, with Amy positioned

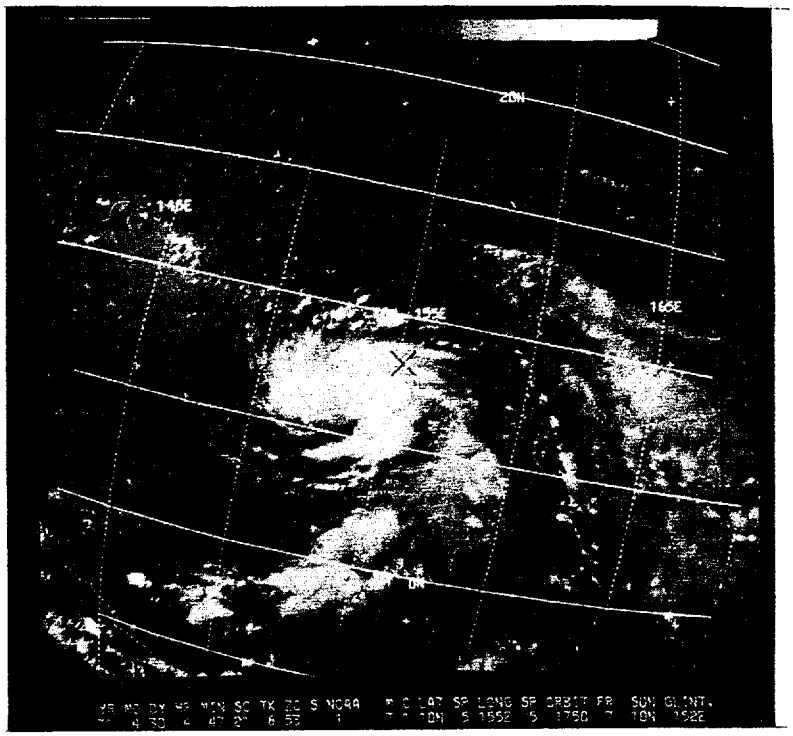

FIGURE 5-5. NOAA-1 PHOTO OF TROPICAL STORM AMY EAST OF TRUK ON 30 APRIL.

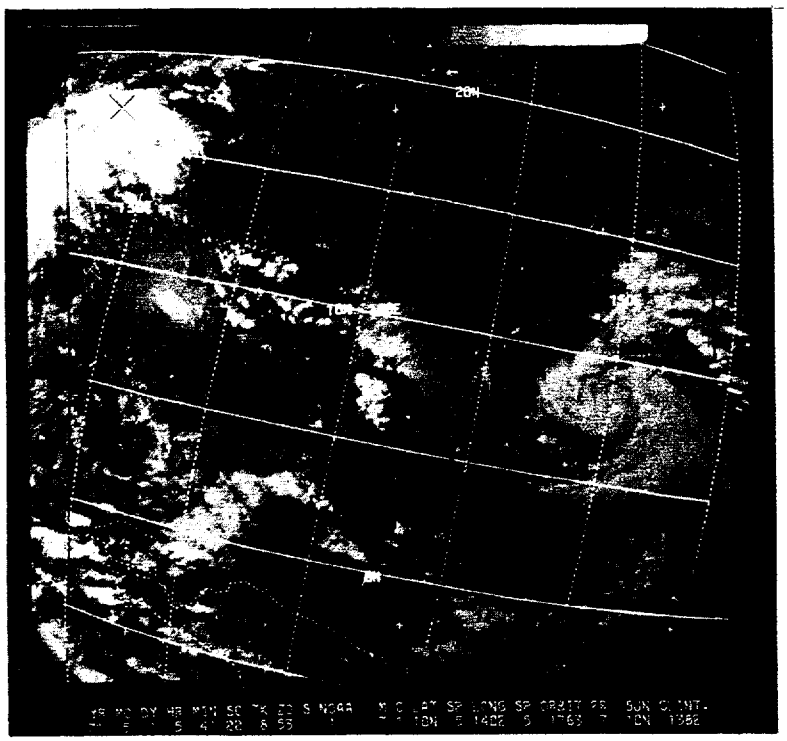

FIGURE 5-6. AMY, GAINING STRENGTH, AFTER PASSAGE OF THE TRUK ISLANDS AS SEEN BY NOAA-1 ON 1 MAY.

250 n mi southeast of Guam, a dropsonde reading indicated Amy had deepened explosively from 950 to 899 mb--a rate of 3.4 mb per hour (Figure 5-9).

During the afternoon Amy reached her peak with a minimum pressure of 895 mb and maximum sustained winds of 150 kt concentrated around a tight circular eye 10 n mi in diameter.

The eye of the typhoon came under surveillance of the radars at Mount Santa Rosa and Andersen AFB about this time. The center tracked south of Guam during the next 12 hours with closest point of approach at 84 n mi on a 208° radial from Apra Harbor.

Amy began to slow in response to the approach of a trough in the westerlies and the weakening of the subtropical ridge line. A slow drift to the northwest occurred about 120 n mi west of Guam on the 3rd. The typhoon then commenced to track northeast at 11 kt west of the Marianas Islands with maximum winds of 120 kt.

Highest winds reported on Guam were 51 kt with a gust to 68 kt (2112 GMT) at Fleet Weather Central (Elev. 600 ft), while Andersen AFB on the northern end of the island sustained winds of 36 kt (1623 GMT) with gusts to 60 kt (2358 GMT). A total rainfall of 15.26 inches was recorded at the National Weather Service Office during the passage of Amy. Minimum sea level pressure observed on the island was at Fleet Weather Central with 998.2 mb.

Damage on Guam amounted to over 900,000 dollars in public and private property damage. On Rota severe crop damage occurred, including destruction of a sea wall as well as damage to bulk storage tanks and feeder pipelines which were washed away at the oil storage yards. In the northern Marianas, minor damage was sustained mostly to the copra and banana trees. The weather station on Pagan reported a maximum wind of 28 kt with gusts to 47 kt.

Amy continued on a northeast course passing the northernmost island of the Marianas, Maug, on the evening of the 5th (Figure 5-10). At a forward speed in excess of 20 kt, she kept a northeast heading through the 6th weakening to minimal typhoon strength. By the 7th Amy decreased to tropical storm intensity and accelerated to greater than 40 kt in forward speed. After crossing the 35th parallel, the storm was overtaken by a cold front early on the 8th.

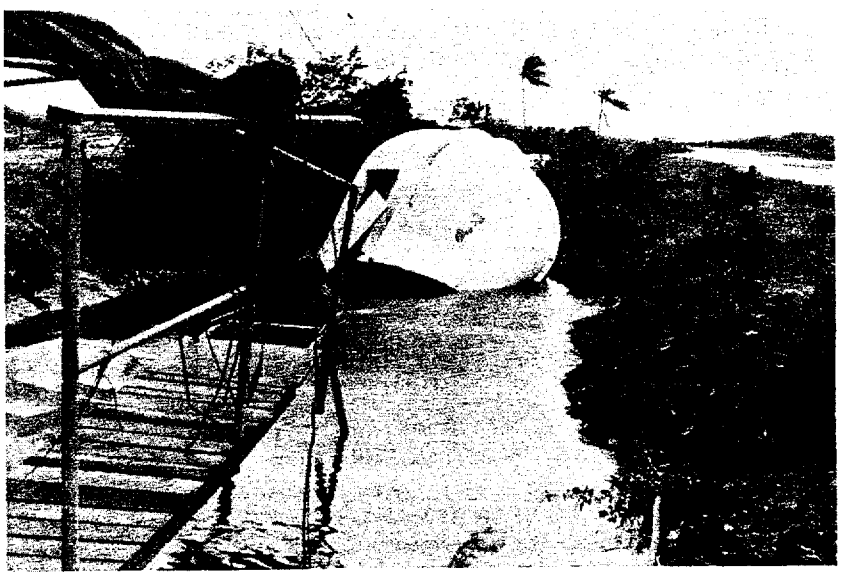

FIGURE 5-7. TRUK'S RAWINSONDE RADOME RESTS IN DRAINAGE DITCH AFTER PASSAGE OF AMY. (THE RADOME, WHICH HAD BEEN REMOVED FROM THE WEATHER STATION'S ROOF AND PLACED ON THE GROUND WHILE AWAITING SERVICING, WAS SEVERELY DAMAGED WHEN IT WAS BLOWN AGAINST A STONE WALL ENROUTE TO ITS FINAL RESTING PLACE IN A DRAINAGE DITCH.)--COURTESY PACIFIC REGION, NATIONAL WEATHER SERVICE.

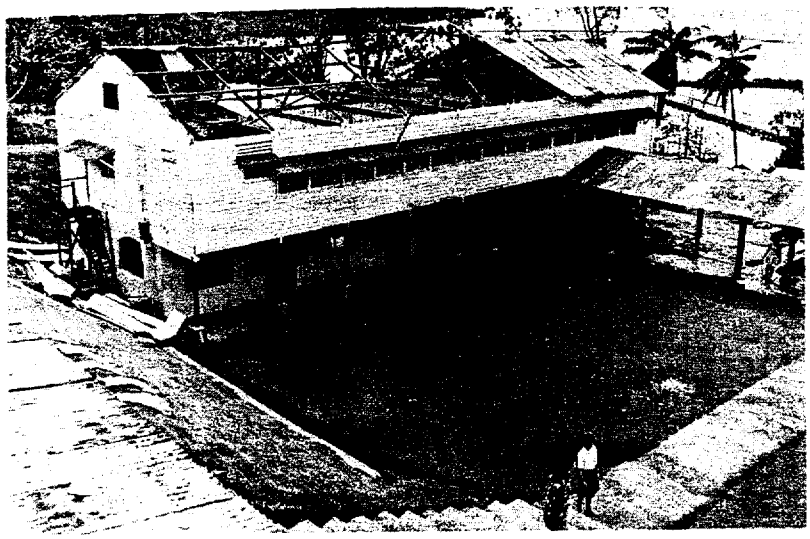

FIGURE 5-8. DAMAGE TO BUILDINGS ON MOEN ISLAND IN THE TRUK GROUP--COURTESY PUBLIC INFORMATION OFFICE, TRUST TERRITORY OF THE PACIFIC ISLANDS.

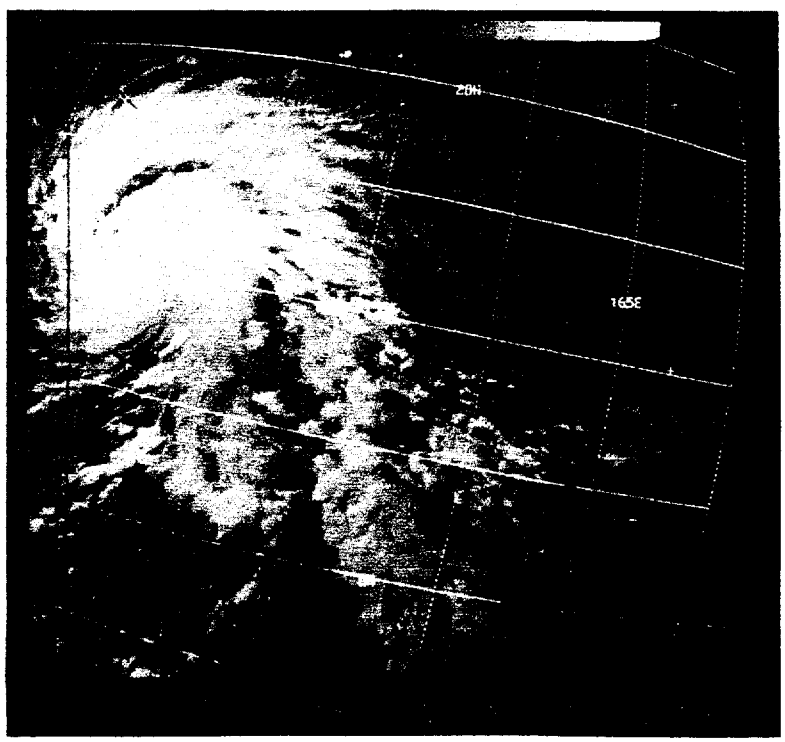

FIGURE 5-9. NOAA-1 VIEW OF SUPER TYPHOON AMY 250 N MI SOUTHEAST OF GUAM ON 2 MAY.

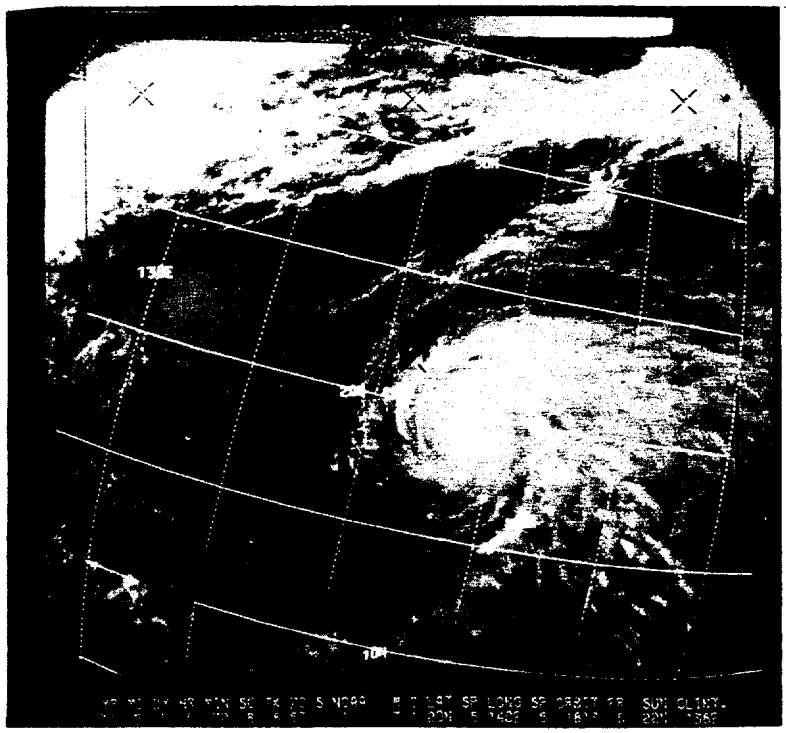

FIGURE 5-10. TYPHOON AMY AS PHOTOGRAPHED BY NOAA-1 ON 5 MAY.

TYPHOON AMY
EYE FIXES FOR CYCLONE NO. 5
29 APR - 07 MAY 71

FIX NO.	TIME	POSIT	UNIT-METHOD -ACCY	FLT LVL	FLT LVL WND	OBS SFC WND	OBS MIN SLP	MIN 700MB HGT	FLT LVL TI/TO	EYE FORM	ORIEN-TATION	EYE DIA	THKN WALL CLD	REMARKS	POSIT OF RADAR
1	280454Z	7.5N 153.0E	SATELIT---	STG B										LRG CONV CLD MASS	
2	290130Z	6.5N 155.2E	VQ-P-----	-----	----	25	1005	----	--/--	----	-----	--	--	INVESTIGATE FIX	
3	290357Z	6.0N 155.0E	SATELIT---	STG X	DIA	4	CAT 2.0							MORE INTENSE	
4	291747Z	6.7N 154.4E	VQ-R- 6---	400M	----	----	----	----	--/--	CIRC		13	5	STG FBS ALL QUADS	6.1N 153.7E
5	292147Z	6.4N 153.7E	VQ-P-15---	-----	----	48	996	----	27/25	CIRC		17	5	BRKS IN WC	
6	300400Z	6.7N 153.6E	54-P- 5---	-----	38	35	995	3048	28/25	CIRC		20	--	CLSD WC - STORM WELL DEFINED	
7	300447Z	6.5N 153.5E	SATELIT---	STG C+										LTL WKR THAN YSTY	
8	301000Z	7.1N 153.1E	54-P- 5---	700MB	48	----	988	3050	16/12	CIRC		20	--	CLSD WC	
9	301554Z	7.2N 152.1E	VQ-P- 5---	700MB	45	----	----	----	14/10	ELIP	E-W	20	6	HVY FBS E-SW	
10	302104Z	7.4N 151.7E	VQ-P- 5---	700MB	58	60	982	----	16/09	CIRC		30	--	EYE OVER TRUK IS.	
11	010400Z	8.1N 150.7E	54-P-10---	700MB	100	100	961	2768	15/11	CIRC		20	8	CLSD WC - STORM ORGANIZ RAPIDLY	
12	010541Z	8.0N 150.0E	SATELIT---	STG X	DIA	2	CAT 3.0							SML CIRC EYE VIS	
13	010700Z	8.4N 150.2E	54-P- 8---	700MB	135	130	958	2740	15/10	ELIP	NE-SW	20X18	--	CLSD WC	
14	011000Z	8.5N 149.7E	54-P- 5---	700MB	115	----	950	2661	20/15	ELIP	N-S	15X20	--	CLSD WC-STG FBS	
15	011502Z	9.2N 148.7E	VQ-R-10---	-----	----	----	----	----	--/--	CIRC		10	--	CLSD WC	9.9N 148.0E
16	020100Z	9.9N 146.9E	54-P- 2---	700MB	135	130	899	2200	25/07	CIRC		10	5	CLSD WC	
17	020400Z	10.3N 146.5E	54-P- 2---	700MB	----	140	896	2169	29/09	CIRC		8	5	SEV TURB SSW QUAD	
18	020445Z	10.0N 146.5E	SATELIT---	STG X	DIA	4	CAT 4.0							SML CIRC EYE VIS	
19	020600Z	10.7N 146.3E	54-P- 2---	700MB	----	140	895	2170	29/09	CIRC		8	--	CLSD WC-TOPS 35K	
20	020840Z	11.2N 145.9E	LND RDR---							----	-----	--	--		
21	020915Z	11.3N 145.8E	LND RDR---							----	-----	--	--		
22	020945Z	11.4N 145.7E	LND RDR---							----	-----	--	--		
23	021015Z	11.5N 145.7E	LND RDR---							----	-----	--	--		
24	021045Z	11.6N 145.7E	LND RDR---							----	-----	--	--	MT SANTA ROSA RDR	13.5N 144.9E
25	021112Z	11.7N 145.5E	LND RDR---							----	-----	--	--	MT SANTA ROSA RDR	13.5N 144.9E
26	021145Z	11.8N 145.4E	LND RDR---							----	-----	--	--	MT SANTA ROSA RDR	13.5N 144.9E
27	021209Z	11.5N 145.3E	54-P- 1---	700MB	125	----	900	2190	29/11	CIRC		10	--	CLSD WC-CONT LTNG	
28	021215Z	11.9N 145.3E	LND RDR---							----	-----	--	--	MT SANTA ROSA RDR	13.5N 144.9E
29	021245Z	11.7N 145.3E	LND RDR---							----	-----	--	--	MT SANTA ROSA RDR	13.5N 144.9E
30	021325Z	11.7N 145.2E	LND RDR---							----	-----	--	--	MT SANTA ROSA RDR	13.5N 144.9E
31	021402Z	11.8N 145.0E	LND RDR---							----	-----	--	--	MT SANTA ROSA RDR	13.5N 144.9E
32	021432Z	11.8N 145.0E	LND RDR---							----	-----	--	--	MT SANTA ROSA RDR	13.5N 144.9E
33	021501Z	11.9N 144.9E	LND RDR---							----	-----	--	--	MT SANTA ROSA RDR	13.5N 144.9E
34	021537Z	11.9N 144.8E	LND RDR---							----	-----	--	--	MT SANTA ROSA RDR	13.5N 144.9E
35	021600Z	11.9N 144.7E	54-P- 1---	700MB	120	----	910	2292	21/09	ELIP	NE-SW	12X10	--	AXIS OF ELLIPSE ROTATING RAPIDLY	
36	021605Z	12.0N 144.8E	LND RDR---							----	-----	--	--	MT SANTA ROSA RDR	13.5N 144.9E
37	021631Z	12.0N 144.6E	LND RDR---							----	-----	--	--	MT SANTA ROSA RDR	13.5N 144.9E
38	021704Z	12.0N 144.5E	LND RDR---							----	-----	--	--	MT SANTA ROSA RDR	13.5N 144.9E
39	021803Z	12.0N 144.4E	LND RDR---							----	-----	--	--	MT SANTA ROSA RDR	13.5N 144.9E
40	021815Z	12.0N 144.3E	54-P- 1---	700MB	125	----	----	2387	22/09	CIRC		8	2	CLSD WC	
41	021900Z	12.0N 144.3E	LND RDR---							----	-----	--	--	MT SANTA ROSA RDR	13.5N 144.9E
42	022000Z	12.1N 144.2E	LND RDR---							----	-----	--	--	MT SANTA ROSA RDR	13.5N 144.9E
43	022100Z	12.2N 144.2E	LND RDR---							----	-----	--	--	MT SANTA ROSA RDR	13.5N 144.9E
44	022150Z	12.2N 144.0E	LND RDR---							----	-----	--	--	MT SANTA ROSA RDR	13.5N 144.9E
45	022231Z	12.3N 143.8E	LND RDR---							----	-----	--	--	MT SANTA ROSA RDR	13.5N 144.9E
46	022255Z	12.3N 143.8E	54-R- 2---	-----	----	----	----	----	--/--	CIRC		20	--	CLSD WC	12.4N 144.6E
47	022330Z	12.3N 143.7E	LND RDR---							----	-----	--	--	MT SANTA ROSA RDR	13.5N 144.9E

TYPHOON AMY
EYE FIXES FOR CYCLONE NO. 5
29 APR - 07 MAY 71

FIX NO.	TIME	POSIT	UNIT-METHOD -ACCY	FLT LVL	FLT LVL WND	OBS SFC WND	OBS MIN SLP	MIN 700MB HGT	FLT LVL TI/TO	EYE FORM	ORIEN-TATION	EYE DIA	THKN WALL CLD	REMARKS	POSIT OF RADAR
48	030002Z	12.4N 143.6E	LND RDR---							----	-----	--	--	MT SANTA ROSA RDR	13.5N 144.9E
49	030200Z	12.6N 143.5E	LND RDR---							----	-----	--	--	MT SANTA ROSA RDR	13.5N 144.9E
50	030400Z	12.6N 143.0E	54-P- 2---	700MB	115	140	915	2387	21/13	CIRC		15	--	SFC CNTR UNDER WC	
51	030400Z	12.7N 143.2E	LND RDR---							----	-----	--	--	MT SANTA ROSA RDR	13.5N 144.9E
52	030430Z	12.7N 143.1E	LND RDR---							----	-----	--	--	MT SANTA ROSA RDR	13.5N 144.9E
53	030500Z	12.8N 143.0E	LND RDR---							----	-----	--	--	MT SANTA ROSA RDR	13.5N 144.9E
54	030534Z	12.5N 143.0E	SATELIT---	STG X	DIA	4	CAT 3.5							SML CIRC EYE VIS	
55	030544Z	12.8N 143.0E	LND RDR---							----	-----	--	--	MT SANTA ROSA RDR	13.5N 144.9E
56	030610Z	12.8N 142.8E	VQ-P- 3---	700MB	115	----	906	2365	20/17	CIRC		8	--	CLSD WC	
57	030710Z	12.9N 142.8E	LND RDR---							----	-----	--	--	MT SANTA ROSA RDR	13.5N 144.9E
58	030755Z	13.0N 142.7E	LND RDR---							----	-----	--	--	MT SANTA ROSA RDR	13.5N 144.9E
59	030845Z	13.0N 142.5E	LND RDR---							----	-----	--	--	MT SANTA ROSA RDR	13.5N 144.9E
60	030927Z	13.1N 142.5E	LND RDR---							----	-----	--	--	MT SANTA ROSA RDR	13.5N 144.9E
61	031000Z	13.3N 142.5E	54-P- 2---	700MB	90	----	919	2323	20/12	CIRC		14	--	CLSD WC	
62	031027Z	13.3N 142.4E	LND RDR---							----	-----	--	--	MT SANTA ROSA RDR	13.5N 144.9E
63	031132Z	13.4N 142.4E	54-P- 2---	700MB	105	----	903	2280	23/13	CIRC		14	--	CLSD WC	
64	031255Z	13.4N 142.3E	LND RDR---							----	-----	--	--	MT SANTA ROSA RDR	13.5N 144.9E
65	031415Z	13.5N 142.0E	LND RDR---							----	-----	--	--	MT SANTA ROSA RDR	13.5N 144.9E
66	031555Z	13.7N 141.9E	LND RDR---							----	-----	--	--	MT SANTA ROSA RDR	13.5N 144.9E
67	031600Z	13.6N 142.0E	54-P- 2---	700MB	120	----	901	2213	21/12	CIRC		14	8	CLSD WC-STARS VIS	
68	071118Z	32.5N 155.0E	VQ-P-15---	700MB	65	57	----	2954	14/10	----	-----	--	--	NO CLSD CIRC	
69	031920Z	13.7N 141.9E	LND RDR---							----	-----	--	--	MT SANTA ROSA RDR	13.5N 144.9E
70	032200Z	14.0N 141.9E	VQ-R- 3---	-----	----	----	----	----	--/--	CONC	-	43X13	--	BOTH WC CLSD	
71	040426Z	15.1N 142.1E	VQ-R-10---	-----	----	----	----	----	--/--	CIRC		15	--	WC OPEN S	14.6N 141.1E
72	040438Z	15.0N 142.0E	SATELIT---	STG X	DIA	3	CAT 4.0							SML CIRC EYE VIS	
73	040447Z	15.1N 142.1E	VQ-P- 5---	700MB	142	----	907	2451	21/11	CIRC		15	--	WC OPEN S	
74	040915Z	15.7N 142.4E	54-P------	-----	----	----	----	----	--/--	----	-----	--	--	PRELIM FIX	
75	041000Z	15.9N 142.4E	54-P- 1---	700MB	90	----	----	2274	20/09	CIRC		12	5	CLSD WC - TOPS 30	
76	041300Z	16.4N 142.4E	54-P- 1---	700MB	110	----	919	2341	20/13	ELIP	E-W	20X13	10	WC OPEN ESE	
77	041600Z	16.8N 142.9E	54-P- 1---	700MB	130	----	----	2377	18/11	CIRC		20	10	WC OPEN SE	
78	041900Z	17.5N 143.1E	54-P- 2---	700MB	110	----	906	2365	21/14	CIRC		20	--	WC OPEN S QUAD	
79	042140Z	18.0N 143.4E	VQ-R-10---	-----	----	----	----	----	--/--	CIRC		15	--	CLSD WC	17.5N 143.8E
80	050053Z	18.4N 143.6E	VQ-P-10---	300M	----	120	934	----	26/22	CIRC		22	--	WC OPEN SE QUAD	
81	050345Z	18.9N 144.1E	VQ-P- 8---	700MB	115	----	940	2652	22/11	CIRC		20	6	WC OPEN S QUAD	
82	050532Z	19.0N 144.0E	SATELIT---	STG X	DIA	3	CAT 2.5								
83	051000Z	19.9N 144.4E	54-P- 3---	700MB	115	----	942	2551	17/10	CIRC		28	7	CLSD WC-THIN CI	
84	051253Z	20.0N 144.1E	---R------	-----	----	----	----	----	--/--	----	-----	30	--	COMM ACFT RDR FIX	
85	051600Z	21.0N 144.9E	54-P- 1---	700MB	100	----	952	2624	15/09	ELIP	SE-NW	40X25	--	CLSD WC-THICK CI	
86	052215Z	21.3N 145.5E	54-P-18---	700MB	90	----	954	2685	15/13	CIRC		10	--	WC POORLY DEF	
87	060100Z	22.6N 145.6E	54-P- 8---	700MB	65	----	----	2829	13/11	----	-----	--	--	SML PART OF WC	
88	060400Z	23.3N 146.0E	54-P-10---	700MB	80	70	957	2722	16/13	----	-----	--	--	NNW OF 700 CNTR NO ORGANIZ ON RDR	
89	060435Z	22.5N 145.0E	SATELIT---	STG X	DIA	3	CAT 3.0							LRG RAGGED EYE	
90	061000Z	24.3N 146.3E	VQ-P- 8---	400M	----	65	960	----	25/22	----	-----	--	--	WEAK 25NM DIA WC	
91	061555Z	25.7N 147.2E	VQ-P- 6---	700MB	----	65	964	2859	17/12	CIRC		25	--	NO WC	
92	062228Z	27.4N 148.9E	54-P- 5---	700MB	75	50	980	2880	14/10	----	-----	--	--	NO RDR PRFS-700 CNTR 37 NM NE	
93	070321Z	29.2N 150.4E	54-P- 3---	700MB	72	55	984	2938	13/12	----	-----	--	--	700 CNTR 40NM NE	
94	070525Z	30.0N 152.0E	SATELIT---	STG X	DIA	3	CAT 2.0							700 CLD TOPS 6K	

0600Z 29 APR TO 1200Z 7 MAY

	BEST TRACK		WARNING				24 HOUR FORECAST						48 HOUR FORECAST						72 HOUR FORECAST					
					ERRORS					ERRORS						ERRORS						ERRORS		
	POSIT	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND
290600Z	6.5N 154.9E	30	6.5N 154.8E	25	6	-5	7.2N 153.8E	35	25	-10	--.- ---.-	--	--	--	--.- ---.-	--	--	--	--.- ---.-	--	--	--
291200Z	6.5N 154.7E	35	6.7N 154.3E	25	27	-10	7.1N 152.3E	35	36	-15	--.- ---.-	--	--	--	--.- ---.-	--	--	--	--.- ---.-	--	--	--
291800Z	6.6N 154.3E	40	6.8N 153.8E	25	32	-15	7.2N 151.8E	40	24	-20	--.- ---.-	--	--	--	--.- ---.-	--	--	--	--.- ---.-	--	--	--
300000Z	6.7N 153.8E	40	6.5N 153.5E	50	21	10	7.1N 151.3E	65	36	-10	8.3N 149.3E	85	161	-55	9.6N 146.8E	95	256	-30
300600Z	6.9N 153.5E	45	6.7N 153.4E	50	13	5	7.3N 151.3E	65	80	-30	8.4N 149.2E	85	219	-65	--.- ---.-	--	--	--
301200Z	7.2N 152.9E	50	7.1N 152.9E	55	6	5	8.5N 151.2E	70	108	-45	9.9N 148.5E	85	211	-55	10.8N 145.5E	95	243	-40
301800Z	7.3N 152.2E	60	7.4N 151.9E	55	19	-5	8.8N 149.4E	70	71	-60	9.7N 146.3E	85	181	-50	--.- ---.-	--	--	--
010000Z	7.7N 151.3E	75	7.8N 151.4E	70	8	-5	8.9N 148.8E	80	117	-60	9.9N 145.7E	90	197	-40	10.6N 142.2E	100	222	-40
010600Z	8.3N 150.4E	95	8.3N 150.5E	95	6	0	10.0N 147.5E	120	82	-30	11.5N 143.8E	120	97	-15	--.- ---.-	--	--	--
011200Z	8.8N 149.4E	115	8.8N 149.5E	105	6	-10	10.5N 145.8E	125	67	-15	11.8N 142.1E	125	96	-15	12.7N 138.1E	125	334	-8
011800Z	9.3N 148.3E	130	9.5N 148.1E	110	17	-20	11.4N 143.7E	125	50	-10	12.5N 139.5E	125	165	-15	--.- ---.-	--	--	--
020000Z	9.9N 147.1E	140	9.9N 147.1E	140	0	0	11.7N 142.6E	150	67	20	12.7N 138.1E	150	235	10	13.3N 134.0E	150	625	30
020600Z	10.7N 146.3E	150	10.7N 146.3E	145	0	-5	13.5N 142.9E	150	42	15	14.3N 138.5E	150	227	15	--.- ---.-	--	--	--
021200Z	11.5N 145.3E	140	11.5N 145.5E	150	12	10	13.8N 141.8E	150	38	10	14.4N 137.4E	150	318	20	14.6N 132.9E	100	753	-10
021800Z	12.0N 144.3E	135	12.2N 144.3E	140	12	5	13.9N 139.8E	140	128	0	14.4N 134.7E	150	509	25	--.- ---.-	--	--	--
030000Z	12.4N 143.5E	130	12.4N 143.6E	135	6	5	13.8N 139.9E	135	114	-5	14.3N 135.5E	140	520	20	14.5N 130.7E	145	974	30
030600Z	12.8N 142.8E	135	12.8N 142.7E	135	6	0	13.8N 138.9E	135	211	0	14.3N 134.5E	140	622	25	--.- ---.-	--	--	--
031200Z	13.4N 142.3E	140	13.4N 142.3E	135	0	-5	15.2N 139.8E	145	172	15	16.1N 136.6E	150	523	40	16.6N 132.9E	150	900	70
031800Z	13.8N 142.0E	140	13.8N 141.8E	140	12	0	15.3N 139.5E	150	237	25	16.2N 136.3E	150	594	45	--.- ---.-	--	--	--
040000Z	14.3N 141.8E	140	14.0N 141.9E	145	19	5	15.1N 141.2E	150	237	30	16.3N 139.0E	150	529	55	17.1N 135.3E	150	1013	80
040600Z	15.3N 142.2E	135	15.3N 142.1E	140	6	5	19.1N 144.1E	130	6	15	22.4N 148.2E	110	139	25	--.- ---.-	--	--	--
041200Z	16.2N 142.6E	130	16.3N 142.5E	140	8	10	20.1N 145.2E	125	30	15	23.4N 150.1E	100	211	20	25.7N 157.3E	75	449	20
041800Z	17.4N 143.0E	125	17.1N 143.1E	135	19	10	20.6N 145.7E	120	61	15	23.5N 150.3E	90	213	15	--.- ---.-	--	--	--
050000Z	18.4N 143.5E	120	18.4N 143.6E	130	6	10	22.3N 147.0E	115	73	20	25.5N 153.0E	80	243	15	--.- ---.-	--	--	--
050600Z	19.2N 144.1E	115	19.2N 144.3E	120	11	5	22.8N 148.0E	100	117	15	25.9N 154.0E	75	299	15	--.- ---.-	--	--	--
051200Z	20.3N 144.7E	110	20.2N 144.6E	115	8	5	24.5N 147.3E	95	45	15	29.3N 152.0E	65	299	15	--.- ---.-	--	--	--
051800Z	21.5N 145.2E	105	21.4N 145.2E	110	6	5	25.6N 148.3E	85	49	10	--.- ---.-	--	--	--	--.- ---.-	--	--	--
060000Z	22.5N 145.7E	95	22.4N 145.7E	100	6	5	27.2N 148.4E	75	71	10	--.- ---.-	--	--	--	--.- ---.-	--	--	--
060600Z	23.7N 146.1E	85	23.7N 146.4E	95	16	10	29.2N 149.5E	60	126	0	--.- ---.-	--	--	--	--.- ---.-	--	--	--
061200Z	24.7N 146.5E	80	24.7N 146.5E	90	0	10	29.8N 149.4E	50	181	0	--.- ---.-	--	--	--	--.- ---.-	--	--	--
061800Z	26.0N 147.5E	75	26.1N 147.4E	80	8	5	--.- ---.-	--	--	--	--.- ---.-	--	--	--	--.- ---.-	--	--	--
070000Z	28.0N 149.4E	65	27.8N 149.5E	70	13	5	--.- ---.-	--	--	--	--.- ---.-	--	--	--	--.- ---.-	--	--	--
070600Z	30.4N 151.5E	60	30.2N 151.2E	60	20	0	--.- ---.-	--	--	--	--.- ---.-	--	--	--	--.- ---.-	--	--	--
071200Z	33.1N 155.8E	50	33.2N 156.0E	55	12	5	--.- ---.-	--	--	--	--.- ---.-	--	--	--	--.- ---.-	--	--	--

	TYPHOONS WHILE WIND OVER 35KTS				ALL FORECASTS			
	WARNING	24-HR	48-HR	72-HR	WARNING	24-HR	48-HR	72-HR
AVERAGE FORECAST ERROR	11NM	97NM	296NM	577NM	11NM	97NM	296NM	577NM
AVERAGE RIGHT ANGLE ERROR	7NM	51NM	188NM	339NM	7NM	51NM	188NM	339NM
AVERAGE MAGNITUDE OF WIND ERROR	6KTS	18KTS	29KTS	40KTS	6KTS	18KTS	29KTS	40KTS
AVERAGE BIAS OF WIND ERROR	2KTS	-3KTS	2KTS	13KTS	2KTS	-3KTS	2KTS	13KTS
NUMBER OF FORECASTS	33	30	23	10	34	30	23	10