ANNEX

A

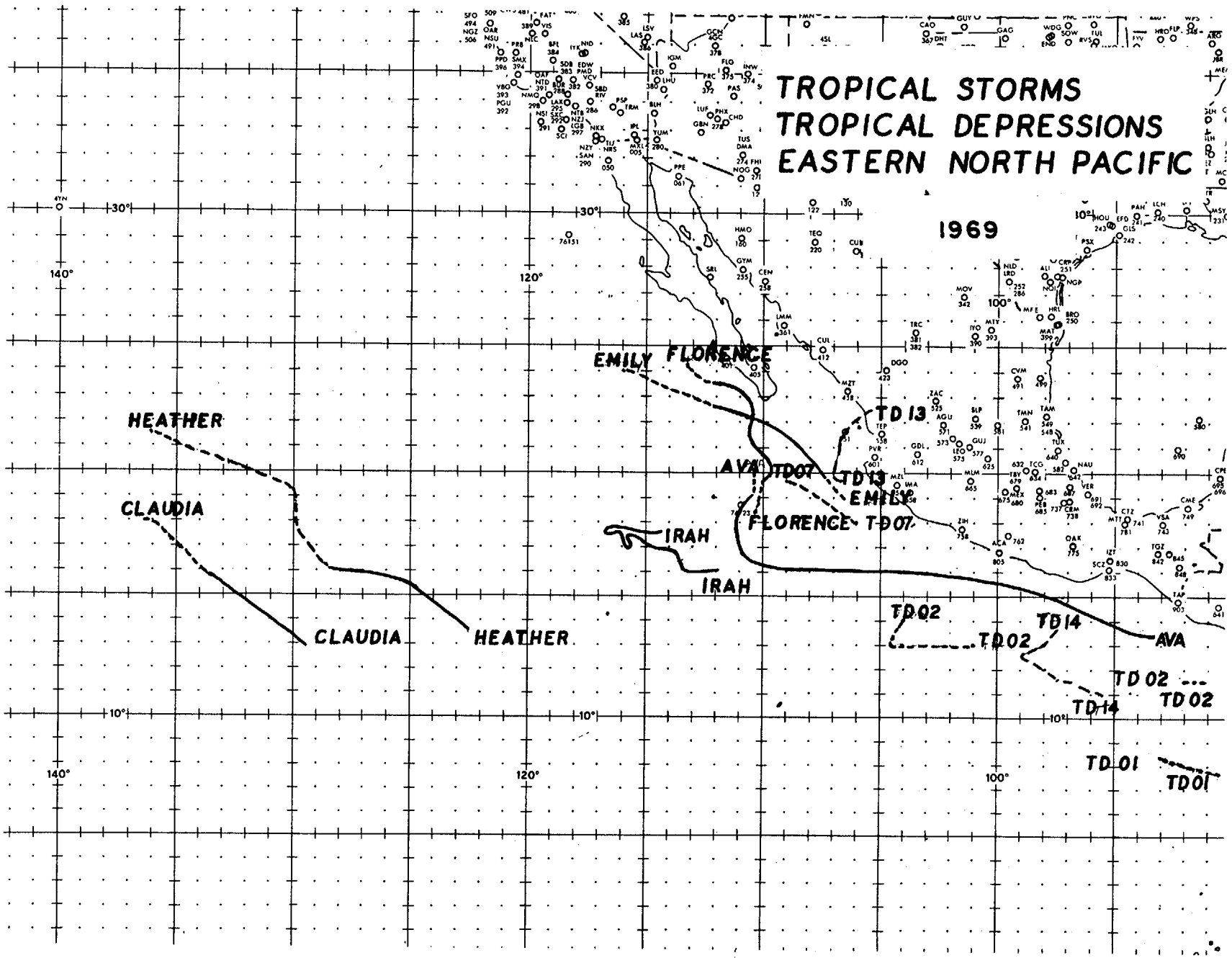
SUMMARY OF TROPICAL CYCLONES

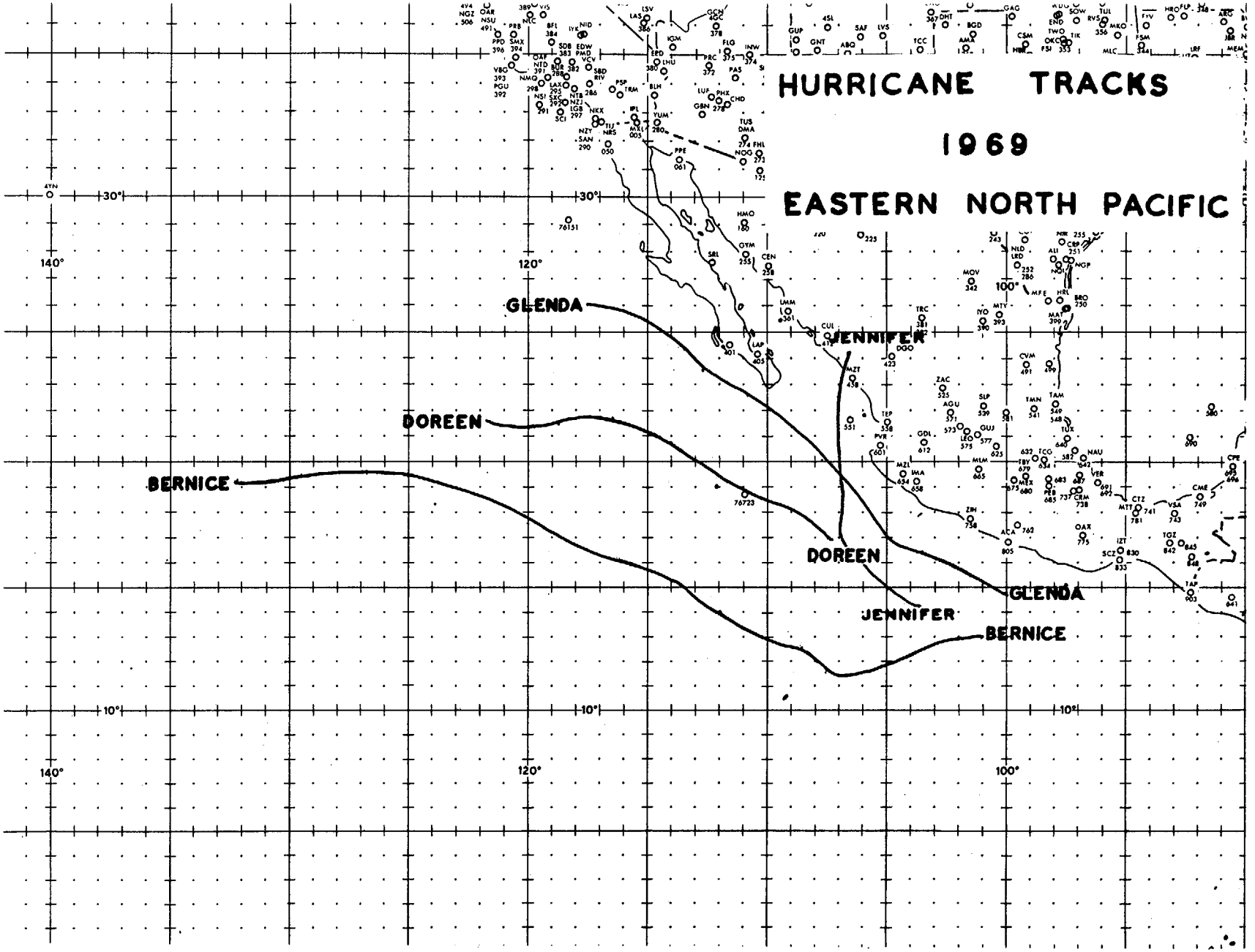
IN THE

EASTERN NORTH PACIFIC OCEAN

FOR

1969


TROPICAL STORMS
TROPICAL DEPRESSIONS
EASTERN NORTH PACIFIC
1969
EMILY
FLORENCE
HEATHER
CLAUDIA
TD 13
AVA
TD07
IRAH
TD02
TD14
TD01
30°
140°
120°
100°
10°


HURRICANE TRACKS
1969
EASTERN NORTH PACIFIC
GLENDA
DOREEN
BERNICE
JENNIFER
GLENDA
DOREEN
JENNIFER
BERNICE
30°
10°
140°
120°
100°

During the 1969 EastPac Tropical Cyclone season, Fleet Weather Central, Alameda, issued a total of 219 Tropical Warnings on four hurricanes, six tropical storms and five tropical depressions. No tropical cyclones originating in Fleet Weather Central, Alameda's area moved out of the area. The 15 tropical cyclones identified this year is the lowest number since 1965 and the number of warnings was the lowest since 1964, reflecting an unusually inactive season. No specific reasons for this apparent inactivity have been determined.

The following eight year summary covering tropical cyclones originating in Fleet Weather Central, Alameda's area of responsibility is presented for comparison. Included are warnings issued by Fleet Weather Central, Pearl Harbor, when the tropical cyclone originated in the Alameda area.

	1962	1963	1964	1965	1966	1967	1968	1969
Total Number of Warnings*	122	80	60	244	342	474	531	219
Calandar Days of Warnings*	35	26	21	73	70	119	126	67
Tropical Depressions*				2	6	2	6	5
Tropical Storms	6	5	4	9	6	12	13	6
Hurricanes	2	4	2	1	7	6	6	4
Total Tropical Cyclones*	8	9	6	12	19	20	25	15

*Tropical Depression information not available 1962-1964

Jennifer was the only tropical cyclone that caused damage on land. One person was killed, 15 injured and a large ferry and 12 shrimp boats were reported swamped at Mazatlan, Mexico. Thirty other shrimp boats were reported lost in smaller harbors nearby. There was extensive property damage along a 100 mile section of the coast but information on money amounts and specific losses are not available. The highest reported winds at Mazatlan Airport were 50 knots with gusts to 70 at 2100Z, 11 October.

Forecasting tools used included twice daily readouts of the Fleet Numerical Weather Central's "HATRACK" steering program, extrapolation and subjective reasoning. While a definitive study of the various techniques has not been made, the latter two methods, coordinated with the Hurricane Warning Office, ESSA Weather Bureau, San Francisco, appear to be the most successful.

This season marked the inauguration of U. S. Navy responsibility in the Eastern Pacific for tropical cyclone reconnaissance. Efforts were limited by resources (two EC-131 aircraft and two meteorological crews operating from the Pacific Missile Range, Pt. Mugu, California) and no rountinely available staging points from which to base aircraft to cover distant storms (more than 1200 nautical miles from Pt. Mugu). Early in the season Acapulco, Mexico was used but 48 hours advance notification was required. Later in the season, limited funds precluded the use of Acapulco except in an emergency. Because of the aircraft configuration (EC-121 vice WC-121), penetrations could not be made and low level eye data was not available. The USAF continued to fly tropical cyclone reconnaissance missions in addition to scheduled Navy flights. High level reconnaissance data are available from that source.

Limited resources, coupled with the great distance at which most of the tropical cyclones were found caused APT data to remain as in previous years, the primary source of fixes. Insufficient reconnaissance data were available to make any meaningful verification of tropical cyclone intensity estimates based on satellite pictures.

TROPICAL CYCLONES FOR THE 1969 SEASON

ORIGINATED BY FLEET WEATHER CENTRAL, ALAMEDA

	CYCLONE	PERIOD
01	Tropical Depression 01	31 May 1969
02	Tropical Depression 02	04 June-05 June 1969
	REGENERATED	07 June-08 June 1969
03	Tropical Storm AVA	02 July-07 July 1969
04	Hurricane BERNICE	08 July-17 July 1969
05	Tropical Storm CLAUDIA	21 July-23 July 1969
06	Hurricane DOREEN	04 August-09 August 1969
07	Tropical Depression 07	09 August 1969
08	Tropical Storm EMILY	22 August-24 August 1969
09	Tropical Storm FLORENCE	02 September-07 September 1969
10	Hurricane GLENDA	08 September-12 September 1969
11	Tropical Storm HEATHER	18 September-22 September 1969
	REGENERATED	23 September-25 September 1969
12	Tropical Storm IRAH	30 September-03 October 1969
13	Tropical Depression 13	03 October-04 October 1969
14	Tropical Depression 14	03 October-05 October 1969
15	Hurricane JENNIFER	08 October-12 October 1969

Below is a summary of aircraft fixes made on hurricanes and tropical storms during the 1969 season.

CYCLONE	DATE/TIME REQ.	DATE/TIME FIX	REMARKS
DOREEN	061800Z	061730Z	
4-9 Aug	071800Z	071800Z	USAF FIX ALSO AT 071800Z 071800Z
	081800Z	081905Z	
EMILY	240000Z	232300Z	USAF FIX ALSO AT 231840Z
22-24 Aug			
FLORENCE	031800Z	031755Z	
2-7 Sep	050000Z	042340Z	USAF FIX ALSO AT 041824Z
	060000Z	052315Z	USAF FIX ALSO AT 951732Z
	080000Z	CANCELED	USAF FIX AT 061805Z. NAVY RECON CANCELED DUE STORM DISSIPATION
GLENDA	091800Z	091800Z	USAF FIX ALSO AT 091748Z
8-12 Sep	110000Z	110000Z	USAF FIX ALSO AT 101730Z
	120000Z	120030Z	USAF FIX ALSO AT 111713Z
HEATHER	NO NAVY RECON REQUESTED		USAF FIX AT 201825Z
18-25 Sep			USAF FIX AT 211809Z
IRAH	011800Z	011900Z	USAF FIX ALSO AT 011800Z
30 Sep-	030000Z	NO FIX	ACFT FLEW BUT UNABLE TO
3 Oct			LOCATE DISCERNABLE CENTER
JENNIFER	110000Z	NO FIX	ACFT NOT AVAIL FOR RECON
8-12 Oct			FLIGHT. USAF FIXED AT 091800Z AND 101740Z
	120000Z	CANCELED	STORM DISSIPATED. USAF FIX AT 111800Z

A total of 15 requests for Navy reconnaissance were made and two were subsequently canceled. Of the 13 remaining requests, only one could not be met and that was due to non-availability of aircraft. Twelve Navy reconnaissance flights were made. During the same period the U.S. Air Force 9th Weather Reconnaissance Wing flew 14 missions.

TROPICAL DEPRESSIONS 1969
POSITION DATA

TROPICAL DEPRESSION ZERO ONE
31 MAY 1969

DTG	LAT	LONG	DTG	LAT	LONG
310600Z	07.8N	90.4W	311800Z	08.2N	93.0W
311200Z	08.0N	92.0W			

TROPICAL DEPRESSION ZERO TWO
04 JUN - 05 JUN 1969

DTG	LAT	LONG	DTG	LAT	LONG
041600Z	11.5N	91.0W	*071800Z	13.0N	104.5W
041800Z	11.5N	91.3W	080000Z	13.5N	105.0W
050000Z	11.5N	92.0W	080600Z	13.7N	105.7W
**070000Z	13.5N	102.5W	081200Z	13.7N	106.0W
*070600Z	13.0N	101.0W	081800Z	14.0N	104.0W
071200Z	13.3N	102.0W			

TROPICAL DEPRESSION ZERO SEVEN
09 AUG 1969

DTG	LAT	LONG	DTG	LAT	LONG
090000Z	18.0N	106.0W	091200Z	18.6N	107.6W
090600Z	18.4N	106.8W	091800Z	19.8N	109.0W

TROPICAL DEPRESSION ONE THREE
03 OCT - 04 OCT 1969

DTG	LAT	LONG	DTG	LAT	LONG
031800Z	20.0N	107.0W	040600Z	22.5N	105.5W
040000Z	21.2N	106.8W			

TROPICAL DEPRESSION ONE FOUR
03 OCT - 05 OCT 1969

DTG	LAT	LONG	DTG	LAT	LONG
031800Z	11.0N	95.5W	041800Z	13.0N	97.0W
040000Z	11.5N	97.3W	050000Z	13.5N	97.5W
040600Z	12.0N	98.0W	050600Z	DISSIPATED	
041200Z	12.6N	99.0W			

*RELOCATED
**REGENERATED

TROPICAL STORMS 1969
POSITION DATA

TROPICAL STORM AVA
2 JUL - 7 JUL

DTG	LAT	LONG	DTG	LAT	LONG
020600Z	13.4N	93.4W	050000Z	16.0N	109.0W
021200Z	13.5N	94.1W	050600Z	16.0N	110.0W
021800Z	13.6N	95.5W	051200Z	16.0N	112.5W
030000Z	13.8N	96.6W	*051800Z	16.5N	111.5W
030600Z	14.0N	97.6W	060000Z	16.7N	112.0W
031200Z	14.2N	98.6W	060600Z	16.8N	112.5W
*031600Z	15.8N	102.0W	061200Z	17.0N	113.0W
031800Z	16.0N	102.5W	*061800Z	18.5N	110.0W
040000Z	16.0N	103.5W	070000Z	19.2N	110.2W
040600Z	16.5N	104.5W	070600Z	19.9N	110.2W
041200Z	16.8N	105.5W	071200Z	20.0N	110.3W
*041800Z	16.0N	108.3W	071800Z	20.0N	110.3W

TROPICAL STORM CLAUDIA
21 JUL - 23 JUL

DTG	LAT	LONG	DTG	LAT	LONG
211800Z	13.0N	129.5W	*221800Z	15.7N	133.5W
220000Z	12.5N	131.0W	230000Z	16.5N	134.4W
220600Z	12.5N	132.0W	230600Z	17.3N	135.3W
221200Z	12.5N	133.0W	231200Z	18.0N	136.2W

TROPICAL ATORM EMILY
22 AUG - 24 AUG

DTG	LAT	LONG	DTG	LAT	LONG
221800Z	19.0N	106.5W	240000Z	22.7N	112.1W
230000Z	20.2N	106.6W	240600Z	23.1N	113.2W
230600Z	21.1N	107.3W	241200Z	23.6N	114.5W
231200Z	22.0N	108.2W	241800Z	24.0N	116.0W
231800Z	22.2N	110.8W			

* RELOCATED

TROPICAL STORM FLORENCE
02 SEP - 07 SEP

DTG	LAT	LONG	DTG	LAT	LONG
021800Z	18.5N	110.2W	050600Z	21.1N	110.0W
030000Z	19.3N	110.5W	051200Z	21.4N	110.0W
030600Z	20.0N	110.8W	051800Z	21.6N	110.6W
031200Z	20.8N	111.0W	060000Z	22.2N	110.4W
031800Z	19.6N	110.0W	060600Z	23.0N	111.6W
040000Z	20.0N	109.5W	*061200Z	23.1N	111.7W
040600Z	20.4N	109.3W	061800Z	23.5N	112.1W
041200Z	20.9N	109.1W	070000Z	23.8N	112.5W
041800Z	20.7N	110.0W	070600Z	24.2N	113.2W
050000Z	20.8N	110.0W			

TROPICAL STORM HEATHER
18 SEP - 22 SEP
23 SEP - 25 SEP

DTG	LAT	LONG	DTG	LAT	LONG
181800Z	13.5N	122.5W	220000Z	16.0N	128.5W
190000Z	13.8N	123.8W	*220600Z	17.0N	130.0W
190600Z	14.0N	124.8W	221200Z	17.3N	130.5W
191200Z	14.2N	125.8W	221800Z	17.6N	129.8W
*191800Z	15.3N	124.8W	**231800Z	19.2N	130.0W
200000Z	15.6N	125.5W	240000Z	20.0N	130.5W
200600Z	16.1N	126.3W	240600Z	20.4N	130.8W
201200Z	16.1N	126,8W	241200Z	20.7N	131.1W
201800Z	16.0N	127.5W	241800Z	20.4N	132.8W
210000Z	16.0N	127.7W	250000Z	20.7N	133.2W
210600Z	16.0N	128.4W	250600Z	21.0N	133.6W
211200Z	16.0N	129.0W	251200Z	21.3N	134.0W
211800Z	16.0N	128.0W	251800Z	21.5N	136.1W

TROPICAL STORM IRAH
30 SEP - 03 OCT

DTG	LAT	LONG	DTG	LAT	LONG
300000Z	16.0N	112.0W	020000Z	17.5N	116.0W
300600Z	16.0N	112.5W	020600Z	17.5N	116.5W
301200Z	16.0N	113.3W	021200Z	17.5N	117.0W
301800Z	16.8N	113.6W	021800Z	17.5N	114.5W
010000Z	16.9N	114.2W	030000Z	17.5N	114.5W
010600Z	17.2N	115.0W	030600Z	17.5N	114.5W
011200Z	17.5N	115.8W	031200Z	17.5N	114.5W
011800Z	17.0N	115.5W	031800Z	17.5N	114.5W

*RELOCATED
**REGENERATED

INDIVIDUAL HURRICANE TRACKS

FOR 1969

IN THE EASTERN NORTH PACIFIC OCEAN

NOTE: Due to a lack of reconnaissance data, accurate intensities could not be determined and thus are not included with the hurricane best tracks.

HURRICANE BERNICE - 07/08/1800Z TO 07/17/0600Z

I. DATA

A. STATISTICS
1. NUMBER OF WARNINGS ISSUED - 35
2. NUMBER OF WARNINGS WITH HURRICANE INTENSITY - 8
3. DISTANCE TRAVELED DURING WARNING PERIOD - 1994 MILES

B. CHARACTERISTICS

1. MINIMUM OBSERVED SLP - UNKNOWN
2. MINIMUM OBSERVED 700 MB HEIGHT - UNKNOWN
3. MAXIMUM SURFACE WIND - 75 KT (EST.)
4. MAXIMUM RADIUS OF SURFACE CIRCULATION - 150 MILES

II. DEVELOPMENT

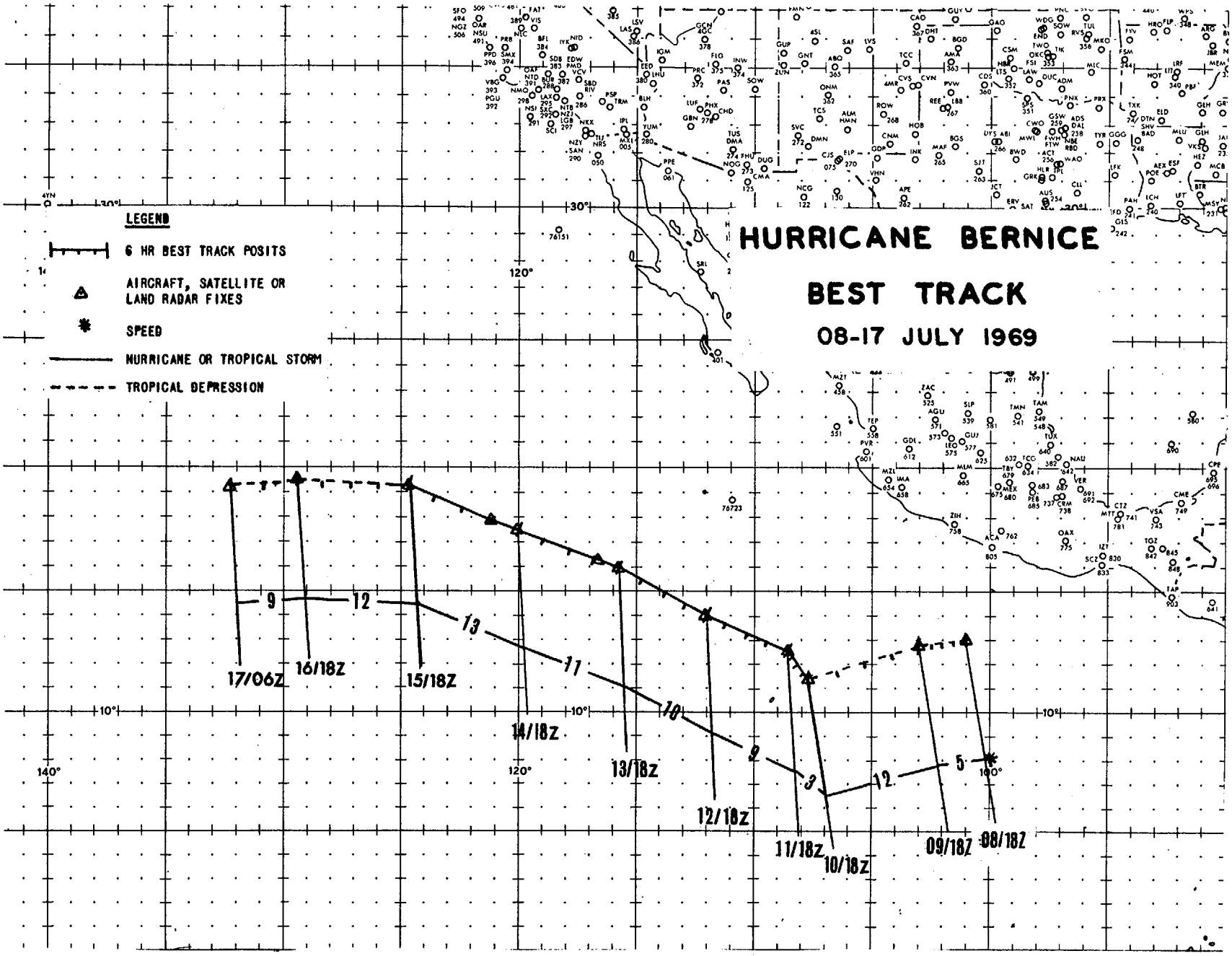
A. INITIAL IMPETUS - ITCZ

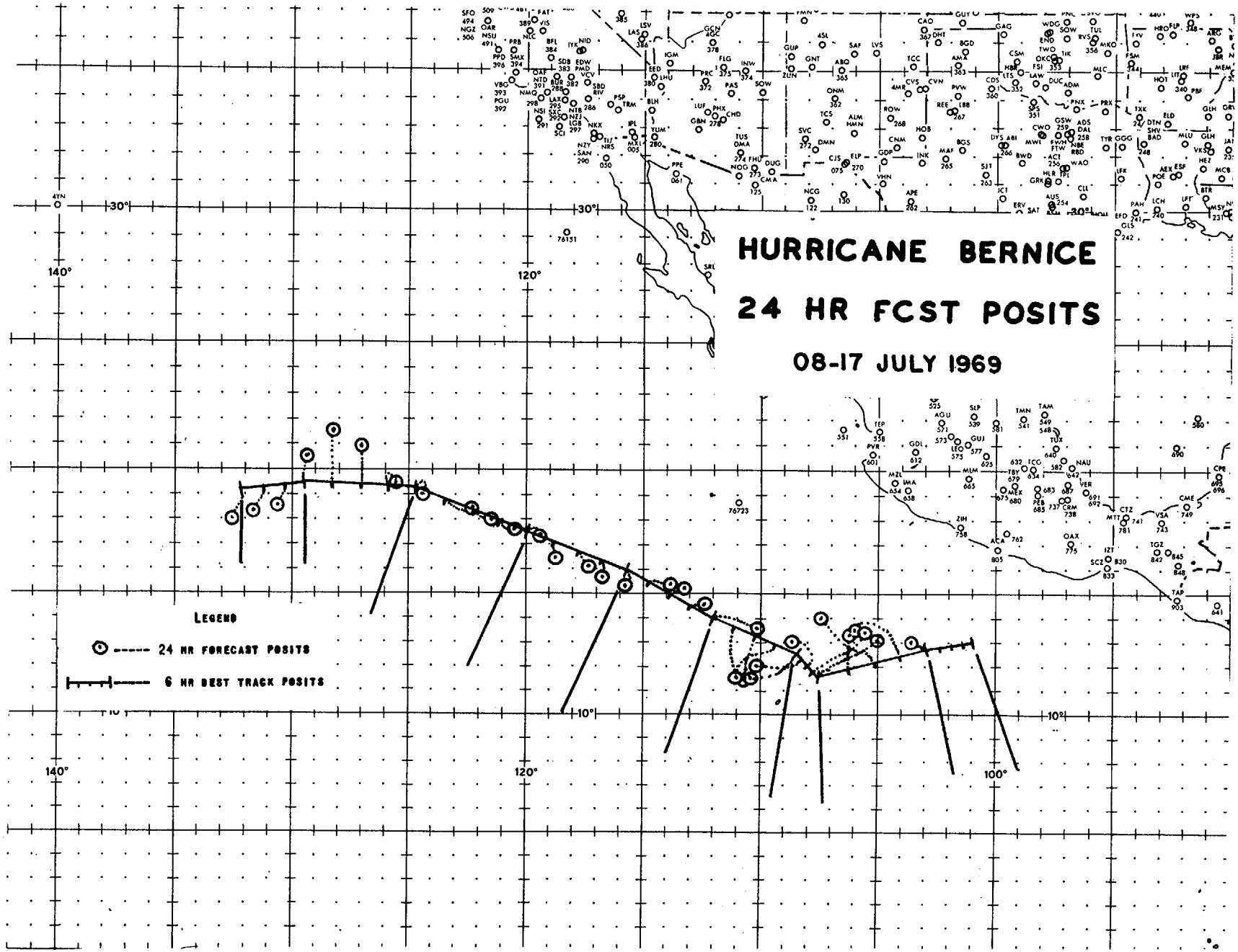
B. INITIAL SURFACE VORTEX
1. 081800Z
2. SURFACE PRESSURE LESS THAN 1008 MB

C. TIME STORM REACHED HURRICANE INTENSITY - 121800Z

III. FINAL DISPOSITION

A. DISSIPATED OVER WATER


LEGEND
6 HR BEST TRACK POSITS
AIRCRAFT, SATELLITE OR LAND RADAR FIXES
SPEED
HURRICANE OR TROPICAL STORM
TROPICAL DEPRESSION
HURRICANE BERNICE
BEST TRACK
08-17 JULY 1969
17/06Z
16/18Z
15/18Z
14/18Z
13/18Z
12/18Z
11/18Z
10/18Z
09/18Z
08/18Z
9
12
13
11
10
9
8
12
5
30°
120°
10°
140°
100°


HURRICANE BERNICE
24 HR FCST POSITS
08-17 JULY 1969
LEGEND
24 HR FORECAST POSITS
6 HR BEST TRACK POSITS
140°
120°
100°
30°
10°

HURRICANE BERNICE
08-17 JULY 1969

DTG	LAT	LONG	24 HR ERROR	48 HR ERROR	72 HR ERROR
081800Z	13.0N	101.0W	-	-	-
090000Z	13.0N	102.5W	-	-	-
090600Z	13.2N	102.5W	-	-	-
091200Z	12.5N	102.5W	-	-	-
091800Z	12.8N	103.0W	300/33	-	-
100000Z	13.0N	103.5W	280/154	-	-
100600Z	13.0N	105.5W	295/134	-	-
101200Z	12.0N	107.0W	040/112	-	-
101800Z	11.5N	107.5W	060/178	-	-
110000Z	11.5N	108.2W	055/212	-	-
110600Z	11.5N	107.5W	320/114	-	-
111200Z	11.5N	108.0W	285/135	-	-
111800Z	12.5N	108.5W	240/123	-	-
120000Z	13.0N	109.5W	225/127	-	-
120600Z	13.5N	110.2W	190/122	-	-
121200Z	13.8N	111.0W	205/152	-	-
121800Z	14.0N	112.0W	105/110	200/162	-
130000Z	14.4N	113.0W	065/44	195/180	-
130600Z	14.8N	114.0W	060/58	125/210	-
131200Z	15.2N	114.9W	085/68	165/231	-
131800Z	16.0N	115.7W	190/42	110/238	-
140000Z	16.3N	116.6W	200/38	090/84	185/286
140600Z	16.6N	117.5W	220/40	075/72	-
141200Z	17.0N	118.5W	200/33	095/113	165/340
141800Z	17.5N	120.0W	100/31	120/58	-
150000Z	17.9N	121.1W	110/46	115/50	095/180
150600Z	18.5N	122.3W	115/65	115/78	-
151200Z	19.0N	123.5W	200/34	110/87	095/208
151800Z	19.3N	124.8W	110/25	120/90	-
160000Z	19.3N	126.0W	070/32	100/108	120/98
160600Z	19.1N	127.1W	005/106	005/123	-
161200Z	18.9N	128.2W	360/154	135/87	120/114
161800Z	19.5N	129.5W	010/60	045/41	-
170000Z	19.5N	130.7W	175/60	025/106	075/170
170600Z	19.3N	132.2W	115/72	010/226	-

24 HOUR FORECAST ERROR = 87.6 MILES
48 HOUR FORECAST ERROR = 123.4 MILES
72 HOUR FORECAST ERROR = 199.4 MILES

HURRICANE DOREEN - 08/04/1800Z TO 08/09/1200Z

I. DATA

A. STATISTICS
1. NUMBER OF WARNINGS ISSUED - 20
2. NUMBER OF WARNINGS WITH HURRICANE INTENSITY - 6
3. DISTANCE TRAVELED DURING WARNING PERIOD - 875 MILES

B. CHARACTERISTICS
1. MINIMUM OBSERVED SLP - UNKNOWN
2. MINIMUM OBSERVED 700 MB HEIGHT - NOT OBSERVED
3. MAXIMUM SURFACE WIND - 75 KT (EST.)
4. MAXIMUM RADIUS OF SURFACE CIRCULATION - 300 MILES

II. DEVELOPMENT

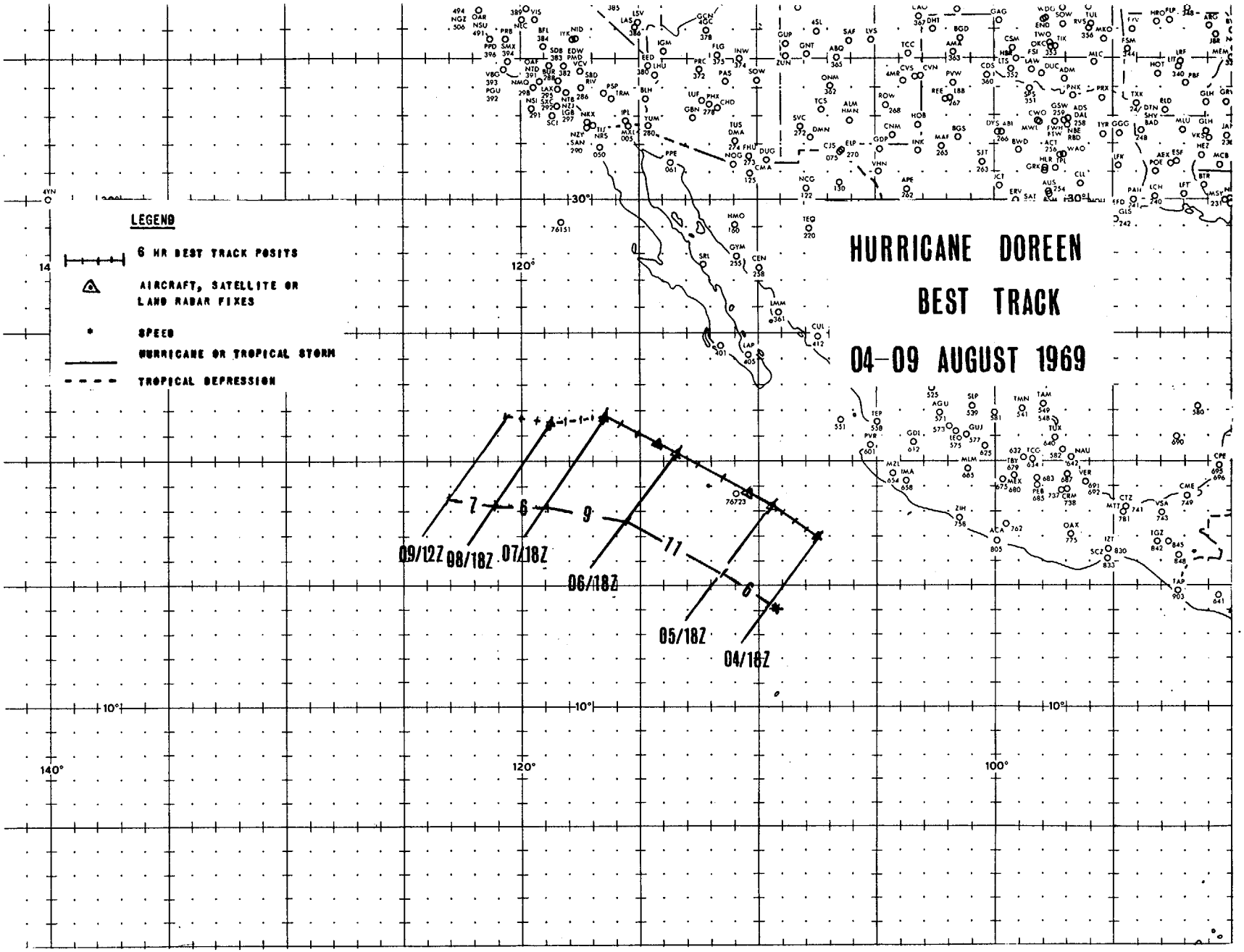
A. INITIAL IMPETUS - ITCZ

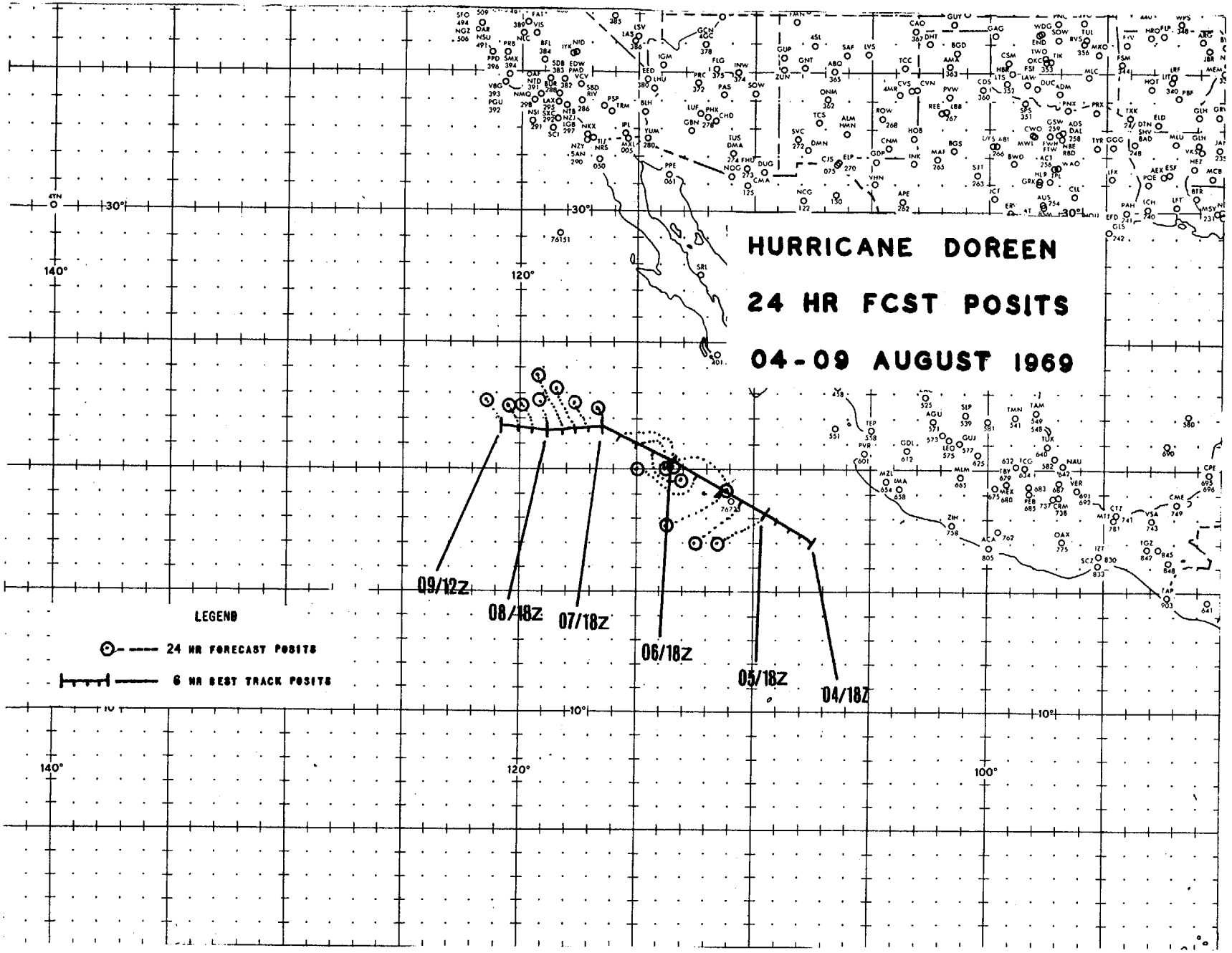
B. INITIAL SURFACE VORTEX
1. 041800Z
2. SURFACE PRESSURE LESS THAN 1008 MB

C. TIME STORM REACHED HURRICANE INTENSITY - 051800Z

III. FINAL DISPOSITION

A. DISSIPATED OVER WATER


LEGEND
6 HR BEST TRACK POSITS
AIRCRAFT, SATELLITE OR LAND RADAR FIXES
SPEED
HURRICANE OR TROPICAL STORM
TROPICAL DEPRESSION
HURRICANE DOREEN
BEST TRACK
04-09 AUGUST 1969
09/12Z
08/18Z
07/18Z
06/18Z
05/18Z
04/18Z
7
6
9
11
6
30°
120°
14
10°
140°
100°


HURRICANE DOREEN
24 HR FCST POSITS
04-09 AUGUST 1969
09/12Z
08/18Z
07/18Z
06/18Z
05/18Z
04/18Z
LEGEND
24 HR FORECAST POSITS
6 HR BEST TRACK POSITS
30°
140°
120°
100°
10°

HURRICANE DOREEN
04-09 AUGUST 1969

DTG	LAT	LONG	24 HR ERROR	48 HR ERROR	72 HR ERROR
041800Z	17.0N	107.5W	-	-	-
050000Z	17.0N	108.5W	-	-	-
050600Z	17.0N	109.5W	-	-	-
051200Z	17.7N	110.7W	-	-	-
051800Z	18.2N	109.5W	240/135	-	-
060000Z	18.7N	110.0W	220/133	-	-
060600Z	18.8N	111.5W	240/144	-	-
061200Z	19.1N	111.9W	285/192	-	-
061800Z	20.3N	113.4W	115/150	215/235	-
070000Z	20.6N	114.1W	135/75	220/210	-
070600Z	21.1N	115.0W	132/96	222/238	-
071200Z	21.6N	115.8W	125/158	280/204	-
071800Z	21.8N	116.5W	340/36	115/230	-
080000Z	22.0N	117.0W	315/52	130/115	230/270
080600Z	22.1N	117.7W	323/74	118/117	-
081200Z	22.2N	118.4W	330/96	110/195	290/355
081800Z	21.5N	118.8W	350/75	335/192	-
090000Z	21.6N	119.7W	355/57	330/195	080/120
090600Z	21.6N	120.3W	355/60	335/226	-
091200Z	21.7N	120.8W	330/74	335/250	075/260

24 HOUR FORECAST ERROR = 100.4 MILES
48 HOUR FORECAST ERROR = 200.6 MILES
72 HOUR FORECAST ERROR = 251.3 MILES

HURRICANE GLENDA - 09/08/0000Z to 09/12/0600Z

I. DATA

A. STATISTICS
1. NUMBER OF WARNINGS ISSUED - 18
2. NUMBER OF WARNINGS WITH HURRICANE INTENSITY 1
3. DISTANCE TRAVELED DURING WARNING PERIOD - 1248 MILES

B. CHARACTERISTICS
1. MINIMUM OBSERVED SEA LEVEL PRESSURE - UNKNOWN
2. MINIMUM OBSERVED 700 MB HEIGHT - UNKNOWN
3. MAXIMUM SURFACE WIND - 65 KT
4. MAXIMUM RADIUS OF SURFACE CIRCULATION - 125 MILES

II. DEVELOPMENT

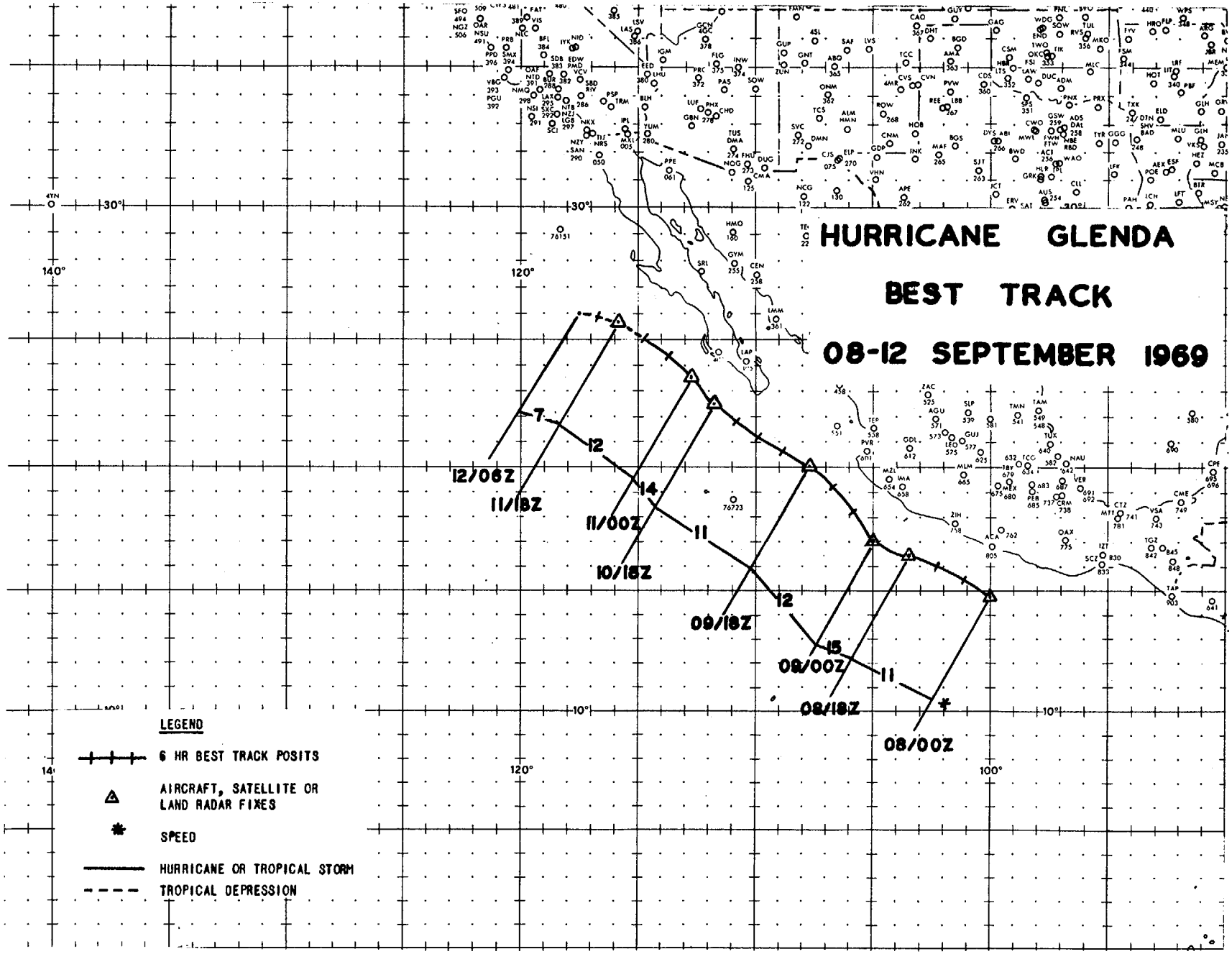
A. INITIAL IMPETUS - ITCZ

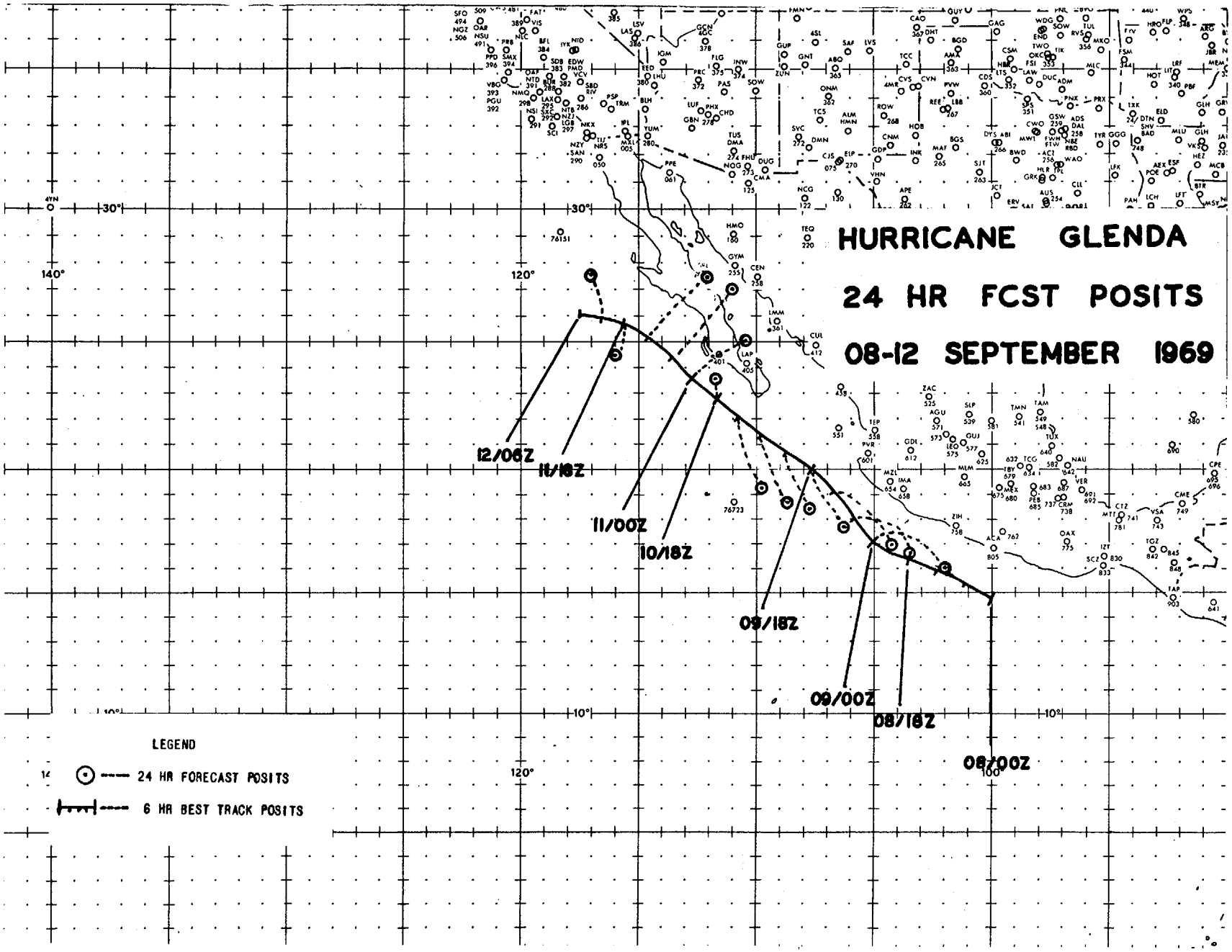
B. INITIAL SURFACE VORTEX

1. 080000Z
2. SURFACE PRESSURE LESS THAN 1008 MB

III. FINAL DISPOSITION

A. DISSIPATED OVER WATER


HURRICANE GLENDA
BEST TRACK
08-12 SEPTEMBER 1969
12/06Z
7
11/18Z
12
14
11/00Z
11
10/18Z
12
09/18Z
15
09/00Z
11
08/18Z
08/00Z
LEGEND
6 HR BEST TRACK POSITS
AIRCRAFT, SATELLITE OR LAND RADAR FIXES
SPEED
HURRICANE OR TROPICAL STORM
TROPICAL DEPRESSION


HURRICANE GLENDA
24 HR FCST POSITS
08-12 SEPTEMBER 1969
12/06Z
11/18Z
11/00Z
10/18Z
09/18Z
09/00Z
08/18Z
08/00Z
LEGEND
24 HR FORECAST POSITS
6 HR BEST TRACK POSITS

HURRICANE GLENDA
08-12 SEPTEMBER 1969

DTG	LAT	LONG	24 HR ERROR	48 HR ERROR	72 HR ERROR
080000Z	14.8N	100.0W	-	-	-
080600Z	15.4N	101.5W	-	-	-
081200Z	15.7N	102.1W	-	-	-
081800Z	16.4N	103.5W	-	-	-
090000Z	17.0N	105.0W	110/185	-	-
090600Z	17.3N	105.7W	110/137	-	-
091200Z	17.7N	106.5W	110/145	-	-
091800Z	20.1N	107.7W	150/165	-	-
100000Z	21.0N	108.4W	170/165	150/258	-
100600Z	22.4N	109.1W	175/225	140/350	-
101200Z	23.5N	109.4W	185/258	150/372	-
*101800Z	22.6N	111.8W	325/45	155/230	-
110000Z	23.5N	112.7W	055/160	150/258	130/504
110600Z	24.4N	113.7W	055/270	160/280	-
111200Z	25.5N	114.0W	050/190	165/360	135/516
111800Z	25.7N	115.7W	195/78	360/68	-
120000Z	25.3N	116.6W	350/130	055/190	140/335
120600Z	26.0N	117.5W	DISSIPATED		

24 HOUR FORECAST ERROR = 165.6 MILES
48 HOUR FORECAST ERROR = 262.9 MILES
72 HOUR FORECAST ERROR = 451.7 MILES

* RELOCATED

HURRICANE JENNIFER - 11/08/1800Z TO 11/12/0300Z

I. DATA

A. STATISTICS
1. NUMBER OF WARNINGS ISSUED - 15
2. NUMBER OF WARNINGS WITH HURRICANE INTENSITY - 8
3. DISTANCE TRAVELED DURING WARNING PERIOD - 754 NM

B. CHARACTERISTICS
1. MINIMUM OBSERVED SEA LEVEL PRESSURE - N/A
2. MINIMUM OBSERVED 700 MB HEIGHT - N/A
3. MAXIMUM SURFACE WIND - 70 KTS
4. MAXIMUM RADIUS OF SURFACE CIRCULATION - 65 NM

II. DEVELOPMENT

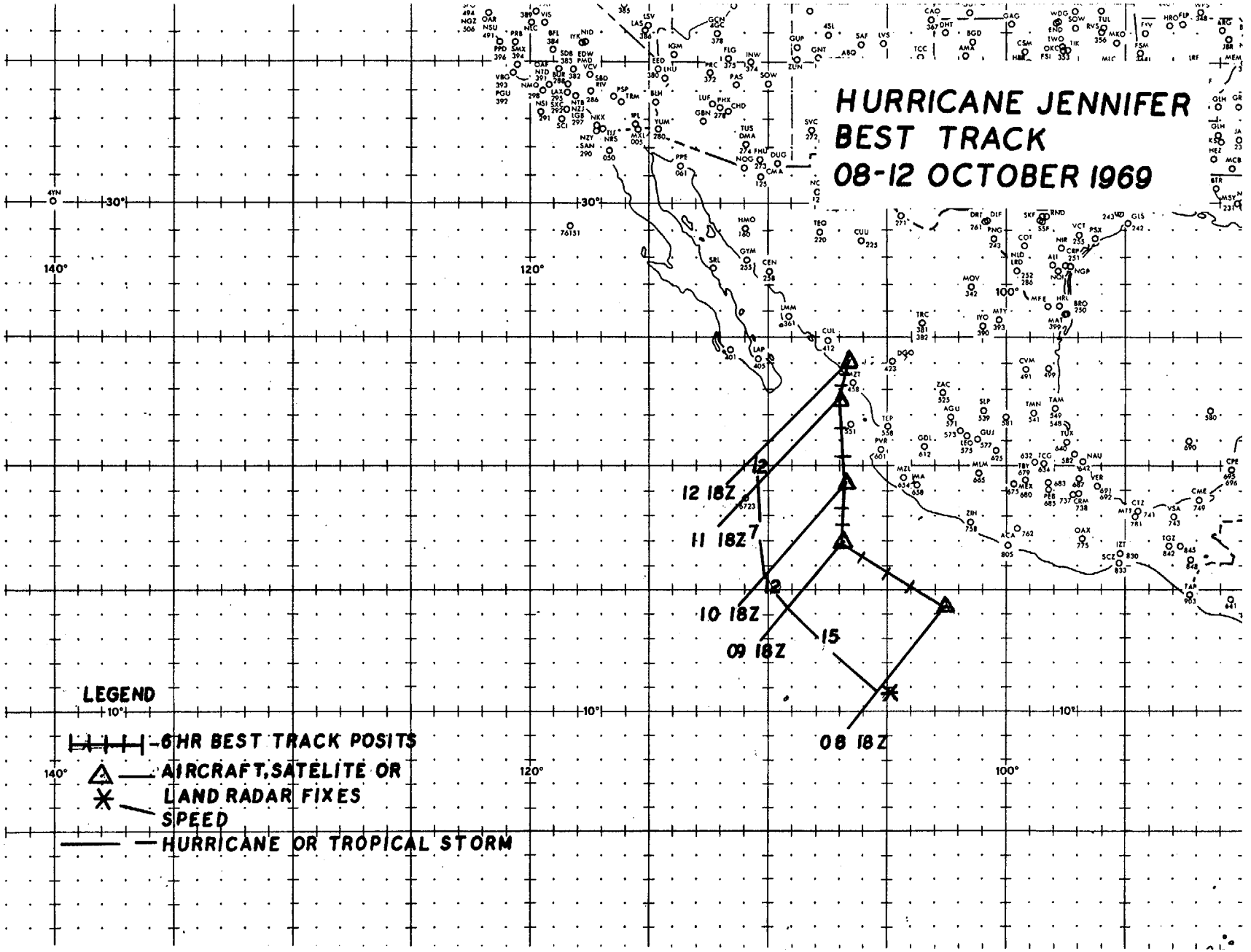
A. INITIAL IMPETUS - ITCZ

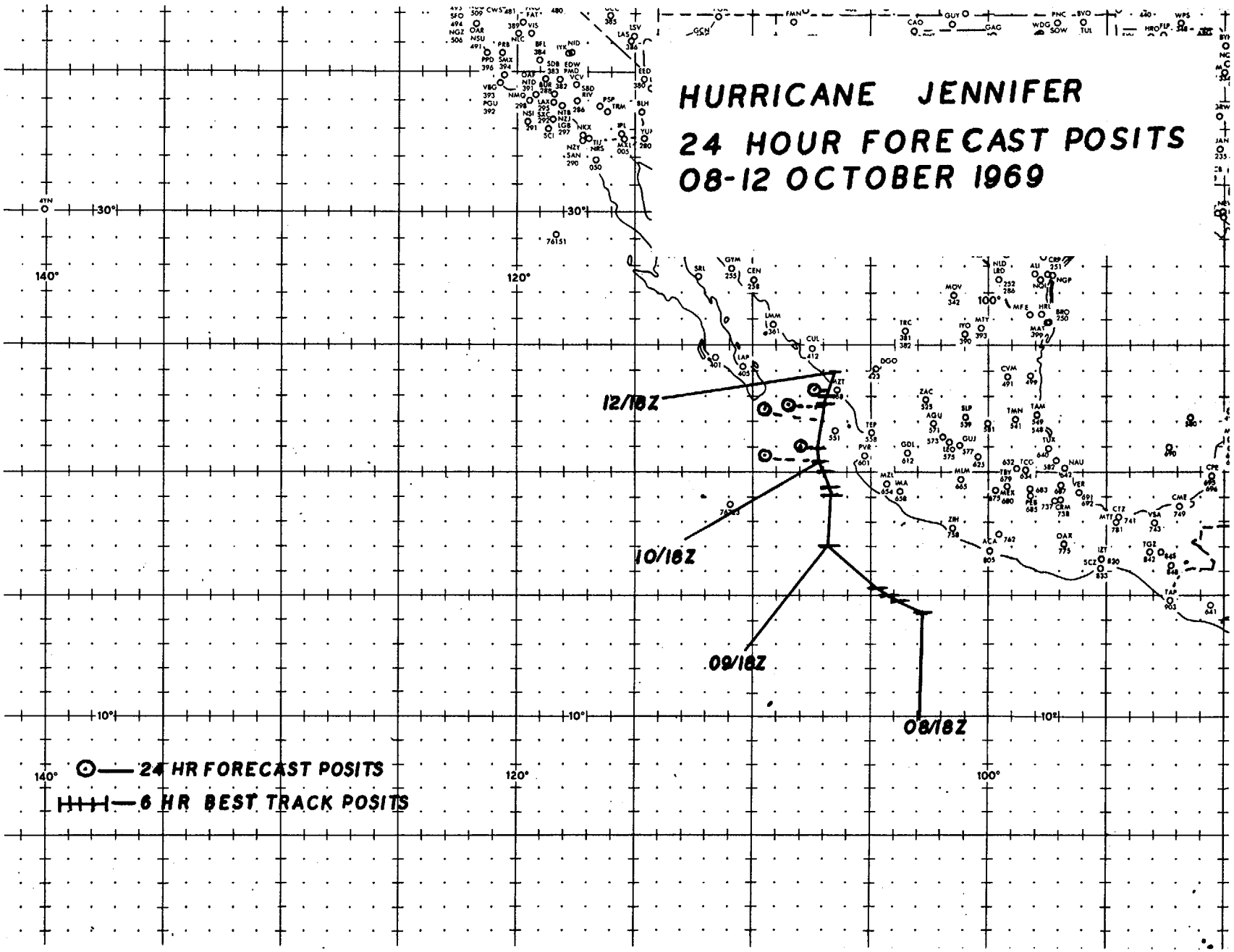
B. INITIAL SURFACE VORTEX
1. 08/1800Z
2. SURFACE PRESSURE LESS THAN 1008 MB

C. TIME STORM REACHED HURRICANE INTENSITY - 09/1800Z

III. FINAL DISPOSITION

A. DISSIPATED OVER LAND.


HURRICANE JENNIFER
BEST TRACK
08-12 OCTOBER 1969
12 18Z
11 18Z
10 18Z
09 18Z
08 18Z
12
12
12
15
LEGEND
-6HR BEST TRACK POSITS
AIRCRAFT, SATELITE OR
LAND RADAR FIXES
SPEED
HURRICANE OR TROPICAL STORM


HURRICANE JENNIFER
24 HOUR FORECAST POSITS
08-12 OCTOBER 1969
12/18Z
10/18Z
09/18Z
08/18Z
30°
10°
140°
120°
100°
24 HR FORECAST POSITS
6 HR BEST TRACK POSITS

HURRICANE JENNIFER
08-12 NOVEMBER 1969

DTG	LAT	LONG	24 HR ERROR	48 HR ERROR	72 HR ERROR
081800Z	14.0N	102.5W	-	-	-
090000Z	14.2N	102.7W	-	-	-
090600Z	14.8N	104.6W	-	-	-
091200Z	15.2N	106.2W	-	-	-
091800Z	17.0N	106.9W	170/132	-	-
100000Z	18.1N	107.3W	190/175	-	-
100600Z	19.2N	107.8W	200/246	-	-
101200Z	19.5N	107.8W	220/270	-	-
101800Z	19.3N	108.6W	320/115	220/252	-
110000Z	20.0N	108.8W	330/187	240/330	-
110600Z	20.3N	109.0W	360/213	240/393	-
111200Z	20.9N	109.1W	020/138	240/437	240/509
111800Z	22.7N	107.0W	-	-	-
120000Z	24.0N	106.5W	-	-	-

24 HOUR FORECAST ERROR = 185 MILES
48 HOUR FORECAST ERROR = 353 MILES
72 HOUR FORECAST ERROR = 509 MILES