

HURRICANE BRET LANDFALL

Flight 3 I990822

DATA TYPE	SENSOR or OPTION
INE	2
Accelerometer	2
Temperature Probe	1
Altitude (for vertical wind)	RA159
Static Pressure	Fuselage
Dynamic Pressure	Fuselage
Dewpoint Probe	2

Notes:

There were several data/time gaps:

194521Z - 194530Z
195321Z - 195430Z
195501Z - 195540Z
195542Z - 195550Z
201141Z - 201150Z
201152Z - 201200Z
201435Z - 201440Z
201601Z - 201620Z

Several small spurious spikes in the fuselage static pressure (PSF) data that occurred during the following time frames:

1937Z - 1940Z
0052Z - 0054Z

These spikes were removed and patched over.

The vertical wind had erroneous values from 2014Z - 2018Z due to the aforementioned data/time gaps.

Aircraft INE positions were renavigated with respect to GPS.

SPECIAL NOTE!!! Locations 80, 81 and 82 of record five on the standard tape contain vertical ground, vertical air and vertical wind speeds, respectively, derived from Dave Jorgensen's vertical wind algorithm. It is recommended that these values be used for vertical wind analysis.

	Takeoff	Landing
Aircraft static pressure	1014.8 mb	1015.8 mb
Corrected tower pressure	1015.4 mb	1015.8 mb

Flight Director: A. Barry Damiano, (813) 828-3310 ext. 3073

FLT ID: I990822	FM: KMCF	TO: KMCF
FLT NO: 99-047	BLK IN: 0305	ATA: 0253Z
ETD: 1730Z	BLK OUT: 1730Z	ATD: 1738Z
ETE:	BLK TIME: 9:35	FLT TIME: 9:15
SPONSOR ORG: HRD	PROGRAM: HURR SEARCH	PURPOSE: LANDFALL H. BRET

DAO PERSONNEL

AC: McKim ✓	SYS ENG
CP: PHILIPSBORN, OMARA	DATA SYS: LYNCH
NAV: PHILIPSBORN RATIBUN	RADAR: BARR
FE: MOORE, WADE	BT/ODW: CARPENTER
RADIO: SANS SOUET	CLD PHYS
FD: DAMIANO	DOPPLER

PARTICIPATING SCIENTIST/VISITORS/DAO

LAST, FIRST NAME	ACTIVITY ON A/C	AFFILIATION
DODGE	PI	HRD
BLACK, M	RADAR	}
GAMACHE	RADAR	
PHILIPSBORN CIONE	MBT	
WALSH	SAR	NASA
WRIGHT	SAR	NASA
DAVIS, R	MBS	MEDIA
FLOYD	MECH	DOC

PROPOSED/ACTUAL MISSION/REMARKS (RECCO, FIXES, STORM, PENET, NHOP #)

BAL DW1 1847Z

- 12.8° pre balance

1900Z DW2 jump

1908Z went to DW1

1953Z sys shut down due to AVAPS Problem

1957 sys up

26°45' 2037Z
97°04'

2120Z
26°46' 97°06'

26°47' 2154Z
97°11'

2651
9717
2300Z

26°51' 97°19'
2330Z

U.S. DEPT. COMM./NOAA/ORD - DATA SECTION WORK FORM NO.2 DROWF2 FILE

FLT ID: I990822 TIME OFF: 1738Z TIME ON: 0253Z

	A/C T/O	WX STN	A/C LAND	WX STN
PRESSURE	1015.5	30.00	1016/1012.5	30.01

NO DATA DISPOSITION/DATE/QUALITY

1/SEC FLT LVL TAPES

2

FAST FLT LVL TAPES

RADAR TAPES

1

DOPPLER TAPES

ODW CASSETTES

HARD COPIES

RXBT

8

RXCP

ODW GPS

35

23 messages sent.

PHOTOGRAPHY

	FWD	LS	RS	VERT
ON				
OFF				
RATE				

REMARKS

I990822

1105

115
15

-12.8

TIME	LAT	LONG	PK	HD	WD	WS	TA	TD	PA	GA	SP	PS			PK
183300	2726	8642	265	266	252	2	-6.4	-17.6	5573	5826	1012.2	504.3	RTN	CLD	74.8
184600	2723	8750	268	269	7	1	-5.1	-23.0	5511	5824	1009.0	504.3	RTN	CLD	72.5
190800	2718	8947	268	269	230	1	-4.3	-18.6	5505	5826	1008.6	504.7	RTN	CLD	72.1
192400	2711	9110	265	266	137	3	-4.4	-12.0	5504	5831	1009.0	504.8	TN	CLD	71.3
194200	2707	9247	279	276	152	22	-5.5	-11.2	5501	5825	1010.7	505.1	THN	CLD	74.3
200100	2713	9430	271	266	161	34	-5.7	-9.1	5501	5804	1008.6	505.1	THN	CLD	74.0
202100	2646	9543	271	261	158	54	6.9	-1.9	3497	3628	1005.6	657.9	-RW		74.2
203239	2647	9642	271	253	158	86	7.5	4.9	3653	3629	983.1	642.7	BT	DROP	75.4
203804	2647	9654	269	253	157	76	10.4	10.1	3909	3680	941.0	620.9	BT	DROP	70.3
204043	2650	9709												DROP	
204111	2651	9708												DROP	
204224	2652	9705												DROP	
205049	2640	9714												DROP	
205114	2640	9716												DROP	
205713	2534	9736												DROP	
210018	2621	9725												DROP	
210249	2611	9717												DROP	
210622	2557	9706												DROP	
210619	2558	9700												BT	
210809	2558	9700												DROP	
211755	2641	9704												DROP	
211813														BT	
212158	2654	9712												DROP	
212220	2655	9712												DROP	
212241	2656	9712												GT	
212305	2658	9712												DROP	
213105	2727	9707												DROP	
213607	2746	9704												BT	
213850	2750	9708												DROP	
214343	2730	9711												DROP	
215135	2654	9717												DROP	
215159	2653	9717												DROP	
215617	2639	9706												DROP	
215810	2633	9706												DROP	
220049	2622	9706												DROP	
220859	2555	9709												DROP	
222130	2655	9642												BT	
222150	2656	9641												DROP	
222702	2722	9648												BT	
223900	2751	9733	255	256	76	63	7.0	3.8	3529	3622	1000.8	655.0	IS		76.1
224419	2737	9738	96	91	71	65	6.5	4.5	3529	3613	997.2	654.8		DROP	LAND
225841	2658	9719												DROP	
230359	2638	9718												DROP	
232000	2613	9704	341	331	234	49	6.9	6.4	3549	3628	996.6	652.3	IS		73.9
232450	2633	9713												DROP	
232809	2645	9718												DROP	
233703	2658	9722												DROP	
233720	2659	9722												DROP	
233701	2659	9720												DROP	
234427	2600	9724												DROP	
235531	2740	9710	29	42	105	60	5.71	7.0	3581	3681	1000.7	650.9	IS		74.7
003100	2815	9453	93	97	136	22	-9.3	-19.9	6430	6806	1002.9	444.7	THN	CLD	78.7
005300	2810	9249	87	90	133	11	-9.3	-17.2	6428	6817	1005.7	444.7	RTN	CLD	78.9

TURN

S PT

S EYE WALL

N EYE WALL

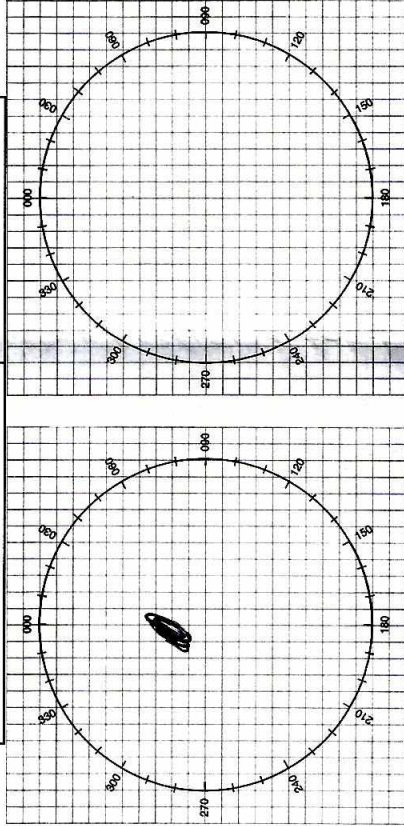
2113 2645 3005 2712 9512 26309630

2645 2037 97061

CLEARANCES			OTHER	
FREQ	ALT	HDG		
			Boxer C16AR KBLPP	
			5 MAREK C16AR	
			PIE	
			TEAL 10	
			TIME 2037	
			N 2645 W 9704	
			MUSYL COVIA PIE	

MISSION LOG

PAGE 1 OF 1



POSITION REPORT					
1. POSITION					
2. TIME					
3. ALTITUDE					
4. NEXT POSITION					
5. ETA					
6. NEXT POSITION					

EMERGENCY MESSAGE

TRANSMIT THE FOLLOWING MESSAGE TO ANY AGENCY ON THE AIR-GROUND FREQUENCY IN USE. IF UNABLE TO ESTABLISH COMMS, ATTEMPT CONTACT ON ANY OF THE FOLLOWING EMERGENCY FREQUENCIES:

UHF/VOICE 121.5 2182 KHZ 8364 KHZ 500 KHZ
MF/VOICE 121.5 2182 KHZ 8364 KHZ 500 KHZ

MAYDAY, MAYDAY, MAYDAY
THIS IS NOAA, NOAA, NOAA

- POSITION _____ N/S _____ E/W AT _____ Z
- HEADING _____ TRUE/MAG
- AT _____ KTS TRUE/INDICATED
- FLIGHT LEVEL OR ALTITUDE _____
- WE ARE A P-3 AIRCRAFT WITH _____ SOULS ON BOARD
- NATURE OF EMERGENCY _____
- ASSISTANCE DESIRED _____
- PILOT INTENTIONS _____
- WE HAVE _____ ENDURANCE REMAINING

TIME	FIX TYPE	POSITION	INS 1 POSITION	K ERR	INS 2 POSITION	K ERR	VAR +E==>	TH	DR +R==>	TRK	GS	WD	WS	ALT	TAS	NEXT PT	DIST	TIME	ETA	REMARKS
1726																				
1730																				
1738																				
1904	Fm1	2718.4 8926.8	2719.1 8926.7	-1.7 +1.1	2719.1 8926.7	-1.7 +1.1		269	21	267	282	035	9	FL180	274					ENG START Block out TAKE OFF
1958		2714.1 9412.5	2714.8 9412.8	-1.7 -1.3	2714.8 9412.8	-1.7 -1.3		257	51	262	290	132	30	FL180	272					
2023		2646.7 9552.0	2647.9 9551.9	-1.2 +1.1	2647.9 9551.9	-1.2 +1.1		258	12	270	257	158	57	1200	244					
2112		2615.2 9701.3	2616.8 9701.6	-1.6 -1.3	2616.8 9701.6	-1.6 -1.3		344	17	956	270	242	57	1200	250					
2200		2626.0 9706.3	2627.3 9706.2	-1.3 +1.1	2627.3 9706.2	-1.3 +1.1		193	13	180	243	264	57	1200	250					
2254		2715.5 9720.3	2717.3 9720.3	-1.8 0	2717.3 9720.3	-1.8 0		153	22	175	242	077	98	1200	243					
2300		2651.1 9718.8	2654.3 9717.4	-3.2 +1.1	2652.5 9718.8	-1.4 0														
0001		2757.7 9658.6	2801.6 9658.4	-3.9 +1.2	2759.6 9658.6	-1.9 0		050	31	037	219	117	57	1200	245					
0059		2810.7 9214.4	2815.2 9211.6	-4.5 +2.8	2810.8 9214.8	-1.1 -1.4		096	31	093	299	160	16	FL210	303					
0151		2803.0 8713.6	2809.7 8709.3	-6.7 +4.3	2802.5 8713.9	+1.5 -1.3		092	00	092	316	279	22	FL210	292					
0233		2721.9 8323.7	2720.5 8319.3	-6.6 +4.4	2719.8 8325.8	+2.1 -2.1		122	21	120	255	260	11	FL210	245					
0253		2700.7 8231.5	2758.4 8226.9	-7.7 +4.6	2748.5 8233.0	+2.2 -1.5														LAND BLOCKED
0305																				

100/25 PIX

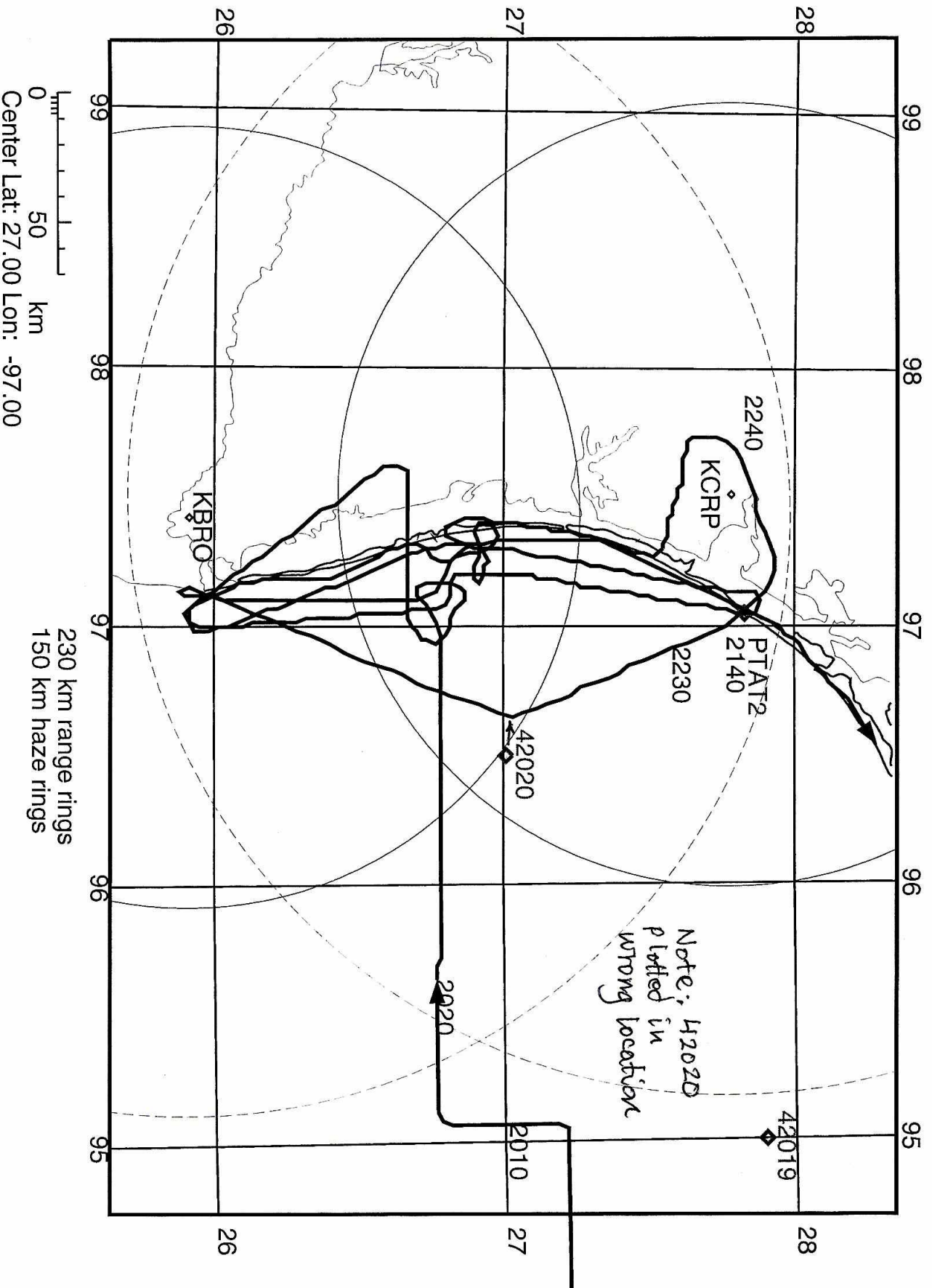
2300

265/05

FLIGHT DIRECTOR

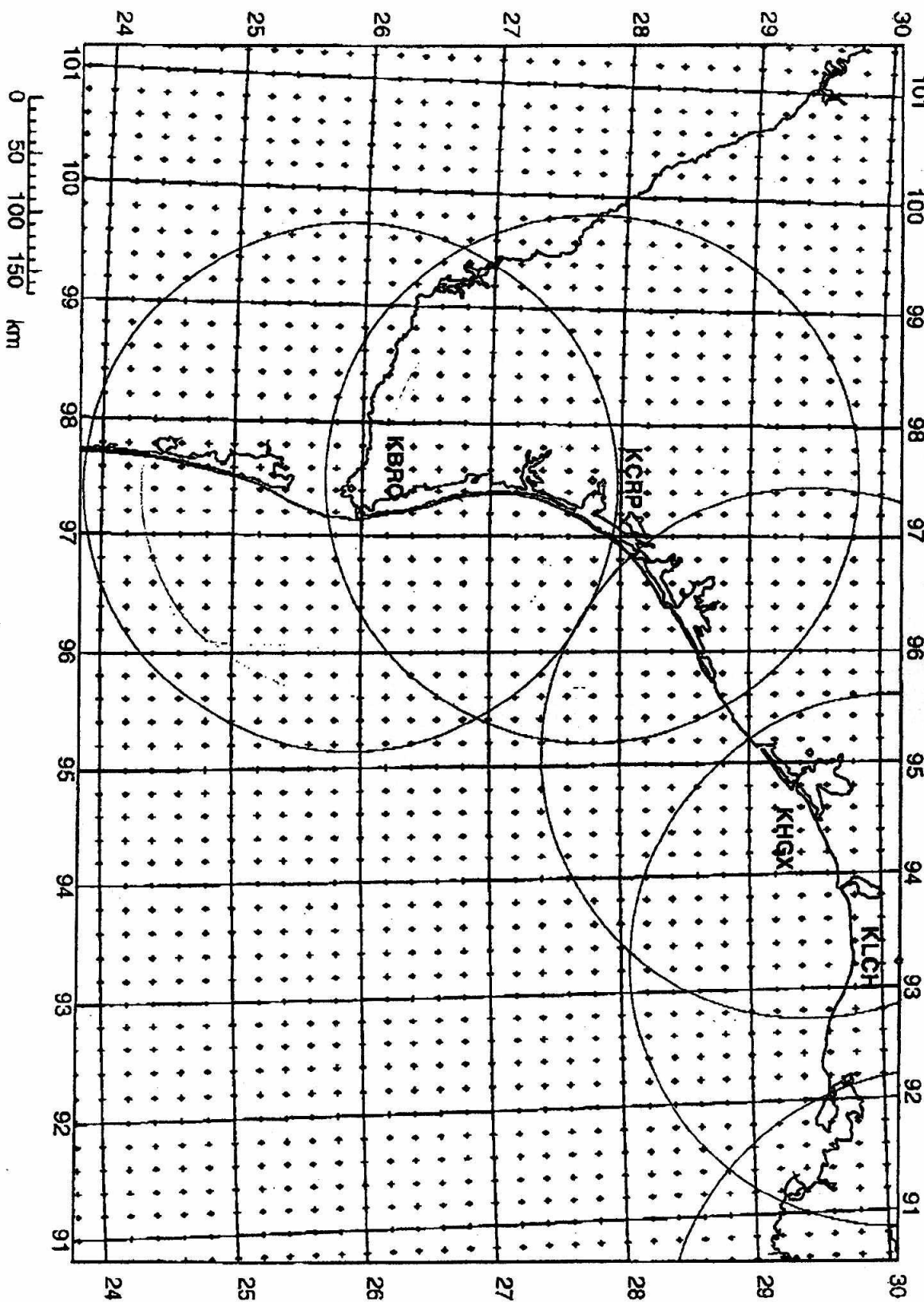
[illegible][illegible]

Hurricane Bret Landfall Flight of NOAA 43 2000 UTC 22 August - 0009 23 August 1999



230 km range rings

Center Lat: 27.00 Lon: -96.00



FROM :

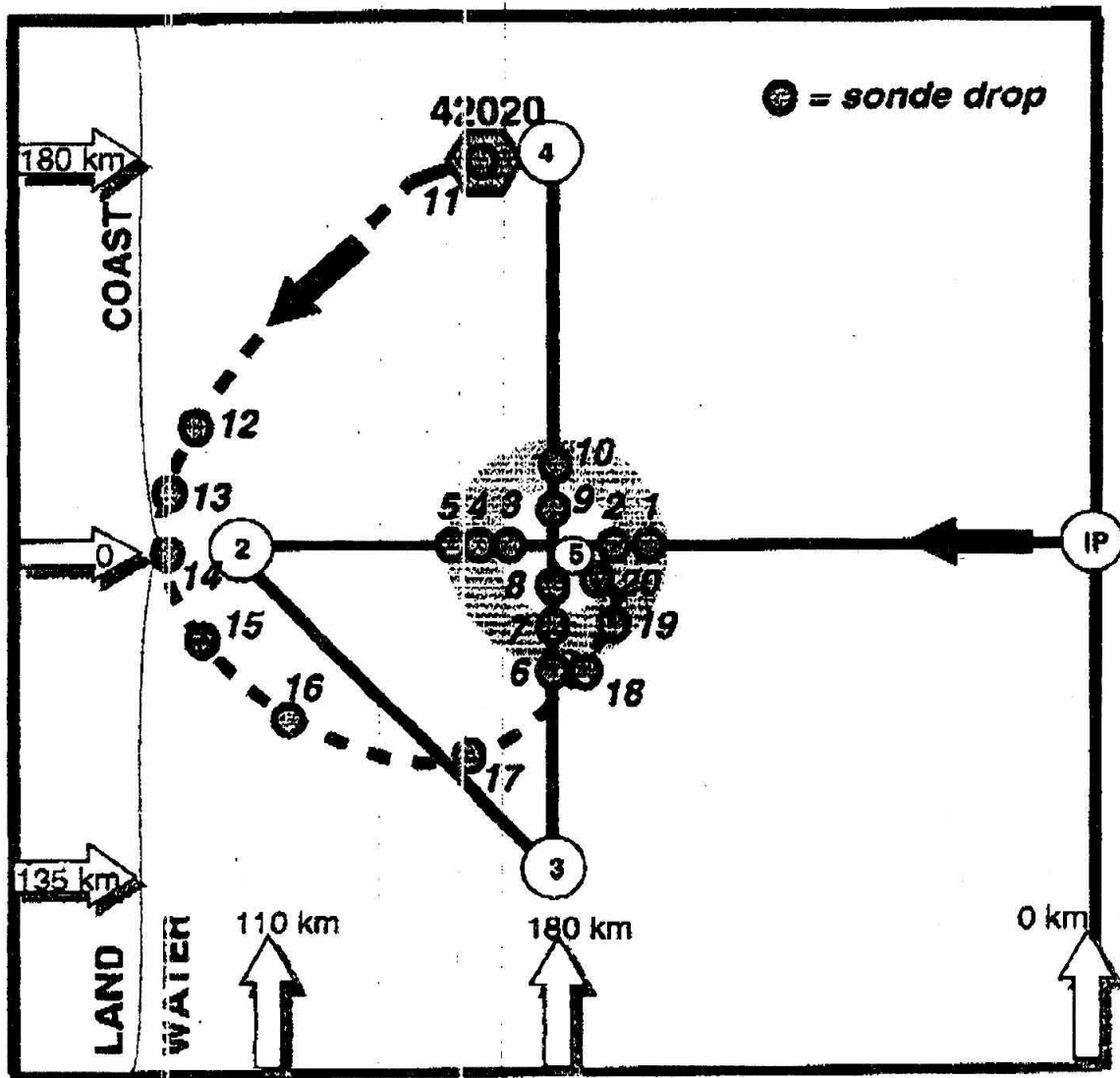
FAX NO. : 3053614402

Aug. 22 1999 09:16AM P2

BNET

187 8122199

BARRY DAMIANO



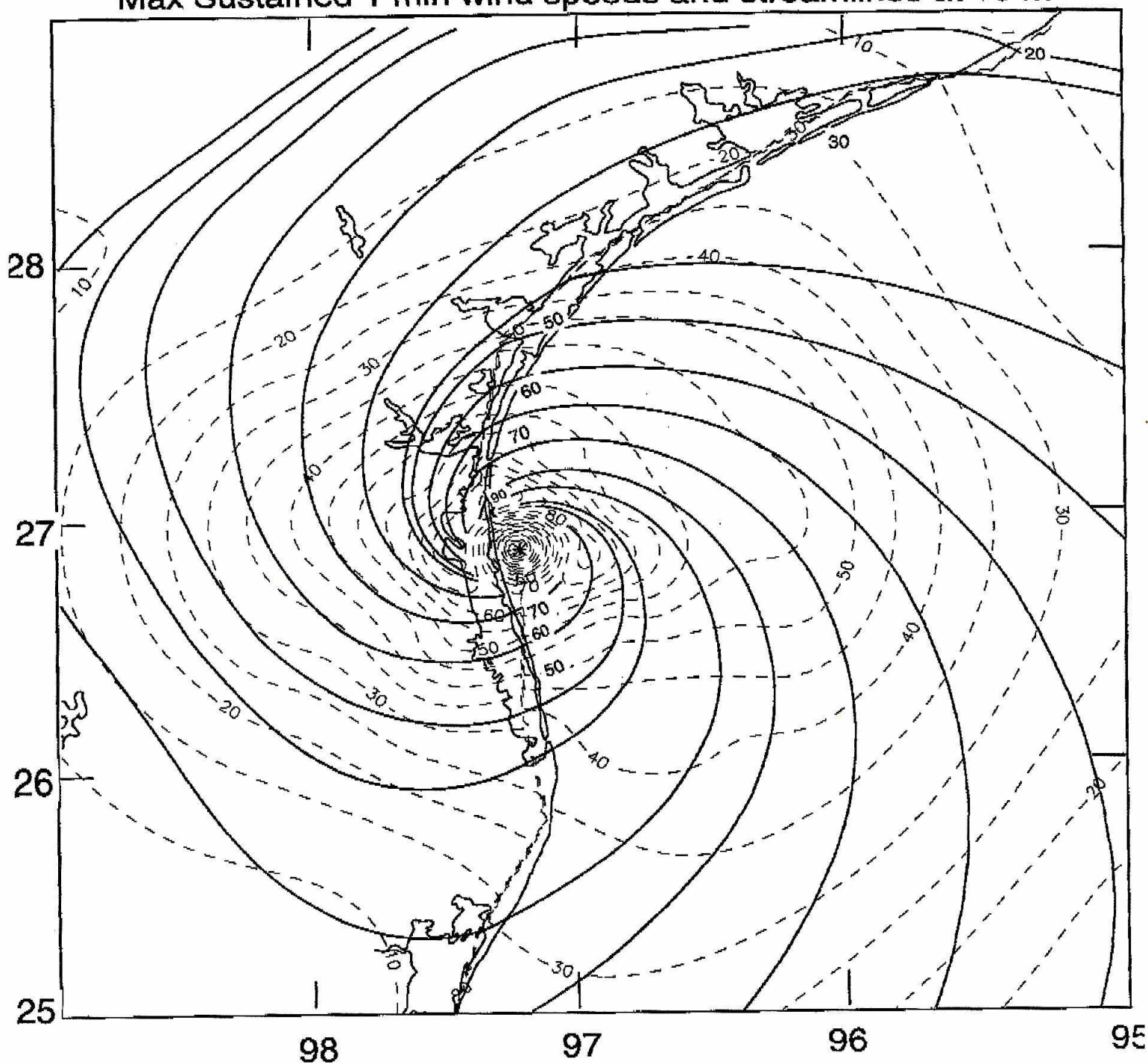
BARRY - 12 AXBT's ext.
20 GPS SONDES

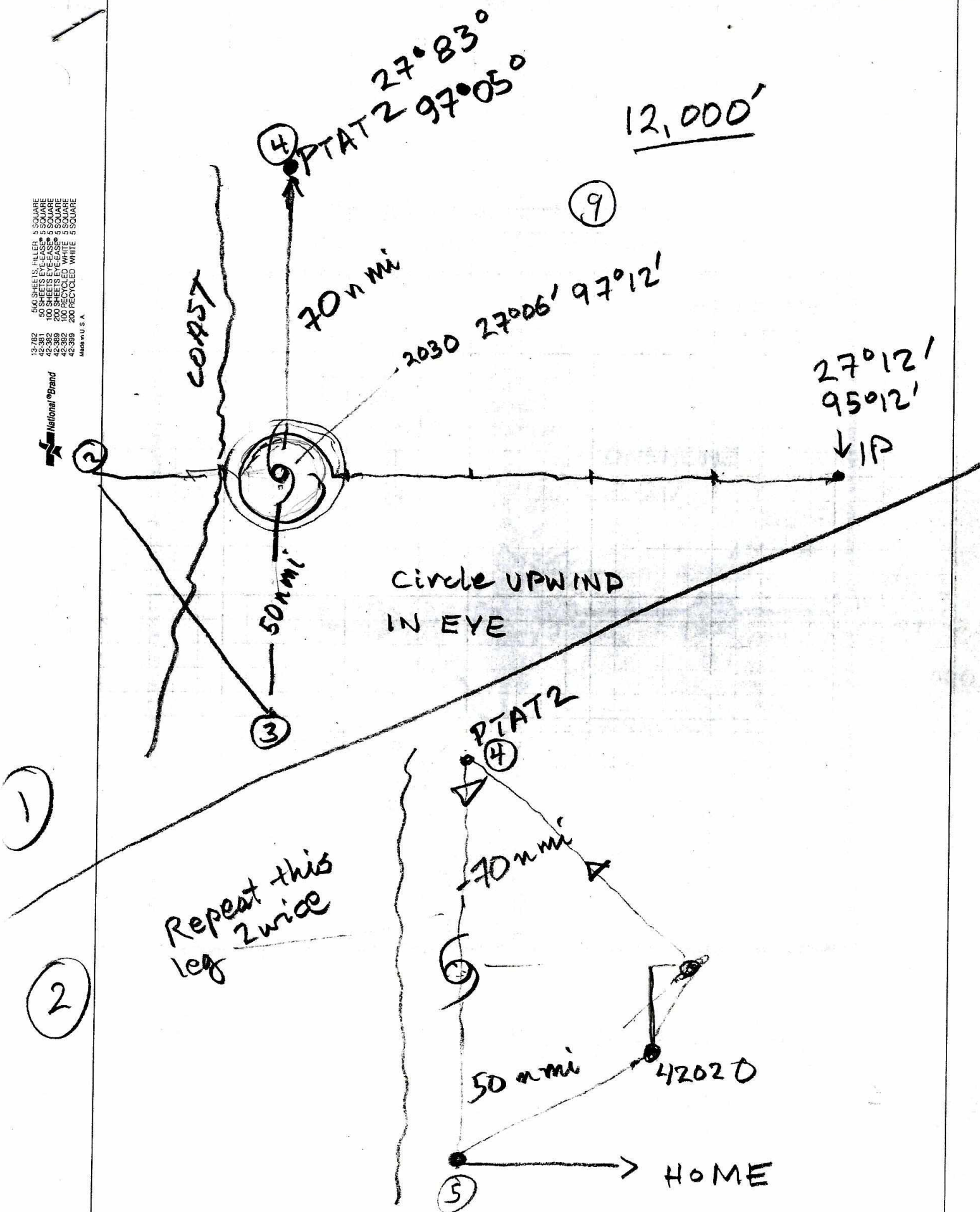
FIG 4 Pts 1 → 4 @ 8,000' SAFETY PERMITTING
Climb @ 4 to 12,000' FOR SPIRAL
IN TO CTR.

CREW: DODGE P.I.
GAMACHE
UHLHARD
BLACK, M.
WALSH
WRIGHT

Hurricane Bret Landfall 2330 UTC August 22, 1999

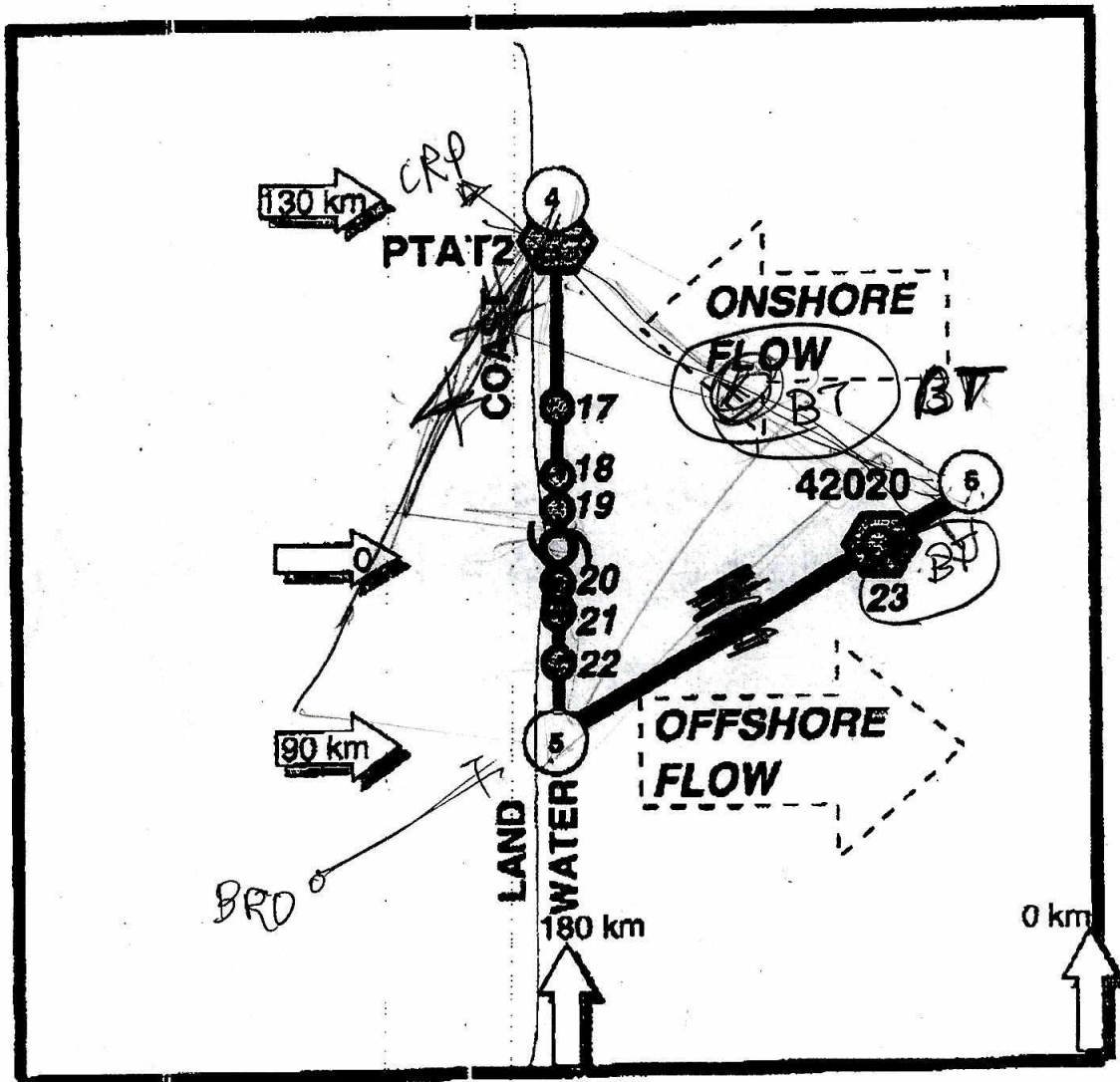
Max Sustained 1 min wind speeds and streamlines at 10 m





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Hur. Brett near landfall (Plan B.2)
"Coastal Patrol" (4 - 6) + drops (18)



Everything in n mi