U.S. Dept. of Commerce/NOAA/Aircraft Operations Center — AOCWF1

Flt ID: I020922	From: KMCF	To: KMCF
Flt No.: 02-35	Blk In: 0045Z	ATA: 0035Z
ETD: 1900Z	Blk Out: 1851Z	ATD: 1933Z
ETE:	Blk Time: 5:54 (5.9)	Flt Time: 5:02 (5.0)
Sponsor Org: HRD	Program: HURRICANE RESEARCH	Purpose: H-ISIDORE CBLAST

AOC Personnel

AC: TENNESEN ✓	Sys Eng: SMITH ✓
CP: HALVERSON / STONG ✓	Data Sys: LYNCH ✓
Nav: ADLER ✓	Radar:
FE: FLOYD / CURRY ✓	GPS/BT: TONG ✓
Avionics: SANS SOUCI ✓	Cld Phys:
FD: DAMIANO ✓	MITCHELL ✓

Participating Scientists/Visitors/AOC

Name (Last, First)	Activity on Aircraft	Affiliation
BLACK, P. ✓	PI	HRD
~~ZIPSER, E.~~ GOLDENBERG STAN ✓	OBS	~~UTAH~~ HRD
MATSUSOV ✓	DOWN LOOKING CAMERA	SCRIPPS
~~WALSH, E.~~ WALSH ✓	~~SFMR~~ AXBT	~~NASA~~ WASA
GRAY, J. ✓	OBS	Dep ~~Dir~~ Dir. AOML
CANTRELL, MARK	MEDIA	Retired Officer Assoc.
GIRIMONTE, A LT ✓	OBS	NRL PILOT
DODGE, P. ✓	HAPS	HRD

Proposed/Actual Mission/Remarks (Recco, Fixes, Storm, ~~PENET, NHOR #~~)

unwgbc. ausfc. nam. gor ~~Gor~~ GOES

Bal DW1 19572

T/O delayed due to APU door problems on N42RF

20 AXBTs

SONABUOYS 6

2 boxes sonde

NO KLW

1 pent 9

Teal ~~48~~

18302 → 0007

AF fix 1848Z, 2133, 8904, 935mb

20262, 2121, 8910, 933mb

MISSION SHORTENED DUE TO STORM CENTER OVER LAND

Teal 27 high 30K-37K alt

U.S. Dept. of Commerce/NOAA/Aircraft Operations Center

AOCWF2

Flt ID: I020922	Time Off: 1933z	Time On: 0055z

	A/C (Take Off)	Wx Stn (Take Off)	A/C (Land)	Wx Stn (Land)
Pressure	1008.2	29.78/1008.4	1009.0	1009.9/29.83

	Number	Data Disposition/Date/Quality
Slow/Fast Flt Lvl Tapes	2	
Radar Tapes	1	
Cloud Physics Tapes		
Video Tapes	3	
AXBT	20	
AXCP		
AXCTD		
Dropsondes	10	5 messages sent

Video

	Forward	Left Side	Right Side	Down	Remarks
Time On					
Time Off					
Rate					

Remarks

NOAA • AOC • SED

N43RF AVAPS DROP LOG

Project : Hurricane '02 Mission : IS 10RG #4 Flight ID : 020922I

Take Off : 1700Z Landing :

PAGE 1 of 2

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Winds Time	Operator	Comments	Good ?
1	020 615 258	1	0	2113	29	DSS		✓
2	022 945 252	1	0	2128	97	RT	LAUNCH D.	
3	021 735 154	2	0	2143	36	RT	REV.D	✓
4	022 945 250	3	0	2143	38	RT	EYE	✓
5	022 945 255	1	0	2143	38	RT	WALL	✓
6	004 255 187	4	0	2147	38	RT		✓
7	022 945 025	1	0	2147	30	RT		✓
8	010 715 109	2	0	2150	24	RT		✓
9	004 255 039	1	0	2155	42	RT		✓
10	003 875 224	1	0	2206	21	RT		✓
11								
12								
13								
14								
15								

NOAA P-3 N43RF
Hurricane Research
H ISIDORE LANDFALL IN YUCATAN

Flight ID: I020922

Sensor or system	Number or Name
INE	2
Accelerometer	2
Temperature Probe	1
Dew Point Probe	3 (Buck Research)
Altitude (for vertical wind)	Radar Altitude (RA-159)
Static Pressure	Rosemount Fuselage
Dynamic Pressure	Rosemount Fuselage
Time Source	Micro 99
Constants File	CO3022.CON

Notes:

The mission was shortened due to the hurricane being over land.

There were no time/data gaps.

The radar altimeter 159, RA159, had a spikes during the following time frames: 1638Z - 1641Z, 2032Z - 2035Z, 2148Z - 2151Z, 225931Z - 220430Z, 232831Z - 233330Z, and 2339Z - 2342Z. These spikes were removed and patched over using the RA232 (radar altimeter 232) and pressure altitude as references.

The King liquid water probe was not operating for the entire mission.

All other instruments worked optimally during the flight.

The 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 speeds, respectively, computed using Dave Jorgensen's vertical wind algorithm.
It is recommended that these values be used for vertical wind analysis.

	Takeoff	**Landing**
Aircraft Static Pressure	1008.2 mb	1009.0 mb
Corrected Tower Pressure	1008.4 mb	1009.9 mb
Flight Director:	A. Barry Damiano	(813) 828-3310 ext. 3073

(72)

Flight ID: I020922

U.S. Dept. of Commerce/NOAA Aircraft Operations Center — Form A

Time	Lat	Long	Trk	Hdg	Wind Dir	Wind Spd	T_a	T_d	Press. Alt.	Geo. Alt.	Sfc Press.	Press. Sfc	Dyn. Press	Remarks
195100	2708	8255	226	224	126	14	3.1	-30.4	4432	4639	1004.0	582.5	65.8	HAZE
200600	2622	8345	222	222	123	6	3.5	-17.9	4400	4603	1003.3	584.8	61.2	SCT CLD
202300	2531	8442	225	223	102	16	2.4	-2.2	4453	4648	1002.2	580.9	64.2	SCT CLD
202942	2510	8505	228	227	104	18	3.2	-2.6	4444	4638	1000.4	581.6	63.8	BT 12
203531	2454	8528			101	18						581.6		BT 14
204033	2438	8549			101	23						582.6		BT 12
204530	2423	8610			98	29						582.9		BT 14
205029	2407	8631			105	32						583.3		BT 12
205541	2350	8653			126	27						620.0		BT 14
210013	2337	8712			106	37						780.3		BT 12
210536	2321	8733			116	40				1516		840.7		BT 14
211335	2259	8801			116	42								BT 12 / (29) SONDE 916
212825	2209	8838			114	51				1612		834.0		BT 14 / SONDE
214330	2121	8914												SONDE
	2121	8914												SONDE
214400	2120	8915												SONDE
214759														SONDE
215050														SONDE
	215011													SONDE
215516	2142	8939			59	69					984.1			SONDE (96) / BT 14
220643	2217	8951			64	53					992.2			(31) SONDE / BT 12
221500	2151	8935			64	65		1K			986.3			
222600	2154	8910			76	54		600K			987.8			
2235-22	4115				1K									
230150	2242	8710			132	28	.9	-.7	4748	4928	997.1	558.5	79.4	BT 12
230614	2255	8653			123	24	.9	-.6	4749	4938	997.0	558.5	77.8	BT 14
231100	2308	8634												BT 12
231506	2320	8619			110	24	1.7	-2.0	4750	4948	997.1	558.5	84.6	BT 14
232000	2335	8559												BT 12
232335	2345	8543			109	19	.2	-2.3			1002.0	558.4		BT 12
232745	2358	8526			115	20								BT 12
233153	2411	8509			106	24			4751	4917	999.7	558.5		BT 12
000000	2608	8341	28	33	112	18	7.5	4.2	3385	3586	1007.5	662.4	87.1	BTN CLD

30-3

Turn Pt	Type	Fix/Point	Latitude	Aspd	Altitude	MH	Leg Time	Leg Dist	Leg Fuel
	DTD	Description	Longitude	Bank	Wind	MC	Clock Time	Total Dist	Total Fuel
1	ST	KMCF/A	N 27 50.95		14M	044	00+00+00	0.0	200
*M		MACDILL AFB	W082 31.28			044	00:00:00	0.0	9800
2		SRQ/R200030	N 26 55.25	N/A	9721M	195	00+09+42	56.6	162
*M		SARASOTA	W082 43.63			195	00:09:42	56.6	9638
		.level off	[illegible]	N/A	15000M	236	00+05+17	30.8	88
*M			[illegible]			236	00:14:59	87.4	9550
3			N 23 00.00	270T	15000M	235	01+15+35	340.1	1260
*M	IP	none	W088 00.00			235	01:30:34	427.6	8290
		[illegible]	N 22 29.65	225T	15000M	215	00+09+56	37.2	166
*M			W088 23.51			215	01:40:30	464.8	8124
4			N 21 42.00	N/A	5000M	215	00+10+00	58.3	167
*M	1		W089 00.00			215	01:50:30	523.1	7957
5		NW	N 22 46.91	225T	5000M	324	00+21+11	79.4	353
*M	2		W089 49.73			324	02:11:41	602.6	7604
6		none	N 21 28.21	225T	5000M	191	00+21+23	80.2	356
*M	3	none	W090 07.65			191	02:33:04	682.8	7248
7		none	N 21 57.01	225T	5000M	076	00+39+05	146.5	651
*M	4	none	W087 33.33			076	03:12:09	829.3	6597
8		none	N 21 42.00	225T	5000M	260	00+21+52	82.0	365
*M	5	none	W089 00.00			260	03:34:01	911.3	6232
		.level off	N 22 25.04	N/A	15000M	041	00+10+00	58.3	167
*M			W088 17.43			041	03:44:01	969.6	6065
9		MCF/T	N 27 51.68	270T	15000M	042	01+40+35	452.6	1676
*M		MACDILL	W082 30.81			042	05:24:36	1422.2	4389

1600

21.7
88.9

15 nm from land

60 ENE

Rig

125 mph

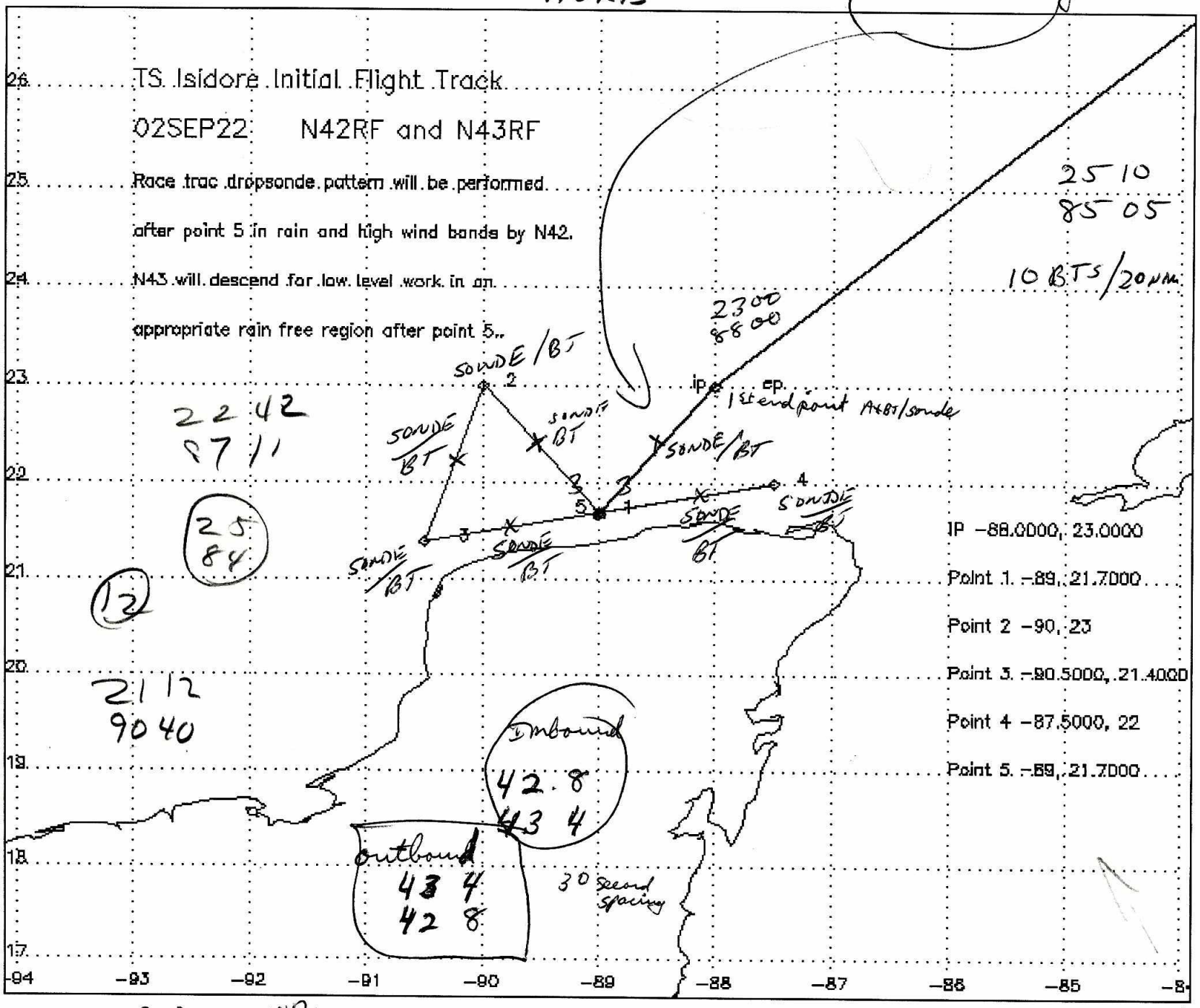
93 knots

WSW 8 mph

18482 2133 8904 935 110 KTS

80nm legs

2421



14.5K

5K

Step descent 25nm 42 12 16

2 115 10 8 1V

NN pt 2230 09000

20267

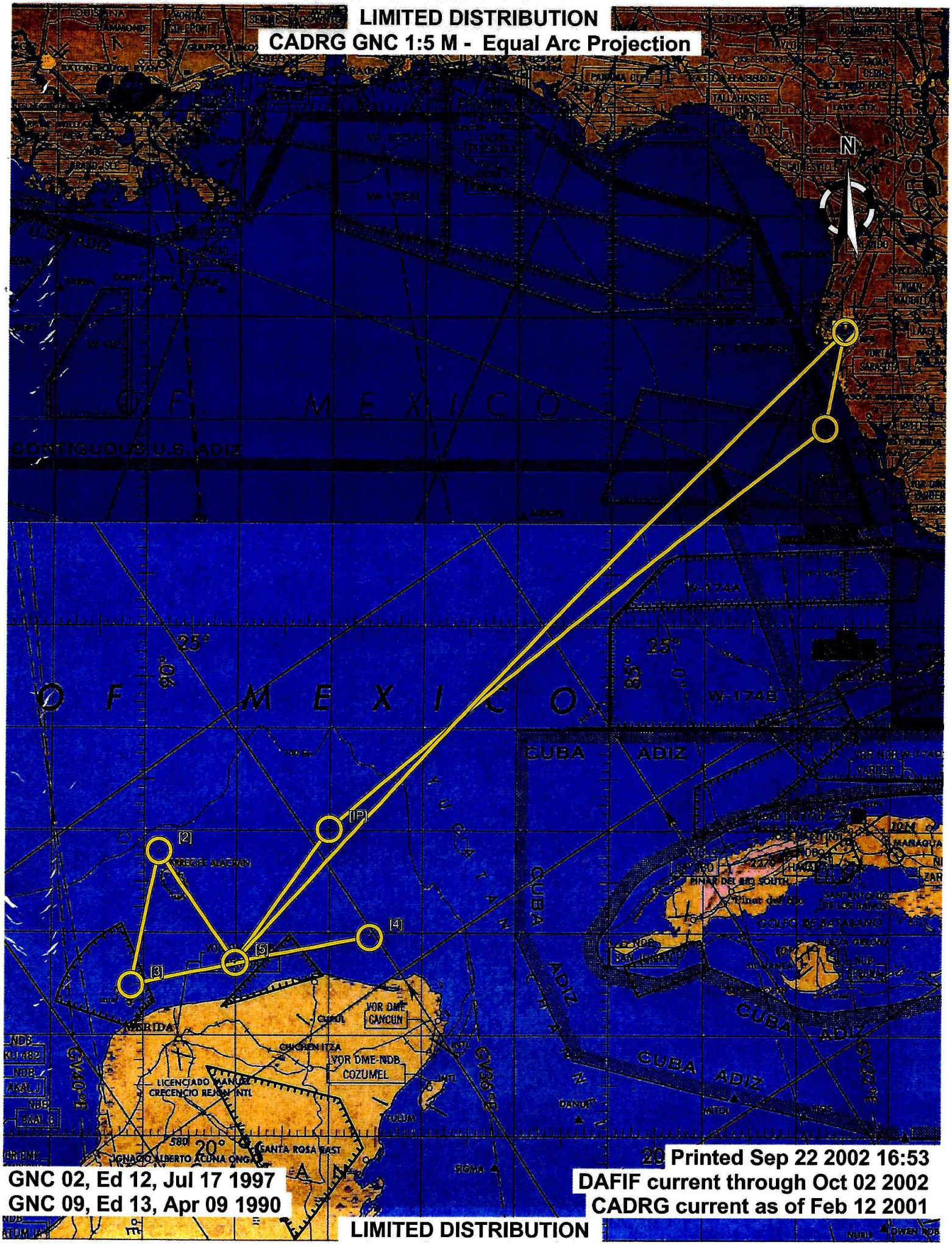
2421 8910 933 12 N42 14 N43

300nm wire length on AXBT

@ 1000ft for 15-20 minute NE of center

LIMITED DISTRIBUTION

CADRG GNC 1:5 M - Equal Arc Projection



GNC 02, Ed 12, Jul 17 1997

GNC 09, Ed 13, Apr 09 1990

29 Printed Sep 22 2002 16:53

DAFIF current through Oct 02 2002

CADRG current as of Feb 12 2001

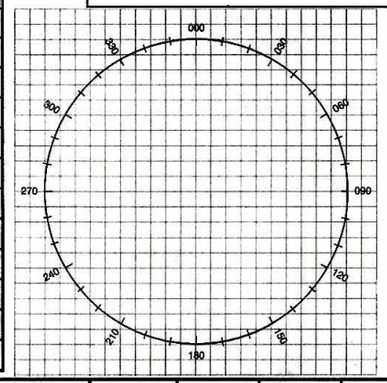
LIMITED DISTRIBUTION

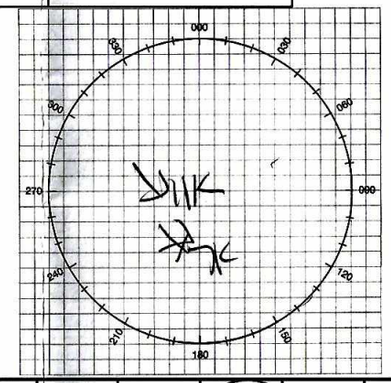
fcst 40

CLEARANCES			
FREQ	ALT	HDG	OTHER
			085 ↗ 1600 14K 2335z
			↗41K
			160°
			↗ 12K
			240°
			↗14K

MISSION LOG

PAGE ___ OF ___





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	VHF/VOICE	MF/VOICE	HF/CW	MF/CW
243.0	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	MH	VAR +E==>	TH	DR +R==>	TRK	GS	WD	WS	ALT	TAS	NEXT PT	DIST	TIME	ETA	REMARKS
1843 1851	ENG TOFF																				2030 46 2116
1857 1932	BLOCK TIO																				
1934	X	27 52.8 082 27.3	27 52.9 082 27.2	-.1 +.1	27 52.9 082 27.1	-.1 +.2				1L	076	168	085	15	1600	192					070/3 mcf
2032	△	25 04.6 085 11.9	25 04.8 085 12.0	-.2 -.1	25 04.8 085 12.0	-.2 -.1				1R	232	262	070	20	14800	246					
2117	△	22 46.2 088 10.1	22 47.3 088 09.6	-.6 +.5	22 47.1 088 09.6	-.4 +.5				1R	214	247	115	45	5000	240					
2211	△	22 00.7 089 41.3	22 01.4 089 40.7		22 01.2 089 40.7					1SR	150	219	070	65	1000	224					
2329	△	24 05.8 085 15.7	24 08.8 085 14.8	-3.0 +.9	24 07.9 085 14.6	-2.1 +1.1				5L	051	296	125	26	15800	300					
0026	△	FMCP LAND																			
		27 51.4 082 30.9	27 55.6 082 30.2	-4.2 +.7	27 53.9 082 29.4	-2.5 +1.5															

2119

2114 12/16

NOAA FORM 56-49
(2-95)

MISSION PREFLIGHT LOG

DESTINATION	MISSION	NAVIGATOR	AIRCRAFT COMMANDER	FLIGHT DIRECTOR	SCHEDULED / ACTUAL TAKEOFF Z	DATE OF TAKEOFF
KMCF	IDAPOR 02	ADLER	TENNESEN	DAMIANO	1900 / 1932	22SEP82

21.7 88S

20 SOB

WP	LAT / LON	RTE	MH	VAR +E==>	TH	DR +R==>	TRK	GS	WD	WS	ALT	TAS	LEG / TOT DIST	LEG / TOT TIME	PROP ETA	ETA	ATA	REMARKS
9	KMCF																	
1	FIRST 2510 08505																	
2	23 088 IP																	
3	2230 090																	
4																		
5																		
6																		
7	SRQ																	
8	ETE																	
					TIME	FUEL	FF	CALC PTC	ENDR	TIME								
					1857	46.2	/	/										
					~~2200~~ 2202	5.0		~~4.7~~	4+45	0245								

INS PERFORMANCE	INS 1	INS 2
BEGIN ALIGN TIME	1615	1615
ALIGN STATUS (0-5)	0	0
END NAV TIME	0036	0036
START NAV TIME	1833	1833
DELTA T	6+03	6+03

TERMINAL ERRORS	INS 1	INS 2
DELTA LAT	+4.2	-2.5
DELTA LON	+.7	+1.5
RGS	2	1
RADIAL ERROR	5	3.

REMARKS

ETE ~~21.7 88S~~

1848Z 213 8904

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
AIRCRAFT OPERATIONS CENTER