19940909H1-FDIR

T.S. "DEBBY"

940909H (Recco/Invest)

TYPE OF DATA	SENSOR OR OPTION
INE	1
Accelerometer	1
Temperature probe	1
Altitude change option (for vertical winds)	RA159
Static pressure	Rosemount fuselage
Dynamic pressure	Rosemount fuselage
Time source	Micro 29
Constants file	CO2942.CON

Notes:

There was one time/data gap at 211947Z - 212000Z.

As always, in very moist conditions wetbulbing occurs, as it did on this flight.

The aircraft INE positions were renavigated with respect to 10 GPS positions.

On decent into Debby TT2 frozeup until level at 1500ft RA...

D.P. balanced at 175400Z - not despiked/patched...

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.

	Takeoff	Landing
Aircraft static pressure	1017.7mb	1005.2mb
Corrected tower pressure	1017.8mb	1012.0mb

Flight Meteorologist: Philip D. Bogert (813) 828-3310 ext. 3072

U.S. DEPT. COMM./NOAA/OAO - DATA SECTION WORK FORM NO.1 OAOWF1 FILE

FLT ID: 940909H	FM: KMCF	TO: TBPB
FLT NO: 94-59	BLK IN: 10/0216Z	ATA: 10/0212Z
ETD: 1700Z	BLK OUT: 1659Z	ATD: 1717Z
ETE: 9+00	BLK TIME: 9+17 (9.3)	FLT TIME: 9+00
SPONSOR ORG: NHC	PROGRAM: HURRICANE	PURPOSE: Recco/INVEST

OAO PERSONNEL

AC	PHILIPPSBORN ✓	SYS ENG	BARR ✓
CP	KENNEDY ✓	DATA SYS	PRADAS ✓
NAV	STRONG ✓	RADAR	MCNAMARA ✓
FE	TORREY ✓ / MOORE ✓	BT/ODW	
RADIO	ARNASON ✓	CLD PHYS	
FD	BOGERT ✓	DOPPLER	

PARTICIPATING SCIENTIST/VISITORS/OAO

LAST, FIRST NAME	ACTIVITY ON A/C	AFFILIATION
KINNEY ✓	II S.O.B.	AOC

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

T.O. ALT — ~~3006/1017.8~~ ~~1018.2mb~~
SP — 1017.9mb
PS. 1017.7 mb

ALT — 2990/1012.0mb
SP — 1005.2
PS — 1005.2

INVEST MISSION TO VCNTY
14-30N 60-00W ~~2200Z~~
→14N 59W 222
D.P. BAC.
1754Z

U.S. DEPT. COMM./NOAA/OAO - DATA SECTION WORK FORM NO.2 OAOWF2 FILE

FLT ID: 940909H TIME OFF: 1711Z TIME ON: 10/0212Z

	A/C T/O	WX STN	A/C LAND	WX STN
PRESSURE				

	NO	DATA DISPOSITION/DATE/QUALITY
1/SEC FLT LVL TAPES	1	
FAST FLT LVL TAPES		
RADAR TAPES	1	
DOPPLER TAPES		
ODW CASSETTES	Ø	
HARD COPIES	Ø	
PMS	Ø	
AXBT	Ø	
AXCP	Ø	
ODW	Ø	

PHOTOGRAPHY

	FWD	LS	RS	VERT	
ON					
OFF					
RATE					

REMARKS

Form 413-50
- 63

240909H

Time	LAT		LONG		TRK	WS	WS	AA	GA	TA	Td	SP	PS	
1748	26	20	80	47	116	050	05	5147	5455	-5.0	-5.3	141	530	
1824	25	01	78	01	120	054	04	5141	5455	-4.8	-5.5	146	530	
1904	23	26	75	01	122	161	13	5802	6182	-8.5	-18.8	184	485	
2000	21	17	70	54	121	109	09	6407	6834	-12.0	-21.6	177	446	
2044	19	26	67	54	123	067	21	6403	6825	-11.8	-24.6	169	446	
2118	18	08	65	26	118	060	23	6404	6794	-11.5	-22.7	142	446	
2215	16	03	61	11	131	032	08	6402	6808	-10.9	-16.9	127	446	DECENT @ 2225Z

NOAA FORM 56-49
(3-86)

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

940909H

FLIGHT PLAN

PROPOSED T.O.	1700
ACTUAL T.O.	1711

WAY POINT	TO	RTE	ALT	TAS	TC	W V DC	TH	VAR	MH	GS	ZONE DIST	TOTAL DIST	ZONE TIME / TOTAL TIME	PROPOSED ETA	ETA / ATA
1 EBV	26-49.7 81-23.5	J43		260						260	95	95	+22 / +22		1733
2 MIA	25 57.8 80-27.6	✓		270						270	72	167	+15 / +37		1748
3 BBV	25-42.2 79-17.7	DD		300						295	68	235	+14 / +51		1805
4 RESIN	24-36N 77-08W	A555									135	370	+28 / 419		1834
5 CROOT	23-57N 76-[illegible]W										72	442	+15 / T34		184
6 ZLS	23-34.9N 75-15.8W										47	489	+10 / T+44		1900
7 INDEE	23-08N 74-23W										55	544	+11 / T+55		1912
8 GTK	21-26.4N 71-08.1W										207	751	+42 / 2+37		1956
9 GRADI	20-31N 69-38W										101	852	+20 / 2+57		2018
10 HARDY	20-01N 68-49W									↓	55	907	+11 / 3+08		2030
11 IDAHO	19-16N 67-38W	↓								305	81	988	+16 / 3+24		2047
12 BQN	18-30N 67-06.5W	RT4									55	1043	+11 / 3+35		2058
13 TUNA	17-59N 65-53.4W	✓									76	1119	+15 / 3+50		21
14 COY	17-42.1 64-42.1	✓									70	1189	+14 / 4+04		21
15 MODLY	16-57N 63-00W	RA88									108	1297	+21 / 4+25		2152
16 PPR	16-16.0N 61-31.0W	UR44									95	1392	+19 / 4+44		2291
17 TP	14-80N 59-00W	DD		✓						✓	70	1462	+14 / 4+58		2250
18 TGPB	13-04.3N 59-29.2W	✓													
	+8		+7		17-03										
	-8		-7		62-55										

SYS	BEGIN ALIGN TIME	NCS CONN	Ω AID	TIME OUT OF COARSE / ELAPSE ALIGN POST TIME	ALIGN STS 0-5	(1) TIME INTO NAV.	(2) TIME OUT NAV.	ΔT (2)(1)	TERMINAL ERRORS LAT	LONG	G S
INS 1	1555Z				5	1655	0217	9+22	-4.4	+7.0	3
INS 2 IMU	✓				1	✓	✓	✓	+20.7	-11.7	6

ALIGN REMARKS:

OTHER REMARKS:

A/C COMMANDER	NAVIGATOR	A/C NO.	MISSION NO.	TIME AIRBORNE	LOCATION	DATE	PROJ. NAME
KENNEDY	STRONG	N42RF	94-59	1711	KMCF → TBPB	9 SEP 94	TROP WAVE Debbie

	TIME OF ENTRY	POSITION	TYPE INE USED	INE #1 POSITION	LAT LON COR'S	INE #2 POSITION	LAT LON COR'S	ALT / GS	TH / TK	REMARKS
1	1737	26-38.7 81-39.3	GPS 1	26-38.7 81-38.8	.0 +.5	26-58.3 81-39.3	+.4 0	17.0 284	111 112	FM1
2	1845	24-18.8 76-27.0	GPS 1	24-19.7 76-25.3	-.9 +1.7	24-16.9 76-27.1	+1.9 -.1	19.0 288	140 135	FM2
3	1945	21-51.7 72-00.7	GPS 1	21-53.9 71-58.1	-2.2 +2.6	21-46.7 72-01.7	+5.0 -1.0	19.0 287	121 120	FM2
4	2039	19-38.9 68-15.0	GPS 1	19-42.5 68-11.3	-3.6 +3.7	19-30.2 68-17.2	+8.7 -2.2	21.0 278	120 122	FM2
5	2127	17-47.8 64-46.1	GPS 1	17-54.3 64-41.4	-6.5 +4.7	17-37.5 64-49.7	+10.3 -3.6	21.0 285	115 117	FM1
6	2216	15-55.9 61-07.3	GPS 1	16-01.2 61-01.7	-5.3 +5.5	15-40.0 61-12.1	+15.9 -4.8	21.0 293	132 134	FM1
7	2310	14-03.1 58-35.9	GPS 1	14-10.7 58-29.4	-7.6 +6.5	13-45.7 58-42.4	+17.4 -6.5	1.5 180	097 091	FM1
8	0004	13-18.1 60-04.8	GPS 1	13-26.1 59-56.5	-8.0 +8.3	12-59.5 60-11.3	+18.6 -6.5	1.5 226	317 320	FM1
9	0105	13-24.1 59-25.4	GPS 1	13-31.2 59-18.4	-7.1 +7.0	13-03.1 59-35.5	+21.0 -10.1	1.5 240	357 000	FM1
0	0217	13-04.6 59-29.4	GPS 1	13-10.0 59-22.4	-4.4 +7.0	12-43.9 59-41.1	+20.7 -11.7	RGS 3/6	RR 9/24	CHOCKS

ATC CLEARANCE: CAF FOE 110/70 UIA RV RSW ↦ ZBV AF
R080 ↗ 1.6 EXP 170 +10
D 278.6 SQ 3701

ENROUTE CLEARANCES:

TYPE OF FIX: (1) DR (2) RADIO (3) CELESTIAL (4) VISUAL (5) LORAN (6) RADAR (7) DOPPLER - INERTIAL (8) OMEGA (9) INERTIAL (10) OMEGA - INERTIAL