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

FLT ID: 990914N	FM: KSAV	TO: TISX
FLT NO: 99-52	BLK IN: 0208	ATA: 0205
ETD: 1730	BLK OUT: 1734	ATD: 1746
ETE: 8+	BLK TIME: 8:34 (8.6)	FLT TIME: 8:19 (8.3)
SPONSOR ORG: NHC	PROGRAM: Surveillance	PURPOSE: N. FLOYD, GEAT

OAO PERSONNEL

AC Maxson ✓	SYS ENG Goldstein, A. ✓
CP McCann/Yates ✓	DATA SYS Hornbrook, C. ✓
NAV White ✓	RADAR Smith, J. ✓
FE Kitson	BT/ODW
RADIO	CLD PHYS
FD Parrish ✓	DOPPLER

PARTICIPATING SCIENTIST/VISITORS/OAO

LAST, FIRST NAME	ACTIVITY ON A/C	AFFILIATION
GOLDENSTEIN, S. ✓		
KRAAN, J. ✓		

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

1653Z 2108A FLOYD KSAV-TISX.
020/12 29.5/4 1900Z Problem with satcomm - getting busy signal - problem likely
29/22 1010.5 at NWS gateway.
29.91 10/7 Dropped 28 sondes. 24 good.

TISX
0047
110/10
29/24
29.90
70/5

990914D H. FLOYD, GEAT SURVEILLANCE

Time	LAT	LON	TH	WD	WS	GA	PA	TA	TD	PS		
1737	out											
1746	off											
174915	32 09	81 00	96	74	13	2452	2432	11	11	741	↑	
195830	.32 04	79 57	97	64	8	6738	6502	-12	-23	436	↑	
181237	32 00	78 00	53	191	8	10620	10156	-36.8	-36	256	↑ Drop	1
183200	33 27	75 30	~	202	29						Drop	2 No launch alt
183239	33 26	75 22	~	204	29	13123	12520	-58	-60	175	Drop	2A
185023	32 38	73 00	~	250	24	13146	12569	-59	-61	175	Drop	3
190751	34 54	72 53	~	240	29	13121	12572	-59	-60	175	Drop	4
192203	33 59	70 57	120	250	20	13150	12579	-58.7	-58	121	Drop	5
193644	32 56	69 04	~	290	9.6	13162	12582	-57.9	-62.5	175	Drop	6
195017	31 30	69 57	~	260	11	13169	12557	-57.6	-62	175.8	Drop	7
200540	29 40	69 10	158	320	7.5	13163	12551	-58	-61	175.7	Drop	8
202103	27 50	68 20	157	333	5.9	13153	12551	-58	-58	176	Drop	9
203605	26 00	67 32	~	14	14	13151	12550	-58.5	-57.9	176	Drop	10 No winds
203714	25 51	67 36	209	353	14	13154	12549	-58	-58	176	Drop	10A
205308	24 07	68 46	218	0	6.5	13144	12546	-58	-56	176	Drop	11
211135	22 02	69 54	~	39	18	13144	12550	-58.8	-56	175.9	Drop	12
213045	21 258	67 30	101	19	33	13723	13129	-64	-63	159.8	Drop	13
215055	21 00	65 00	89	10	36	13696	13120	-65	-64	160	Drop	14
221448	20 59	62 00	89	3	26.6	13681	13122	-65.9	-67.7	160	Drop	15
223759	21 00	59 00	89	206	4.4	13685	13127	-64.7	-66.8	159.8	Drop	16
230047	21 04	56 03	~	216	9.8	13702	13132	-65	-67	159.7	Drop	17
231909	23 27	55 55	~	195	16	13679	13134	-64	-68	159.7	Drop	18
233723	23 25	53 33	~	172	19.8	14284	13704	-70	-71	144.8	Drop	19
000152	20 45	53 30	180.4	152	19	14296	13703	-69.7	-70.9	144.9	Drop	20
002551	18 02	53 34	~	161	16	14290	13703	-69.6	-69.6	144.9	Drop	21
004727	17 55	56 20	268	178	14	14287	13703	-68.5	-70.7	145	Drop	22 NO WINDS
004911	17 54	56 35	268	180	16.6	14285	13702	-69	-70.8	144.96	Drop	22A
010935	17 51	59 10	269	155	13	14278	13703	-70.6	-71.3	145	Drop	23
013132	17 47	62 00	268	152	13	14285	13701	-68.9	-70.8	145	Drop	24 LATE WINDS
013322	17 46	62 12	268	124	7.5	14277	13699	-70	-70	145	Drop	24A
014930	17 43	64 10	264	170	6.5	2161	2057	15	11	815	↓	
0208	17.659	64.79					13.9	31	22	1011.5	VBLOCK IN	

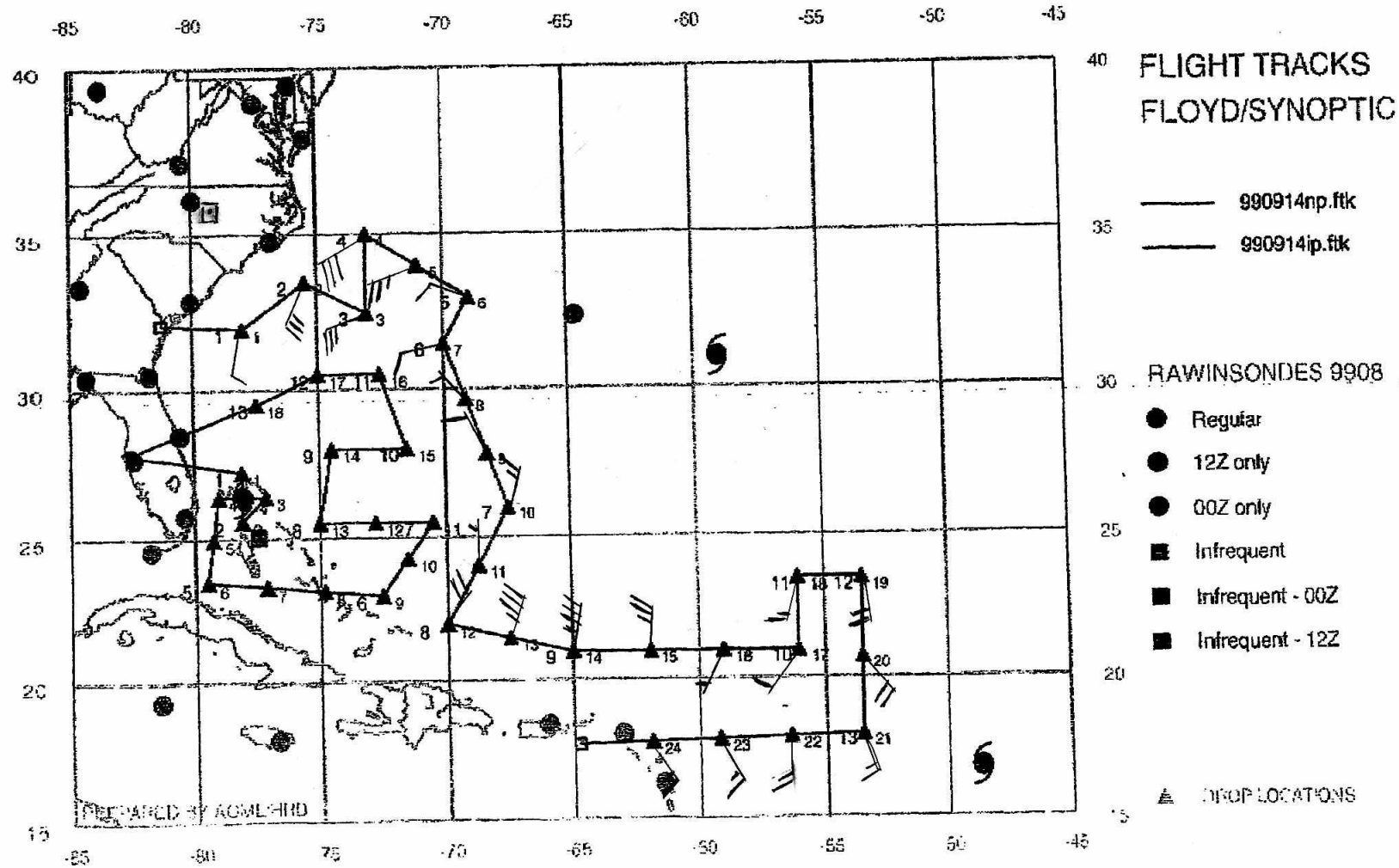
N49RF AVAPS DropSonde Log

N49RF Project: GOLDSTEIN, SMITA, HORNBROOK Flight ID 990914N

Mission: FLOYD Flight #: 15 System Status: OK

Drop #	Sonde Serial Number	Chn. #	Time (Zulu)	Press. offset	Winds time	Operator Initials	Comments / Drop Status/ Failure Reason	GOOD ☑/B
1	983310107	1/5	1812	Ø	15	ASG		✓
2	991515277	1/5	1832	.4	—	ASG	NO LAUNCH DETECT	B
3	990435457	2	1832	.6	27	ASG		✓
4	984325280	1/5	1850	.3	25	ASG	CHAN 5 NEW FIRMWARE - WINDS @ 14 SEC	✓
5	991835079	1/5	1907	0	59	ASG		✓
6	983310123	2/6	1922	.4	20	ASG		✓
7	991845307	1/5	1936	.7	29	ASG		✓
8	991828007	2/6	1950	.7	11	ASG		✓
9	991515154	1/5	2005	.8	22	ASG		✓
10	991515275	2/6	2021	.6	22	JAS		✓
11	984325117	1/5	2036	.4	—		NO SATS/NO WINDS-FAST FALL	B
12	991835083	3	2037	0	✓		BACKUP	✓
13	985035133	1/5	2053	.7	14			✓
14	984325047	1/5	2111	.5	30			✓
15	990845010	2	2130	.7	24			✓
16	991835101	1	2150	.5	38			✓
17	991835084	1	2214	Ø	17			✓
18	991835080	1	2238	.4	23	JAS		✓
19	991515276	1/5	2300	.5	36	JAS	Channel 5 no winds Firmware bug? Channel 1 o.k.	Became fast fall
20	991835103	1/6	2319	.5	23	JAS		✓
21	991828047	1/6	2337	1.4	23	JAS		✓
22	991835102	1/6	0001	.6	20	JAS		✓
23	984325028	1/6	0025	0	53	JAS		✓
24	991515037	1/6	0047	.8			Late winds	
25	991515040	2	0049	.5	43		Back up	✓
26	991515035	1/6	0109	.5	37			✓
27	991845261	1/6	0131	.5	125		Late winds	
28	991835078		0133	0	56			✓
29								
30								
31								
32								
33								

PI DATA RECORDED FOR ALL CHAN 1 DROPS


FLIGHT TRACKS
FLOYD/SYNOPTIC
990914np.ftk
990914ip.ftk
RAWINSONDES 9908
Regular
12Z only
00Z only
Infrequent
Infrequent - 00Z
Infrequent - 12Z
DROP LOCATIONS
PREPARED BY AOML/HRD
-85
-80
-75
-70
-65
-60
-55
-50
-45
40
35
30
25
20
15

461
WTNT43 KNHC 141449
TCDAT3
HURRICANE FLOYD DISCUSSION NUMBER 28
NATIONAL WEATHER SERVICE MIAMI FL
11 AM EDT TUE SEP 14 1999

FLOYD IS NOW MOVING...AS EXPECTED...WEST-NORTHWEST OR 295/12. THIS MOTION IS BASED ON RECON FIXES AND HIGH RESOLUTION VISIBLE IMAGES. THE GENERAL STEERING WHICH IS CONTROLLING THE MOTION OF FLOYD IS GRADUALLY EVOLVING AS MODELS HAVE BEEN INDICATING. THERE IS NO REASON THEN TO CHANGE SIGNIFICANTLY THE PREVIOUS FORECAST TRACK...EXCEPT FOR A MINOR ADJUSTMENT TO THE LEFT BASED ON LATEST GFDL AND AVN MODELS. THIS MEANS THAT FROM CENTRAL FLORIDA NORTHWARD BECOMES EVEN MORE VULNERABLE TO EXPERIENCE THE WESTERN PORTION OF THE EYEWALL. ONLY SMALL DEVIATION TO THE LEFT WOULD BRING THE EYE TO THE COAST. NO CHANGES IN WATCHES AND WARNINGS ARE REQUIRED FOR THE EAST COAST OF THE UNITED STATES AT THIS TIME.

THE HURRICANE IS FLUCTUATING IN INTENSITY...AND THIS IS NORMALLY OBSERVED..ESPECIALLY WHEN THE EYE INTERACTS WITH ISLANDS. MAXIMUM WINDS NOW ARE ABOUT 125 KNOTS AND THE PRESSURE IS 932 MB. ADDITIONAL FLUCTUATIONS...UP OR DOWN...IN INTENSITY ARE EXPECTED DURING THE NEXT 48 HOURS.

AVILA

FORECAST POSITIONS AND MAX WINDS

INITIAL	14/1500Z	25.7N	76.8W	125 KTS
12HR VT	15/0000Z	26.5N	78.5W	125 KTS
24HR VT	15/1200Z	28.0N	80.0W	125 KTS
36HR VT	16/0000Z	31.0N	81.0W	125 KTS
48HR VT	16/1200Z	34.0N	80.0W	120 KTS...INLAND
72HR VT	17/1200Z	41.0N	77.0W	40 KTS...INLAND

HURRICANE SYNOPTIC SURVEILLANCE MISSION PLAN: FLOYD/SYNOPTIC

Prepared by the Hurricane Research Division at 11:45:20 AM on 09/13/99.
File: 990914np.ftk

Aircraft: N49RF Altitude: FL410-450 Proposed takeoff: 14/1730Z

DROP LOCATIONS

49RF

#	LAT (d m)	LON (d m)	RAD/AZM (nm/dg)	TIME (h:mm)
				0:32
1	32 00	78 00		0:53
2	33 30	75 30		1:12
3	32 30	73 00		1:33
4	35 00	73 00		1:48
5	34 00	71 00		2:04
6	33 00	69 00		2:18
7	31 30	70 00		2:34
8	29 40	69 10		2:50
9	27 50	68 20		3:07
10	26 00	67 30		3:25
11	24 00	68 45		3:44
12	22 00	70 00		4:04
13	21 30	67 30		4:23
14	21 00	65 00		4:46 →2216
15	21 00	62 00		5:09
16	21 00	59 00		5:32
17	21 00	56 00		5:52
18	23 30	56 00		6:11
19	23 30	53 30		6:33
20	20 45	53 30		6:55
21	18 00	53 30		7:17
22	17 55	56 20		7:39
23	17 51	59 09		8:01
24	17 47	61 59		

HURRICANE SYNOPTIC SURVEILLANCE MISSION PLAN: FLOYD/SYNOPTIC

Prepared by the Hurricane Research Division at 11:45:20 AM on 09/13/99.
File: 990914np.ftk

Aircraft: N49RF Altitude: FL410-450 Proposed takeoff: 14/1730Z

TRACK DISTANCE TABLE

#	LAT (d m)	LON (d/m)	RAD/AZM (nm/dg)	LEG (nm)	TOTAL (nm)	TIME (h:mm)
0	SAVANNAH			0.	0.	0:00
1	32 00	78 00		163.	163.	0:32
2	33 30	75 30		155.	318.	0:53
3	32 30	73 00		140.	458.	1:12
4	35 00	73 00		150.	608.	1:33
5	33 00	69 00		233.	841.	2:04
6	31 30	70 00		104.	945.	2:18
7	26 00	67 30		356.	1300.	3:07
8	22 00	70 00		277.	1577.	3:44
9	21 00	65 00		286.	1863.	4:23
10	21 00	56 00		505.	2368.	5:31
11	23 30	56 00		150.	2518.	5:52
12	23 30	53 30		138.	2656.	6:11
13	18 00	53 30		331.	2987.	6:55
14	17 42	64 48		647.	3634.	8:33

394
WTNT44 KNHC 141435
TCDAT4
HURRICANE GERT DISCUSSION NUMBER 13
NATIONAL WEATHER SERVICE MIAMI FL
10 AM EST TUE SEP 14 1999

SATELLITE IMAGERY SHOWS GERT HAS A WELL DEVELOPED EYE. SATELLITE INTENSITY ESTIMATES FROM TAFB AND SAB ARE 90 KT...WHICH WILL BE THE MAXIMUM INTENSITY FOR THIS ADVISORY.

THE INITIAL MOTION IS LESS ESTIMATED TO BE 285/14. THE SYNOPTIC PATTERN IS BASICALLY UNCHANGED. WITH GERT CONTINUING WEST TO WEST-NORTHWEST UNDER THE SUBTROPICAL RIDGE. THE RIDGE SEEMS TO STRENGTHEN BEHIND FLOYD...KEEPING GERT ON A WEST TO WEST-NORTHWEST TRACK. SEVERAL HURRICANE GUIDANCE MODELS...MOST NOTABLY THE NOGAPS AND THE BAMM...HAVE A TURN TOWARD THE NORTHWEST DUE TO A WEAKENING RIDGE NEAR THE END OF THE FORECAST PERIOD. THIS APPEARS TO BE THE INFLUENCE OF FLOYD, AND MAY NOT BE REALIZED IF FLOYD MOVES ON OUT AND IS INDEED NORTH OF OR NEAR THE RIDGELINE. THE OFFICIAL FORECAST IS SHIFTED ONLY SLIGHTLY NORTHWARD FROM THE PREVIOUS PACKAGE. WHILE THE FORECAST KEEPS GERT NORTH OF THE LEEWARDS...GERT COULD STILL BE A THREAT TO THAT AREA IF THE STORM MOVES MORE TO THE WEST THAN CURRENTLY FORECAST.

THERE IS NO CHANGE IN THE INTENSITY FORECAST FROM THE PREVIOUS CYCLE. BASICALLY THIS AGREES WITH SHIFOR AND IS SLIGHTLY STRONGER THAN SHIPS. SHIPS INDICATES AN INCREASE IN WIND SHEAR THAT ALSO MAY BE RELATED TO FLOYD.

JARRELL

FORECAST POSITIONS AND MAX WINDS

INITIAL	14/1500Z	17.1N	45.3W	90 KTS
12HR VT	15/0000Z	17.5N	47.4W	95 KTS
24HR VT	15/1200Z	18.1N	50.4W	100 KTS
36HR VT	16/0000Z	18.7N	53.0W	105 KTS
48HR VT	16/1200Z	19.1N	55.7W	110 KTS
72HR VT	17/1200Z	20.0N	61.0W	110 KTS

NOAA/AOC/SED N49RF Flight Performance log

N49RF Project: Hurr 99 **Project No.** 430 **Flight No.** 15 **Flight ID:** 990914N

SED Crew: Hornbrook, Goldstein, Smith **Mission:** Floyd

Pre-Flight: 1621 Z **Take-Off:** 1745:53 Z **Landing:** 0208 Z

	SYSTEM			Pre-Flight Check	In-Flight	Post-Flight Check	
NAV	IRS #1						
	IRS #2						
	IRS #3						
	GPS Honeywell #1						
	GPS Honeywell #2						
	GPS Collins					Off? ☐	
	Nose Radar -Collins					Off? ☐	
TEMP		Time	Temp °C			Time	Temp °C
	Temp #1	1635	35.9				
	Temp #2	↓	33.6				
	Temp #3		33.9				
	Temp #4		36.1				
	DP Left		25.0		Cal. Time:		
	DP Right	↓	23.4		Cal. Time:		
PRESS	Attack Angle (ADCAOA)						
	Slip Angle (BPx/DxPx)						
	Differential (PQ1/PQ2)						
	Absolute (PS1/PS2)						
	Check Radome Press. Lines ☑			Date: 9/8/99			
SYSTEMS	DOWN PRT-5 ⇨ Open? ☐			Not USED		Closed? ☐	
	MADS (WINDS/DISCWIN)					# DATs:	
	MADS Printer ⇨ Paper? ☑					Printer Power off? ☐	
	MADS Cal. Date: 8/26/99			QC time: 1638		QC time:	
	WINDS ⇨NET BCAST ☑						
	HAPS System / Time set? ☑			Stan		# Msg.:	# Fail:
	AVAPS System						
	K2 Printer ⇨ Paper? ☑					Printer Power off? ☐	
	Exterior Walk Around ☑			ASG			
	Inspect DropSonde Chute Bolts			JAS			
MISC	Satcom (Flight Phone) ☑					Off CB? ☐	
	Call COMSAT? ☐ (*292#)						
	FCU/UPS/CB			CB's Checked? ☑		UPS off? ☐	
	AVAPS Sondes			# On Board: 98 / 93 Good 5 Bad	# Dropped: 28	# Good: 24	
	AXBT			# On Board:	# Dropped:	# Good:	
	APN-232 Altimeter						
	Modem Power On? ☑						

1	DAT Tape #1	On: 1732	Type:	Off: ?DRIVE FAILED	
2	DAT Tape #2	On:	Type:	Off: 0211	
	Comments: DRIVE 0 FAILED				

07/26/99 JCPB