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

FLT ID: I950426	FM: OKC	TO: OKC
FLT NO: 95-30	BLK IN: 0026Z	ATA: 0023Z
ETD: 2100Z	BLK OUT: 2040Z	ATD: 2048Z
ETE:	BLK TIME: 3:46	FLT TIME: 3:35
SPONSOR ORG: NSSL	PROGRAM: VORTEX95	PURPOSE: ARM CLOUDY FLT

OAO PERSONNEL

AC	KENNEDY	SYS ENG	LYNCH
CP	TENNESEN	DATA SYS	PRADAS-BERGNES
NAV	STRONG	RADAR	
FE	BAST	BT/ODW	[redacted]
RADIO	~~DA~~ SANS SOUCI	CLD PHYS	
FD	DAMIANO	DOPPLER	

PARTICIPATING SCIENTIST/VISITORS/OAO

LAST, FIRST NAME	ACTIVITY ON A/C	AFFILIATION
ZIEGLER	ASST. PT	NSSL
SHEPHERD	RADAR	"
MADDOX		"
FEDOR	PI	NCAR
WEST WATER	PMS	NOAA
WISCOMBE	PMS	NASA

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

[redacted] DW1 sensor. REPLACED!

2059302 under FMT

2107202 in cld DW check

Prog LWC not operational

.024 offset on Gerber at T/O LWC

0026 FMT

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

FLT ID: I950426 TIME OFF: 2048Z TIME ON: 0023Z

	A/C T/O	WX STN	A/C LAND	WX STN
PRESSURE	963.5		968.5	

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

PHOTOGRAPHY

	FWD	LS	RS	VERT	
ON					
OFF					
RATE					

REMARKS

NOAA • AOC• SED Flight Performance Log

22 March 95

Aircraft : N43RF Project: VORTEX • ARM '95 Mission : ARM

SED Crew: Lynch, JCPB Flight ID : 950426I

Pre-Flight: 1800 Take-Off: 2037 Landing: 0022

	System			Pre-Flight	In-Flight	Post-Flight		
NAV	INE #1	Aligned to : 5		✓TL		+1.7	-.4	2
NAV	INE #2	Aligned to : 1		✓TL		-2.7	-2.2	0
NAV	GPS			✓TL		Lat	Long	GS
RADAR	Nose			✓TL				
RADAR	L/F	R/T SN : 102		JCPB		Mod Switch Off ? ✓		
RADAR	Tail	R&T SN : 202 / 201		↓		Mod Switch Off ? ✓		
RADAR	ASAU's & RCU							
RADAR	MARS Data System					# DATs : 1		
PMS	2DG-C	Ch 1/64: 1		✓ JCPB				
PMS	2DG-P	Ch 1/64: 1		✓ JCPB				
PMS	FSSP	Ref VDC:		✓ JCPB				
PMS	SEA Data System			✓ JCPB		# DATs : 1		
TEMP		Cal High	Cal Low			Cal High	Cal Low	
TEMP	Temp #1	30.6	-30.2	RJM		30.7	-30.1	
TEMP	Temp #2	30.5	-30.3	RJM		30.5	-30.3	
TEMP	Temp #3	(Starboard)		✓TL				
TEMP	Dewpoint #1			RJM (2)				
TEMP	Dewpoint #2			✓TL				
PRESS	Attack Angle	(AP/DAP)		✓TL				
PRESS	Slip Angle	(BP/DBP)		✓TL				
PRESS	Differential	(PQ1/PQ2/PQ3)		✓TL				
PRESS	Absolute	(PS1/PS2)		✓TL				
PRESS	Radome Transducers			Plugs Out ?				
FLT LVL	Apn-159	SN: SW 71-01		✓TL (1)	(6)			
FLT LVL	Apn-232	SN: 1699		✓TL				
FLT LVL	King Liquid Water			✓ RM (3)				
FLT LVL	J&W Liquid Water			✓ RM	(7)			
FLT LVL	Down PRT-5	(SST)		RJM				
FLT LVL	Side PRT-5	(CO^2)		RJM				
FLT LVL	Up PRT-5			Open ? Y ✓TL	(5)	Closed ? ✓TL		
FLT LVL	RAMS Data System			✓TL (4)		# DATs : 2		
	Exterior Walk Arround			RJM				
	Video	(N) (L) (R) D		✓TL				
	FCU	-A-B-C-		✓ JCPB				
USER	Charge Probe			NU		Accelerometers		
USER	Gerber Liquid Water	1.7 | .8		✓TL		#1 (2 G) : 8148		
USER	Field Mills	(L) (R) U (D)		✓ JCPB		#2 (2.5 G) : 6084		
USER	ETL Dual-Channel uWave Radiometer			✓TL		#3 (3 G) : 5967		
USER	Epply Radiometers	(PSP / PIR)		✓TL		#4 (3.5 G) : 2892		
USER	2 Meter Repeater / Duplexer			✓ TL				
USER	Cappiccuno Machine			✓ TL / RM				

Please Note any Discrepencies

Item #	Zulu Time	Problem Description	Initials	A-23A #
(1)		Replaced APN-159 (Fwd) At pre-flight SW 71-01 in	TL	OK
(2)		Neo Dew #1 at pre-flight SN 927168 in	TL	↓
(3)		Neo king LW wire at preflight	TL	↓
(4)		Check CPuB Hard drive for duplicate dit's	TL	OK
(5)	2112	AFSRU ADL FAST DATA BURST ERROR: Previous DATA NOT RECEIVED by dest Prog	JC	✓
(6)		APN 159 Sunden Burts Alt. Replace PS' on Arrival	JC	✓
(7)		KING LOW FAIL ON ground check	JC	✓

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
Rockville, MD 20852-3019

OFFICE OF NOAA CORPS OPERATIONS
Aircraft Operations Center
P.O. Box 6829
Tampa, Florida 33608-0829

MEMORANDUM FOR: DR. ROBERT MADDOX, DIRECTOR NSSL

FROM: CAPT George C. Player III, NOAA
Acting Director, Aircraft Operations Center

SUBJECT: Hazard Duty Flight

The mission flown on AOC aircraft # W43RF on 4/26/95 has been declared hazardous. The following personnel from you laboratory participated in this mission.

ZIEGLER
SHEPHERD
MADDOX

For purposes of computing allowable hazard duty time, the hazard period during this mission was from 3:30pm local time on 4/26/95 until 7:30pm on 4/26/95.

VORTEX95/ARM95

FLIGHT #08 I950426 (ARM, Cloudy flight near Morris, OK)

TYPE OF DATA	SENSOR OR OPTION
INE	1
Accelerometer	2
Temperature probe	1
Altitude change option (for vertical winds)	PA
Static pressure	Rosemount fuselage
Dynamic pressure	Rosemount fuselage
Time source	Micro 99
Constants file	CO3956.CON

Notes:

There was one time/data gap:

211255Z - 211310Z

The dewpoint sensor, DW1, was replaced prior to take-off. It operated without any problems.

The King Liquid water probe was not operational.

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	963.5mb	968.5mb

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

34,36 98,94

I950426

RENAV INE 1

[redacted]

DATA GAPS
211255 – 211310

212600, .8, .6
222600, ~~-4, 0~~ 1.2, .7
232600, ~~-20, +5~~ 1.5, 1.4
002600, ~~-28, +10~~ 1.8, .4

Replaced DW1 sensor

Fix RA159 using RA232 at T/O
RA159 = RA232

002300 – 002600

2349 wt check

NOAA FORM 59-4
(2-72)

I950426

TIME	LAT	LON	TRK	HD	WD	WS	PA	CA	TA	TD	SL	PS		PC
205100	3530	9741	329	325	265	22	1401	1034	10.1	6.2	—	851.6	CLR	62.1
205700	3528	9720	125	129	249	16	1568	1193	9.6	6.4	—	839.3	CLR	62.7
210500	3512	9648	118	124	245	31	1562	1281	10.4	8.5	—	839.2	CLD ABV	68.9
211600	leg	below cld leg			to NE		(cals lower are too high)							
211900	3511	9603	35	32	238	31	1557	1351	10.5	7.7	—	839.7	CLD ABV	65.3
212800	3542	9538	35	32	235	36	1555	1368	10.2	7.4	—	839.9	CLD ABV	65.8
213530	headed to apt further SE to find lower base clouds													
213700	3559	9513	133	143	217	34	1554	1336	9.9	7.3	—	840.0	CLD ABV	67.3
214300	3543	9500	215	217	214	29	1555	1325	10.1	7.5	—	840.3	CLD ABV	71.8
215000	3525	9515	215	216	212	32	1957	1810	7.0	6.8	—	797.4	IN CLD	63.4
215900	3502	9532	182	188	219	35	1975	1804	7.1	8.0	—	797.6	IN CLD	69.7
220330	start NE leg													
221200	3537	9505	365	35	223	38	2598	2371	3.1	4.8	—	739.6	IN CLD	69.5
221520	end NE leg													
221820	start SW leg													
222200	3542	9502	214	216	222	39	2113	1883	6.0	7.2	—	782.1	in cld	70.1
223000	3521	9519	215	218	225	36	2698	2480	3.1	3.2	—	737.0	blw cld	68.1
223435	end SW leg													
223900	headed to apt further E to avoid cold front													
224200	start NE leg													
225250	end NE leg													
225500	start SW leg													
230000	3526	9458	218	221	228	40	2950	2840	.8	2.0	—	706.6	in cld	62.5
230500	3513	9510	217	220	230	36	2799	2656	2.9	2.3	—	733.4	in cld	68.2
230900	end SW leg													
231200	start NE leg		no parasonics											
231500	3511	9512	28	214	235	34	3085	2941	-.7	-1.9	—	693.2	BLW cld	63.6
232300	end NE leg													
232630	start below cld leg to SW at 6K MSL													
233100	3531	9454	215	219	239	27	1852	1679	8.9	5.0	—	809.3	BLW cld	67.7
234150	end below cld leg													
234700	3501	9537	267	266	252	23	1855	1671	9.3	6.3	—	809.6	CLD LNE	67.2
235500	3509	9607	278	273	226	27	1819	1579	9.0	7.5	—	812.7	BKN CLD	72.8
000400	3514	9644	280	278	249	30	1820	1561	9.5	6.7	—	813.1	CLD BLW	66.7

19 April 11 Apr Version

- Flight Id not right #
- upper 8 ND good (2 or 3 sometimes OK)
-

Dew #1

S/N 92768

-16.8948

+11.1099

NEW DEWPOINT SENSOR (DW1)

APR 26 1995

VORTEX95 PROJECT

Top 8 Channel work wrong ECOM most of the time

Flight Track leading pixel different color for Tracking

Destination and eye options

DATE : 4/26/95

TO : Chief, AOC Flight Operations

FROM : Pilot/Flight Director, Aircraft N43RF ON 0026Z BLOCKTIME OFF 2040Z 3:46

SUBJECT: Hazardous Duty

PURPOSE OF FLIGHT: VORTEX 95 PROJECT

Hazardous Duty Pay is required for flight made on 4/26/95 (DATE)

Request based on FLYING AROUND SEVERE THUNDERSTORMS

Personnel on board authorized Hazard Pay:

BAST	
D'AMIANO	
LYNCH	
PRADAS-BERGNES	
SANS SOUCI	

PILOT/FLIGHT DIRECTOR: A. Barry Damiano

APPROVED: _____ DISAPPROVED: _____

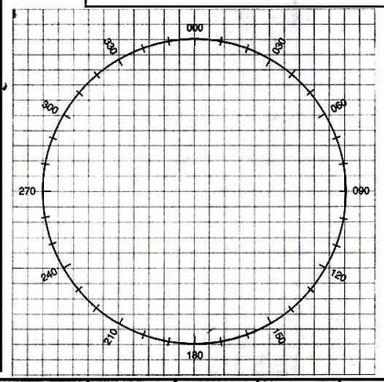
CHIEF, AOC FLIGHT OPERATIONS: _____

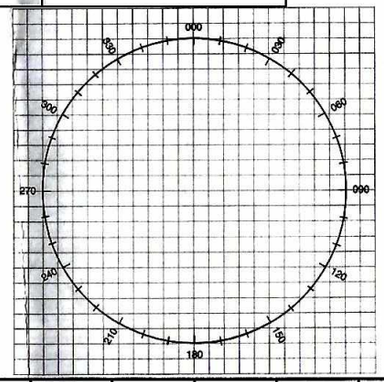
CLEARANCES

FREQ	ALT	HDG	OTHER
			GOLF
			NOAA43 CAF OKC VIA ASPIL4
			HDG 350
			5 K EXP ___ K+ ___
			SQ 6244 DEP 24.2

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
2040	V	35-24.1 97-36.2	35-04.7 96-32.2																		CHOCKS
2109	G	35-05.0 96-32.4	35-04.7 96-32.2	+.3 +.2	35-04.9 96-32.4	+.1 0					120	236			5.0						
2213	G	35-41.0 95-01.6	35-40.3 95-00.5	+.7 +1.1	35-41.7 95-01.6	-.7 0					035	253	216	37	7.0	215					
2356	G	35-09.6 96-10.7	35-07.7 96-09.8	+1.9 +.9	35-11.8 96-10.3	-2.2 +.4					281	245				210					
0030	V	35-24.1 97-36.2	35-22.4 97-35.8	+1.7 -.4	35-26.8 97-34.4	-2.7 -2.2															