

FLT ID: <u>I950429</u>	FM: <u>OKC</u>	TO: <u>OKC</u>
FLT NO: <u>95-32</u>	BLK IN: <u>0146Z</u>	ATA: <u>0142Z</u>
ETD: <u>1900Z</u>	BLK OUT: <u>1848Z</u>	ATD: <u>1857Z</u>
ETE: <u>11</u>	BLK TIME: <u>6:58</u>	FLT TIME: <u>6:45</u>
SPONSOR ORG: <u>NSSL</u>	PROGRAM: <u>VORTEX95</u>	PURPOSE: <u>PRE-CONVECTIVE</u> <u>NR ARDMORE</u>

DAO PERSONNEL

AC <u>KENNEDY</u>	SYS ENG <u>LYNCH</u>
CP <u>TENNESEN</u>	DATA SYS <u>PRADAS-BERNES</u>
NAV <u>STRONG</u>	RADAR
FE <u>BAST</u>	BT/ODW <u>McNAMARA</u>
RADIO <u>SANS SOULT</u>	CLD PHYS
FD <u>DAMIANO</u>	DOPPLER

PARTICIPATING SCIENTIST/VISITORS/DAO

LAST, FIRST NAME	ACTIVITY ON A/C	AFFILIATION
<u>WATSON</u>	<u>NSSC PT</u>	<u>NSSC</u>
<u>SHIEGLER</u>	<u>ASST PT</u>	<u>NSSC</u>
<u>SHEPHERD</u>	<u>RADAR</u>	
<u>EACK</u>	<u>RADAR</u>	
<u>WOOD</u>	<u>OBS</u>	
<u>WEYGANDT</u>	<u>OBS</u>	
<u>WESTWATER</u>	<u>RADIOMETER</u>	<u>NOAA</u>
<u>HAZEN</u>	<u>RADIOMETER</u>	<u>NOAA</u>
PROPOSED/ACTUAL MISSION/REMARKS (RECCO, FIXES, STORM, PENET, NHOP #)		
<u>LILJEGREN</u>	<u>RADIOMETER</u>	<u>DOE</u>
<u>WISCOMBE</u>		<u>WASA</u>

Gerber LWC has .022 offset at T/O

34°00' EPT
97°25' for dry line
34°00'
98°25' WPT

NEW LOCATION TO SEARCH
FOR DRY LINE

33°30' WPT
98°00'
33°30'
97°00'

KING LWC
NOT OPERATIONAL

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

FLT ID: *I950429* TIME OFF: *1857Z* TIME ON: *0142Z*

	A/C T/O	WX STN	A/C LAND	WX STN
PRESSURE	<i>962.5</i>		<i>966.0</i>	

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**2*

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 : VortexSED Crew: Lynch, JCPB, McNamaraFlight ID : 950429IPre-Flight: 16:30 ZTake-Off: 18:56Landing: 01:42

System			Pre-Flight	In-Flight	Post-Flight		
NAV	INE #1	Aligned to : <u>S</u>	✓ TL		-4.9	76.5	4
	INE #2	Aligned to : <u>D</u>	✓ TL		46.0	+1.1	6
	GPS		✓ TL		Lat	Long	GS
RADAR	Nose		✓ TL				
	L/F	R/T SN : <u>102</u>	✓ TL		Mod Switch Off ? ✓ TL		
	Tail	R&T SN : <u>202-1 201</u>	✓ TL		Mod Switch Off ? ✓ TL		
	ASAU's & RCU		✓ TL				
	MARS Data System		✓ TL		# DATs : 1		
PMS	2DG-C	Ch 1/64: <u>1</u>	✓ JCPB	(2)			
	2DG-P	Ch 1/64: <u>1</u>	✓ JCPB				
	FSSP	Ref VDC: <u>8.13</u>	RJM				
	SEA Data System		RJM				# DATs : 2
TEMP		Cal High	Cal Low		Cal High	Cal Low	
	Temp #1	<u>30.6</u>	<u>-30.2</u>	✓ TL	<u>30.6</u>	<u>-30.1</u>	
	Temp #2	<u>30.5</u>	<u>-30.3</u>	✓ TL	<u>30.5</u>	<u>-30.3</u>	
	Temp #3	(Starboard)		✓ TL			
	Dewpoint #1			✓ TL			
	Dewpoint #2			✓ TL			
PRESS	Attack Angle (AP/DAP)		✓ TL				
	Slip Angle (BP/DBP)		✓ TL				
	Differential (PQ1/PQ2/PQ3)		✓ TL				
	Absolute (PS1/PS2)		✓ TL				
	Radome Transducers		Plugs Out ? RJM				
FLTLV	Apn-159	SN: <u>SW 71-01</u>	✓ TL (2)				
	Apn-232	SN: <u>1699</u>	✓ TL				
	King Liquid Water		✓ TL (1)	(4)			
	J&W Liquid Water		RJM				
	Down PRT-5 (SST)		✓ TL				
	Side PRT-5 (CO ²)		✓ TL				
	Up PRT-5		Open ? RJM			Closed ?	
	RAMS Data System		✓ TL			# DATs : 2	
USE	Exterior Walk Around		RJM				
	Video	<u>(N) (D) (R) D</u>	✓ TL				
	FCU	<u>-A-B-C</u>	✓ TL				
USE	Charge Probe		NU		Accelerometers		
	Gerber Liquid Water	<u>1.71.8</u>	✓ TL		#1 (2 G) :	<u>8148</u>	
	Field Mills	<u>(D) (R) U (D)</u>	✓ TL		#2 (2.5 G) :	<u>6684</u>	
	ETL Dual-Channel uWave Radiometer		✓ TL		#3 (3 G) :	<u>5967</u>	
	Eppl Radiometers (PSP / PIR)		✓ TL		#4 (3.5 G) :	<u>2892</u>	
	2 Meter Repeater / Duplexer		✓ TL				
	Cappiccuno Machine		✓ TL				

Please Note any Discrepancies

[illegible]

I 950429

DATA GAP

INE 1 RENAV

222841-223000

204500, -2.3, 1.2

PC glitch (INE2)

214500, -2.7, 1.7

012130

224500, -3.2, 2.8

234500, -4.3, 4.6

004500, -5.2, 4.6

014500, -4.9, 6.5

RA159 fix at T/O

PREFL check

RA159 = RA232

~~10110~~ OK

~~0110~~ 0145

2212-2222

VORTEX95/ARM95

FLIGHT #10 I950429 (VORTEX, Storms near Sherman, TX)

TYPE OF DATA -----	SENSOR OR OPTION -----
INE	1
Accelerometer	2
Temperature probe	2
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 gaps:

222841Z - 223000Z

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	962.5mb	966.0mb
Corrected tower pressure	N/A	N/A

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

I 950429

TIME	LAT	LONG	TRK	HD	WD	WS	PA	GA	TH	TD	SP	PS		PO
190100	3524	9743	175	176	354	27	2095	1718	9.3	-1.4	-	779.3	CLR	85.4
191400	3441	9730	160	157	12	12	689	284	19.5	15.7	-	939.8	CLD ABV	66.7
192100	3417	9725	180	181	18	7	512	182	23.1	16.3	-	952.6	CLD ABV	62.4
192600	start 500 ft leg W													
192900	3400	9738	270	271	284	6	450	171	24.9	15.9	-	960.3	BLW CLD	62.8
193600	3400	9708	271	274	241	6	488	158	24.7	15.0	-	955.3	BLW CLD	62.3
194030	end 500 ft leg													
194315	start 3000 ft leg E													
194400	3400	9824	92	90	15	11	1206	912	17.4	12.9	-	876.5	BLW CLD	67.7
194900	3400	9802	91	90	356	6	1209	947	17.4	12.8	-	877.0	BLW CLD	69.4
195500	3400	9735	90	91	324	6	1172	929	18.0	13.8	-	879.7	BLW CLD	66.6
195730	end 3000 ft leg													
200200	3400	9725	269	272	290	16	2648	2417	10.5	-10.6	-	733.2	ABV CLD	67.4
	start 8000 ft leg W													
200900	3400	9755	271	272	282	15	2648	2443	10.6	-12.7	-	733.0	ABV CLD	65.1
201500	3400	9821	272	274	281	11	2653	2422	10.4	-13.4	-	732.6	ABV CLD	65.0
201600	end 8000 ft leg													
201800	3355	9831	225	228	278	10	2638	2383	10.8	-13.6	-	738.7	ABV CLD	65.3
202600	3333	9856	223	225	8	11	558	141	25.8	14.4	-	947.8	CLR	68.2
202800	start 500 ft leg E													
202900	3328	9851	90	88	16	11	600	174	25.4	13.7	-	943.5	CLR	68.0
203400	3328	9830	90	89	327	9	538	168	26.4	13.8	-	950.5	CLR	66.3
204000	3328	9805	90	90	305	8	529	164	26.7	14.3	-	951.0	CLR	64.0
204600	3328	9740	90	91	322	2	524	163	25.6	17.0	-	951.6	BLW CLD	68.7
	9737 - DRY LINE??													
205400	3328	9708	92	94	150	8	437	187	24.5	17.5	-	962.5	BLW CLD	73.3
205500	end 500 ft leg													
205800	start 3000 ft leg W													
205900	3330	9705	272	271	227	11	1124	915	18.7	14.6	-	885.4	BLW CLD	66.3
210500	3330	9730	270	271	181	6	1190	877	19.1	16.1	-	878.8	BLW CLD	72.4
211000	3330	9752	269	270	330	4	1181	869	19.8	14.1	-	878.5	BLW CLD	66.4
211200	end 3000 ft leg													
211500	start 9000 ft leg E													
211630	3330	9757	91	90	298	18	2953	2744	7.8	-9.4	-	704.6	ABV CLD	67.0
212200	3330	9730	90	89	286	20	2954	2734	8.3	-12.1	-	705.1	ABV CLD	68.8
212700	3330	9704	89	89	285	18	2955	2789	8.4	-11.9	-	705.1	ABV CLD	67.0
212800	end 9000 ft leg													
213130	start 500 ft leg W													
213300	3330	9710	270	269	130	12	426	150	25.0	17.9	-	963.5	BLW CLD	63.3
213700	3330	9726	269	269	123	9	493	191	26.0	16.7	-	955.4	BLW CLD	63.8
214300	3330	9751	270	272	11	4	537	192	26.4	15.3	-	950.6	BLW CLD	60.8
214530	end 500 ft leg													
214740	3330	9800	92	92	342	10	1258	951	19.1	13.7	-	871.4	BLW CLD	74.3
	start 3000 ft leg E													
215300	3330	9735	89	90	347	2	1211	899	19.6	13.6	-	876.4	BLW CLD	64.4
215600	3330	9722	91	92	248	6	1211	937	18.7	14.0	-	875.8	BLW CLD	68.2
220100	end 3000 ft leg													



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 MADDUX, DIRECTOR NSSC

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

SUBJECT: Hazard Duty Flight

The mission flown on AOC aircraft # N43RF on 4/29/95 has been declared hazardous. The following personnel from your laboratory participated in this mission.

ZIEGLER	EACK
WATSON	WOOD
SHEPHERD	WEYLANDT

For purposes of computing allowable hazard duty time, the hazard period during this mission was from 2pm local time on 4/29/95 until 9pm on 4/29/95.



I 950429

TIME	LAT	CON	TRK	HD	WD	WS	PA	GA	TA	TD	SP	PS			PQ
220600	start 10K leg W														
220700	3330	9709	271	272	274	23	3264	3126	5.3	-11.9	—	677.8	ABV	CLD	67.3
221200	3330	9730	275	275	275	25	3259	3058	5.2	-12.4	—	677.4	ABV	CLD	68.4
221600	3330	9748	270	272	282	26	3265	3020	5.2	-14.2	—	677.8	ABV	CLD	64.8
221900	end 10K leg														
222400	start 500 ft leg E														
222500	3330	9757	90	88	350	14	498	166	26.6	15.6	—	954.8	BLW	CLD	69.9
223000	3330	9734	92	91	341	8	504	131	26.6	16.0	—	952.3	BLW	CLD	63.8
223600	3330	9710	91	93	130	8	444	181	25.3	18.1	—	961.8	BLW	CLD	71.8
223810	end 500 ft leg														
225320	3357	9655	279	279	282	29	3272	3167	5.0	—	—	—	CLD	LNE	—
230400	3349	9639	296	295	215	7	1130	931	18.7	14.0	—	884.8	CLD	LNE	68.8
230900	3357	9658	295	298	31	7	1126	913	17.9	15.6	—	884.6	CLD	LNE	66.1
231100	3357	9655	117	119	295	13	1123	920	18.6	15.6	—	884.4	CLD	LNE	70.7
231400	3352	9643	116	118	248	3	1129	930	18.7	14.3	—	884.8	CLD	LNE	62.4
231700	3348	9638	297	297	256	7	1129	897	18.5	14.6	—	885.0	CLD	LNE	66.7
232000	3353	9649	298	297	250	11	1130	909	18.7	15.5	—	884.8	CLD	LNE	65.7
232500	3355	9657	120	118	14	10	1128	895	18.3	16.3	—	884.0	CLD	LNE	71.5
232900	3349	9641	115	117	262	11	1132	915	18.7	15.2	—	884.5	CLD	LNE	67.1
233200	3349	9643	304	301	228	13	1131	875	18.8	14.6	—	884.8	CLD	LNE	66.5
234300	3345	9646	96	99	239	10	998	790	20.0	15.5	—	898.7	CLD	LNE	68.8
234600	3344	9632	97	99	103	1	996	792	19.3	16.4	—	898.7	CLD	LNE	67.3
234900	3343	9636	279	278	216	7	999	757	20.0	15.6	—	898.9	CLD	LNE	69.0
235200	3343	9650	263	262	235	7	1001	766	20.4	14.8	—	899.3	CLD	LNE	68.4
235400	3341	9644	92	95	215	9	1001	778	20.0	15.6	—	898.6	CLD	LNE	66.3
235830	3340	9633	273	272	187	8	1001	755	19.5	16.2	—	898.6	CLD	LNE	65.3
000200	3340	9648	273	272	220	8	1000	763	20.2	15.7	—	899.0	CLD	LNE	68.7
000600	3339	9655	93	95	248	8	1000	754	20.1	15.8	—	898.9	CLD	LNE	67.7
001010	3338	9636	93	95	171	6	1000	760	19.5	16.2	—	898.8	CLD	LNE	66.5
001400	3336	9632	268	267	156	7	1001	796	19.8	15.4	—	898.8	CLD	LNE	65.5
001800	3336	9649	270	267	180	11	1001	760	19.7	16.6	—	898.7	CLD	LNE	71.1
002100	3334	9649	89	92	194	10	1000	758	19.8	16.3	—	898.8	CLD	LNE	67.1
002730	3333	9634	273	272	132	12	999	744	19.8	15.8	—	898.9	CLD	LNE	67.5
003000	3334	9645	276	272	189	18	1000	757	19.9	16.3	—	898.7	CLD	LNE	69.0
003500	3333	9643	91	96	186	15	1002	715	19.8	16.3	—	898.6	CLD	LNE	68.3
003900	3331	9635	273	271	146	15	1000	731	19.9	15.9	—	898.7	CLD	LNE	63.6
004230					223	9			19.7	16.6					
004500	3330	9648	93	96	271	14	1002	761	20.2	16.4	—	898.8	CLD	LNE	69.7
004930	3328	9640	275	273	147	16	1004	751	19.8	16.4	—	898.5	CLD	LNE	69.4
005400	3326	9650	98	99	250	9	999	783	19.8	16.6	—	898.3	CLD	LNE	65.0
010000	3323	9640	272	270	181	12	986	739	19.9	16.5	—	900.3	CLD	LNE	66.4
010300	3323	9652	291	292	296	4	985	778	20.0	16.9	—	900.2	CLD	LNE	69.0
011220	3348	9710	354	350	292	21	2494	2309	10.6	-7.8	—	747.2	CLD	BLW	64.0
012400	3429	9723	342	340	288	12	2448	2217	9.8	-9.7	—	751.8	CLD	BLW	66.5

DATE : 4/29/95

TO : Chief, AOC Flight Operations

FROM : Pilot/Flight Director, Aircraft N43RF ON 0146Z BLOCKTIME
OFF 1848Z 6:58

SUBJECT: Hazardous Duty

PURPOSE OF FLIGHT: VORTEX 95 PROJECT

Hazardous Duty Pay is required for flight made on 4/29/95
(DATE)

Request based on FLYING AROUND THUNDERSTORMS

Personnel on board authorized Hazard Pay:

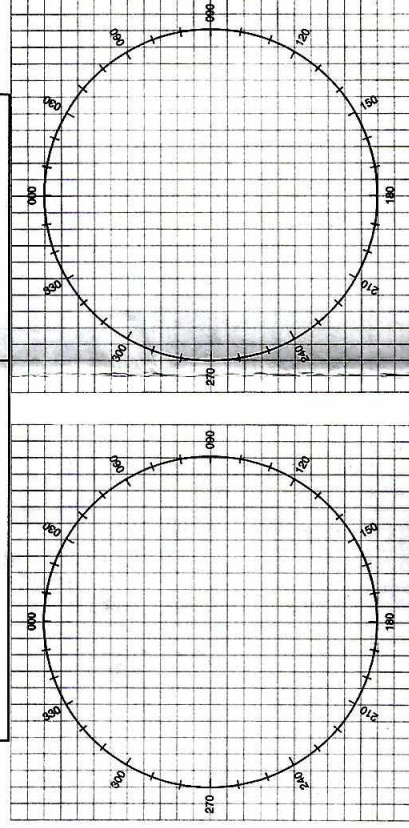
<u>BAST</u>	_____
<u>DAMIANO</u>	_____
<u>LYNCH</u>	_____
<u>PRADAS-BERGNES</u>	_____
<u>SANS SOUCI</u>	_____
<u>MCMANARA</u>	_____
_____	_____
_____	_____
_____	_____

PILOT/FLIGHT DIRECTOR: A. Barry Damiano

APPROVED: _____ DISAPPROVED: _____

CHIEF, AOC FLIGHT OPERATIONS: _____

POSITION REPORT

[illegible]

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 _____

- HEADING	TRUE/MAG
1.000000	0.000000
2.000000	0.000000
3.000000	0.000000
4.000000	0.000000
5.000000	0.000000
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96.000000	0.000000
97.000000	0.000000
98.000000	0.000000
99.000000	0.000000
100.000000	0.000000

-AT_____KTS TRUE/INDICATED

- FLIGHT LEVEL OR ALTITUDE _____

- WE ARE A P-3 AIRCRAFT V

- NATURE OF EMERGENCIES

- ASSISTANCE DESIRÉE
PILLOT INTENTIONS

- PILOT INTENTIONS
- WE HAVE
- ENDURANCE REMAINING

[illegible]