RFF-10 WORK FORM
(8 - 72)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
RESEARCH FLIGHT FACILITY
MIAMI, FLORIDA

FLIGHT LOG

AIRCRAFT: N42RF

FLIGHT NO.: ~~[illegible]H~~ 57-83

FLIGHT ID: 830825H

DATE: ~~25~~ 25 August 1983

TAKE OFF (City or airport)	LAND (City or airport)	ALTITUDE
KMIA	KMIA	5K

PURPOSE: Vortex evolution experiment on T.S. Barry

PROPOSED TAKEOFF TIME:	~~[illegible]~~ 0200Z	PROPOSED FLIGHT DURATION:	10 +
TIME IN:	~~[illegible]~~ 0715	TIME ON:	0707
TIME OUT:	~~[illegible]~~ 0143Z	TIME OFF:	0153Z
BLK. TIME:	5+32	FLIGHT TIME:	5+14

FLIGHT PERSONNEL

OPERATIONS CREW		WEATHER CREW			VISITORS
Noble	Mendelkern	Zysko	Schricker	Jorgenson	Lord
Genzlinger		Parrish	Milander	Willis	Williams
Adams		DeVivo		Feinberg	Liff
Ricci		DuGranrut		~~Cheng~~	Reis

PROPOSED MISSION

Fly to vicinity of T.S. Barry (28.1 N, 78.5 W), conduct vortex evolution experiment at 5000 ft.

B

ACTUAL MISSION AND REMARKS

Attempted to do experiment on 43 - engine had chips in oil. Flew pattern in 42 - changed pattern after finding very weak system. Made 6 center transits, investigated convective bands to south & west.

DATA COLLECTED AND REMARKS

6 cloud physics tape
4 radar tape
1 glow tape

...T LOG

T TECH: D'G/Schricker
CRAFT: N42RF
ME: (Pre-Flt) 0014Z (Take-Off) 0154Z (Land) 0707Z

FLIGHT I.D.: 830825H
MISSION: T.S. Barry

SYSTEM		ALIGN PI	AID	PRE-FLIGHT	INFLIGHT	POST-FLIGHT		
						LAT	LON	GS
NAV	INE1	0	0/D	✓		-2.9	+1.0	2
	INE2	0	0/D	✓		+1.3	-.5	1
	ONE			✓	(6)			
	DOPLR			✓				
RADAR		INTEGRATION(PRI'S)						
	NOSE			✓				
	L/F			✓				
	TAIL			✓				
	DATA SYSTEM			(1) ✓				
RAMS DATA SYSTEM				✓		#TAPES: 4		
					(8)	" 1		
TEMP	CAL HI	CAL LO		AMBIENT		CAL HI	CAL LO	
TEMP #1	30.5	-30.0		23.8		29.2	-30.8	
TEMP #2	30.1	-29.6		24.1		28.8	-30.5	
DEW POINT (CLEANED:Y/N) N				23.7				
ATTACK ANGLE				✓				
SLIP ANGLE				✓				
ABSOLUTE PRESSURE				✓				
DIFFERENTIAL PRESSURE				✓				
RDR ALTM. S/N: 71-02				✓				
J&W				✓				
PMS	OAP 2D-C			✓	(5)			
	OAP 2D-P			✓				
	FSSP-100			✓				
	DATA SYSTEM			✓				
FOIL IMPACTOR				NF	(8)	#TAPES: 6		
ICE RATE DETECTOR				NF		#INCHES: —		
CO2 RADIOMETER				(3) (4)	(8)			
MICROWAVE RADIOMETER				NF				
SURFACE RADIOMETER				✓				
SEEDER				NF				
GUST PROBE				NF				
ASDL (TEST TRANSMISSION) X				✓				
HARD COPY				✓		#MESSAGES: 12		
CLEAN MAG TAPE HEADS				✓				
HUMIDIOMETER				✓				
PHOTO		RATE		(COUNTS)			(COUNTS)	
	FORWARD			NU				
	VERTICAL			NU				
	RIGHT SIDE			NU				
	LEFT SIDE			NU				
AXBT SYSTEM				NU				
ODW SYSTEM				NU				
AXBT EXPENDABLES: #ON BOARD: 0					(7)			
DROPSONDES: #ON BOARD: 8				#DROPPED:		#GOOD:		
				#DROPPED: 0		#GOOD:		

CUMMULATIVE ACCEL. (MELC) (LOG AT END OF FLIGHT)	#1 (2G)	#2 (2.5G)	#3 (3G)	#4 (3.5G)
	8987	5503	3203	2723

CODE: ✓ - OPERATIONAL; X(#) (TIME) - FAILURE (NOTE);
NI - NOT INSTALLED; NU - NOT USED
USE REVERSE SIDE FOR NOTES.
REPORT COMPLETION OF PRE-FLIGHT AND INSTRUMENT STATUS TO FLIGHT DIRECTOR

830825H

...mory problem DSC #2 — RADALS

... READING LOOKS VERY SUSPICIOUS — CUZ

RAMTEK CH Ø IN-OP — KEMS

APPARENT LOSE CONTACT IN POWER UNIT — UNIT OK NOW — ...

5 CLA PROBE — CLEAR AIR UPDATE — DISCONNECTED — RAIS

(6) INE#1 DISCONNECTED FROM ONE (REPLY FAIL) — NTJ

(7) NOVA WILL NOT Respond to Stop Switch — ODW

(8) Bad memory in A-slice of display memory — FMS

A/C COMMANDER	NAVIGATOR	A/C NO.	MISSION NO.	TIME AIRBORNE	LOCATION	DATE	PROJECT NAME
[illegible]	ADAMS	42	830825	23	KMIA N25-48.3 W080-17.6	24/25 Aug. 1983	[illegible]

TIME OF ENTRY	POSITION	TYPE	INERTIAL POSITION	LAT LON COR'S	POSITION	LAT LON COR'S	REMARKS
0143 [illegible]	N25-49.3 W080-17.6	4	N25-48.8 W080-17.6	+.7 0	N25-48.[illegible] W080-47.5	0 +.5	Block out
015351 22	25-48.1 080-17.2	4	25-48.0 080-17.1	+.1 +.1	25-47.9 080-17.1	+.2 +.1	T OFF
0224	26-35.3 78-41.5	2	26-35.9 78-41.2	-2.9 +.7	26-35.7 78-41.3	-2.8 1.6	MOT FR [illegible]
024702			28-04.1 79-05.8		28-04.5 79-05.9		Just west of [illegible]
0331		2	28-09.4 80-33.8		28-09.3 80-29.8		Yaw 14/29.
0349			28-06.1 79-21.5		28-05.6 79-21.2		5
0446			28-03.7 79-28.9		28-03.1 79-29.6		5
0550			28-07.1 79-43.2		28-05.1 79-43.5		5
061830			28-09.0 79-48.9		28-06.3 79-50.4		5
070719	25-48.1 080-17.2	4	25-51.1 080-16.3	-3.0 +.9	25-47.1 080-17.6	+1.0 -.4	LAND KMIA
0744	25-48.3 080-17.6	4	25-51.2 080-16.3	-2.9 +1.3	25-47.3 080-18.1	+1.0 -.5	Block OUT

SYS	BEGIN ALIGN TIME	NCS CONN	Ω AID	TIME OUT OF COARSE ELAPSE ALIGN POST TIME	ALIGN STS 0-8	(1) TIME INTO NAV.	(2) TIME OUT NAV.	ΔT (2)(1)	TERMINAL ERROR LAT	LONG	[illegible]
INE 1		✓	✓		0	0133	0715	5.8	-3.4	+1.3	[illegible]
INE 2		✓	✓		0	2228	0715	5.6	+1.0	-.5	[illegible]

ALIGN REMARKS: Warm T103 32 warn lights both INE's — INE1 unaided

OTHER REMARKS:

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

A/C COMMANDER	NAVIGATOR	A/C NO.	MISSION NO.	TIME AIRBORNE	LOCATION	DATE	PROJ NAME
NOBLE	ADAMS	42 ~~43RF~~	830824 25	~~23~~ 015351	KMIA N25-48.3 W080-17.6	24-25 Aug. 1983	5 BARRY

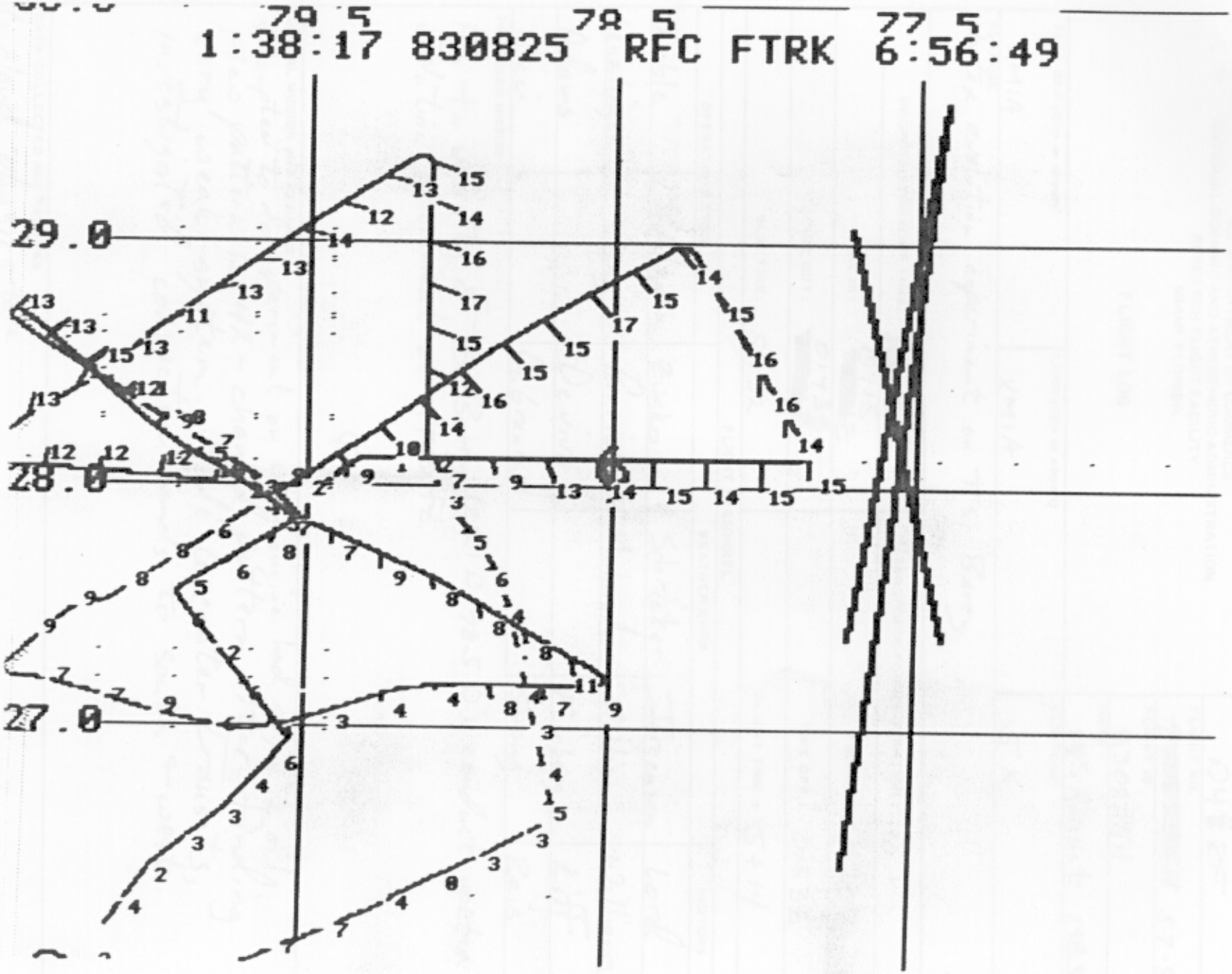
TIME OF ENTRY	POSITION	TYPE	INERTIAL POSITION	LAT LON COR'S	POSITION	LAT LON COR'S	REMARKS
0143 ~~22~~ 24/25	N25-48.3 W080-17.6	4	N25-48.2 W080-17.6	+.1 0	N25-48.1 W080-17.5	0 +.5	Block out
015351 22	25-48.1 080-17.2	4	25-48.0 080-17.1	+.1 +.1	25-47.9 080-17.1	+.2 +.1	T OFF
0224	26-33.3 78-41.9	2	26-35.7 78-41.2	-2.4 +.7	26-35.7 78-41.3	-2.4 +.6	MOT FR (Late mark)
024702			28-04.4 79-05.8		28-04.5 79-05.9		just west of 5 cen
0331		2	28-09.4 80-33.8		28-09.3 80-33.8		Vero 106/29.0
034900			28-06.1 79-21.5		28-05.6 79-21.2		5
0446			28-03.7 79-28.9		28-03.1 79-29.4		5
0550			28-07.1 79-43.2		28-05.1 79-43.9		5
061830			28-09.0 79-48.9		28-06.3 79-50.4		5
070714	25-48.1 080-17.2	4	25-51.1 080-16.3	-3.0 +.9	25-47.1 080-17.6	+1.0 -.4	LAND KMIA
0714	25-48.3 080-17.6	4	25-51.2 080-16.3	-2.9 +1.3	25-47.3 080-18.1	+1.0 -.5	Block OUT

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 ERRO LAT	LONG	G
INS 1		✓	✓		0	~~2225~~ 0125	0715	5.8	-2.9	+1.3	2
INS 2 or IMU		✓	✓		0	2228	0715	5.8	+1.0	-.5	1

ALIGN REMARKS: ~~Warn~~ T1032 warn lights both INE's - INE1 UNaided

OTHER REMARKS:

TYPE OF FIX: (1) DR (2) RADIO (3) CELESTIAL (4) VISUAL (5) LORAN (6) RADAR (7) DOPPLER (8) OMEGA (9) INERTIAL (10) OMEGA - INERTIAL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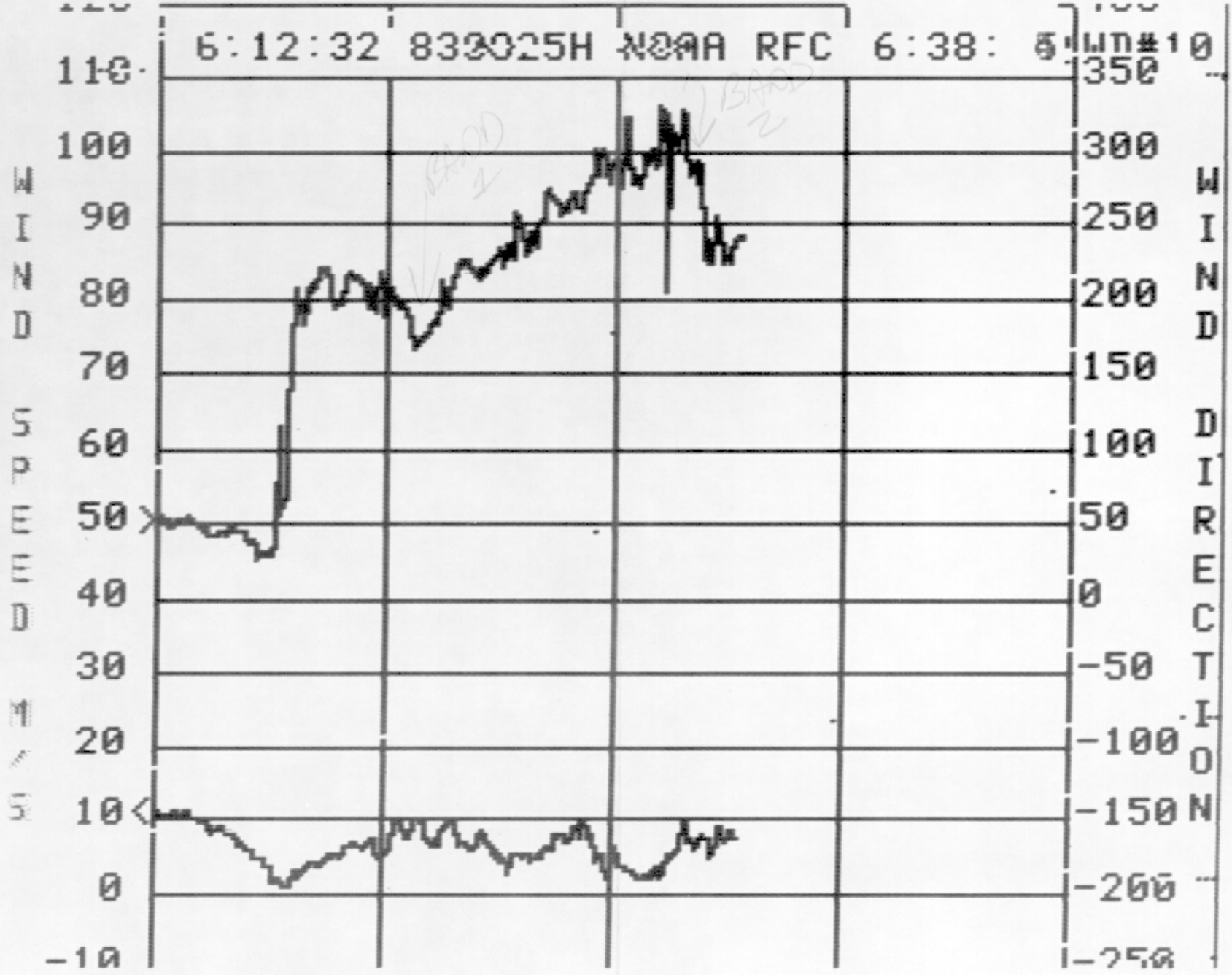
29.0
28.0
27.0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WIND SPEED M/S
110
100
90
80
70
60
50
40
30
20
10
0
-10
350
300
250
200
150
100
50
0
-50
-100
-150
-200
WIND DIRECTION