

### E.1 Lead Project Scientist (On-Board)

The on-board lead project scientist is responsible for carrying out the scientific mission of his assigned aircraft. (Check off and initial when completed.)

#### E.1.1 Preflight

- HEB 1. Participate in general mission briefing.
- HEB 2. Determine specific mission and flight pattern(s) for his aircraft.
- HEB 3. Determine from CARCAH or field program director whether aircraft has operational fix responsibility and discuss with RFC flight director/meteorologist and CARCAH, unless briefed otherwise by field program director.
- HEB 4. Contact NHRL members of crew to:
  - a. Assure availability for mission.
  - b. Arrange ground transportation schedule when deployed.
  - c. Determine equipment status.
- HEB 5. Meet with RFC flight crew 90 minutes before takeoff, provide copies of flight plans and give a formal briefing to the flight director, navigator, and pilots. 42 TO TAKE RECON.
- HEB 6. Report status of aircraft, systems and crews to appropriate NHRL operations center.

#### E.1.2 In-Flight

- \_\_\_\_\_ 1. Confirm from RFC flight director/meteorologist that satellite data link is operative (information).
- \_\_\_\_\_ 2. Confirm camera mode of operation.
- \_\_\_\_\_ 3. Confirm data recording rate.

On-board Lead Project Scientist Checklist

DATE 13 Oct AIRCRAFT 42 FLT 831013H

A. Participants

<u>Function</u>	<u>Participant</u>	<u>Function</u>	<u>Participant</u>
Lead Proj. Sci.	<u>WILLOUGHBY</u>	Gust Probe	_____
Cloud Physics	<u>BLACK/WILLIS</u>	Omegasonde	_____
AXBT	_____	Sys Eng	_____
Hot Film	_____	Data Tech	_____
Radar	<u>MAZKS/BURPEE</u>	EI Tech	_____
Flt Dir/Met	<u>PARZISH</u>	Other	_____

Take Off 131515Z Location ACA Landing 140046Z Location ACA

B. Past and Forecast Storm Position

<u>Date</u>	<u>Time</u>	<u>Latitude</u>	<u>Longitude</u>	<u>MSLP</u>
<u>13</u>	<u>1345Z</u>	<u>13.4</u>	<u>103.1</u>	<u>45 KT</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

C. Mission Briefing

PLY RAINBAND FIG 4 + STAIRSTEPS ALTERNATING  
7 HR ONSTA

D. Equipment Status

<u>Equipment</u>	<u>Pre Flt</u>	<u>In Flt</u>	<u>Post Flt</u>	<u>Reports Collected</u>
Aircraft	↑	↑	← <sup>4</sup>	_____
Radar	↑	↑ <sup>2</sup> (!!!) <sup>3</sup>	↑	_____
Cloud Physics	↑ <sup>1</sup>	↑	↑	_____
Data Sys	↑	↑	↑	_____
Omegasondes	NOB	_____	_____	_____
AXBT	NOB	_____	_____	_____
Gust Probe	NOB	_____	_____	_____
Hot Film	NOB	_____	_____	_____
Photography	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

REMARKS

- 1 CLOUD PROBE ↓
- 2 DISPLAY dBZ PROBS FIXED (SO2Y OF)
- 3 AFC PROBLEMS WITH LF RADAR. SWAPPED T/R BOX, NFG. PUT ORIG BACK MANUAL TUNING.
- 4 FLAP ASSYM ↓ VIBRATION IN #2. NEED CHECK ON GROUND

E. Proposed and Actual Flight Patterns



B. THEN OUT & IN AT 2000  
 OUT & IN AT 1000  
 CLIMB TO 2000 EXIT FOR BAND  
 100 @ GO NMI



D. STAIRSTEP  
 OUT 2000  
 OUT-IN 1000  
 OUT-IN 2000

111

CLIMB TO 18,000

DATE 13 Oct 83


















FLIGHT 831013H

LPS WILLOUGHBY

Lead Project Scientist Event Log #

040130

9 1848 13:35  
102.58.

EVENT	TIME*	POSITION	COMMENTS**
AIRBORNE	131515Z	ACA	
	1558	14.7 102	EYE ON RADAIZ WIND 105/13 M/S
	1621	13.28 102.74	TRACK OUT 225 990 400/S
TURN 090	1642	12.33 103.68	TURN TO DIAGN LEG OF FIGURE 4
TURN 315 	1713	12.30 102	TRACK 315 
	1743	13.49 102.87	989 TRACK 
TURN 180	1747		TRACK 198 TO MEET 43 AT 1330' 103°33'
TURN 090	1754	13.49 103.49	
NEAR 	1803		TRACK 100  2000 FT
90-270 TURN	1813	13.49 102.38	TRACK  2000 FT 280
90-270 IN EYE	1821		TRACK  1000 FT 100
40-270	1833		TRACK  1000 FT 280
TURN CLIMB	1845		 AT 2000 FT TRK 100
TURN TO 300			FLY DIAGN LEG OF FIG 4
TURN	1939		TRACK 170 TO 
	1951	13.70 102.97	40 M/S 987
TURN	2005		TRACK 360 TO 
	2016	13	TRACK 040  → PAST BAND
TURN TO 220	2030		TRACK ACROSS BAND AT 1000 FT
TURN TO 040	2035		11

\*Log times of all significant altitude changes, turns, and eye fixes  
\*\*New altitude, heading, center position, etc.

DATE 13 OCT 83

FLIGHT 831013H

LPS WILLOWHISY

Lead Project Scientist Event Log

172  
10

EVENT	TIME*	POSITION	COMMENTS**
ENT EYE CLIMB	2103	SW OF G	
<del>II</del>	2120		43 RTB, CHIP LIGHT
	~2123		24000 FT → G TK 040
CPA TO G	2135		TRACK 060 G →
	2150	14.45 N 101.84 W	START DOWNWIND ARC 75 NM FROM G
TURN TO 145	2214	14.91 103.73	TRACK → G
G	2230	13.88 103.02	TRACK G → 060
	2239	14.18 102.37	DOWN FIRST "BAND"
			LOOP TO CHANGE RADAR TAPE
	2247	14.21 102.34	DOWN BAND AGAIN AFTER LOOP
	2300	14.30 103.39	TURN 135 → G) END PASS
G	2308	13.81 103.01	TRACK 060 G →
	2315		TURN DOWN LANE BTW BAND AND STRUALL
	~2326		TURN TO 150 TRACK → G
CPA TO G	2331	13.87 103.04	PASSED W OF G TRACK 060 FROM G
	~2336		TURN DOWN LANE BTW BAND & EYE WALL
G		13.86 102.94	TK 050 → ACA
LANDING	40046	ACU	

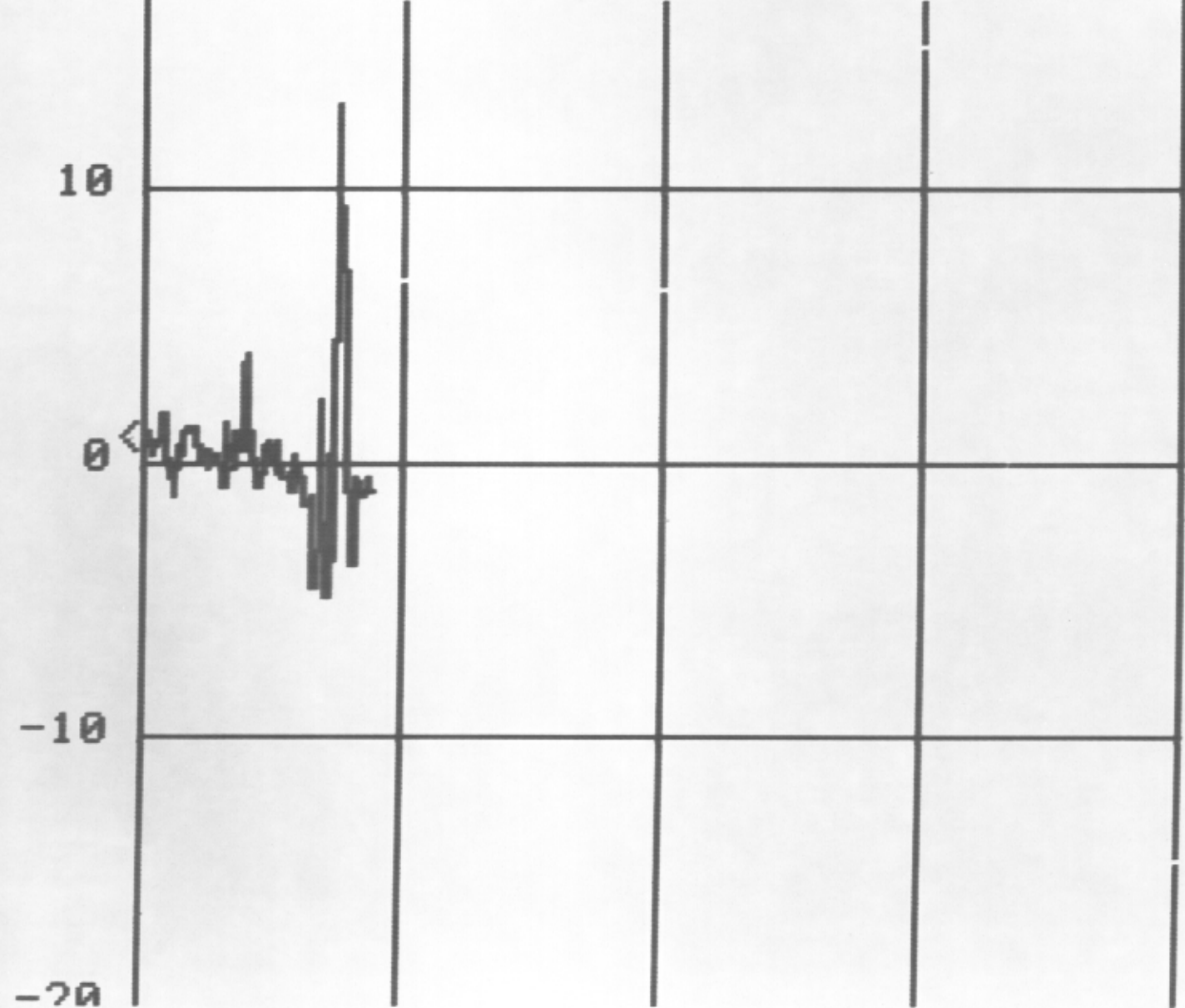
\*Log times of all significant altitude changes, turns, and eye fixes

\*\*Altitude, heading, center position, etc.



FW#5

23:26:24 831013H NOAA RFC 23:35:21



F I L T E R W I N D M / S

FW#5

23:58:49

831013H

NOAA RFC

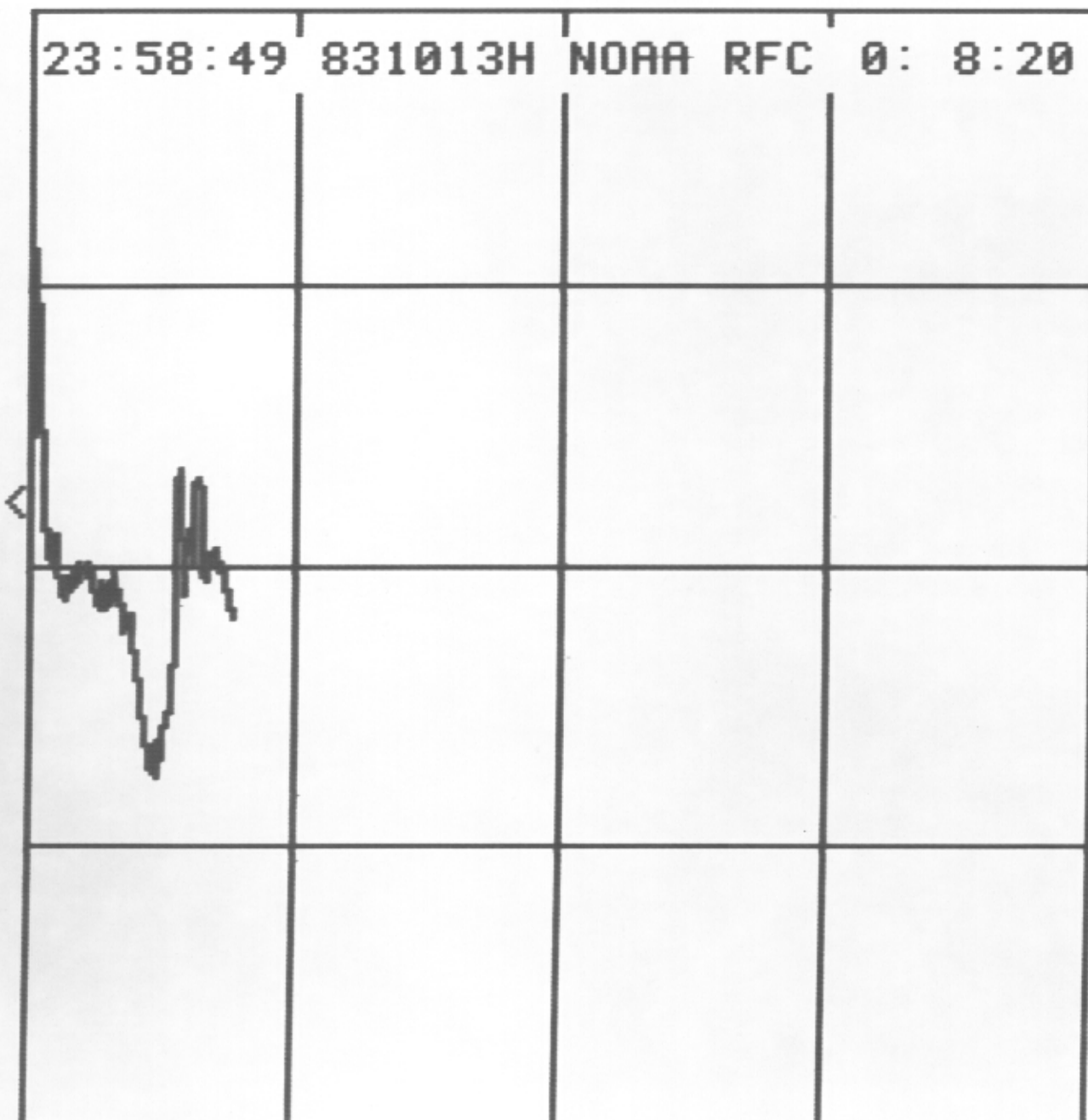
0: 8:20

10

0

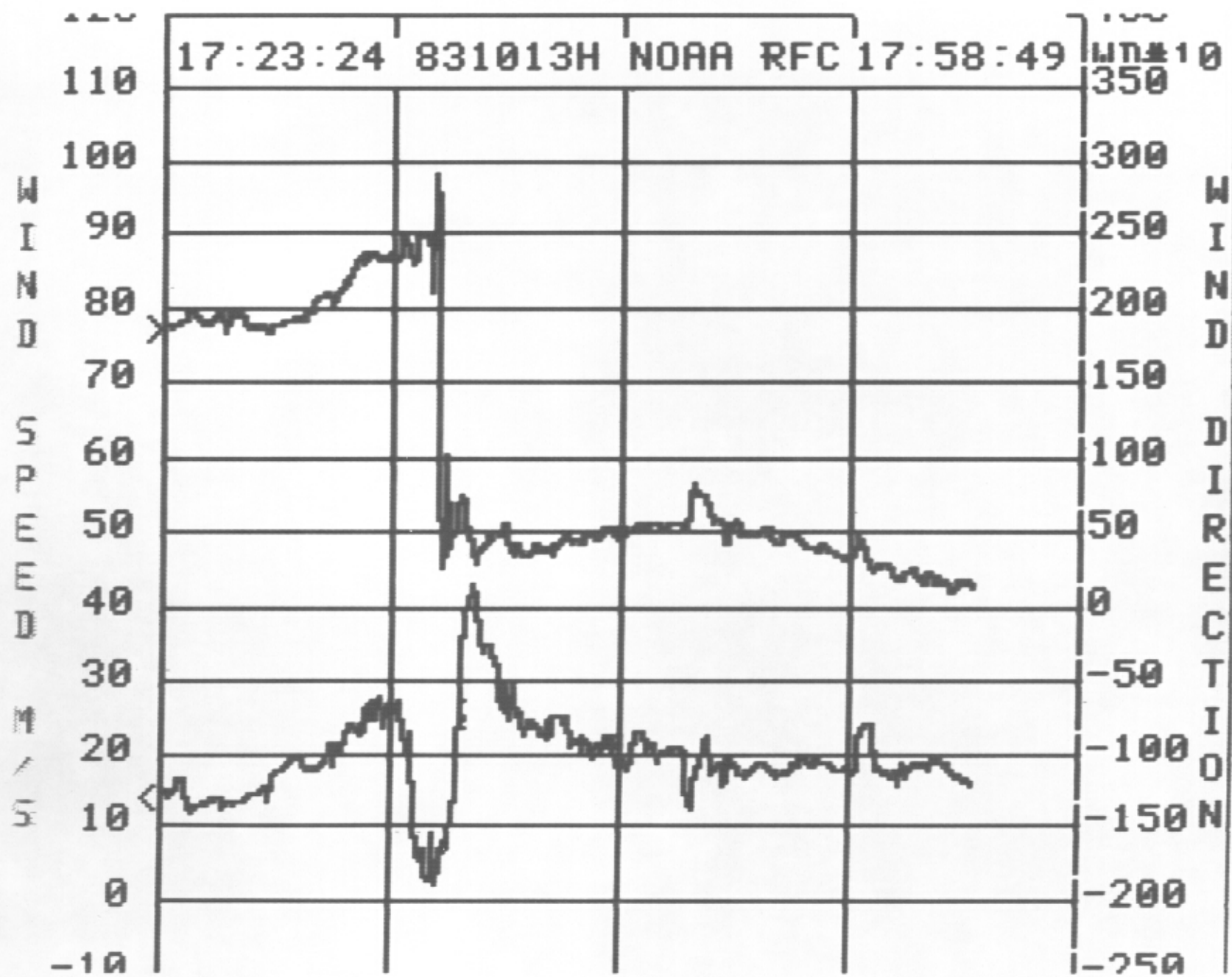
-10

-20

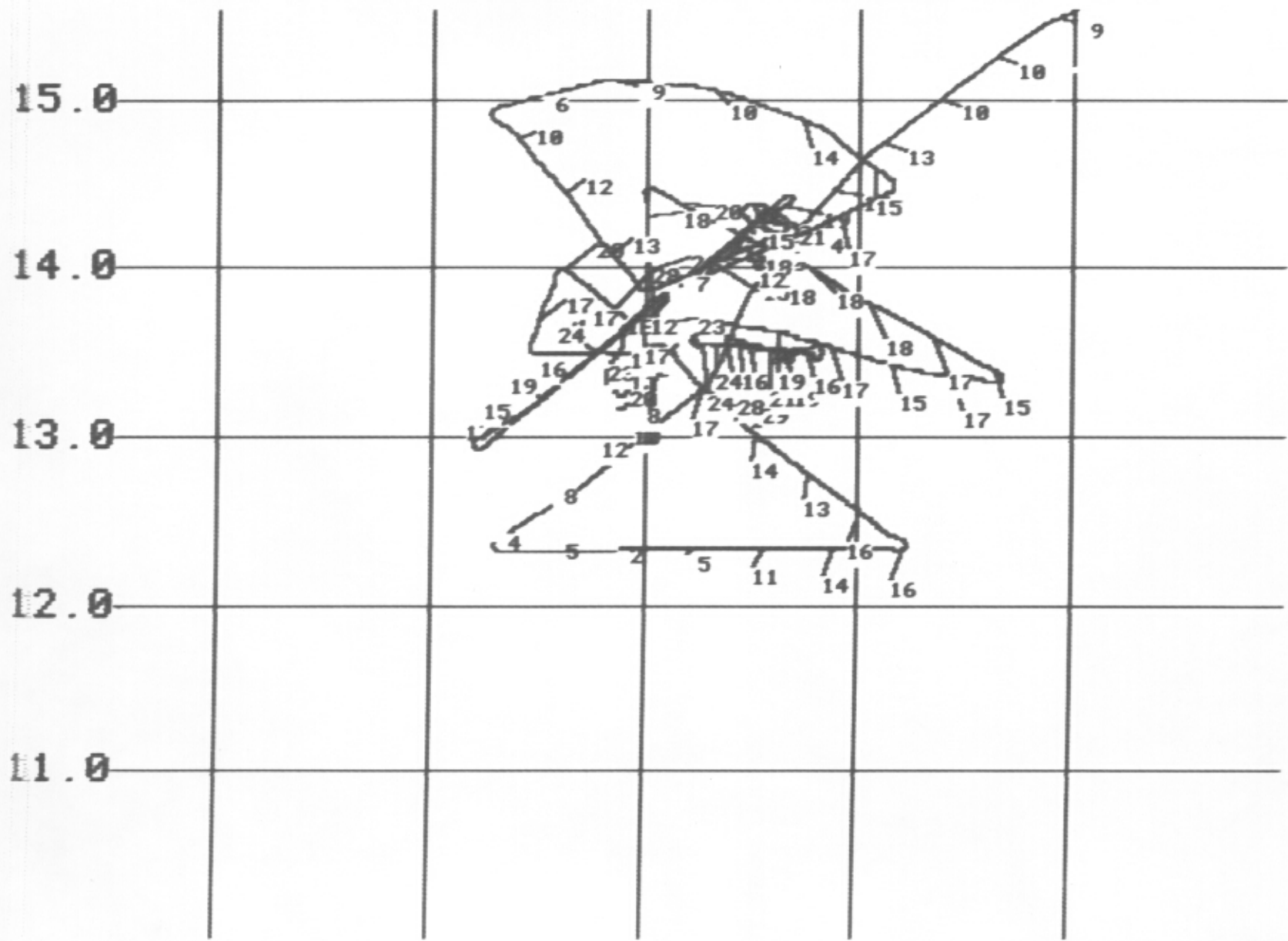


F  
I  
L  
T  
E  
R  
E  
D  
W  
I  
N  
D  
M  
/  
S





105  
15: 5:51 831013 RFC FTRK 22:45: 1 6



104  
15: 1:51 831013 RFC FTRK 23:27:30

