

E.5 Doppler Radar Scientist (On-Board)

The on-board Doppler radar scientist (DRS) is responsible for data collection from all radar systems on his/her assigned aircraft. Detailed operational procedures and check lists are contained in the operator's manual supplied to each operator. General supplementary procedures follow. (Check off and initial.)

E.5.1 Preflight

- ☒ 1. Determine the status of equipment and report results to the on-board lead project scientist (LPS).
- ☒ 2. Confirm mission and pattern selection from the on-board LPS.
- ☒ 3. Select the operational mode for radar system(s) after consultation with the HRD/DRS and the on-board LPS.
- ☒ 4. Complete the appropriate preflight calibrations and check lists as specified in the radar operator's manual.

E.5.2 In-Flight

- ☐ 1. Operate the system(s) as specified in the operator's manual and as directed by the HRD/DRS, unless superseded by directions from the on-board LPS or as required for aircraft safety as determined by the OAO flight director or aircraft commander.

E.5.3 Postflight

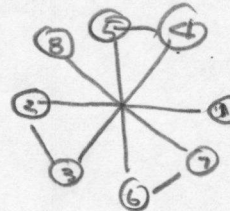
- ☐ 1. Complete the summary check lists and all other appropriate check lists and forms.
- ☐ 2. Brief the on-board LPS on equipment status and turn in completed forms to the LPS.
- ☐ 3. Hand-carry all radar tapes and arrange delivery as follows:
 - a. Outside of Miami - to the HRD operations center (FGOC).
 - b. In Miami - to MGOC or to AOML/HRD. [Note: all data removed from the aircraft by HRD personnel should be cleared with the OAO flight director.]
- ☐ 4. Debrief at the appropriate operations center (FGOC or MGOC).
- ☐ 5. Determine the status of future missions and notify the appropriate operations center (FGOC or MGOC) as to where you can be contacted.

Other problems:

SEP 25 1994

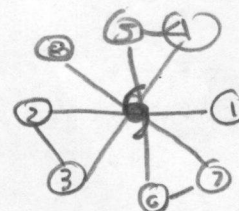
Form E-5
Page 2 of 3

HRD Radar Tape Log

Flight 9409251 Aircraft N431ZF Operator WILLOUGHBY Sheet 1 of

Tape #	Time On	Time Off	Comments	
<u>1</u>	<u>25/1937</u>	<u>2219</u>		1910 12010
	<u>1940</u>		OLIVIA VISIBLE AT EXTREME RANGE CONCENTRIC EYEWALL? FAST ON 10 RPM ON TA	
	<u>1943</u>	<u>1943</u>	LP + REWIND TAPE ↓	
<u>1</u>	<u>1953</u>		RECORDING RESTARTED ON TAPE ↓ FAST ON	
	<u>195530</u>		FAST ON	
	<u>2023</u>		IP, FAST OFF, W → 6	①
	<u>2032</u>		18-58 120-03 6 TRACK W	②
	<u>2048</u>		TURN 3 E FAST ON	③
	<u>2054</u>		FAST OFF 3 TRACK NE → 6	④
	<u>2106</u>		925 19-02 120-04 6 TRACK NE	⑤
	<u>2118</u>		FAST ON TRACK NW	⑥
	<u>2127</u>		FAST OFF TRACK S → 6	⑦
	<u>2138</u>		19-05 120-02 6 TRACK S → 6	⑧
	<u>2150</u>		FAST ON TRACK NE	⑨
	<u>2158</u>		FAST OFF TRACK NW → 6	⑩
	<u>2211</u>		935 19-13 120-05 6 TRACK NW	⑪
	<u>2219</u>		RADAR ↓	⑫
<u>2</u>	<u>2235</u>	<u>260200</u>	RADAR ↑ RECORDING	⑬
	<u>2237</u>		TRACK E → 6	⑭
	<u>2249</u>		19-16 119-58 6 TRACK E	⑮
	<u>2300</u>		FAST ON TRACK NW	⑯
	<u>2308</u>		FAST OFF TRACKING SW → 6	⑰
	<u>2317</u>		19-19 119-59 6	⑱
	<u>2328</u>		FAST ON	⑲

HRD Radar Down-Time Log



Operator WILLOUGHBY

Sheet 2 of 2

Item	Time Down	Time Up	Problem
RADAR	2219	2235	WOULD NOT RESET
DMTR1	260058	260113	OPERATOR ERROR

Item List: DMTR1, DMTR2, COMP, RDSC, LF, TA, DSC1, DSC2.

HRD Radar Tape Log

Flight 950935T Aircraft N431ZF Operator WILLOWGRIFF Sheet 2 of 2

[illegible]

HRD Radar Down-Time Log

Operator _____

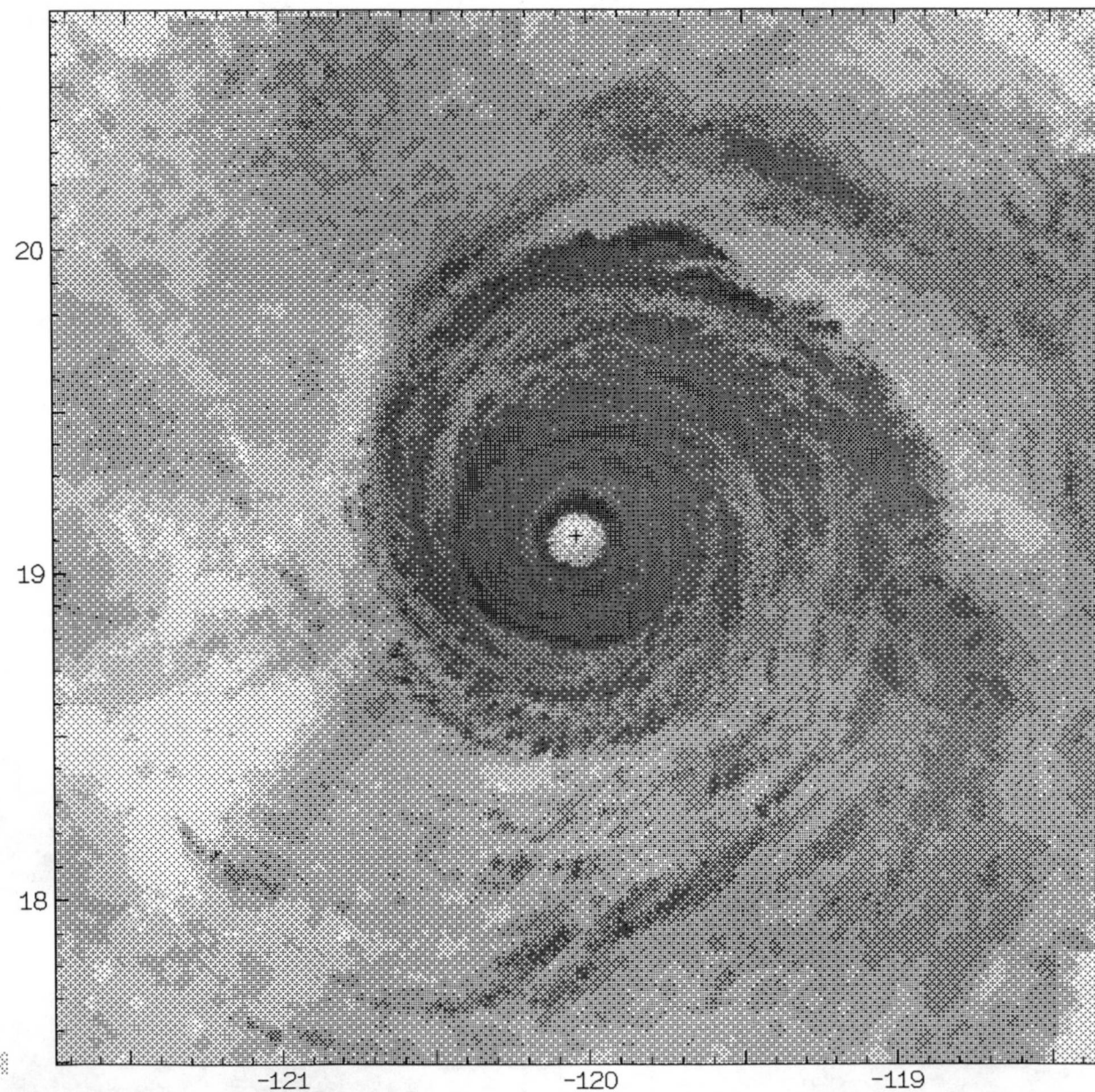
Sheet ____ of ____

Item	Time Down (HHMMSS)	Time Up (HHMMSS)	Problem

Item List: DMTR1, DMTR2, COMP, MARS, LF, TA.

940925I1

OLIVIA



(min.) (max.)

Pitch= .6; 2.2

52 Roll= -4.1; 1.5
49
46 Track=174.1;175.3
43
40 Drift= 10.5; 11.2
37
35 Tilt= 2.4; 3.3
32
29 Alt= 4250 m
26
23 Slat= 19.08 N
20 Slon= 120.03 W
17 Rlat= 19.63 N
15 Rlon= 120.08 W

dBZ

213014 Z
Lower Fuselage
360 X 360 km

produced by
HRD / AOC

940925I1

OLIVIA

(min.) (max.)

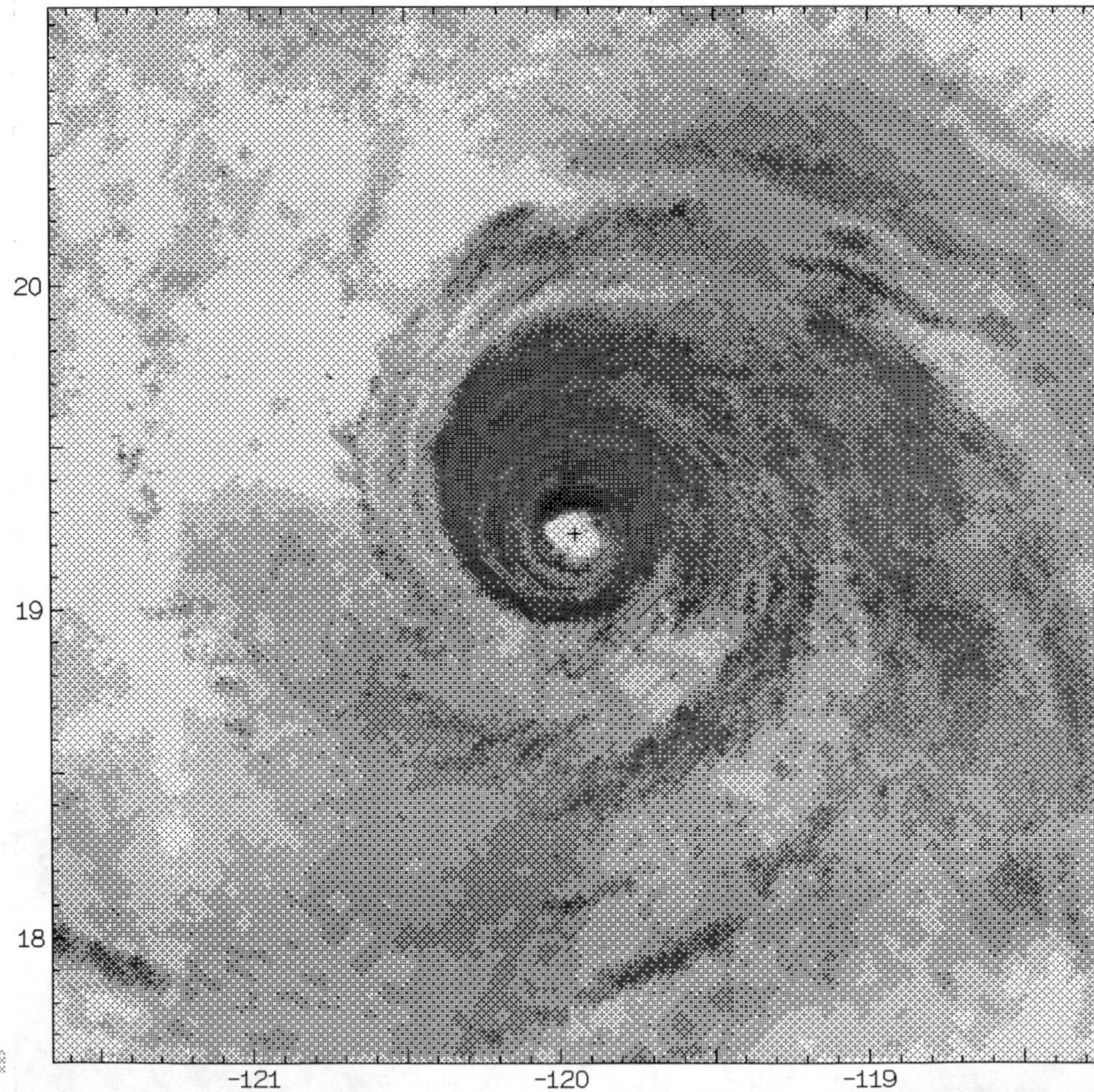
Pitch= 1.7; 2.0

52 Roll= -1.3; .2
49
46 Track=319.4;320.2
43
40 Drift= .1; .8
37
35 Tilt= 2.5; 3.2
32
29 Alt= 4250 m
26
23 Slat= 19.27 N
20 Slon= 119.97 W
17 Rlat= 19.67 N
15 Rlon= 119.28 W

dBZ

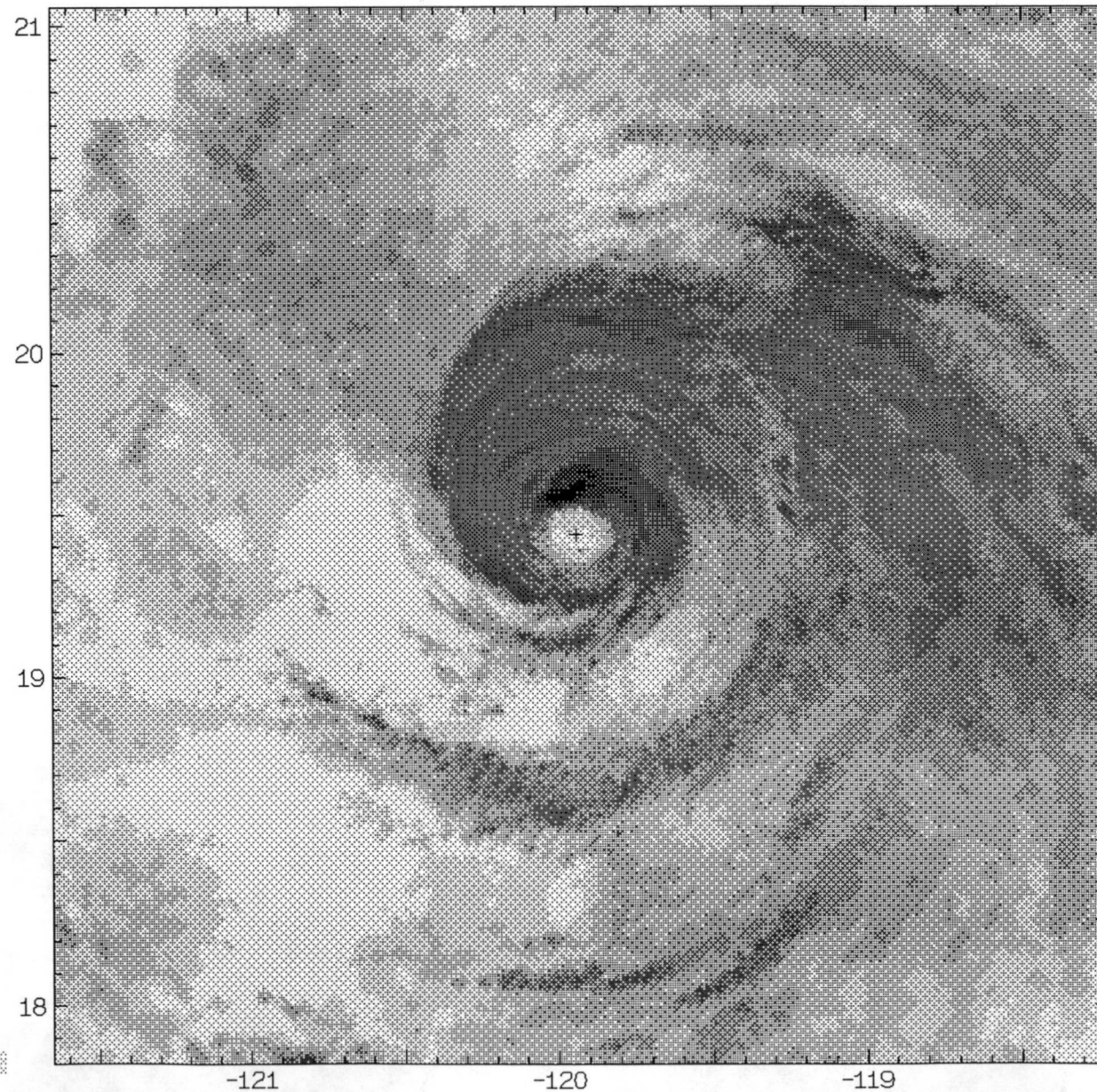
230418 Z
Lower Fuselage
360 X 360 km

produced by
HRD / AOC



940925I1

OLIVIA



(min.) (max.)

Pitch= 1.2; 1.8

52 Roll= -2.7; -8
49
46 Track=174.4;176.5
43
40 Drift= 7.8; 9.1
37
35 Tilt= 2.5; 3.3
32
29 Alt= 4276 m
26
23 Slat= 19.41 N
20 Slon= 119.93 W
17 Rlat= 20.15 N
15 Rlon= 120.00 W

dBZ

240215 Z
Lower Fuselage
360 X 360 km

produced by
HRD / AOC