

19930828I1-RADAR

AUG 28 1993

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

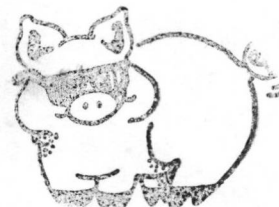
- ↑ 1. Determine the status of equipment and report results to the on-board lead project scientist (LPS).
- ↑ 2. Confirm mission and pattern selection from the on-board LPS.
- ↑ 3. Select the operational mode for radar system(s) after consultation with the on-board LPS.
- ↑ 4. Complete the appropriate 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 on-board LPS or as required for aircraft safety as determined by the AOC 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 AOC 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.



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Doppler Radar Scientist Check List

Flight ID 930828I
Aircraft # 43RF
Operators Marks
Radar Tech. Goldstein

Number of digital magnetic tapes on board > 20

Number of tape labels on board > 30

Component systems up and checked:

MARS	<u>↑</u>	Computer	<u>9</u>
DMTR1	<u>↑</u>	DMTR2	<u>↑</u>
LF	<u>↑</u>	R/T#	<u>124</u>
TA	<u>↑</u>	R/T#	<u>201</u>

Time correction between radar time and digital time 1 s

Radar Postflight Summary

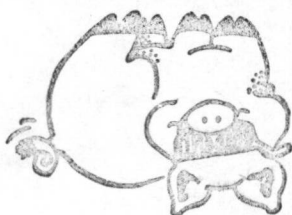
Number of digital tapes used:

DMTR1	<u>4</u>
DMTR2	<u>3</u>

Significant down time:

DMTR 1	<u>none</u>	Radar LF	<u>none</u>
DMTR 2	<u>none</u>	Radar TA	<u>none</u>

Other problems:



got tape Fault at end of last tape
Terry Lynch working on it. Only glitch
was with bad range gate near 75m/150m
transition in TA data.

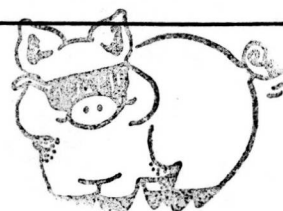
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Form E-5
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HRD Radar Tape Log

Flight 930828I Aircraft 43RF Operator Markus Sheet 1 of

Tape #	Time On (HHMMSS)	Time Off (HHMMSS)	Comments
1-1	181615	1903	right after TO point land outland F/A CON $\pm 17-20$
2-1	1903	1934	190416 CON
1-2	1935	2008	in F34 FA CON downwind 194835 CON TK 220
2-2	2008	2048	at end of inner F34 200930 turn to WNW FA/CON $\pm 17-18^\circ$ nice scatterers!!!
			2019 start seeing range gate noise at the transition between 75m and 150m gates (#256-257) one gate or so wide (extra range rng)
1-3	2048	214848	FA CON out on N-S leg W of G still have bad range gate 214533 CON mode on TK to G
2-3	214850	2223	CON inbound to G 220445 F/A CON downwind 221716 CON inbound TK 150
1-4	2223	231428	CON on inbound leg



1133 067 790 1145 72 8071

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HRD Radar Down-Time Log

Operator Marley

Sheet 1 of

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

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

