19871011I1-RADAR

E.5 Radar/Airborne Doppler Radar Scientist (On-board)

The on-board Radar Scientist (RS) is responsible for data collection from all radar systems on his/her assigned aircraft. Detailed operational procedures and checklists 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/RS and the on-board LPS.

_____ 4. Complete the appropriate preflight calibrations and checklists 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 Operate the system(s) as specified in the operator's manual and as directed by the HRD/RS unless superseded by directions from the on-board LPS or as required for aircraft safety as determined by the OAO/Flight Director or Aircraft Commander.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 checklists and all other appropriate checklists 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.

Form E-5
Page 1 of 4

Radar Scientist Checklist

Flight ID 871011 I

Aircraft # N43RF

Operators Griffin _____

Radar Tech Al Goldstein

Number of digital magnetic tapes on-board 17+

Number of tape labels on-board ✓

Component systems up and checked:

RDSC _____ DSC1 _____

Computer _____ DSC2 _____

DMTR1 _____ DMTR2 _____

LF _____ R/T# 101M

TA _____ R/T# 201M

Time correction between radar time and digital time +1 sec

Radar Postflight Summary

Number of digital tapes used DMTR 1 _____

DMTR 2 _____

Significant recorder downtime:

DMTR 1 _____ Radar LF _____

DMTR 2 _____ Radar TA _____

Other problems:

Form E-5
Page 2 of 4

HRD RADAR TAPE LOG

FLIGHT 870111I AIRCRAFT N43RF OPERATOR GRIFFIN SHEET 1 OF ___

Tape #	Time On	Time Off	Source Radar TA	Source Radar LF	Comments
1-1	233300	000330	✓	✓	
2-1	000330	003430	✓	✓	
1-2	003430	023302	✓	✓	0043 tail off
2-2	023302	030330		✓	

HRD RADAR LOG

OPERATOR_____

SHEET____ OF ____

RADAR DOWN-TIME LOG

ITEM	TIME DOWN	TIME UP	PROBLEM

ITEM LIST: VTR, DMTRI, DMTR2, COMP, ROSC, LF, NO, TA, DSCI, DSC2

E.5 Radar/Airborne Doppler Radar Scientist (On-board)

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

OCT 11 1987

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/RS and the on-board LPS.

___ 4. Complete the appropriate preflight calibrations and checklists 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/RS 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 checklists and all other appropriate checklists 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.

Form E-5
Page 1 of 4

Radar Scientist Checklist

Flight ID 870111I1

Aircraft # 43RF

Operators GAMACHE

Radar Tech GOLDSTEIN

Number of digital magnetic tapes on-board OVER 30

Number of tape labels on-board ENROUGH

Component systems up and checked:

RDSC _____ DSC1 _____

Computer _____ DSC2 _____

DOPPLER ✓
DMTR1 _____ DMTR2 _____

LF _____ R/T# _____

TA _____ R/T# _____

Time correction between radar time and digital time +2

Radar Postflight Summary

Number of digital tapes used DOPPLER
DMTR 1 2

DMTR 2 _____

Significant recorder downtime:

DMTR 1 _____ Radar LF _____

DMTR 2 _____ Radar TA _____

Other problems:

Form E-5
Page 4 of 4

HRD DOPPLER RADAR TAPE LOG

FLIGHT 87101111 AIRCRAFT 43RF OPERATOR GAMACITE SHEET ___ OF ___

TAPE NO.	TIME ON	TIME OFF	SOURCE* V	H	S	COMMENTS**(#pulses,scan rate, range)
						32, MAX, 300m
1	000250	001850			✓	
2	001200	003810			✓	

OCT 11 1987

*Vertical, Horizontal, or Full Sweep Scan

** # of pulses averaged (32,64,128,256); scan rate(Min,Max); range resolution(150m, 300m)

Form E-5
Page 3 of 4

HRD RADAR LOG

OPERATOR_____

SHEET____ OF ____

RADAR DOWN-TIME LOG

ITEM	TIME DOWN	TIME UP	PROBLEM

ITEM LIST: VTR, DMTR1, DMTR2, COMP, ROSC, LF, NO, TA, DSC1, DSC2