E.5 Radar Scientist

The on-board radar scientist 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 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.

2. Maintain a written commentary in the radar logbook of tape and event times, such as the start and end times of F/AST legs. Also document any equipment problems or changes in R/T, INE, or signal status.

E.5.3 Post flight

1. Complete the summary checklists 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 LPS.
   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 MGOC or the hotel during a deployment.

5. Determine the status of future missions and notify MGOC as to where you can be contacted.
HRD Radar Scientist Check List

Flight ID: 0309 127
Aircraft Number: VHT EF
Radar Operators: Page
Radar Technician: Lynch
Number of digital magnetic tapes on board: 

Component Systems Status:

MARS Computer
DAT1 DAT2
LF R/T Serial #
TA R/T Serial #

Time correction between radar time and digital time: 

Radar Post flight Summary

Number of digital tapes used: DAT1
DAT2

Significant down time:
DAT1 Radar LF
DAT2 Radar TA

Other Problems:
HRD Radar Tape Log

Flight: 030912
Aircraft: MZ0E
Operator: Rogers
Sheet: of

LF RPM
TA RPM

(Including start and end times of DATs, as well as times of F/AST legs and any changes of radar equipment status)

<table>
<thead>
<tr>
<th>Tape #</th>
<th>F/AST On?</th>
<th>Event Time (HHMMSS)</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>13:50:12</td>
<td>Switch to F/AST, ferrying to IF at 13:54:47</td>
<td></td>
</tr>
<tr>
<td>Y</td>
<td>16:43:57</td>
<td>Switched continuous, started IF at 16:44:00, heading 071</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>17:03:30</td>
<td>Switched F/AST, in 1/2</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>17:37:36</td>
<td>Switched off, beginning outbound leg</td>
<td></td>
</tr>
<tr>
<td>Y</td>
<td>17:41:03</td>
<td>F/AST starting downwind leg at 17:41:03, descending</td>
<td></td>
</tr>
</tbody>
</table>