

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 or initial.)

Preflight

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

In-Flight

- _____ 1. Operate the system(s) as specified in the operator's manual and as directed by the 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.

Post flight

- _____ 1. Complete the summary checklists and all other appropriate forms.
- _____ 2. Brief the 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: 050706I

Aircraft Number: 43

Radar Operators: S. Murillo, P. Dodge

Radar Technician: J. Barr, T. Lynch

Number of digital magnetic tapes on board: ~4 boxes

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:

*Radars performed
beautifully.*

HRD Radar Event Log

HRD Radar Event Log

Flight 05076I Aircraft 43 Operator Murillo Dodge Sheet 1 of 1

LF RPM _____ TA RPM _____

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

[illegible]

(4) 050705I

2224 radar ↑

2225 tape on

223030 Snd 12.67° 88.15°

and turn to head back
West and climbing to
head back.

2248 in LF looks like
an eye about 90 nmi
and 45° from us. It
may have gotten it's stuff
together.

050706I G Dennis

LPS: M Black 1/2 Murillo / Dodge

Sonde: Murillo / Dodge

Cloud Phys: P. Willic

OBS: Robbie Hood, Kate Musgrave

Paula Henson

T/O: 2156 from MROC (^{San}Jose,
CR)
(~ 3 HRS Late due to
LADRONES...)

Flying WISENT not working. This
one of the ~~the~~ newer ones.

J. Barr & Damon took WKSTN
apart - resealed boards &
now drive and now it works!!
Not that that has anything to
do with RADAR...

0025 in good stratiform
region SSW of center.
Wedge below tail NOT
yet apparent.

0040 turning at 14
~~to 14~~ no not a mile -

② 050706I

004120 turn.

DROP 15.03 73.19

0042 CONTINUOUS
ON - for ERZ overpass

0044 climb 14 → 18K
(maybe)

004625 15°24' 73°11'
SONDE

0051 ERZ CP over us

0054 we desc back to 14K.

0056 F/AST for eyewall

005738 "eyewall" SND

010020 "eye" drop NLD

102 74 KTS ~~At eyewall~~
drop

050706③
16°21' 73°13' center 010015

0111 17°10' 73°12'
SND, BT SND no telem

116 sonde at N pt.
and turn

11820 F/AST OFF
for N/S pass with ERZ

128 desc 18 → 14K

132 ERZ heading home
before we got to center - but
we got 3 good legs for
them.

0137 center drop 16°17'
73°17.9'

14032 drop 16°06' 73°19'

145 start climb to 19K'

147 wedge below tail
Quite apparent now -

④ 050706 G DENNIS
and we are still in continuous
mode.

0155 end N/S Leg
while we continue desc.

015739 end desc, back
to 141K.

015831 F/AST ON

212 sonde and we are
heading NE back to G

021755 SNP, BT
15°48' 73°53'
28.2 C from BT

022557 SW eyewall drop
no telemetry -
then came in.

228 circling in
eye to go back around
and Monty find the center

⑤ 050706

23930 16°0' 73°32'
SW Eyewall

24151 center | G Dennis
Hurricane
at 6 PM

245 73 KTS NE.
eyewall drop
16°33' 73°20'

Landed 060043 UTC
back in CR
(MIDNIGHT LOCAL)