

TD 11 19900919I1-LPS

Form E-2
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On-Board Lead Project Scientist Check List

Date 19SEP90 Aircraft N432F Flight ID 900919I

A. Participants

HRD		OAO	
Function	Participant	Function	Participant
Lead Proj. Sci.	<u>WILLOUGHBY</u>	Flight Director	<u>PAIZISH</u>
Cloud Physics	<u>DODGE</u>	Pilots	<u>TIKNOZ KENNEDY</u>
Radar	<u>GAMACHE</u>	Navigator	<u>NOULTS</u>
Doppler	<u>ROUX</u>	Sys. Engr.	<u>GOLDSTEIN</u>
Photographer	<u> </u>	Data Tech.	<u> </u>
Omegasonde	<u> </u>	El. Tech.	<u> </u>
AXBT/AXCP	<u>P. BLAIS</u>	Other	<u> </u>
SMURF	<u> </u>		

Take-Off 19/1407 Location BARBADOS Landing Location

B. Past and Forecast Storm Locations

Date/Time	Latitude	Longitude	MSLP	Max. Wind
<u>19/1800Z</u>	<u>16</u>	<u>49.3</u>	<u> </u>	<u>45kt</u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>

C. Mission Briefing

FLY TD11. TWO FIG 4 PATTERNS.
GET FIXES OF OPPORTUNITY
SEE ATTACHED SHEET

900919I

E.2 Lead Project Scientist (On-Board)

E.2.1 Preflight

- HB 1. Participate in general mission briefing.
- HB 2. Determine specific mission and flight requirements for assigned aircraft.
- HB 3. Determine from CARCAH or field program director whether aircraft has operational fix responsibility and discuss with OAO flight director/meteorologist and CARCAH unless briefed otherwise by field program director.
- HB 4. Contact HRD members of crew to:
 - a. Assure availability for mission.
 - b. Arrange ground transportation schedule when deployed.
 - c. Determine equipment status.
- HB 5. Meet with OAO flight crew at least 90 minutes before takeoff, provide copies of flight requirements and provide a formal briefing for the flight director, navigator, and pilots.
- _____ 6. Report status of aircraft, systems, necessary on-board supplies and crews to appropriate HRD operations center (MGOC in Miami or FGOC at remote recovery location).

E.2.2 In-Flight

- HB 1. Confirm from OAO flight director/meteorologist that satellite data link is operative (information).
- HB 2. Confirm camera mode of operation.
- HB 3. Confirm data recording rate.
- HB 4. Complete Form E-2.

E.2.3 Postflight

- _____ 1. Debrief scientific crew.
- _____ 2. Report landing time, aircraft, crew, and mission status along with supplies (tapes, etc.) remaining aboard the aircraft to the appropriate HRD operations center (MGOC or FGOC).
- _____ 3. Gather completed forms for mission and turn in at the appropriate operations center. [Note: all data removed from the aircraft by HRD personnel should be cleared with the OAO flight director.]
- _____ 4. Determine next mission status, if any, and brief crews as necessary.
- _____ 5. Notify the appropriate operations center (FGOC or MGOC) as to where you can be contacted and arrange for any further coordination required.

D. Equipment Status

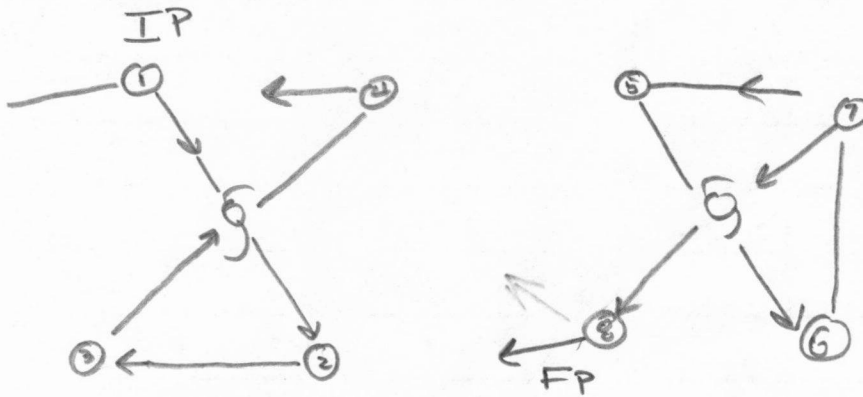
<u>Equipment</u>	<u>Pre-Flight</u>	<u>In-Flight</u>	<u>Post-Flight</u>
Aircraft	↑	↑	
Radar	↑	↑ (2)	
Cloud physics	DUBIOUS (1)		
Data system	↑	↑	
Omegasondes	NOT EMPLOYED		
AXBT/AXCP	"		
Doppler	↑	↑	
Photography	NOT EMPLOYED		

REMARKS:

(1) NO GOOD PRECIP PROBE

(2) TAIL RADAR FLAKY ON FERRY TO STORM.
LOOKED OK AT IT.

E. I. Proposed Flight Pattern (sketch or designate by number)



E. II. Actual Flight Pattern

Lead Project Scientist Event Log

Date 19 SEP 90

Flight 900919I

LPS WILLOUGHBY

Time	Event	Position	Comments
19/1407	T/O	BARBADOS	
1550	START DESCENT		
1600	AT 5000 ft 51° 18'	16° 44' 51° 18'	SHURE CALIBRATION
1618	IP #1	17° 09' 50° 18'	TURN SE → 6
1649	6	15° 34' 49° 08'	SLP 1005
1714	POINT #2	14° 25' 47° 56'	TRACK W TO #3 WIND 35 Kt
1722	DESCEND TO 500'		FOR SURFACE TEMP/WIND CHECK
1731-1733	AT 500'		
1737	AT 510 ft		
1754	#3	14° 24' 50° 16'	TRACK NE TO 6
1819	6	15° 36' 49° 14'	1004 SLP
1845	#4	16° 48' 48° 00'	TRACK W TO 5
1918	#5	16° 49' 50° 24'	TRACK SE TO 6
1946	6	15° 37' 49° 00'	DIDNT GET TOO CLOSE TO 6 SLP = 1005
2011	#6	14° 28' 47° 52'	TRACK N TO 7
2043	#7	16° 40' 47° 56'	TRACK 215 TO 6
2106	6	15° 42' 48° 57'	
2133	#8	14° 28' 50° 10'	FINAL POINT
2133-2140	TAS CAL		
2140	DEPART STORM	14° 28' 50° 07'	CLIMB TO
2343	RECOVER	BARBADOS	

1845
1618
227

1
1820
240
2100

1
1845
235
2120
2
2320

1
1918
227
2135

4
2250
1005

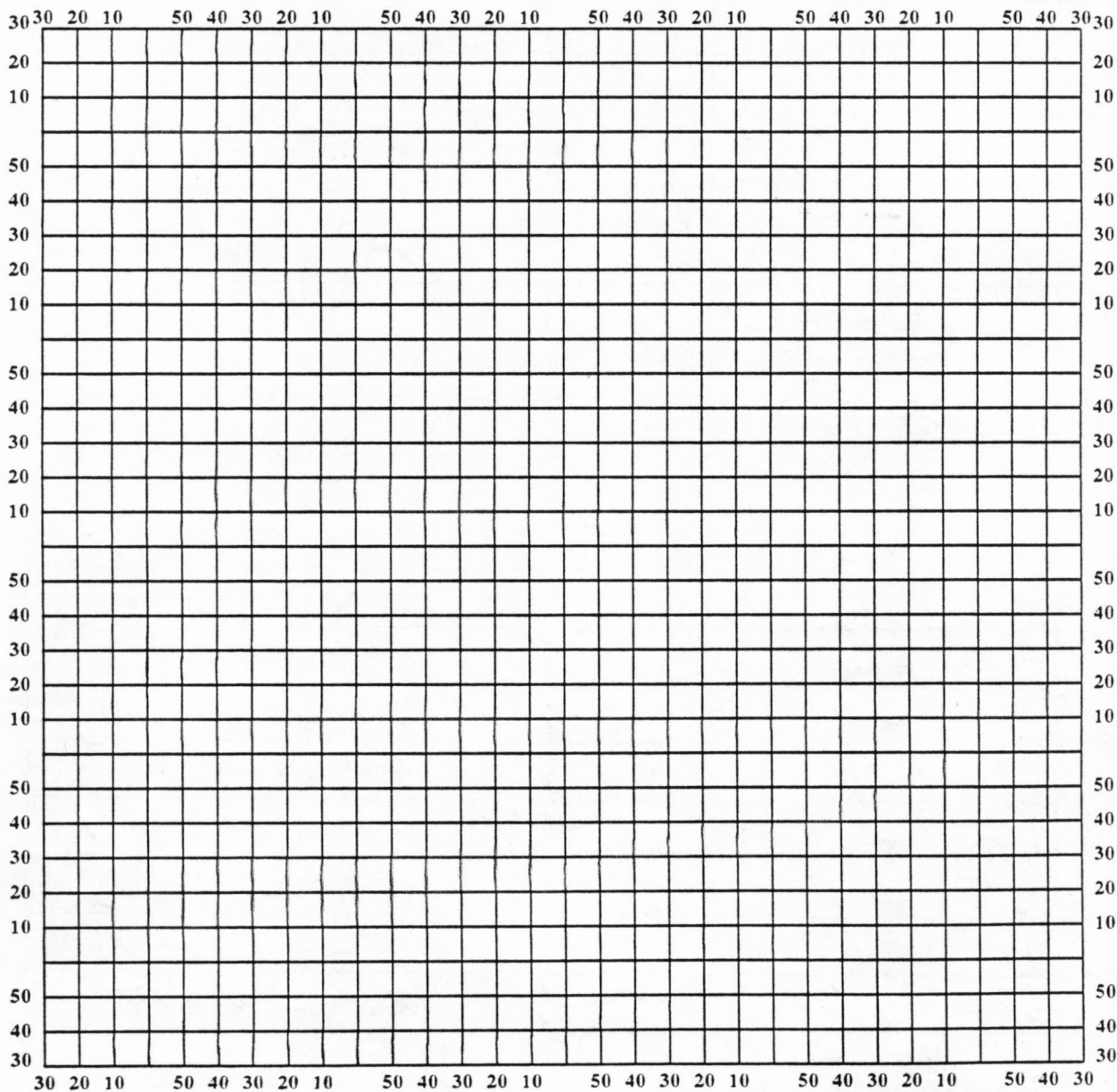
TAS CAL
→ N 263 26
→ SW 277 22

[Handwritten signature]

Hurricane Recco Plotting Chart

True at 25° Latitude, in Degrees and Minutes of ϕ and λ .

Date _____ Longitude _____ Observer _____



Note: Label full degrees according to location of flight area.

Doppler Radar Scientist Check List

Flight ID 900919I1
Aircraft # 43
Operators GAMACHE, ROUX, DODGE
Radar Tech. GOLDSEGIN

SEP 19 1990

Number of digital magnetic tapes on board 11 tapes in bin

Number of tape labels on board enough

Component systems up and checked:

MARS ✓
DMTR1 ✓
LF ✓
TA ✓

Computer ✓
DMTR2 ✓
R/T# 124
R/T# ~~SN 102*~~ 204

Time correction between radar time and digital time

Radar Postflight Summary

Number of digital tapes used:

DMTR1 2

DMTR2 2

Significant down time:

DMTR 1 none
DMTR 2 none

Radar LF none
Radar TA none

ONCE RECORDING
STARTED

Other problems: BEFORE RECORDING:

AL G. had to SWAP R/T on TAIL at start of flight, to SN102. Then JG noticed no coherence in Doppler return from sea surface

so Al and Saleem worked some more. Swapped RT's back but first RT (#204) just would not fire. So put SN102 back in - but its transmission was intermittent - so

finally SN 204 was THE ONE.

PROBLEM was bad fault card in RT 204 - FAULT card from 102 was swapped in, because 102 wouldn't work at all.

SEP 19 1990

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.

SEP 10 1999

HRD Radar Down-Time Log

Operator Gammache, Roux, Dodge Sheet 1 of 1

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

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

SEP 19 1990

SEP 9 1 1990

HRD Radar Tape Log

Flight 900919I1 Aircraft 43 Operator Gannet, Rovers Sheet 1 of 1

[illegible]