

19890805J1-LPS-7N

E.2 Lead Project Scientist (On-Board)

E.2.1 Preflight

- ☒ 1. Participate in general mission briefing.
- ☒ 2. Determine specific mission and flight requirements for assigned aircraft.
- ☒ 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.
- ☒ 4. Contact HRD members of crew to:
 - a. Assure availability for mission.
 - b. Arrange ground transportation schedule when deployed.
 - c. Determine equipment status.
- ☒ 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

- ☒ 1. Confirm from OAO flight director/meteorologist that satellite data link is operative (information).
- ☐ 2. Confirm camera mode of operation.
- ☒ 3. Confirm data recording rate.
- ☒ 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. Obtain a copy of the 10-s flight listing from the OAO flight director. Turn in with completed forms.
- ☐ 5. Determine next mission status, if any, and brief crews as necessary.
- ☐ 6. Notify the appropriate operations center (FGOC or MGOC) as to where you can be contacted and arrange for any further coordination required.

On-Board Lead Project Scientist Check List

Date 5 Aug 89 Aircraft 43 RF Flight ID 890805I1

A. Participants

HRD		OAO	
Function	Participant	Function	Participant
Lead Proj. Sci.	<u>WILLIS</u>	Flight Director	<u>DAMIANO</u>
Cloud Physics	<u>—</u>	Pilots	<u>TURNER, TERRY</u>
Radar	<u>GAMACHE</u>	Navigator	<u>NOKUTIS</u>
Doppler	<u>GAMACHE</u>	Sys. Engr.	<u>Schrickel</u>
Photographer	<u>—</u>	Data Tech.	<u>Terry Lynch</u>
Omegasonde	<u>FRANKLIN, BURKE</u>	El. Tech.	<u>Jock Hanchett</u>
AXBT/AXCP	<u>—</u>	Other	<u>—</u>

Take-Off	Location	Landing	Location
<u>1332/46</u>	<u>SJU</u>	<u>2224/50</u>	<u>SJU</u>

B. Past and Forecast Storm Locations

Date/Time	Latitude	Longitude	MSLP	Max. Wind
<u>8/05 10Z</u>	<u>24.3</u>	<u>63.9</u>	<u>—</u>	<u>75</u>
<u>18Z</u>	<u>26.0</u>	<u>64.0</u>	<u>—</u>	<u>75</u>
<u>06Z</u>	<u>28.5</u>	<u>64.0</u>	<u>—</u>	<u>70</u>
<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>

C. Mission Briefing

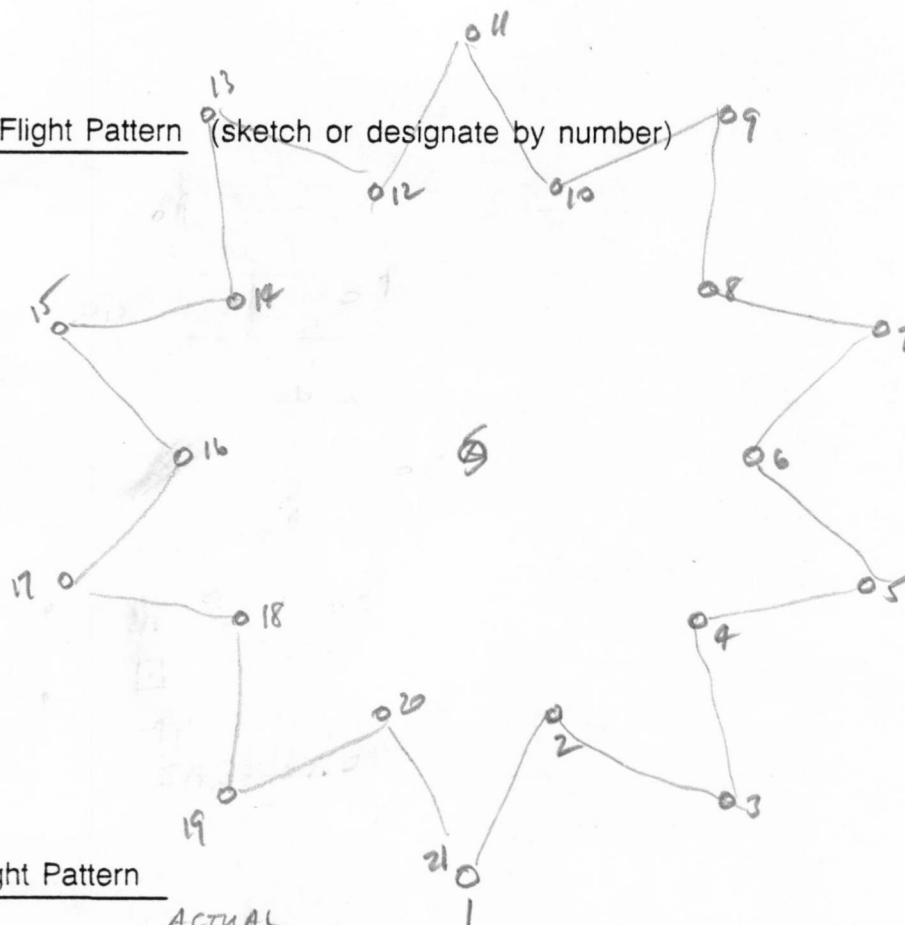
Outer Doppler and Dropwindsonde Pattern
for Energetics and Budgets experiment

D. Equipment Status

<u>Equipment</u>	<u>Pre-Flight</u>	<u>In-Flight</u>	<u>Post-Flight</u>
Aircraft	☒	☒	☐
Radar	☒	☒	☐
Cloud physics	☒	☒	☐
Data system	☒	☒	☐
Omegasondes	☒	<i>Aircraft SC Recr</i> ☒	☐
AXBT/AXCP	☐	☐	☐
Doppler	☒	☒	☐
Photography	☒	☒	☐

REMARKS:

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



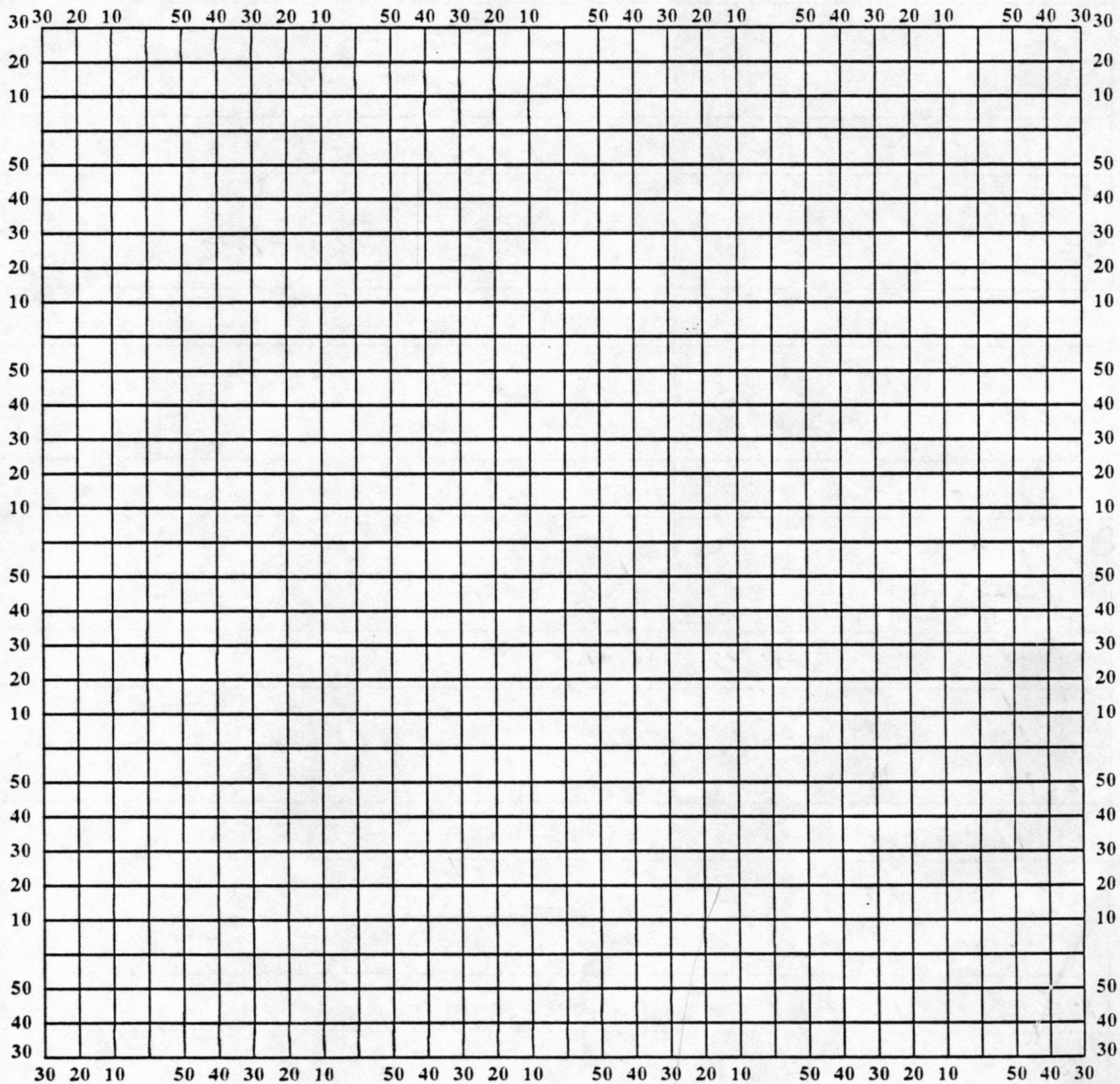
E. II. Actual Flight Pattern

	PLANNED		ACTUAL	
			NO DRAP	
1	21/12	64/20		
2	22/40	63/06	22 39.6	63 5.2
3	22/04	61/28	22/13.1	61 28.4
4	23/44	61/38	23 42.2	61 37.4
5	24/04	59/50	24 4.8	59 50.9
6	25/34	61/02	25 33.6	61 8.8
7	26/44	59/44	26 44.9	59 45.5
8	27/04	61/34	27 11.5	61 44.0
9	28/44	61/19	28 43.2	61/24.0
10	28/14	63/04	28/15.7	63/4.8
11	29/42	64/00	29/16.8	64/7.1
12	28/32	64/56	28/31.1	65/2.2
13	29/14	66/41	29/17.0	66 49.2
14	27/46	66/26	27 41.8	66/26.2
15	27/26	68/17	27/26.3	68/14.8
16	26/12	66/58	26/13.5	66 57.0
17	24/58	68/12	24 57.7	68 6.5
18	24/50	66/22	24 48.8	66 21.0
19	23/10	66/33	23 9.9	66 29.5
20	23/52	64/54	23 53.1	64 51.2
21	22/24	64/00	22 27.3	63 54.8

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.

Lead Project Scientist Event Log

Date 5 Aug 89 Flight 890805I1 LPS Willis

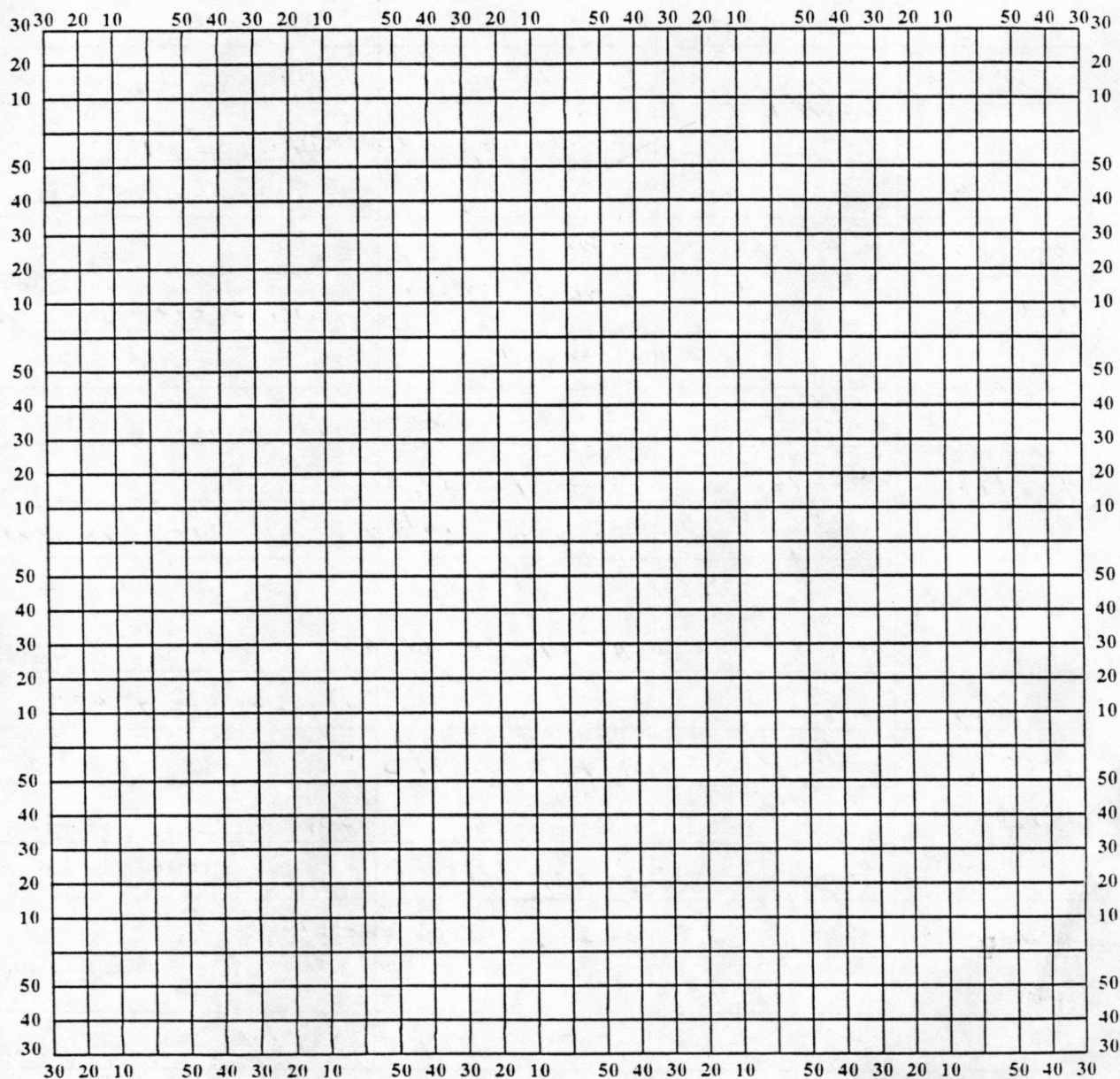
Time	Event	Position	Comments
1332/46	T/O SJ4	18 26.2 N 66 0.9 W	minor APU power problem
IP 1418	POINT	21 15 / 65 50	GOING AROUND MISSILE RANGE
	Onaga receiver out going to start ^{SL} at point 2		
1422/20		21 55.6 N 65 55.8 W	
1456/30	PT 2 SL DROP	22 39.6 63 05.2	FIRST WIND LOOKS OK
1506	PT 3	22 26.3 62 16	DEVIATING AROUND CONVECTIVE CLOUD AHEAD
1515/33	PT 3 SL DROP	22 13 61 29.9	1517/40 SL drop
1509 Z	42 FIX	25 22 63 55	978 mb SEC WIND 80
1534/21	PT 4	23 42.2 61 37.4	SONDES LOOK GOOD OUT OF CLOUD
1554/03	PT 5	24 4.8 59 50.9	215/19 -9.3 465.6 mb -21.6
1555 Z	25/38 64/06 W	42 FIX	978 90 KTS 350/23 KTS
	SONDE & BACKUP FAILED AT 5 STREAMER & NO WINDS		
1617/38	PT 6	25 33.6 61 8.8	WX, WILL DELAY DROP
1637/26	PT 7	26 44.9 / 59 45.5	
1659/40	PT 8	27 11.5 61 44.0	-9.7 -13.2 133/25
1718/20	PT 9	28 43.2 61 24.0	ASKED FOR REVISED PT 11
1716 Z	42 FIX	25 56 N 64 01 W	976 mb 350/16 SEC 85 KTS
1736/48	PT 10	28 15.7 63 4.8	148/35 -10.4 / -12.8 446.4
1748	PT		42 DOPPLER OVERHEATING PROBLEM, WILL TRY IT AGAIN SOON
1752/20	PT 11	29 16.8 64 7.1	192/37 -10.9 446.4 -11.2
	DID NOT GET CLEARANCE	FOR REVISED PT 11 IN CERMUDA FIS	

End Pg 1

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.

Lead Project Scientist Event Log

DEAN
Date 890805 Flight 89 0805 I LPS Willis

Time	Event	Position	Comments
1801/30	WILL TRY OUTSIDE TURN AT 12,		
1808/40	PT 12	28/31.1 / 65 2.2	137/30 -10.8 496.6
1824/13	PRIOR TO TURN	29/8.4 66/27.6	149/11 -12.1 446.5
1828/09	PT 13	29/17.0 66/49.2	IN CLOUD ON N SIDE
1848/50	PT 14	27/41.8 66 26.2	206/17 -13.3 427.7
1858/50	197/16	27 36.3 67 18.6	SOME OVERHANG, BUT PRETTY CLEAR ON THIS SIDE
1908/58	PT 15	27/26.3 / 68 19.8	230/21 -14.9 406 162 427.6
			227/27 -12.8 427.7
1929/12	PT 16	26 13.5 / 66 57.0	
1938	264/29 -12.9 -23.3	427.5 25 38.9 / 67/29	2 RAPAR DATA SYSTEM POLY
1944Z	42 FIX	26/28 64/04	981 mb 100 KTS ON E
1948	DOPLER DATA SYSTEM BACK UP		
1950/10	PT 17	24/57.7 68/6.5	291/24 -12.7 -20.3 427.6
2007/58	PT 18	24/48.8 66 21.0	258/34 -12.5 -28.9 427.8
2028/58	PT 19	23 9.9 / 66 29.5	240/29 -12.1 -28.6 427.6
2046/56	PT 20	23 53.1 64 51.2	249/29 -12.1 -28.1 427.6
2106/26	PT 21	22 27.3 63 54.8	253/26 -12.5 -24.0 427.7
		LAST DROP	
2122/50		22 25.6 65 18.5	248/22 MAY BE ARCING?
2145/06	FIELD MILL CHARGE TEST	OFF 2146 ON 2148/00	OFF 2150/00
2224/50	LANDER SW	18 26.2 65 57.0	

NO 42
DOPLER
621 MB TO
1500 FT

406 270

SIDE

406
162

SIR CLR

NOT MUCH
ON SISEN
UP