

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 AOC 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 AOC 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 AOC flight director 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 AOC flight director.]
- _____ 4. Obtain a copy of the 10-s flight listing from the AOC 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.
- _____ 7. Prepare written mission summary.

On-Board Lead Project Scientist Check List

Date Sept 25 '02 Aircraft 43 Flight ID 020925I

A. Participants:

HRD		AOC	
Function	Participant	Function	Participant
Lead Project Scientist	<u>Cione</u>	Flight Director	<u>Damiani</u>
Cloud Physics	<u>—</u>	Pilots <u>Kerul</u>	<u>Halverson</u>
Radar	<u>P. Dodge</u>	Navigator	<u>Carl</u>
Workstation	<u>P. Dodge</u>	Systems Engineer	<u>Jeff Smith</u>
Photographer/Observer	<u>Nolga</u>	Data Technician	<u>Dana Sansus</u>
Omegasonde GPS	<u>—</u>	Electronics Technician	<u>Terry Lynch</u>
AXBT/AXCP/Guest	<u>Uhlan</u>	Other <u>all</u>	<u>all</u>

mgoc howie

Take-Off: 22:26 Location: Mac Dill
 Landing: — Location: " " Number of Eye Penetrations: —

B. Past and Forecast Storm Locations:

Date/Time	Latitude	Longitude	MSLP	Maximum Wind
<u>9/25/21Z</u>	<u>27.3</u>	<u>90.5</u>	<u>989</u>	<u>65 kts</u>

C. Mission Briefing:

this is an MHC-Tasked
recon/leadfull Flight Mission. We will
also attempt to 'hit' 7 CMAN/fixed buoy
platforms w/ GPS/AXBTs for ~~comparison~~ intercomparison
w/ surface lat (off altitude). Very few
surface-buoy stc current comparisons currently
exist.

D. Equipment Status (Up, Down, Not Available, Not Used)

Equipment	Pre-Flight	In-Flight	Post-Flight
Aircraft	✓		
Radar/LF	✓		
Radar/TA (Doppler)	✓		
Cloud Physics	✓		
Data System	✓		
Omegasondes	✓		
AXBT/AXCP	✓		
Workstation	✓		
Videography	✓		

REMARKS:

no problems mechanically...

Major change due to miscal
from Nav ... (we do correct pattern
we miss out fix ... so ...
Borg Data is completely down flight
pattern ... we are now going from
center first ... then modify pattern with
that ... See "----" on flight track
map for "actual" altered flight
track ...

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

See attached Map--

Equipment	Pre-Flight	In-Flight	Post-Flight
Aircraft	✓		
Weather	✓		
Radio (A) (B) (C) (D)	✓		
Cloud Physics	✓		
Data System	✓		
Omegasondes	✓		
AXBT/AXCP	✓		
Wind Station	✓		
Video/Photo	✓		

E. (II) Actual Flight Pattern

See "made" to attached map--

27 39
90 15
26-30
91-68

LPS *Cone* 91-1

Time	Event	Position	Comments
23:43:38	BT drop 1	27.53 88.53	dive East of Center SS
00:06:00	Center fix	27.65 90.25	Fl lev winds 1.2k
00:28:40	leg turn S	27.69 92.22	
00:30:50	BT #2	27.59 92.79	SST 28.2 veg sta
00:46:14	turn N to NE	26.37 91.58	
00:49:12	BT #3	26.47 91.44	SW of Stan SST
01:13:14	BT #4	27.59 90.25	Center 28.25
01:23:00	Speed + Dr TC	N/A	340 @ 15 kts
01:46:44	BT #5 Buoy	29.24 88.21	Buoy 40045 T 996.70p-95 40kts 110000
02:07:10	Turn pt Coast E-W line	30.08 87.95	NE quad west of
02:08:45	ready 270/East	30.08 87.10	beach... 70kts Fl
02:15:31	E-W line	30.08 87.67	SFMR = 33m/s SW
02:18:34	"	30.08 88.0	Backy GPS
02:22:15	"	30.08 88.31	-
02:29:30	Turn to SSE	30.05 89.02	head towards Bu
02:30:55	GPS only	29.96 89.06	GPS failed
02:48:29	ink carousel	28.91 89.42	BUR - CHAN GP
		BT = 28.8	No winds
02:50:49	redo gp (P)	28.80 89.63	Too far 2 fm B
03:08:00	Center fix	28.84 90.80	Center GPS

Stom May 32

Pre SS =

$$V =$$

42007

42036?

⑧? Inter comparisons: 42040 = all 3; Bird ² 1/3 1/3; 42001 w/ ² 1/3 1/3
no 42039; no 42041 OK SPS NO Boy 205 SPS through 205

Lead Project Scientist Event Log

2848
9122

Date _____ Flight _____ LPS _____

Time	Event	Position	Comments
04:01:40	GPS + Sols	26.07 89.94	42001.120
04:03:55	GPS Backs	26.16 89.88	Way low shear ST=28.0
05:05:00	GPS only	30.17 87.17	E-W leg 11 Conf
05:11:00	GPS	30.15 87.70	GPS only No wind
05:13:34	GPS/Bug/she	30.14 87.87	42007 Wnd OK?
05:18:33	GPS	30.13 88.34	GPS E-W leg No wind
05:26:30	GPS only	30.07 89.05	GPS NO wind again
05:58:00	GPS	28.9 91.08	Wind, OK
06:00:00	Eye	Made last	
08:00Z	Lochy		

70d GPS
Relay
wind
max
Theor
Good
Cell
100%

ST=28.0
Conf
No wind
Wind OK?
No wind
again





