

M. Black

Lead Project Scientist

Storm or Project Dong Experiment name Cold SST
Flight ID 110722 ± Mission ID ~~110722~~ 1
Preflight

- ☒ 1. Participate in general mission briefing.
- ☒ 2. Determine specific mission and flight requirements for assigned aircraft.
- ☒ 3. Determine from AOC flight director/meteorologist whether aircraft has operational fix responsibility and the mission designation.
- ☒ 4. Contact HRD members of crew to:
 - a. Assure availability for mission.
 - b. Review field program safety checklist
 - c. Arrange ground transportation schedule when deployed.
 - d. Determine equipment status.
- ☐ 5. Meet with AOC flight director and navigator at least 3 hours before take-off for initial briefing.
- ☐ 6. Meet with AOC flight crew at least 2 hours before take-off for crew briefing. Provide copies of flight requirements and provide a formal briefing for the flight director, navigator, and pilots.
- ☐ 7. Report status of aircraft, systems, necessary on-board supplies and crews to MGOC in Miami.
- ☐ 8. Before take-off, brief the on-board GPS dropsonde operator on times and positions of drop times.
- ☐ 9. Make sure each HRD flight crew member has a life vest.
- ☐ 10. Perform a headset operation check with all HRD flight crew members. Make sure everyone can hear and speak using the headset.

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 Lead Project Scientist Form.
- ☐ 5. Check in with the flight director to make sure the mission is going as planned (i.e. turns are made when they are supposed to be made).

Post flight

- ☐ 1. Debrief scientific crew.
- ☐ 2. Gather completed forms for mission and turn in to data manager at HRD.
- ☐ 3. Obtain a copy of the 10-s flight listing from the AOC flight director. Turn in with completed forms.
- ☐ 4. Obtain a copy of the radar DAT tapes. Turn in with completed forms.
- ☐ 5. Obtain a copy of serial flight data on thumb drive. Turn in with completed forms.

[Note: all data removed from the aircraft by HRD personnel should be cleared with the AOC flight director.]

- ☐ 6. Report landing time, aircraft, crew, and mission status along with supplies (tapes, etc.) remaining aboard the aircraft to MGOC.
- ☐ 7. Determine next mission status, if any, and brief crews as necessary.
- ☐ 8. Notify MGOC as to where you can be contacted and arrange for any further coordination required.
- ☐ 9. Prepare written mission summary using **Mission Summary** form.

Lead Project Scientist Check List

Storm or Project Dora Experiment name EPAC SST Reentry
 Flight ID 110722I Mission ID 1104E Dora

A. Participants:

HRD		AOC	
Function	Participant	Function	Participant
Lead Project Scientist	<u>M. Black</u>	Flight Director	<u>Ian Sears, Jack</u>
Radar/Workstation	<u>Paul Leighton</u>	Pilots	<u>Joe Halverson, Danish</u>
		Navigator	<u>Chris Kent, Jan Kipper</u>
Cloud Physics		Systems Engineer	<u>Joe Kipper</u>
Photographer/Observer	<u>Pete Curran</u>	Data Technician	<u>Todd Richards</u>
/Guests	<u>Diana</u>	Electronics Technician	<u>Bill Ohney</u>
Dropwindsonde		Other	<u>Todd Richards</u>
AXBT/AXCP			

B. Take-off and Landing Times and Locations:

Take-Off: 1652 UTC Location: San Diego Navy Base
 Landing: _____ UTC Location: _____

Number of Eye Penetrations: _____

C. Past and Forecast Storm Locations:

Date/Time	Latitude	Longitude	MSLP	Maximum Wind
<u>1780</u>	<u>19.5</u>	<u>109.5</u>	<u>987</u>	<u>85 MPH</u>
<u>197</u>	<u>19.64</u>	<u>109.64</u>		
<u>23/12Z</u>	<u>21.0</u>	<u>111.3</u>		<u>45</u>
<u>24/00Z</u>	<u>22.0</u>	<u>112.5</u>		
<u>24/12</u>	<u>23.1</u>	<u>113.9</u>		<u>30</u>
<u>25/12</u>	<u>25.0</u>	<u>116.5</u>		

D. Mission Briefing:

2 hr Ferry to west of Dora
For BT combos ahead of storm, Regure
4, IP 200km north, exit west
BT's and Drops, End, middle, RMU

Fest

4
3
2

Storm or Project _____ Experiment name _____

Flight ID _____ Mission ID _____

E. — Equipment Status (Up ↑, Down ↓, Not Available N/A, Not Used O)

Equipment	Pre-Flight	In-Flight	Post-Flight	# DATs / CDs /Expendables/ Printouts
Radar/LF	X	✓ X		
Doppler Radar/TA	X			
Cloud Physics	3			
Data System	✓			
GPS sondes	✓			
AXBT/AXCP	✓			
Ozone instrument	—			
Workstation	✓			
Cameras	✓			

REMARKS:

Sat 23 20Z 21.5 112.0

Lead Project Scientist Event Log

Date _____ Flight ID _____ LPS _____

Time	Event	Position	Comments
1652	T/O	San Diego	
1717	Radar Started to record		
1830-1900	Radar up + down		
#1 191230	IP	22.94 116.6	First sonde/BT
1914	Radar back up		
1915	SFMR 9 m/s		
	AXBT 1	23°C	no mixed layer
2400 #2 193617	AXBT2, Sonde	22.0 111.8	SFMR - 11 kt
1925	Radar Up		
2000	Descend to 5,000 ft		
2006	At 5,000 ft		
2007	ATIP turning to south to eye		
#3 200824	Combo #3 BT, sonde	21.24 109.7	SFMR 18 m/s
2009	LF reset - 2010		Back up
#4 202042	Combo #4 BT, Sonde	20.5 109.7	
	SFMR 45 kt - SEC est 45-50 kt		
	BT 26°C		
#5 203545	Combo RMW north		SFMR 60 kt
	20.16 109.82	BT 27°C	
203145	Sonde only	19.8 109.77	eye 998 mb
	Storm motion at 3 kt/12 hr		
#7 RMW	south 19.29	RMW 109.77	26°C
#8 mid	204745 18.82 109.77	mid point south	-26°C
#9 South	205903 18.14 109.78	South	Combo
			SST 27°C
#10	211623 19.05 108.87		2400C

Combo
mid downwind