050705I T.S. Dennis

Lead Project Scientist

Preflight

MB 1. Participate in general mission briefing.

MB 2. Determine specific mission and flight requirements for assigned aircraft. / No Loof will give one

MB 3. Determine from field program director whether aircraft has operational fix responsibility and discuss with AOC flight director/meteorologist unless briefed otherwise by field program director.

✓ 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.

✓ 5. 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.

✓ 6. Report status of aircraft, systems, necessary on-board supplies and crews to appropriate HRD operations center (MGOC in Miami). – W/S Down

in-flight 7. Before take-off, brief the on-board GPS dropsonde operator on times and positions of drop times.

✓ 7. Make sure each HRD flight crew members have life vests

Aaron 7. Perform a headset operation check with all HRD flight crew members. Make sure everyone can hear and speak using the headset.

____ 8. Collect "mess" fee ($2.00) from all on-board HRD flight crew members.

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. Report landing time, aircraft, crew, and mission status along with supplies (tapes, *etc.*) remaining aboard the aircraft to MGOC.

____ 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. Obtain a copy of the radar DAT tapes. Turn in with completed forms.

____ 6. Obtain a copy of the all VHS videos form aircraft cameras (3-4 approx.). Turn in with completed forms.

____ 7. Obtain a copy of CD with all flight data. Turn in with completed forms.

____ 8. Determine next mission status, if any, and brief crews as necessary.

____ 9. Notify MGOC as to where you can be contacted and arrange for any further coordination required.

____ 10. Prepare written mission summary using **Mission Summary** form (due to Field Program Director a week after the flight).

NOAA3
WX04A DENNIS

14.2
68.3

Lead Project Scientist Check List

Storm or Project TS Dennis **Experiment name** IFEX / TCSP
Date 7/5/05 **Aircraft** 43RF **Flight ID** 050705I

A. Participants:

HRD		AOC	
Function	**Participant**	**Function**	**Participant**
Lead Project Scientist	M. Black	Flight Director	T. Shepherd / Mandy Mayeaux
Radar	P. Dodge	Pilots	Mark Nelson, Tebeest
Workstation	Dunn	Navigator	Devin Brakob
Cloud Physics	Paul Willis / Aaron	Systems Engineer	Dewie Floyd
Photographer/Observer /Guests	Ed Zipser	Data Technician	William Olney
Dropwindsonde	Rob Rogers	Electronics Technician	Lynch
AXBT/AXCP	Shay	Other	Jim Barr...

Damon San Souci

B. Take-off and Landing Times and Locations:

Take-Off: 1701 UTC Location: San Jose, CR

Landing: ________ UTC Location: ________________

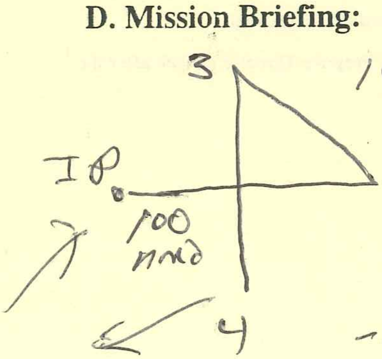
Number of Eye Penetrations: 2

C. Past and Forecast Storm Locations:

Date/Time	Latitude	Longitude	MSLP	Maximum Wind
7/5/21Z	13.8	67 W	?	?

D. Mission Briefing:

Coordinated Figure 4 w/ ER2.
100 nmi legs (150 nmi for ER2)
F/4 Alt 12,000 ft RA
F/AFT Radar except downwind
2 leg - ER2 stacked north or ctr
4 AXBTS - west and
~20 sondes regularly spaced
3h 40min ferry



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

Equipment	Pre-Flight	In-Flight	Post-Flight	# DATs / Cds /Expendables/ Printouts
Radar/LF	UP	UP		
Doppler Radar/TA	UP	UP		
Cloud Physics	UP	UP		
Data System	UP	UP		
GPS sondes	UP	UP		
AXBT/AXCP	UP			
~~Ozone instrument~~	~~Check NR~~	~~UP 1820~~		
Workstation	Down	~~Down~~	~~Down~~	
Videography	UP	UP		

REMARKS:

Lead Project Scientist Event Log

Date 7/5/05 **Flight** 050705I **LPS** M. Black

Time	Event	Position	Comments
1701	Takeoff	10N, 85 W	San Jose
1820	Workstations Up - 2 quick bands		
2003	Descend slightly 20 miles to ID		
2008	200 mi west, hdg east	14.6 71°49'	
200957	AXBT #1	14.0 71.42° W	28.4°C
20010	Descend to	12,000 ft	
2025	In weak outer band		
203310	14.0 69.67	~100 n mi west of ctr	Drop #1 AXBT #2 27.2?
203920	13.99 69.18	75 mi west	Drop #2
204420	13.96 68.87		Drop #3
204910	Track to	the left 20° to find radar ctr	
205712	Drop near band W of ctr		Drop #4
210102	Drop in ~~west~~ east side		Drop #5
210727	Drop #6	50 miles to ctr. east	Drop #6
211409	Drop #7	75 miles east of ctr	Drop #7
211705	Drop #8	~95 miles east of ctr	Drop #8
2122	In concentric band		
	mid point downwind leg		Drop #9
214755	North point	15.81 68.09 / 100 nm	Drop #10
215449	75 miles north of ctr		Drop #11
			Drop #12
220451			Drop #13
221421	Near ctr - no telemetry		Drop #14
221603	SE of ctr ~ 20 miles		Drop #15
222149	~50 miles south of ctr		Drop #16
223031	~90 miles south of ctr		Drop #17
2231	Final Pt	~90 miles south	

Landing 02Z

See Electronic Version

Mission Summary
Storm name
YYMMDDA# Aircraft 4_RF

Scientific Crew (4 RF)
Lead Project Scientist _____
Radar Scientist_____
Cloud Physics Scientist_____
Dropwindsonde Scientist_____
Boundary-Layer Scientist_____
Workstation Scientist_____
Observers_____

Mission Briefing: (include sketch of proposed flight track or page #)

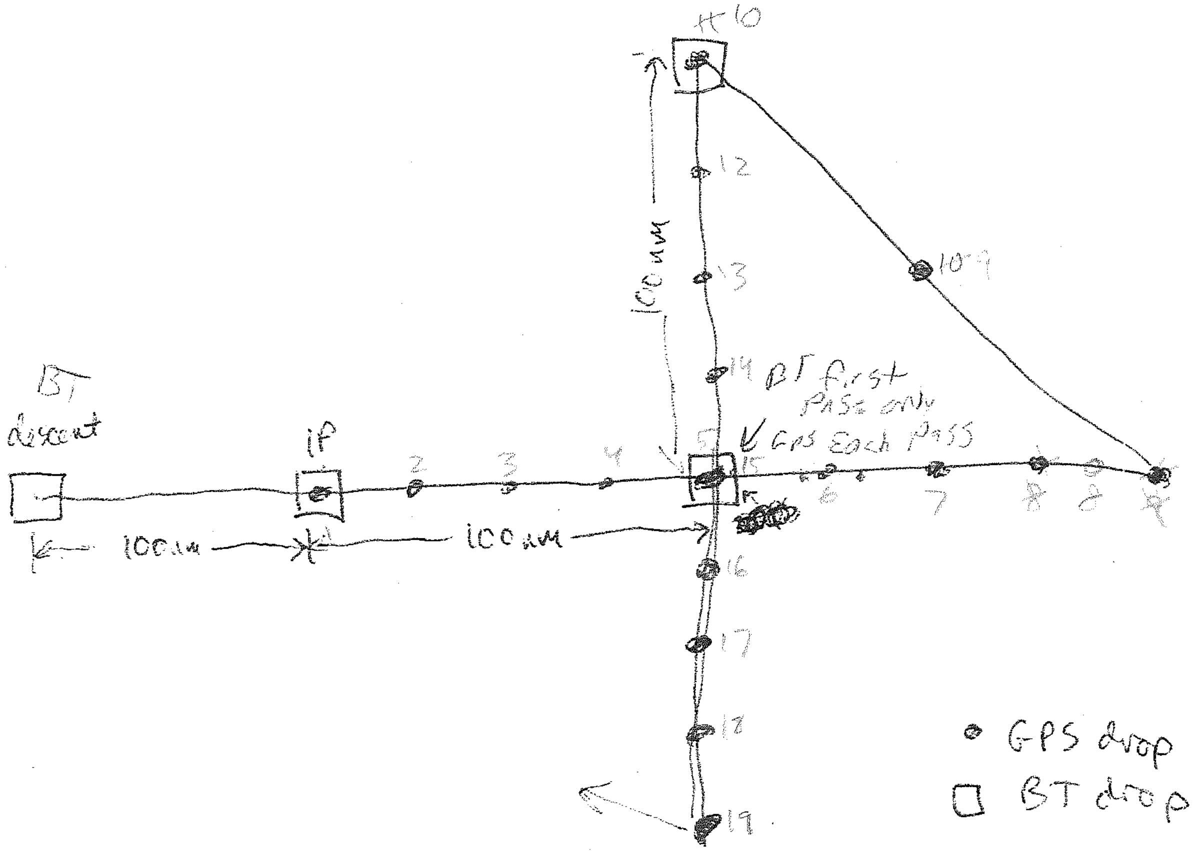
Mission Synopsis: (include plot of actual flight track)

Evaluation: (did the experiment meet the proposed objectives?)

Problems:(list all problems)

Expendables used in mission:
GPS sondes : _____
AXBTs :_____
Sonobuoys: _____

050705I


BT descent
IP
100nm
100nm
100nm
BT first pass only
GPS each pass
GPS drop
BT drop