

Lead Project Scientist

Date 8/10/2021

Flight ID 20210810JI1

Storm or Project
Mission ID 0106A Invest

Experiment name Invest ID 6/AL94

Pre-flight

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 takeoff 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 Field Program Director.
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 Field Program Director
7. Determine next mission status, if any, and brief crews as necessary.
8. Notify Field Program Director 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

Experiment name

Invest TD 6

Flight ID *20210810I1*

Mission ID

0106A Invest

A. Participants:

| Function | Participant | Function | Participant |
|------------------------|---------------------|-------------------------|-------------------------|
| Lead Project Scientist | <i>Marks/Wadler</i> | Flight Director | <i>Lundry/Hatthawan</i> |
| Radar | <i>Marks</i> | Pilot | <i>Abithool</i> |
| Workstation | — | Pilot | <i>Stachler/SNOW</i> |
| Cloud Physics | — | Navigator | <i>Wagner/Richards</i> |
| Dropsonde | <i>Wadler</i> | Systems Engineer | <i>Todd</i> |
| Dropsonde | — | Data Technician | <i>Wagner/Plumley</i> |
| AXBT/AXCP | — | Electronics Technicians | <i>Kiragaj/Sotter</i> |
| Observer/Guest | <i>Crawford</i> | Flight Engineer | <i>Sanchez</i> |
| Observer/Guest | <i>Telework</i> | | |

B. Take-off and Landing Times and Locations:

Take-Off: *0830* UTC Location: *La Grange*

Landing: _____ UTC Location: _____

Number of Eye Penetrations: _____

C. Past and Forecast Storm Locations:

| Date/Time | Latitude | Longitude | MSLP | Maximum Wind |
|-----------|----------|-----------|------|--------------|
| / | | | | |
| / | | | | |
| / | | | | |
| / | | | | |
| / | | | | |

D. Mission Briefing:

*Take-off must into FL94/TD6
 transit to Pt 1 (IP) 60nm N of estimated 5
 TR 180 through 6) to Pt 2 60nm S of 5
 TR 030 to Pt 3 60nm NE of 5
 TR 225 to 6) to Pt 4 60nm SW of 5
 #5 continue Alpha
 # no 5 box search*

Storm or Project AL94/04 Experiment name tasked mission

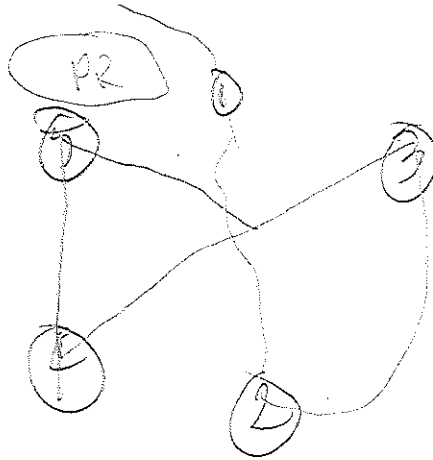
Flight ID 207:0810II Mission ID 0106 A Invest

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

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

REMARKS:

Tasked mission:



Lead Project Scientist Event

Date 8/16/21

Flight ID 207108 LPS

Nov 15/18/21

| Time | Event | Position | Comments |
|--------|---------------|----------------------|------------------|
| 0839 | TO | Lakeland | |
| | IP | 16.3 -63 | |
| 115630 | Acq 1 181° | 18.9 x 66 W | TORT 1 |
| 120300 | '2 | 18.5 65.5 W | TORT 2 |
| 1215 | '3 | 18.0 64.5 W | TORT 3 |
| | | | drops are across |
| | | | major heading |
| 1212 | start descent | | |
| 1221 | (1) | 1500 | |
| 1238 | | | mainly down cont |
| | | | 50 m/s. 0.5 m/s |
| 1248 | | | 1000 to 2500 |
| 125330 | 6 | shear zone | |
| 1313 | (2) | Turn to -K MNF along | leeward islands |
| 1338 | (3) | turn TK 225° | |
| 1352 | (4) | | |
| 1424 | (4) | Turn TK 360 | |
| 1450 | (5) | Turn TK 135 | |
| 1504 | (6) | | |

1513 (7) 1000
 1524 (8) 800
 1538 (9) 600
 1550 (10) 400
 1600 (11) 200
 1610 (12) 100
 1620 (13) 0