

Lead Project Scientist

Storm or Project T.S. Chris Experiment type TDR
Flight ID 20180708H2 Mission ID NOAA20503A

CHRIS

Preflight

1. Participate in general mission briefing.
2. Determine specific mission and flight requirements for assigned aircraft from the Field Program Director.
3. 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.
4. Meet with AOC flight director and navigator at least 3 hours before take-off for initial briefing.
5. Determine from AOC flight director the mission designation and whether aircraft has operational fix responsibility
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 drops.
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. Request AOC flight director to leave radar in non-sector mode for initial Figure 4.
5. Once at IP, request AOC flight director adjust radar tilt to minimize sea clutter.
6. Complete Lead Project Scientist Form.
7. Check in occasionally 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 Dropsonde raw and processed files from the AVAPS operator on thumb drive.
4. Obtain a copy of the radar LF files from the radar technician on thumb drive.
5. Obtain a copy of the tar'ed radar TA files from the radar scientist on thumb drive.
6. Obtain a copy of serial flight data and raw NetCDF file on thumb drive from the data technician.
7. Obtain a copy of SFMR data on thumb drive from the data technician.
8. Obtain a copy of DMT data on thumb drive from the data technician.
9. Report landing time, aircraft, crew, and mission status to the Field Program Director.
10. Determine next mission status, if any, and brief crews as necessary.
11. Prepare written mission summary using **Mission Summary** form.

Lead Project Scientist Check List

Storm or Project TS Chris Experiment name TDR

Flight ID 20180708#2 Mission ID NOAA2 0503A CHRIS

A. Participants:

| HRD | | AOC | |
|-----------------------------------|------------------------------|------------------------|---|
| Function | Participant | Function | Participant |
| Lead Project Scientist | <u>Christophersen</u> | Flight Director | <u>Henning</u> |
| Radar/Workstation | <u>Marks</u> | Pilots | <u>Kibbey</u> <u>Didier</u> <u>Abitball</u> |
| | | Navigator | <u>Freeman</u> |
| Cloud Physics | | Systems Engineer | <u>Hays</u> <u>Each</u> <u>Darby</u> |
| | | Data Technician | <u>Richards</u> <u>Cynthia</u> |
| Dropwindsonde | <u>Alaka</u> | Electronics Technician | <u>Peale</u> |
| AXBT/AXCP | | Other | |
| Photographer/Observer s/Guests | <u>Brin James (Hollings)</u> | | |

B. Take-off and Landing Times and Locations:

Take-Off: 2332 UTC Location: LAL

Landing: _____ UTC Location: LAL

Number of Eye Penetrations: _____

C. Past and Forecast Storm Locations:

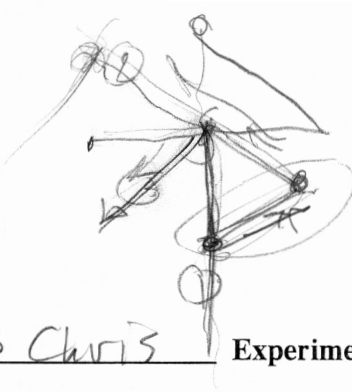
| Date/Time | Latitude | Longitude | MSLP | Maximum Wind |
|--------------------|-------------|-------------|------------|--------------|
| <u>07/08 1938Z</u> | <u>32.6</u> | <u>74.6</u> | <u>100</u> | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

D. Mission Briefing:

see Figure 9 text files
Figure 9 of SA TDR v Plus high-altitude cirrus at 70nm
at 105nm legs

1013
 6
 1006
 25 um

1600 45 min



+ to ... optical gravity ...
 optical 2 roll down ...
 + 80 + 240 ...
 80

Storm or Project TS CHRIS Experiment name TDR

Flight ID 20180708H2 Mission ID NOAA2 0503A CHRIS

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 | ✓ | ✓ | | |
| Doppler Radar/TA | ✓ | ✓ | | |
| Cloud Physics | ✓ | ✓ | | |
| Data System | ✓ | ✓ | | |
| GPS sondes | ✓ | ✓ | | |
| AXBT/AXCP | | | | |
| Ozone instrument | | | | |
| Workstation | ✓ | ✓ | | |
| Cameras | ✓ | dark | | |

REMARKS:

23h flight delay
 21:40 — engine 2 deice valve problem return to fix
 22:00 — fixed deice valve & found oil leak
 23:17 — fixed oil leak ready to go
 Change plan to just do Figure 4 and scratch circumscribe

Observer's Flight Track Worksheet

Date 7/8/18 Flight 20180708HZ Observer Marks

