

198209 2411-LPS

### E.1 Lead Project Scientist (On-Board)

The on-board lead project scientist is responsible for carrying out the scientific mission of his assigned aircraft. (Check off and initial when completed.)

#### E.1.1 Preflight

- ☒ 1. Participate in general mission briefing.
- ☒ 2. Determine specific mission and flight pattern(s) for his aircraft.
- N/A 3. Determine operational fix responsibility, if any. Discuss with RFC flight director/meteorologist and CARCAH, unless briefed otherwise by field program director.
- ☒ 4. Contact NHRL members of crew to:
  - a. Assure availability for mission.
  - b. Arrange ground transportation schedule when deployed.
  - c. Determine equipment status.
- ☒ 5. Provide supplementary briefing to specific crew.
- ☒ 6. Report status of aircraft, systems and crews to appropriate NHRL operations center.

#### E.1.2 In-Flight

- ☒ 1. Confirm from RFC flight director/meteorologist that satellite data link is operative (information).
- N/A 2. Confirm camera mode of operation.
- ☒ 3. Confirm data recording rate.
- ☒ 4. Complete form E-1.

### E.1.3 Postflight

- ✓ 1. Debrief crew.
- ✓ 2. Report landing time, aircraft, crew and mission status to NHRL operations center.
- as necessary* ✓ 3. Gather completed forms for mission and turn in at the operations center.
- ✓ 4. Determine next mission status, if any, and brief crews as necessary.
- ✓ 5. Notify operations center as to where you can be contacted.

On-board Lead Project Scientist Checklist

DATE 820924H1

AIRCRAFT 42RF

FLT 820924H1

A. Participants

| Function        | Participant                 | Function   | Participant                 |
|-----------------|-----------------------------|------------|-----------------------------|
| Lead Proj. Sci. | <u>Willis</u>               | Gust Probe | <u>                    </u> |
| Cloud Physics   | <u>N/A</u>                  | Omegasonde | <u>LOBO/WILLDOUGBY</u>      |
| AXBT            | <u>                    </u> | Sys Eng    | <u>DUGANRUT</u>             |
| Hot Film        | <u>                    </u> | Data Tech  | <u>DARBY</u>                |
| Radar           | <u>MARKS</u>                | EI Tech    | <u>JARVI</u>                |
| Flt Dir/Met     | <u>DAVIS</u>                | Other      | <u>                    </u> |

Take Off

Location

Landing

Location

B. Past and Forecast Storm Position

| Date                        | Time                        | Latitude                    | Longitude                   | MSLP                        |
|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| <u>24/128</u>               | <u>1200Z</u>                | <u>26.0N</u>                | <u>123.0W</u>               | <u>TS</u>                   |
| <u>25/00Z</u>               | <u>                    </u> | <u>28.5N</u>                | <u>123.5W</u>               | <u>                    </u> |
| <u>                    </u> | <u>                    </u> | <u>                    </u> | <u>                    </u> | <u>                    </u> |
| <u>                    </u> | <u>                    </u> | <u>                    </u> | <u>                    </u> | <u>                    </u> |
| <u>                    </u> | <u>                    </u> | <u>                    </u> | <u>                    </u> | <u>                    </u> |

C. Mission Briefing

FLY PATTERN OF DODGE AS INDICATED

D. Equipment Status

| <u>Equipment</u> | <u>Pre Flt</u>       | <u>In Flt</u> | <u>Post Flt</u>           | <u>Reports Collected</u> |
|------------------|----------------------|---------------|---------------------------|--------------------------|
| Aircraft         | ✓                    | ✓             | ✓                         |                          |
| Radar            | ✓                    | ✓             | ✓                         |                          |
| Cloud Physics    | ✓ CLOUD PROBE<br>OOD | ✓             | ✓                         | SL<br>Scat hit           |
| Data Sys         | ✓                    | ✓             | some problem<br>with ASDL |                          |
| Omegasondes      | ✓                    | ✓             | ✓                         |                          |
| AXBT             | N/A                  |               | ✓                         |                          |
| Gust Probe       | N/A                  |               |                           |                          |
| Hot Film         | N/A                  |               |                           |                          |
| Photography      |                      |               |                           |                          |
|                  |                      |               |                           |                          |
|                  |                      |               |                           |                          |

REMARKS

10  
60

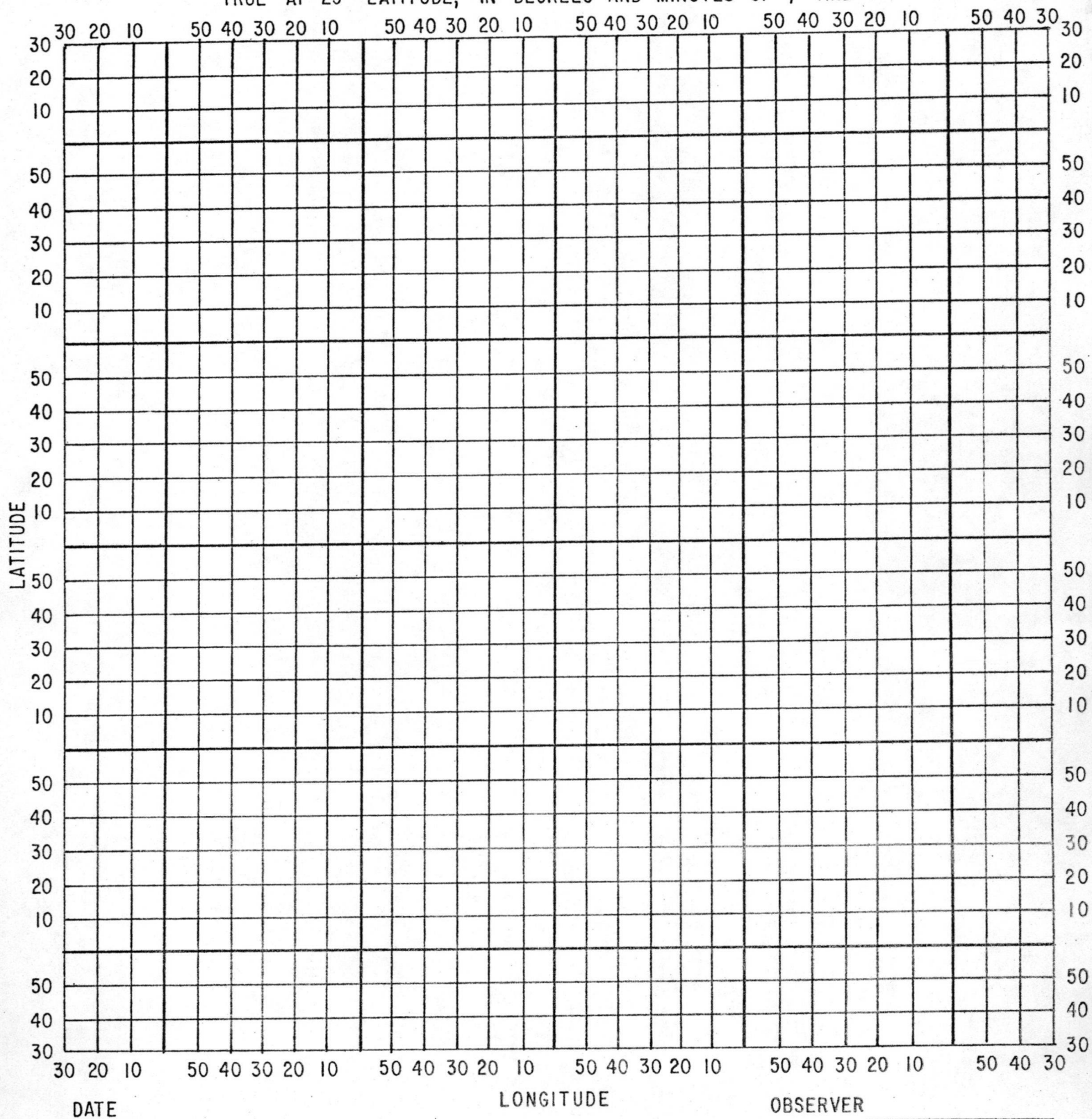
Form E-1  
Page 3 of 5

E. Proposed and Actual Flight Patterns

*See Attached Sheets*

# HURRICANE RECCO PLOTTING CHART

TRUE AT 25° LATITUDE, IN DEGREES AND MINUTES OF  $\phi$  AND  $\lambda$



NOTE: Label full degrees according to location of flight area

DATE 820924H 1

FLIGHT \_\_\_\_\_

LPS Willis

Lead Project Scientist Event Log

| EVENT                                      | TIME*              | POSITION                 | COMMENTS**                                                     |
|--------------------------------------------|--------------------|--------------------------|----------------------------------------------------------------|
| T/O                                        | 1842/30            |                          |                                                                |
| DROP #1                                    | 1929/45            | 31.02N 119.40            | 178.4/29.6 462.3 <sup>-P.2</sup> /42.5 $\Phi$ BLO $\Phi$ ABOVE |
| DROP #2                                    | 1947/36            | 30.97 121.07             | 170/15.6 465.7 -6.9/-8.7 in cloud, running with                |
| BAD SENSE<br>DROPS?<br>lost SL<br>DROPS #3 | 2009/40            | 30.21 122.66             | 017/5.8 462.2 -7.2/-9.1 $\Phi$ RIGHT IN TOPS                   |
| 3B                                         | 2018/08            | 2029.84 123.35           | 031/6.7 $\Phi$ Sc below well out of cloud now                  |
| DROPS #4                                   | 2030/57            | 29.36 124.29             | 185/3 <sup>427.0</sup> $\Phi$ As deck below clr above          |
| 5B                                         | 2052/30            | 28.52 126.01             | 321/4.2 425.4 -10.0/-42.0 $\Phi$ As below                      |
| DROPS #5                                   | 2102/29            | 28.51 126.89             | 295/3.6 423.9 -10.3/-42.6 $\Phi$ Sc below                      |
| DROPS #7                                   | 2125/50            | 28.50 129.01             | 280/2.2 420.5 -12.6 -43.8 $\Phi$ Sc below                      |
| DROPS #8                                   | 2201/15            | 28.56 132.03             | 227/8.9 392.2 -18.1 -47.7 $\Phi$ Cu below                      |
| DROPS #9                                   | 2216/50            | 29.83 132.57             | 242/16 393.4 -17.9/-47.3 clr - $\Phi$ below                    |
| DROPS #10                                  | 2234/55            | 31.28 133.21             | 246/18.7 392.7 -18.5/-47.8 clr. below                          |
| NO S - DROPS #11                           | 2253/47            | 32.70 133.80             | 258/17.4 391.5 -20.5/-42.5 clr below                           |
| DROPS #12                                  | 2302/28            | 32.94 132.93             | 254/20.5 390.8 -20.0/-48.2 clr below                           |
| DROPS #13                                  | 2319/50            | 33.34 130.96             | 255/27.5 392.4 -18.8/-49.5 clr below                           |
| DROPS #14                                  | 2335/28            | 33.66 129.22             | 247.3/21.9 392.5 -18.5/-49.1 $\Phi$ Sc below                   |
| DROPS #15                                  | 2352/19            | 32.29 128.70             | 259/17.6 391.5 -17.9/-49.0 $\Phi$ -O cu below                  |
| DROPS #16                                  | 0019/40            | 30.52 127.89             | 263/9.8 394.3 -17.0/-48.0 $\Phi$ Cu below                      |
| DROPS #17                                  | 0029/21            | 30.91 126.41             | 258/6.6 391.5 -16.2/-47.5 $\Phi$ Sc below                      |
| #18                                        | 0044/12            | 31.41 125.05             | 235/7.0 394.7 -15.4/-46.6 $\Phi$ Sc below                      |
| #19                                        | 0100/05            | 32.27 125.89             | 251/7.7 394.3 -16.2/-44.7 $\Phi$ cu below                      |
| #20                                        | 0117/55            | 34.27 125.88             | 238/18 391.6 -16.8/-45.1 clr below                             |
| #21                                        | 0127/28            | 34.60 124.83             | 243/16.8 393.4 -16.0/-46.3 clr                                 |
| #22                                        | 0138/08            | 34.78 123.65             | 260/19.7 393.0 -16.3/-46.7 $\Phi$ cu below                     |
| Feathered Engine - direct to NZY<br>#23    | 0151/58            | 34.20 122.46             | 243/8.6 465.0 -6.3/-41.3 $\Phi$ below ahead                    |
|                                            | 0208/30            | 33.85 121.06             | 195/13.3 478.9 -6.5/-9.5                                       |
|                                            | 0218/00            | 33.64 120.28             | 198/18.3 496.5 -5.2/-6.7                                       |
|                                            | 0229/00<br>0306/10 | 33.34N 119.41W<br>loaded | 197/16 501.0 -5.0/-6.2                                         |

\*Log times of all significant altitude changes, turns, and eye fixes

\*\*New altitude, heading, center position, etc.

