## Radar Scientist

## Flight ID 20150823 II Storm T.S Danny_ Radar Scientist Klotz

The on-board radar scientist is responsible for data collection from all radar systems on his/her assigned aircraft. Detailed operational procedures and checklists are contained in the operator's manual. General supplementary procedures follow. (Check off or initial.)

## Preflight

1. Determine status of equipment and report results to lead project scientist (LPS).
2. Confirm mission and pattern selection from the LPS.
_ 3. Select the operational mode for radar system(s) after consultation with the LPS.
_ 4. Complete the appropriate preflight check list.

## In-Flight

$\qquad$ 1. Monitor the Tail Doppler Radar function regularly, using the realtime TDR display, to make sure the Doppler radar is scanning and working normally.
$\qquad$ 2. Maintain the Doppler Wind Parameter form as well as a written commentary in the Radar Event Log of event times, such as ending and restarting of radar recording. Also document any equipment problems or changes in R/T, INE, or signal status.

## Post flight

1. Complete the summary checklist and all other appropriate forms.
2. Download all Tail (TA) radar data files to thumb drive.
$\qquad$ 3. Brief the LPS on equipment status and turn in completed forms and thumb drives to the LPS.
3. Debrief at the base of operations.
$\qquad$ 5. Determine the status of future missions and notify HFP Director as to where you can be contacted.

## HRD Radar Scientist Check List

Flight ID: 20150823 TL
Aircraft Number: NOAA 43
Radar Scientist: $\qquad$
Radar Technician: $\qquad$

Component Systems Status (Up $\uparrow$, Down $\downarrow$, Not Available N/A, Not Used O):
Radar Computer $\qquad$
Lower Fuselage (LF) Antenna $\qquad$
Tail (TA) Antenna Up

Time correction between LF radar time and digital time: $\qquad$

TA Radar Parameters:
(Single/Dual) PRF 2100 F/AST (Y/N) Rotation Rate ___ RPM
Sweeps/File __ Record $2^{\text {nd }}$ Trip (Y/N) (Circle appropriate status)

## Radar Post flight Summary

Significant down time:


## Other Problems:

## HRD Radar Event Log


(Include down time and times of when recording ended and was restarted)

| Time <br> (HHMMSS) | Event |
| :--- | :--- |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

## Doppler Wind parameters

| Flight ID: 20150823 It |  |  |  | Doppler flight-leg notes(for use in automatic QC and analysis) |  |  |  | Scientist: B. Klo z |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Leg StartTime | Leg EndTime | Storm Motion |  | Center Fix |  |  | $\begin{aligned} & \text { Inbound } \\ & \text { track } \end{aligned}$ | $\begin{gathered} \text { Outbound } \\ \text { track } \end{gathered}$ | $\begin{gathered} \text { Max } \\ \text { Radius } \\ \text { Refautt }=245 \end{gathered}$ | $\begin{aligned} & \text { Horz. Res } \\ & \text { Default }=5 \end{aligned}$ | Sent |
|  |  |  |  | Time | Latitude | Longitude |  |  |  |  |  |
| HHMMSS | HHMMSS | Degrees | Knots | HHMMSS | (Deg/Min) | (Deg/Min) | Degrees | Degrees | (km) | (km) |  |
| 073800 z |  | 275 | 13 | 080410 | $15^{\circ} 33^{\prime}$ | $55^{\circ} 50^{\prime}$ | 315 | 315 | 245 | 5 | $y$ |
| 085800 | $\begin{array}{\|l\|} \hline 85: 094413 \\ 30: 100505 \\ \hline \end{array}$ | 275 | 13 | 092139 | 1534 | $56^{\circ} 10^{\prime}$ | $50^{\circ}$ | $45^{\circ}$ | 245 | 5 | $y$ |
| 100510 | $\left\|\begin{array}{l} x S \cdot 105200 \\ 3 D: \mid 12230 \end{array}\right\|$ | 275 | 13 | 103020 | $15^{\circ} 36^{\prime}$ | $56^{\circ} 24^{\prime}$ | 180 | $180^{\circ}$ | 245 | 5 | y |
| 12300 | xS: 121500 | 275 | 13 | 115150 | $15^{\circ} 38{ }^{\prime}$ | $56^{\circ} 44^{\prime}$ | $270{ }^{\circ}$ | $270^{\circ}$ | $245$ | 5 | $\alpha$ |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | $\square$ |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  | + |  |  |  |  |  |  |  |  |  |  |

