

1704A CRISTOBAL

### Radar Scientist

Flight ID \_\_\_\_\_ Storm \_\_\_\_\_ Radar Scientist \_\_\_\_\_

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

- \_\_\_\_\_ 1. Monitor the Tail Doppler Radar function regularly, using the realtime TDR display, to make sure the Doppler radar is scanning and working normally.
- \_\_\_\_\_ 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.
- \_\_\_\_\_ 3. Brief the LPS on equipment status and turn in completed forms and thumb drives to the LPS.
- \_\_\_\_\_ 4. Debrief at the base of operations.
- \_\_\_\_\_ 5. Determine the status of future missions and notify HFP Director as to where you can be contacted.

## Doppler Wind parameters

Flight ID: 20140826 I1				Doppler flight-leg notes (for use in automatic QC and analysis)			Scientist: <i>Abrson / Gamache</i>				
Leg Start Time	Leg End Time	Storm Motion		Center Fix			Inbound track	Outbound track	Max Radius Default = 245	Horz. Res Default = 5	Sent ?
				Time	Latitude	Longitude					
HHMMSS	HHMMSS	Degrees	Knots	HHMMSS	(Deg/Min)	(Deg/Min)	Degrees	Degrees	(km)	(km)	(Y/N)
<i>190627</i>	<i>190627</i>			<i>17:02:20</i>	<i>27 55</i>	<i>71 24</i>	<i>90</i>				
<i>in</i>	<i>out</i>										
<i>190627</i>	<i>202420</i>	<i>035</i>	<i>14</i>	<i>19:56:54</i>	<i>28 37</i>	<i>71 27</i>	<i>90</i>	<i>90</i>			
<i>downwind</i>											
<i>202420</i>	<i>204750</i>										
<i>in</i>	<i>out</i>										
<i>204750</i>	<i>213930</i>	<i>010</i>	<i>24</i>	<i>21:12:01</i>	<i>29 07</i>	<i>71 23</i>	<i>210/225</i>	<i>210/225</i>	<i>310</i>		
<i>downwind</i>											
<i>213930</i>	<i>220645</i>										
<i>in</i>	<i>center</i>										
<i>220645</i>	<i>223130</i>				<i>29 10</i>	<i>71 17</i>	<i>330/310</i>	<i>—</i>			
<i>center</i>	<i>out</i>										
<i>223130</i>	<i>224130</i>						<i>180</i>	<i>—</i>			
<i>downwind</i>											
<i>224130</i>	<i>224700</i>										
<i>in</i>	<i>out</i>										
<i>224700</i>	<i>234100</i>	<i>345</i>	<i>12</i>	<i>23:00:44</i>	<i>29 27</i>	<i>71 31</i>	<i>250</i>	<i>330</i>			

AF

*989 mb  
54 kt SFMR  
79 kt FL*

*986 mb  
60 kt SFMR  
75 kt FL*

*986 mb  
47 kt SFMR  
75 kt FL*

*983 mb  
70 kt SFMR  
88 kt FL*

*305  $\frac{mm}{h}$  x  
5m x  $\frac{1h}{60m}$*