Radar Scientist

Flight ID 20180904H1 **Storm** TS-Gordon

Radar Scientist S. Munro **Radar Technician** T. Richards

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

SM 1. Determine status of equipment and report results to lead project scientist (LPS).

SM 2. Confirm mission and pattern selection from the LPS.

SM 3. Select the operational mode for radar system(s) after consultation with the LPS.

SM 4. Complete the appropriate preflight check list.

In-Flight

SM 1. Monitor the Tail Doppler Radar function regularly, using the real-time TA display, to make sure the Doppler radar is scanning and working normally.

SM 2. Once at the IP, request that the tilt be adjusted to remove sea clutter. already adjusted

SM 3. Request that the LF radar is set to full scan (non-sector mode) for first Figure 4. already in RJ11 scan mode

SM 4. 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

SM 1. Complete the summary checklist and all other appropriate forms.

SM 2. Download all Belly (LF) scan radar data files to thumb drive. MMR

SM 3. Download all tar'd (TA) radar data files to thumb drive.

SM 4. Brief the LPS on equipment status and turn in completed forms and thumb drives to the LPS.

SM 5. Debrief at the base of operations.

SM 6. Determine the status of future missions and notify HFP Director as to where you can be contacted.

Mission ID 09047A Gordon

HRD Radar Scientist Check List

Flight ID: 20180904H1

Aircraft Number: N42RF

Radar Scientist: Shirley Murillo

Radar Technician: Todd Richards

Component Systems Status (Up ↑, Down ↓, Not Available **N/A**, Not Used **O**):

Radar Computer ↑

Lower Fuselage (LF) Antenna ↑

Tail (TA) Antenna ↑

Radar Post flight Summary

Significant down time:

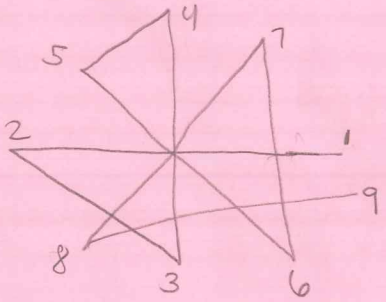
Radar LF display froze around

Radar TA none

Other Problems:

1st and 2nd radar analyses pass were a bit noisy despite there being little returns as shown in the dBz display. Asked Todd Richards if settings were changed/altered for previous deployment in Lane in the central Pacific. He said no.

Proposed pattern



HRD Radar Event Log

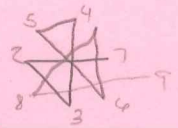
Flight ID 2018091HI **Storm** TS. Gordon

Radar Scientist S. Murillo **Radar Technician** T. Richards

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

Time (HHMMSS)	Event
083354	take off time
083900	TDR on and recording
085516	at IP 27.55 83.41
1500:10	radar stopped recording, end of flight

Doppler Wind parameters



Flight ID: 20180904H1	Doppler flight-leg notes (for use in automatic QC and analysis)	Scientist: Murillo

Leg Start Time	Leg End Time	Storm Motion		Center Fix			Inbound	Outbound	Max Radius (km)	Horz. Res (km)	Sent ?
				Time	Latitude	Longitude					
HHMMSS	HHMMSS	Degrees	Knots	HHMMSS	(Deg/Min)	(Deg/Min)	track	track	Default = 245	Default = 5	(Y/N)
085516	090451O	300	15	092135	27.46	85.46	270	269	245	5	y
0904510	102101	300	15				132		2 ← 1 2 → 3		
102131	110915	300	18	104629	27.56	86.41	360	10	245	5	
112410	121745	300	18	115606	28.36	86.14	229	229	4 ↑ 3		y
121749	125806						52	334	245	5	y
125900	134254			13222	28.24	86.30	225	45	245		y
134300	143115						4[illegible]				[illegible]