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Appendix A

Maintenance Terminal Display Screens

This appendix contains the screens available from the maintenance terminal and instructions pertaining to what the various entries mean. Each figure will represent a screen as it appears on the terminal.

- | | |
|------------------------------------|---------------------------------------|
| 1. This page | 2. Range, Mode, Azimuth and Elevation |
| 3. Thresholds | 4. Threshold Levels (Reflectivity) |
| 5. Threshold Levels (Velocity) | 6. Threshold Levels (Spectral Width) |
| 7. Clutter Filters (Range 32 km) | 8. Clutter Filters (Range 64 km) |
| 9. Clutter Filters (Range 128 km) | 10. Clutter Filters (Range 256 km) |
| 11. Clutter Filters (Range 320 km) | 12. Clutter Filters (Range 416 km) |
| 13. Clutter Filters (Range ??? km) | 14. Triggers |
| 15. Attenuator Table -- first half | 16. Attenuator Table -- second half |
| 17. Phase Shift Table | 18. AGC Curve Table |
| 19. Calibration Parameters | 20. RVP-6 Console |
| 21. Status Display | |
- Select 1



Cursor location

0 to 9, +, -, Enter Ctrl+N page, Ctrl+P

page. 1

Where:

- 0 to 9 = the allowable number entry keys
- + = the plus sign will move ahead to the next higher number
- - = the minus sign will move back the previous number
- Enter = accept the number currently displayed at the cursor position
- Ctrl+N = move to the next sequential page from the current page
- Ctrl+P = move to the last sequential page from the current page

Figure A-1. Maintenance Terminal Screen 1 of 21.

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Read Parameters from:

Floppy Disk

Range (32 to 1024 in 1 km)

256

Operation Mode

Corrected Reflectivity

Azimuth Control

Field change character

Mode

Stop C

Speed degrees/second (3 to 36)

36

Center angle (0 to 359)

0

Sector Width (0 to 359)

45

Direction

Clock Wise

Offset

0x0000

Elevation Control

Mode

Stop

Speed degrees/second (3 to 36)

3

Lower angel (-10 to 89)

0

Upper angle (-10 to 89)

10

Step Size in 1/8 degree (0 to 32)

1

Offset

0x0000

0 to 9, +, -, Arrow keys, Ctrl+N page, Ctrl+P page, S send.

NOTE:

The values shown in the figure are the default values for your system. Entries made to fields will not take effect until they are saved. When this screen is exited, any entries not saved will result in a prompt at the time of exiting as to whether to save the entries. For allowable entries for each of these fields, refer to Table A-1.

Where:

- 0 to 9 = the allowable number entry keys (if in a numeric field)
- A field change character of "C" indicates a field change made, but not yet saved.
- + = the plus sign will change to the next sequential value for the selected field
- - = the minus sign will change to the last sequential value for the selected field
- Arrow keys: ← & ↑ = move up one line; → & ↓ = move down one line
- Ctrl+N = move to the next sequential page from the current page
- Ctrl+P = move to the last sequential page from the current page
- S send = accept the value currently displayed at the cursor position

Figure A-2. Maintenance Terminal Screen 2 of 21.

Table A-1. Maintenance Terminal Screen 2 Definitions .

Entry	Value	Meaning
Range (32 to 1024 in 1km)	Numeric value in the range of 32 to 1024	The desired operational range of the radar
Operational Mode	Corrected Reflectivity	Refer to the RVP-6 manual for further information about these modes.
	Uncorrected Reflectivity	
	Test	
	Velocity	
	Spectral Width	
	Standby	
Azimuth Control:		
Mode	Stop	Stop antenna movement
	Scan	Perform a scan at the specified azimuth
	Sector Scan	Perform a sector scan with the selected azimuth and elevation center angles and widths specified
Speed degrees/second (3 to 36)	Numeric value in the range of 3 to 36	Number of degrees per second to rotate the antenna
Center angle (0 to 359)	Numeric value in the range of 0 to 359	This indicates the degree of azimuth to be used as the center of a sector scan.
Sector Width (0 to 359)	Numeric value in the range of 0 to 359	This indicates the width (in degrees) of a sector scan. One half of this number will occur on each side of the center angle value. A value of 0 will result in the antenna acting as though it received a stop mode command.
Direction	Clock Wise	This will cause the antenna (when viewed from above) to rotate in a clockwise direction.
	Counter Clock Wise	This will cause the antenna (when viewed from above) to rotate in a counter clockwise direction.
Offset	Hexadecimal value in the range of 0000 to 0xFFFF	This value should not be changed unless maintenance has been performed on the antenna that resulted in the azimuth offset being in error.

Table A-1. Maintenance Terminal Screen 2 Definitions (continued).

Entry	Value	Meaning
Elevation Control:		
Mode	Stop	Stop antenna movement
	Scan	Perform a scan at the specified elevation
	Sector Scan	Perform a sector scan with the selected azimuth and elevation center angles and widths specified
Speed degrees/second (3 to 36)	Numeric value in the range of 3 to 36	Speed of elevation in degrees per second
Lower angle (-10 to 89)	Numeric value in the range of -10 to 89	The bottom angle of elevation in a sector scan
Upper angle (-10 to 89)	Numeric value in the range of -10 to 89	The top angle of elevation in a sector scan
Step size in 1/8 degree (0 to 32)	Numeric value in the range of 0 to 32	Results in an elevation rise of between 0 and 4 degrees per elevation sweep. This parameter has no effect during sector scans.
Offset	Hexadecimal value in the range of 0000 to xFFF	This value should not be changed unless maintenance has been performed on the antenna that resulted in the elevation offset being in error.

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Pulse per second (125 to 3000)	500	0x3e80
20 MHz IF Band Width	2 MHz	
50 MHz IF Band Width	5 MHz	
IF Attenuator (0 to 63)	40	
Unfolding (1,2,3)	1	
Sample Size (4 to 255)	25	
Clutter Threshold (0 to -50 dB in 1/16 dB)	320	-20.0000 dB
Signal Quality Index Threshold (0 to 255)	128	
Weather Signal Power Threshold (0 to 1024 dB in 1/16 dB)	40	-5.0000 dB
Uncorrected Reflectivity Thresholding (0x0000 to 0xFFFF)	0xaaaa	
Corrected Reflectivity Thresholding (0x0000 to 0xFFFF)	0x8888	
Velocity Thresholding (0x0000 to 0xFFFF)	0xc0c0	
Width Thresholding (0x0000 to 0xFFFF)	0xc000	
AGC Enable	On	
Clutter Microsuppression	On	
Three lag algorithm	Off	
RVP-6 Processing	Disabled	

0 to 9, +, -, Arrow keys, Ctrl+N page, Ctrl+P page, S send.

NOTE:

The values shown in the figure are the default values for your system. Entries made to fields will not take effect until they are saved. When this screen is exited, any entries not saved will result in a prompt at the time of exiting as to whether to save the entries. For allowable entries for each of these fields, refer to Table A-2.

Where:

- A field change character of "C" indicates a field change made, but not yet saved.
- 0 to 9 = the allowable number entry keys (will delete existing entry)
- + = the plus sign will move ahead to the next entry
- - = the minus sign will move back to the previous entry
- Arrow keys: ← & ↑ = move up one line; → & ↓ = move down one line
- Ctrl+N = move to the next sequential page from the current page
- Ctrl+P = move to the last sequential page from the current page
- S send = accept the value currently displayed at the cursor position

Figure A-3. Maintenance Terminal Screen 3 of 21.

Table A-2. Maintenance Terminal Screen 3 Definitions .

Entry	Value	Meaning
Pulse per second (125 to 3000)	Numeric value in the range of 125 to 3000	The desired PRF. The lower the range (see Figure A-2), the higher the allowable PRF. Refer to Table A-3 for allowable PRFs versus selected ranges.
20 MHz Band Width	Off	No receiver band pass filter selected
	45 kHz	Use the 45 kHz receiver band pass filter
	80 kHz	Use the 80 kHz receiver band pass filter
	200 kHz	Use the 200 kHz receiver band pass filter
	500 kHz	Use the 500 kHz receiver band pass filter
	1 MHz	Use the 1 MHz receiver band pass filter
	2 MHz	Use the 2 MHz receiver band pass filter
50 MHz Band Width	Off	No receiver band pass filter selected
	5 MHz	Use the 5 MHz receiver band pass filter
	10 MHz	Use the 10 MHz receiver band pass filter
IF Attenuator (0 to 63)	Numeric value in the range of 0 to 63	Select a value for the IF attenuator (used to set the receiver noise threshold)
Unfolding (1, 2, 3)	1	No unfolding
	2	2x unfolding
	3	3x unfolding
Sample Size (4 to 255)	Numeric value in the range of 4 to 255	Number of transmitter pulses returned to the receiver to be averaged together to obtain a digital video data word for transmission to the Triton. This value should be determined by determining the operational mode of the radar and the PRF of the transmitter. The shorter the range and higher the PRF, the higher the sample size should be.
Clutter Threshold (0 to -50 dB in 1/16 dB)	Numeric value in the range of 0 to 50	CCOR threshold: refer to the CCOR threshold paragraph in section 3 for a definition of this entry.
Signal Quality Index Threshold (0 to 255)	Numeric value in the range of 0 to 255	SQL threshold: refer to the SQL threshold paragraph in section 3 for a definition of this entry.
Weather Signal Power Threshold (0 to 1024 dB in 1/16 dB)	Numeric value in the range of 0 to 16384	WSP threshold: refer to the WSP threshold paragraph in section 3 for a definition of this entry.

Table A-2. Maintenance Terminal Screen 3 Definitions (continued).

Entry	Value	Meaning
Uncorrected Reflectivity Thresholding (0x0000 to 0xFFFF)	Hexadecimal numeric value	See the RVP-6 Manual for a description of this entry.
Corrected Reflectivity Thresholding (0x0000 to 0xFFFF)	Hexadecimal numeric value	
Velocity Thresholding (0x0000 to 0xFFFF)	Hexadecimal numeric value	
Width Thresholding (0x0000 to 0xFFFF)	Hexadecimal numeric value	
AGC Enable	On	Use AGC control to linear amplifier.
	Off	Use STC curve to linear amplifier.
Clutter Microsuppression	On	Eliminate clutter bins prior to averaging when range averaging is used by the RVP-6.
	Off	Use clutter bins when range averaging is used by the RVP-6.
Three Leg algorithm	Off	Perform calculation of spectral width, as described in the RVP-6 manual using the two-leg auto-correlation estimate.
	On	Perform calculation of spectral width, as described in the RVP-6 manual. Use of this may cause the loss of some range bins due to the amount of time required to perform the calculations versus the distance of range being searched. Most range bin losses will occur at a high PRF with short ranges.
RVP-6 Processing	Disabled	Do not process video data with the RVP-6 processor. (Used during testing, when video returns are not important, or not desired.)
	Enabled	Process returned video using the RVP-6 processor.

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Table A-3. PRF Selection by Range.

Range	Maximum PRF	Usable PRF	Maximum Pulse Width	Maximum Velocity
16 km (10 miles)	9362	3000	2 μ s	40.1 m/s
32 km (20 miles)	4681	3000	2 μ s	40.1 m/s
48 km (30 miles)	3120	3000	2 μ s	40.1 m/s
64 km (40 miles)	2340	2300	2.6 μ s	30.7 m/s
80 km (50 miles)	1872	1850	3.24 μ s	24.7 m/s
96 km (60 miles)	1560	1500	4 μ s	20.8 m/s
112 km (70 miles)	1337	1300	4.6 μ s	17.4 m/s
128 km (80 miles)	1170	1100	5.45 μ s	14.7 m/s
144 km (90 miles)	1040	1000	6 μ s	13.4 m/s
160 km (100 miles)	936	900	6.66 μ s	12 m/s
176 km (110 miles)	851	750	8 μ s	10 m/s
192 km (120 miles)	780	750	8 μ s	10 m/s
208 km (130 miles)	720	500	12 μ s	6.7 m/s
224 km (140 miles)	668	500	12 μ s	6.7 m/s
240 km (150 miles)	624	500	12 μ s	6.7 m/s
256 km (160 miles)	585	500	12 μ s	6.7 m/s
272 km (170 miles)	550	500	12 μ s	6.7 m/s
288 km (180 miles)	511	500	12 μ s	6.7 m/s
304 km (190 miles)	492	400	15 μ s	5.3 m/s
320 km (200 miles)	468	400	15 μ s	5.3 m/s
336 km (210 miles)	445	400	15 μ s	5.3 m/s
352 km (220 miles)	425	400	15 μ s	5.3 m/s
368 km (230 miles)	407	400	15 μ s	5.3 m/s
384 km (240 miles)	350	350	17.14 μ s	4.7 m/s
400 km (250 miles)	374	350	17.14 μ s	4.7 m/s
416 km (260 miles)	360	350	17.14 μ s	4.7 m/s
Velocity conversion of m/s to MPH (KPH):				
40.1 m/s = 90 (144) MPH 30.7 m/s = 69 (110) MPH 24.7 m/s = 55 (88) MPH 20.8 m/s = 47 (75) MPH 17.4 m/s = 39 (62) MPH 14.7 m/s = 33 (52) MPH 13.4 m/s = 30 (48) MPH 12 m/s = 27 (43) MPH 10 m/s = 22 (35) MPH 6.7 m/s = 14 (22) MPH 5.3 m/s = 11 (17) MPH 4.7 m/s = 10.5 (16) MPH				
NOTE:				
If increasing pulse width, change PRF followed by pulse width.				
If decreasing pulse width, change pulse width followed by PRF.				

Threshold Levels (Reflectivity)

0	0	64	74	84	94	104	114	124	134	144
10	154	164	174	184	194	204	214	224	234	244
20	255	255	255	255	255	255	255	255	255	255
30	255	255	255	255	255	255	255	255	255	255
40	255	255	255	255	255	255	255	255	255	255
50	255	255	255	255	255	255	255	255	255	255
60	255	255	255	255						

Reflectivity 0 dBz

NOTE: Only positions 1-15 are used. All subsequent entries (16-64) are ignored.

0 to 9, +, -, Ctrl+W fill, Arrow keys, Ctrl+N page, Ctrl+P page, S send.

NOTE:

This screen covers the displayed radar display screen colors. The values shown in the figure are the default values for your system. For allowable entries for each of these fields, refer to Table A-4.

Where:

- 0 to 9 = the allowable number entry keys
- + = the plus sign will move ahead to the next entry
- - = the minus sign will move back to the previous entry
- Ctrl+W = fill the remainder of the table with the cursor location value
- Arrow keys: ↑ = move up one line; ↓ = move down one line; ← = move left one field; → = move right one field
- Ctrl+N = move to the next sequential page from the current page
- Ctrl+P = move to the last sequential page from the current page
- S send = accept the value currently displayed at the cursor position

Figure A-4. Maintenance Terminal Screen 4 of 21.

Table A-4. Maintenance Terminal Screen 4 Definitions.

Entry	Value	Meaning
Fields 1-15	Numeric value in the range of 0 to 255 0 = no signal 1 = -31.5 dBz 2 = -31 dBz ↓ 64 = 0 dBz ↓ 255 = 95.5 dBz	The number represents the threshold at which the color bar on the side of display will change, indicating a greater number of particles present in the returned signal. Each number between 1 and 255 equals 0.5 dBz. Numbers between 1-63 equal negative dBz and 64-255 equal positive dBz. The default settings would result in a change in color for every 5 dBz increase.

Threshold Levels (Velocity)

0	1	1	13	32	51	70	89	108	128	147
10	166	185	204	223	242	255	255	255	255	255
20	255	255	255	255	255	255	255	255	255	255
30	255	255	255	255	255	255	255	255	255	255
40	255	255	255	255	255	255	255	255	255	255
50	255	255	255	255	255	255	255	255	255	255
60	255	255	255	255						

Velocity -6.7 m/s

0 to 9, +, -, Ctrl+W fill, Arrow keys, Ctrl+N page, Ctrl+P page, S send.

NOTE:

The values shown in the figure are the default values for your system. For allowable entries for each of these fields, refer to Table A-5.

Where:

- 0 to 9 = the allowable number entry keys; values entered will result in the display of the equivalent velocity in meters per second, which equate to the following wind speeds:

40.1 m/s = 90 MPH (144 KPH)	13.4 m/s = 30 MPH (48 KPH)
30.7 m/s = 69 MPH (110 KPH)	12 m/s = 27 MPH (43 KPH)
24.7 m/s = 55 MPH (88 KPH)	10 m/s = 22 MPH (35 KPH)
20.8 m/s = 47 MPH (75 KPH)	6.7 m/s = 14 MPH (22 KPH)
17.4 m/s = 39 MPH (62 KPH)	5.3 m/s = 11 MPH (17 KPH)
14.7 m/s = 33 MPH (52 KPH)	4.7 m/s = 10.5 MPH (16 KPH)
- + = the plus sign will move ahead to the next entry
- - = the minus sign will move back to the previous entry
- Ctrl+W = fill the remainder of the table with the cursor location value
- Arrow keys: ↑ = move up one line; ↓ = move down one line; ← = move left one field; → = move right one field
- Ctrl+N = move to the next sequential page from the current page
- Ctrl+P = move to the last sequential page from the current page
- S send = accept the value currently displayed at the cursor position

Figure A-5. Maintenance Terminal Screen 5 of 21.

Table A-5. Maintenance Terminal Screen 5 Definitions.

Entry	Value	Meaning
Fields 1-64	Numeric value (0-255)	0 = no velocity data available 1 = maximum velocity toward the radar ↓ ↓ 128 = no movement ↓ ↓ 255 = maximum velocity away from the radar

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Threshold Levels (Spectral Width)

0	2	38	77	115	153	191	230	255	255	255
10	255	255	255	255	255	255	255	255	255	255
20	255	255	255	255	255	255	255	255	255	255
30	255	255	255	255	255	255	255	255	255	255
40	255	255	255	255	255	255	255	255	255	255
50	255	255	255	255	255	255	255	255	255	255
60	255	255	255	255						

Width 1.0 m/s

0 to 9, +, -, Ctrl+W fill, Arrow keys, Ctrl+N page, Ctrl+P page, S send.

NOTE:

The values shown in the figure are the default values for your system. For allowable entries for each of these fields, refer to Table A-6.

Where:

- 0 to 9 = the allowable number entry keys
- + = the plus sign will move ahead to the next entry
- - = the minus sign will move back to the previous entry
- Ctrl+W = fill the remainder of the table with the cursor location value
- Arrow keys: ↑ = move up one line; ↓ = move down one line; ← = move left one field; → = move right one field
- Ctrl+N = move to the next sequential page from the current page
- Ctrl+P = move to the last sequential page from the current page
- S send = accept the value currently displayed at the cursor position

Figure A-6. Maintenance Terminal Screen 6 of 21.

Table A-6. Maintenance Terminal Screen 6 Definitions.

Entry	Value	Meaning
All fields	Numeric value (0-255)	0 = no spectral width data available 1-255 = n Where: $n/256 * Vu = m/s$ Vu = unambiguous velocity m/s = meters per second

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Clutter Filters (Range 32 km)

	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9
0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
20	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
40	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
60	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
100	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
120	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
140	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
160	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
180	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
200	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
220	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
240	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1				

0 to 7, +, -, Ctrl+W fill, Arrow keys, Ctrl+N page, Ctrl+P page, S send.

NOTE:

The values shown in the figure are the default values for your system. For allowable entries for each of these fields, refer to Table A-7.

Where:

- 0 to 7 = the allowable number entry keys
- + = the plus sign will move ahead to the next entry
- - = the minus sign will move back to the previous entry
- Ctrl+W = fill the remainder of the table with the cursor location value
- Arrow keys: ↑ = move up one line; ↓ = move down one line; ← = move left one field; → = move right one field
- Ctrl+N = move to the next sequential page from the current page
- Ctrl+P = move to the last sequential page from the current page
- S send = accept the value currently displayed at the cursor position

Figure A-7. Maintenance Terminal Screen 7 of 21.

Table A-7. Maintenance Terminal Screen 7 Definitions.

Entry	Value	Meaning
All fields	Numeric value (0-7)	0 = all pass filter selected (no clutter suppression) 1-7 = specific filters (see RVP-6 manual, appendix III, for filter characteristics)

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Clutter Filters (Range 64 km)

	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9
0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
20	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
40	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
60	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
100	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
120	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
140	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
160	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
180	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
200	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
220	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
240	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1				

0 to 7, +, -, Ctrl+W fill, Arrow keys, Ctrl+N page, Ctrl+P page, S send.

NOTE:

The values shown in the figure are the default values for your system. For allowable entries for each of these fields, refer to Table A-8.

Where:

- 0 to 7 = the allowable number entry keys
- + = the plus sign will move ahead to the next entry
- - = the minus sign will move back to the previous entry
- Ctrl+W = fill the remainder of the table with the cursor location value
- Arrow keys: ↑ = move up one line; ↓ = move down one line; ← = move left one field; → = move right one field
- Ctrl+N = move to the next sequential page from the current page
- Ctrl+P = move to the last sequential page from the current page
- S send = accept the value currently displayed at the cursor position

Figure A-8. Maintenance Terminal Screen 8 of 21.

Table A-8. Maintenance Terminal Screen 8 Definitions

Entry	Value	Meaning
All fields	Numeric value (0-7)	0 = all pass filter selected (no clutter suppression) 1-7 = specific filters (see RVP-6 manual, appendix III, for filter characteristics)

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Clutter Filters (Range 128 km)

	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9
0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
20	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
40	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
60	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
100	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
120	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
140	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
160	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
180	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
200	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
220	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
240	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1				

0 to 7, +, -, Ctrl+W fill, Arrow keys, Ctrl+N page, Ctrl+P page, S send.

NOTE:

The values shown in the figure are the default values for your system. For allowable entries for each of these fields, refer to Table A-9.

Where:

- 0 to 7 = the allowable number entry keys
- + = the plus sign will move ahead to the next entry
- - = the minus sign will move back to the previous entry
- Ctrl+W = fill the remainder of the table with the cursor location value
- Arrow keys: ↑ = move up one line; ↓ = move down one line; ← = move left one field; → = move right one field
- Ctrl+N = move to the next sequential page from the current page
- Ctrl+P = move to the last sequential page from the current page
- S send = accept the value currently displayed at the cursor position

Figure A-9. Maintenance Terminal Screen 9 of 21.

Table A-9. Maintenance Terminal Screen 9 Definitions

Entry	Value	Meaning
All fields	Numeric value (0-7)	0 = all pass filter selected (no clutter suppression) 1-7 = specific filters (see RVP-6 manual, appendix III, for filter characteristics)

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Clutter Filters (Range 256 km)

	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9
0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
20	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
40	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
60	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
100	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
120	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
140	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
160	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
180	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
200	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
220	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
240	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1				

0 to 7, +, -, Ctrl+W fill, Arrow keys, Ctrl+N page, Ctrl+P page, S send.

NOTE:

The values shown in the figure are the default values for your system. For allowable entries for each of these fields, refer to Table A-10.

Where:

- 0 to 7 = the allowable number entry keys
- + = the plus sign will move ahead to the next entry
- - = the minus sign will move back to the previous entry
- Ctrl+W = fill the remainder of the table with the cursor location value
- Arrow keys: ↑ = move up one line; ↓ = move down one line; ← = move left one field; → = move right one field
- Ctrl+N = move to the next sequential page from the current page
- Ctrl+P = move to the last sequential page from the current page
- S send = accept the value currently displayed at the cursor position

Figure A-10. Maintenance Terminal Screen 10 of 21.

Table A-10. Maintenance Terminal Screen 10 Definitions

Entry	Value	Meaning
All fields	Numeric value (0-7)	0 = all pass filter selected (no clutter suppression) 1-7 = specific filters (see RVP-6 manual, appendix III, for filter characteristics)

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Clutter Filters (Range 320 km)

	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9
0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
20	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
40	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
60	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
100	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
120	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
140	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
160	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
180	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
200	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
220	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
240	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

0 to 7, +, -, Ctrl+W fill, Arrow keys, Ctrl+N page, Ctrl+P page, S send.

NOTE:

The values shown in the figure are the default values for your system. For allowable entries for each of these fields, refer to Table A-11.

Where:

- 0 to 7 = the allowable number entry keys
- + = the plus sign will move ahead to the next entry
- - = the minus sign will move back to the previous entry
- Ctrl+W = fill the remainder of the table with the cursor location value
- Arrow keys: ↑ = move up one line; ↓ = move down one line; ← = move left one field; → = move right one field
- Ctrl+N = move to the next sequential page from the current page
- Ctrl+P = move to the last sequential page from the current page
- S send = accept the value currently displayed at the cursor position

Figure A-11. Maintenance Terminal Screen 11 of 21.

Table A-11. Maintenance Terminal Screen 11 Definitions

Entry	Value	Meaning
All fields	Numeric value (0-7)	0 = all pass filter selected (no clutter suppression) 1-7 = specific filters (see RVP-6 manual, appendix III, for filter characteristics)

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Clutter Filters (Range 416 km)

	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9
0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
20	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
40	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
60	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
100	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
120	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
140	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
160	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
180	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
200	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
220	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
240	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

0 to 7, +, -, Ctrl+W fill, Arrow keys, Ctrl+N page, Ctrl+P page, S send.

NOTE:

The values shown in the figure are the default values for your system. For allowable entries for each of these fields, refer to Table A-12.

Where:

- 0 to 7 = the allowable number entry keys
- + = the plus sign will move ahead to the next entry
- - = the minus sign will move back to the previous entry
- Ctrl+W = fill the remainder of the table with the cursor location value
- Arrow keys: ↑ = move up one line; ↓ = move down one line; ← = move left one field; → = move right one field
- Ctrl+N = move to the next sequential page from the current page
- Ctrl+P = move to the last sequential page from the current page
- S send = accept the value currently displayed at the cursor position

Figure A-12. Maintenance Terminal Screen 12 of 21.

Table A-12. Maintenance Terminal Screen 12 Definitions

Entry	Value	Meaning
All fields	Numeric value (0-7)	0 = all pass filter selected (no clutter suppression) 1-7 = specific filters (see RVP-6 manual, appendix III, for filter characteristics)

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Clutter Filters (Range ??? km)

	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9
0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
20	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
40	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
60	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
100	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
120	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
140	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
160	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
180	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
200	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
220	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
240	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

This screen is used if a non-standard range is selected.

0 to 7, +, -, Ctrl+W fill, Arrow keys, Ctrl+N page, Ctrl+P page, S send.

NOTE:

The values shown in the figure are the default values for your system. For allowable entries for each of these fields, refer to Table A-13.

Where:

- 0 to 7 = the allowable number entry keys
- + = the plus sign will move ahead to the next entry
- - = the minus sign will move back to the previous entry
- Ctrl+W = fill the remainder of the table with the cursor location value
- Arrow keys: ↑ = move up one line; ↓ = move down one line; ← = move left one field; → = move right one field
- Ctrl+N = move to the next sequential page from the current page
- Ctrl+P = move to the last sequential page from the current page
- S send = accept the value currently displayed at the cursor position

Figure A-13. Maintenance Terminal Screen 13 of 21.

Table A-13. Maintenance Terminal Screen 13 Definitions

Entry	Value	Meaning
All fields	Numeric value (0-7)	0 = all pass filter selected (no clutter suppression) 1-7 = specific filters (see RVP-6 manual, appendix III, for filter characteristics)

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Pulse per second (125 to 3000)	500	0x3e80
Drive Pulse Width (0.5 to 20.0 us in 125 ns)	16	2.0000 μ s
RF Delay (0 to 32 us in 125 ns)	8	1.0000 μ s
System Delay	6	0.7500 μ s
STC start (0 to 127 in 125 ns)	80	1.5 km
STC end (0 to 2047 in 125 ns)	1100	20.6 km
Attenuator Trigger rate (0 to 65535)	64	
Phase Trigger Rate (0 to 65535)	0	
Trigger Enables (0 to 127)	0	
0x01 – Prf Enable (Master Enable)		
0x02 – Phase Enable		
0x04 – Drive Pulse Enable		
0x08 – RF Drive Enable		
0x10 – STC Trigger Enable		
0x20 – Test Trigger Enable		
0x40 – Internal prf Enable		

0 to 9, +, –, Arrow keys, Ctrl+N page, Ctrl+P page, S send.

NOTE:

The values shown in the figure are the default values for your system. For allowable entries for each of these fields, refer to Table A-14.

Where:

- 0 to 9 = the allowable number entry keys
- + = the plus sign will move ahead to the next entry
- – = the minus sign will move back to the previous entry
- Arrow keys: ← & ↑ = move up one line; → & ↓ = move down one line
- Ctrl+N = move to the next sequential page from the current page
- Ctrl+P = move to the last sequential page from the current page
- S send = accept the value currently displayed at the cursor position

Figure A-14. Maintenance Terminal Screen 14 of 21.

Table A-14. Maintenance Terminal Screen 14 Definitions .

Entry	Value	Meaning
Pulse per second (125 to 3000)	Numeric value in the range of 125 to 3000	The desired PRF. The lower the range (see Figure A-2), the higher the allowable PRF. Refer to Table A-3 for allowable PRFs versus selected ranges.
Drive Pulse Width μ 0.5 to 20.0 (s in 125 ns)	Numeric value (4 to 160)	Multiply this value by 0.125 to yield the number of μ s.
RF Delay (0 to 32 μ s in 125 ns)	Numeric value (0-256)	Multiply this value by 0.125 to yield the number of μ s. This is the amount of time (in μ s) that the RF gate from the TAC will be delayed to allow the transmitter modulator output pulse to achieve a stable level before transmitting the RF pulse to the antenna.
System Delay	Numeric value NOTE: This value should be entered during the installation process. DO NOT change this value during other operations.	This is the amount of delay inherent in the modulator. The system delay corrects for this delay so that the actual RF pulse sent to the antenna is the width specified by the drive pulse width.
STC Start (0 to 127 in 125 ns)	Numeric value (0 to 1016)	Multiply this value by 0.125 to yield the number of μ s. NOTE: This field currently has no effect.
STC end (0 to 2047 in 125 ns)	Numeric value (0 to 16376)	Multiply this value by 0.125 to yield the number of μ s. NOTE: This field currently has no effect.
Phase Trigger Rate (0 to 65535)	Numeric value (0 to 65535)	This sets the rate at which the receiver steps through the Phase Shift table (see Figure A-17). This in turn determines the doppler shift.
Attenuator Trigger Rate (0 to 65535)	Numeric value (0 to 65535)	This sets the rate at which the receiver steps through the Attenuator table (see Figure A-15). This allows known values to be output at specified ranges on the display.
Trigger Enables (0 to 127)	Numeric value (0-127)	This number is the cumulative value of all selected enables. To determine the value, refer to the values of the triggers.

Table A-14. Maintenance Terminal Screen 14 Definitions (continued).

Entry	Value	Meaning
0x01 - Prf Enable (Master Enable)	1	This trigger must be selected if any trigger other than the Phase Enable trigger is to be used.
0x02 - Phase Enable	2	This trigger is not affected by the enabling of the PRF Enable. If selected, this trigger will allow velocity measurement testing.
0x04 - Drive Pulse Enable	4	Enable the TAC to generate the drive pulse timing. This must be selected to allow the enabling of the RF gate.
0x08 - RF Drive Enable	8	Enable the TAC to send the RF drive pulse. If disabled, the RF gate remains at a continuous high signal level for calibration.
0x10 - STC Trigger Enable	16	This trigger currently has no effect.
0x20 - Test Trigger Enable	32	This trigger is used for stepping through the attenuator table. When disabled, only the first value from the attenuator table will be used.
0x40 - Internal prf Enable	64	Generate an internal PRF trigger when there is no RVP-6 installed.

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Attenuator Table – first half

0	65535	65535	65535	65535	65535	65535	65535	65535	65535	65535
10	65535	65535	65535	65535	65535	65535	65535	65535	65535	65535
20	65535	65535	65535	65535	65535	65535	65535	65535	65535	65535
30	65535	65535	65535	65535	65535	65535	65535	65535	65535	65535
40	65535	65535	65535	65535	65535	65535	65535	65535	65535	65535
50	65535	65535	65535	65535	65535	65535	65535	65535	65535	65535
60	65535	65535	65535	65535	65535	65535	65535	65535	65535	65535
70	65535	65535	65535	65535	65535	65535	65535	65535	65535	65535
80	65535	65535	65535	65535	65535	65535	65535	65535	65535	65535
90	65535	65535	65535	65535	65535	65535	65535	65535	65535	65535
100	65535	65535	65535	65535	65535	65535	65535	65535	65535	65535
110	65535	65535	65535	65535	65535	65535	65535	65535	65535	65535
120	65535	65535	65535	65535	65535	65535	65535	65535	65535	65535

Attenuator 127.50

NOTE: These values should only be changed during calibration.

0 to 9, +, -, Ctrl+W fill, Arrow keys, Ctrl+N page, Ctrl+P page, S send.

NOTE:

The values shown in the figure are the values to be entered for the normal operation of your system. For allowable entries for each of these fields during calibration, refer to Table A-15.

Where:

- 0 to 9 = the allowable number entry keys
- + = the plus sign will move ahead to the next entry
- - = the minus sign will move back to the previous entry
- Ctrl+W = fill the remainder of the table with the cursor location value
- Arrow keys: ↑ = move up one line; ↓ = move down one line; ← = move left one field; → = move right one field
- Ctrl+N = move to the next sequential page from the current page
- Ctrl+P = move to the last sequential page from the current page
- S send = accept the value currently displayed at the cursor position

Figure A-15. Maintenance Terminal Screen 15 of 21.

Table A-15. Maintenance Terminal Screen 15 Definitions

Entry	Value	Meaning
All fields	Numeric value (0-65535, which results in an attenuation value of 0-127.5 dB)	This value controls the attenuation values from the test attenuators (see Figure A-15 and Figure A-16). The values entered here are interpreted to obtain the settings for the two separate attenuators. To determine the attenuator values based on the numeric value entered, and a sample method of determining the attenuation value, see below.

Attenuator #1								Attenuator #2								Bit values by attenuator	
32	16	8	4	2	1	.5	.25	32	16	8	4	2	1	.5	.25		
7	6	5	4	3	2	1	0	7	6	5	4	3	2	1	0	Bit position by attenuator	
Entries that would achieve an attenuation of 1 dB.																Value for table	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	4
0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	259
0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	514
0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	769
0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1024
32668	16384	8192	4096	2048	1024	512	256	128	64	32	16	8	4	2	1	Numeric value by bit position (added together to yield value for the numeric entry)	

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Attenuator Table – second half

120										65535	65535
130	65535	65535	65535	65535	65535	65535	65535	65535	65535	65535	65535
140	65535	65535	65535	65535	65535	65535	65535	65535	65535	65535	65535
150	65535	65535	65535	65535	65535	65535	65535	65535	65535	65535	65535
160	65535	65535	65535	65535	65535	65535	65535	65535	65535	65535	65535
170	65535	65535	65535	65535	65535	65535	65535	65535	65535	65535	65535
180	65535	65535	65535	65535	65535	65535	65535	65535	65535	65535	65535
190	65535	65535	65535	65535	65535	65535	65535	65535	65535	65535	65535
200	65535	65535	65535	65535	65535	65535	65535	65535	65535	65535	65535
210	65535	65535	65535	65535	65535	65535	65535	65535	65535	65535	65535
220	65535	65535	65535	65535	65535	65535	65535	65535	65535	65535	65535
230	65535	65535	65535	65535	65535	65535	65535	65535	65535	65535	65535
240	65535	65535	65535	65535	65535	65535	65535	65535	65535	65535	65535
250	65535	65535	65535	65535	65535	65535	65535	65535	65535	65535	65535

Attenuator 127.50

NOTE: These values should only be changed during calibration.

0 to 9, +, -, Ctrl+W fill, Arrow keys, Ctrl+N page, Ctrl+P page, S send.

NOTE:

The values shown in the figure are the values to be entered for the normal operation of your system. For allowable entries for each of these fields during calibration, refer to Table A-16.

Where:

- 0 to 9 = the allowable number entry keys
- + = the plus sign will move ahead to the next entry
- - = the minus sign will move back to the previous entry
- Ctrl+W = fill the remainder of the table with the cursor location value
- Arrow keys: ↑ = move up one line; ↓ = move down one line; ← = move left one field; → = move right one field
- Ctrl+N = move to the next sequential page from the current page
- Ctrl+P = move to the last sequential page from the current page
- S send = accept the value currently displayed at the cursor position

Figure A-16. Maintenance Terminal Screen 16 of 21.

Table A-16. Maintenance Terminal Screen 16 Definitions

Entry	Value	Meaning
All fields	Numeric value (0-65535, which results in an attenuation value of 0-127.5 dB)	This value controls the attenuation values from the test attenuators (see Figure A-15 and Figure A-16). The values entered here are interpreted to obtain the settings for the two separate attenuators. To determine the attenuator values based on the numeric value entered, and a sample method of determining the attenuation value, see below.

Attenuator #1								Attenuator #2								Bit values by attenuator	
32	16	8	4	2	1	.5	.25	32	16	8	4	2	1	.5	.25		
7	6	5	4	3	2	1	0	7	6	5	4	3	2	1	0	Bit position by attenuator	
Entries that would achieve an attenuation of 1 dB.																Value for table	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	4
0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	259
0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	514
0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	769
0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1024
32668	16384	8192	4096	2048	1024	512	256	128	64	32	16	8	4	2	1	Numeric value by bit position (added together to yield value for the numeric entry)	

Phase Shift Table

	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9
0	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	0	1	2	3
20	4	5	6	7	8	9	10	11	12	13	14	15	0	1	2	3	4	5	6	7
40	8	9	10	11	12	13	14	15	0	1	2	3	4	5	6	7	8	9	10	11
60	12	13	14	15	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
80	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	0	1	2	3
100	4	5	6	7	8	9	10	11	12	13	14	15	0	1	2	3	4	5	6	7
120	8	9	10	11	12	13	14	15	0	1	2	3	4	5	6	7	8	9	10	11
140	12	13	14	15	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
160	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	0	1	2	3
180	4	5	6	7	8	9	10	11	12	13	14	15	0	1	2	3	4	5	6	7
200	8	9	10	11	12	13	14	15	0	1	2	3	4	5	6	7	8	9	10	11
220	2	13	14	15	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
240	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15				

NOTE: The given values represent the positional step within a digital sine wave. The sine wave changes in $22\frac{1}{2}^\circ$ increments.

0 to 9, +, -, Ctrl+W fill, Arrow keys, Ctrl+N page, Ctrl+P page, S send.

NOTE:

The values shown in the figure are the default values for your system. For allowable entries for each of these fields, refer to Table A-17.

NOTE:

The phase trigger entered in screen 14 affects the step rate of these values. The faster the step rate, the greater the velocity.

Where:

- 0 to 9 = the allowable number entry keys
- + = the plus sign will move ahead to the next entry
- - = the minus sign will move back to the previous entry
- Ctrl+W = fill the remainder of the table with the cursor location value
- Arrow keys: ↑ = move up one line; ↓ = move down one line; ← = move left one field; → = move right one field
- Ctrl+N = move to the next sequential page from the current page
- Ctrl+P = move to the last sequential page from the current page
- S send = accept the value currently displayed at the cursor position

Figure A-17. Maintenance Terminal Screen 17 of 21.

Table A-17. Maintenance Terminal Screen 17 Definitions

Entry	Value	Meaning
All fields	Numeric value (0-15)	This number represents the quantity of 22.5° phase shifts. The values for the phase shift are as follows: 0 = 0° 1 = 22.5° 2 = 45° 3 = 67.5° 4 = 90° 5 = 112.5° 6 = 135° 7 = 157.5° 8 = 180° 9 = 202.5° 10 = 225° 11 = 247.5° 12 = 270° 13 = 292.5° 14 = 315° 15 = 337.5°

AGC Curve Table

	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
220	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
240	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

NOTE: These values should only be changed during calibration.

0 to 9, +, -, Ctrl+W fill, Arrow keys, Ctrl+N page, Ctrl+P page, S send.

NOTE:

The values shown in the figure are the default values for your system. For allowable entries for each of these fields, refer to Table A-18.

Where:

- 0 to 9 = the allowable number entry keys
- + = the plus sign will move ahead to the next entry
- - = the minus sign will move back to the previous entry
- Ctrl+W = fill the remainder of the table with the cursor location value
- Arrow keys: ↑ = move up one line; ↓ = move down one line; ← = move left one field; → = move right one field
- Ctrl+N = move to the next sequential page from the current page
- Ctrl+P = move to the last sequential page from the current page
- S send = accept the value currently displayed at the cursor position

Figure A-18. Maintenance Terminal Screen 18 of 21.

Table A-18. Maintenance Terminal Screen 18 Definitions

Entry	Value	Meaning
All fields	Numeric values (0-255)	Based on the AGC response curve for the radar. The value entered results in application of an AGC of 0 volts (no attenuation) to -4 volts (-80 dB) to the I/Q amplifier to prevent clipping of the peaks of the I and Q waveforms. Clipping of the waveforms results in an incorrect phase shift measurement.

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Calibration Reflectivity (0 to -100 dB in 1/16 dB)	352	-22.0000 dB
Calibration Pulse Width (0 to 20 μ s in 1/2 μ s)	10	5.0000 μ s
Clutter Filter Stabilization Delay (0 to 255)	0	
Number of AGC Pulses Integrated (0 to 255)	8	
Enable Zero clutter Filters	Yes	
Log receiver noise threshold (0 to 16 dB in 1/16 dB)	8	0.5000 dB
Enable Pipelining	Yes	
Log Receiver Slope (0 to 65535)	1300	

0 to 9, +, -, Arrow keys, Ctrl+N page, Ctrl+P page, S send.

NOTE:

The values shown in the figure are the default values for your system. For allowable entries for each of these fields, refer to Table A-19.

Where:

- 0 to 9 = the allowable number entry keys
- + = the plus sign will move ahead to the next entry
- - = the minus sign will move back to the previous entry
- Arrow keys: $\leftarrow$ & $\uparrow$ = move up one line; $\rightarrow$ & $\downarrow$ = move down one line
- Ctrl+N = move to the next sequential page from the current page
- Ctrl+P = move to the last sequential page from the current page
- S send = accept the value currently displayed at the cursor position

Figure A-19. Maintenance Terminal Screen 19 of 21.

Table A-19. Maintenance Terminal Screen 19 Definitions

Entry	Value	Meaning
Calibration Reflectivity (0 to -100 dB in 1/16 dB)	Numeric value (0-1600)	Multiply the value by 0.0625 to obtain the actual reflectivity. (This value will be determined during calibration.)
Calibration Pulse Width (0 to 20 μ s in 1/2 μ s)	Numeric value (0-40)	Multiply the value by 0.5 to obtain the actual pulse width. (This value will be determined during calibration.)
Clutter Filter Stabilization Delay (0 to 255)	Numeric value (0-255)	Quantity of pulses to discard during dual PRF operation to account for clutter filter ringing. See the RVP-6 manual for clutter filter operation.
Number of AGC Pulses Integrated (0 to 255)	Numeric value (0-255)	Number of pulses averaged to determine the AGC value sent to the I/Q amplifier in the receiver.
Enable Zero clutter Filters	No	DO NOT change this setting.
Log receiver noise threshold (0 to 16 dB in 1/16 dB)	Numeric value (0-256)	Multiply the value by 0.0625 to obtain the actual threshold.
Enable Pipelining	Yes	DO NOT change this setting.
Log Receiver Slope (0 to 65535)	Numeric value (0-65535)	Determined during initial calibration. This value is based on the analog to digital value for the selected position on the slope curve.

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RVP-6 console control/setup mode.

To exit WITHOUT exiting RVP-6 monitor mode press ESC.

Exit will be automatic when the string "Setups.."

is received from the RVP-6.

RVP-6 V07 Non-Volatile Setups

Commands:

- (F) Use Factory Defaults
- (S) Save Current Settings
- (R) Restore Saved Settings
- (M) Modify/View Current Settings
- (Q) Quit

> M

NOTE: Don't select the S (save) option without doing the M (modify) entry. Performing the Q (quit) option from here will cause all changes to be ignored.

Figure A-20. Maintenance Terminal Screen 20 of 21 (First Screen).

Power-Up PRF: 500.00 Hz
Power-Up Pulse Width: 0
PreTrigger active on rising edge: YES
Delay from PreTrigger to range zero: 30.00 usec
STC delay to range zero: 2.00 usec
AGC anticipation of LOG Receiver: 0.00 usec
Trig 0: Start: -5.00 Width: 1.00 High: YES
Trig 1: Start: -4.00 Width: 1.00 High: YES
Trig 2: Start: -3.00 Width: 1.00 High: YES
Trig 3: Start: -2.00 Width: 1.00 High: YES
Trig 4: Start: -1.00 Width: 1.00 High: YES
Trig 5: Start: 0.00 Width: 1.00 High: YES
Fast polarization switching: NO
Switch point relative to range zero: 0.00 usec
Max PRF for Pulse Width 0: 2000.00 Hz. Bits: 1110
Max PRF for Pulse Width 1: 1000.00 Hz. Bits: 1101
Max PRF for Pulse Width 2: 800.00 Hz. Bits: 1011
Max PRF for Pulse Width 3: 500.00 Hz. Bits: 0111
PWINFO command enabled: YES
Default STC ranges Min: 4.00 Max: 75.00
Default STC shape Exp: 3.00 Inv: NO
Acquisition clock: 14.3900 MHz
DSP clock (U34): 40.0000 MHz
TTY secondary rate: 1200 Baud
Serial Interface rate: 9600 Baud
SCSI Bus ID: 4
Host Interface— 0: Parallel, 1: SCSI : 0
PipeLine— 0: Never, 1: User, 2: Always : 1
R2 Processing— 0: Never, 1: User, 2: Always : 1
Dynamic Angle Sync— 0: Never, 1: User, 2: Always : 1
Clutter MicroSuppression— 0: Never, 1: User, 2: Always : 1
of AUX Boards (-1: Dynamic): -1
of bits in A/D converters: 12
RVP-5 Emulation: NO

NOTE: This screen will only appear if the M entry is selected on the first screen.

These entries may vary from your system. For entry descriptions, refer to the RVP-6 manual.

> Q

Exiting Setups..

The proper order to exit from this screen and save the entries is to select S (save), followed by Q (quit).

Figure A-21. Maintenance Terminal Screen 20 of 21 (Second Screen).

Kavouras Inc. TDR 3000 Local Control – Status

Range	256
Mode	Velocity
Azimuth	25
Elevation	1.8
Pulse per Second	500
Drive Pulse Width	2.0000 μ s
Antenna Errors	
17 Comm Errors	

Press HOME to exit.

Figure A-22. Maintenance Terminal Screen 21 of 21.