NWS: EHB-6, Software Note 23
DoD: TO 31P1-4-108-617
FAA: EEM Modification Handbook 6345.1 CHG 48, Chap 44

CORRECTION OF HIGH/LOW CLUTTER MAP BOUNDARY ELEVATION FOR RADAR DATA ACQUISITION (RDA)

DOPPLER METEOROLOGICAL RADAR WSR-88D

DoD Distribution Statement A - Approved for public release; distribution is unlimited.

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FAA APPROVAL:

Signature Valid

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1. SUBJECT

Correction of High/Low Clutter Map Boundary Elevation for Radar Data Acquisition (RDA).

2. PURPOSE

This modification is required to accommodate the introduction of VCP 12 in RPG Software Build 5.0. This software note must be completed prior to the installation of RPG Software Build 5.0.

This adaptation change reduces the High/Low Clutter Map Boundary Elevation Value for the RDA to 1.65 degrees. This will ensure the low segment bypass map affects only the 0.5 and 1.5 degree elevation cuts, and the high segment bypass map affects only elevation cuts greater than 1.65 degrees. This change eliminates the possibility of the low segment bypass map affecting elevation cuts above 1.65 degrees. The Adaptable Parameter Working Group recommended approval of this adaptation change. This document is authorized by the NEXRAD Configuration Control Board under CCR 03-00109 (CHANGE CLUTTER TRANSITION ANGLE TO 1.65 DEGREES).

Due to the adaptation data change, site personnel are requested to generate new clutter bypass maps as soon as possible after the change is made.

For additional information concerning this document, contact the WSR-88D Hotline, Norman, OK; phone number: (800) 643-3363 or (405) 366-2980 or by e-mail at NEXRAD.Hotline@noaa.gov. An electronic copy of this document can be found at the following Internet address:
www.roc.noaa.gov/ssb/sysdoc/techman/tmlinks.asp

3. SITES AFFECTED

See ATTACHMENT 3 for site effectivity.

4. ESTIMATED COMPLETION DATE

This modification must be reported completed no later than 60 days after receipt of this kit.

5. EQUIPMENT AFFECTED

Radar Data Acquisition Group.

6. SPARES AFFECTED

Not applicable.

7. MODIFICATION ACCOMPLISHED BY

Site electronic systems analysts and/or electronics technicians will accomplish this task. One technician is required to perform these procedures.

8. MATERIALS REQUIRED

The following materials will be required.

Nomenclature	Qty NWS/DoD Single Channel	Qty NWS/FAA Redundant
Blank SCSI tapes	2	4

9. SOURCE OF MATERIALS

The materials listed in paragraph 8 will be supplied by the site.

10. SPECIAL TOOLS AND TEST EQUIPMENT REQUIRED

Not applicable.

11. TIME AND PERSONNEL REQUIRED

Work Phases	Work-hours
Coordination/Backup	1.0
Installation	4.5
Assembly	0.0
Operational Check	0.5
Total Work-hours	6.0

12. DOCUMENTS AFFECTED

Not applicable.

13. VERIFICATION STATEMENT

This modification was successfully installed at WSFO Tulsa, Oklahoma.

14. DISPOSITION OF REMOVED AND REPLACED PARTS/MATERIALS

Not applicable.

15. PROCEDURES

Perform the procedures in ATTACHMENT 1 and ATTACHMENT 2.

The NEXRAD site Unit Radar Committee (URC) chairperson must coordinate downtime with all dedicated users in accordance with the Memorandum of Agreement (MOA) for the Interagency Operation of the WSR-88D. An electronic copy of this document can be found at the following Internet address:
http://www.osf.noaa.gov/MOA.pdf

- ATTACHMENT 1, Correct Value of S139 in SPS Adaptation Data
- ATTACHMENT 2, Generating a Clutter Bypass Map using RDASOT

16. FAA DISTRIBUTION

This directive is distributed to selected offices and services within Washington headquarters, the William J. Hughes Technical Center, the Mike Monroney Aeronautical Center, regional Airway Facilities divisions, and Airway Facilities field offices having the following facilities/equipment: NXRAD.

17. CHANGES TO TABLE OF CONTENTS (FAA)

This chapter will be included in the next revision to the table of contents for FAA Order 6345.1, Electronic Equipment Modification Handbook - Next Generation Weather Radar (NEXRAD).

To obtain additional copies of this publication, contact Printing and Distribution Team, AMI-700B, at (405) 954-3771.

18. RECOMMENDATIONS FOR CHANGES (FAA)

Forward any recommendations for changes to this directive through normal channels to the National Airway Systems Engineering Division, AOS-200, Operational Support.

19. REPORTING INSTRUCTIONS

a. NWS

Report the completed modification using the Engineering Management Reporting System (EMRS) according to the instructions in NWS Instruction 30-2104, Maintenance Documentation, Part 4 and Appendix E. Include the following information on the EMRS report:

(1) An Equipment Code of RDA in Block 7.

(2) The appropriate serial number in Block 8.

(3) A Mod No. of S23 in Block 17a.

A sample EMRS report is provided as ATTACHMENT 5.

b. DoD

Update the AFTO Form 95 to show TCTO compliance. Report TCTO compliance in accordance with TO 00-20-2, Table 3-10, Rule 9.

c. FAA

Enter this directive number, date, and chapter number on the appropriate FAA Form 6032-1, Airway Facilities Modification Record.

Use the Maintenance Management System (MMS) application Log Equipment Modification (LEM) function to report the completion of this modification. Verify N is in the REP COD field to ensure the log entry will be upward reportable to the national data base for access by AOS. If not found in the LEM database, this change should be entered into the LEM fields as follows:

(1) FAC/SERV: NXRAD

(2) LOC/IDENT: 55 BA

(3) Short Name: SYS

(4) Order No.: 6345.1

(5) Chapter: 44

(6) Change: 48

d. DoD and FAA

Complete ATTACHMENT 4 and return the information to the ROC by one of the methods below:

(1) Mail Address: Program Branch, Configuration Management Team
WSR-88D Radar Operations Center
3200 Marshall Ave., Suite 101
Norman, Oklahoma 73072-8028

(2) Fax Number: (405) 366-6553
ATTN: Configuration Management Team

(3) E-mail Address: NEXRAD.CM.comments@noaa.gov

(4) Web Version: http://www.roc.noaa.gov/ssb/logistics/completion.asp

ATTACHMENT 1

CORRECT VALUE OF S139 IN THE SPS ADAPTATION DATA

Initial Conditions:

Ensure the RDA software is up and the RDA is operating.

S139 is the High/Low Clutter Map boundary for elevation. Change S139, High/Low Clutter Map Boundary Elevation, to a corrected value of 1.65 degrees using the following procedures:

Step	Action/Response	Comments
1	At the RPG, If not logged in, log in as a regular site user. <u>For FAA only</u>: Be on the active/controlling RPG channel.	
2	If there is not an HCI, open one. In a `Terminal` window, at the *user* prompt, enter: **hci &<Return>**	The HCI will be used to send out a free text message and to give control to the RDA.
3	Send out a free text message using the `Console Messages` window under the Applications column. Click on the **Console Messages** icon. Click on **ALL** Destinations under the **Other** category. Click on the `Outgoing Messages:` edit block to reposition the cursor. Enter the desired message using the following format: State: The xxxx radar will be down for approximately 5 hours for Software Note 23. Estimated time back on line will be ____ GMT. After clicking on the **Send** button, click on the **Close** button to close the `Console Messages` window.	Response in feedback line of the HCI will read: `Sending Console Message.`

ATTACHMENT 1 (Continued)

CORRECT VALUE OF S139 IN THE SPS ADAPTATION DATA

Step	Action/Response	Comments
4	Send out any other applicable free text messages, emails, or make phone calls to any other agencies that require notification of your site being off-line.	
5	In the RDA box, click on the **Control** button. The `RDA Control/Status` window is displayed.	
6	In the RDA Control section, click on **Enable Local (RDA),** and click on **Yes** in the `warning_popup` window. Close the `RDA Control/Status` Window.	Enables local control of the RDA.
	NOTE The following steps are performed at the RDA maintenance terminal (applications mode).	
7	<u>For NWS redundant and FAA only</u>: Be on the active/controlling RDA channel.	
8	At the RDA maintenance terminal, at the RDA Main Menu command line, enter: **RELC<Enter>**	RDA requests local control.
9	At the RDA Main Menu command line, enter: **ICRA<Tab>HIGH<Enter>**	Adaptation Control menu is displayed, allowing you to modify RDA adaptation data.
10	At the command line, enter: **SF<Enter>**	Select File for Modification menu is displayed.
11	At the command line, enter: **C<Enter>**	Program loads Current version of adaptation data from hard disk into memory, updates line 7 to indicate the file being modified is Current, then displays Adaptation Edit Control menu.
12	At the command line, enter: **S<Enter>**	Displays first page of the SPS Adaptation Data Change menu. Values can now be changed.

ATTACHMENT 1 (Continued)

CORRECT VALUE OF S139 IN THE SPS ADAPTATION DATA

Step	Action/Response	Comments
13	At the command line, enter: **F<Enter>** Repeat until page with line number 139, High/ Low Clutter Map Boundary Elevation, is displayed.	Forwards next page of adaptation data.
14	At the command line, enter: **C<spacebar>139<Enter>**	Line 139 will list the allowable range of values for the selected parameter. The cursor will be positioned on line 21 on the leftmost character of the data value.
15	Enter: **1.65<spacebar><Enter>**	The new value will be displayed in the menu area.
16	After changing the adaptation parameter, exit the menu. At the command line, enter: **A<Enter>**	Returns you to the Adaptation Edit Control menu.
17	At the command line, enter: **SO<Enter>**	Displays first page of the SOT Adaptation Data Change menu. Values can now be changed.
18	At the command line, enter: **C<spacebar>2<Enter>**	Line 2 will list the allowable range of values for the selected parameter. The cursor will be positioned on the leftmost character of the data value.
19	Enter: **0.9<spacebar><Enter>**	The new value will be displayed in the menu area.
20	At the command line, enter: **C<spacebar>3<Enter>**	This will list the allowable values for the selected parameter. The cursor will be positioned on the leftmost character of data display.
21	Enter: **1.8<spacebar><Enter>**	The new value will be displayed in the menu area.
22	At the command line, enter: **C<spacebar>4<Enter>**	This will list the allowable values for the selected parameter. The cursor will be positioned on the leftmost character of data display.

ATTACHMENT 1 (Continued)

CORRECT VALUE OF S139 IN THE SPS ADAPTATION DATA

Step	Action/Response	Comments
23	Enter: **2.4<spacebar><Enter>**	The new value will be displayed in the menu area.
24	At the command line, enter: **A<Enter>**	Returns you to Adaptation Edit Control menu.
25	At the command line, enter: **SC<Enter>**	Changes are saved to the Current version of Adaptation Data on the hard disk, the file being modified on line 7 is cleared, and the Adaptation Control menu is displayed.
	NOTE After the new values have been saved in Step 25, subsequent displays of elevation angles are rounded up to the nearest tenth of a degree. The actual High/Low Clutter Map Boundary Elevation retains its new value of 1.65 degrees, however.	
26	At the command line, enter: **CF<Enter>**	The Adaptation Control menu is displayed.
27	At the command line, enter: **C<Enter>**	RDA Main Menu is displayed.
28	At the command line, enter: **REST**	RDA is restarted with the new adaptation change.
29	Return the RDA to normal operation	
30	<u>For FAA only:</u> Be on the inactive/non-controlling RPG channel. If not logged in, log in as a regular user. Repeat steps 2 and 5.	

ATTACHMENT 1 (Continued)

CORRECT VALUE OF S139 IN THE SPS ADAPTATION DATA

Step	Action/Response	Comments
31	For FAA only: Be on the inactive/non-controlling RDA channel. Repeat steps 8 through 29.	
32	For NWS redundant only: Be on the inactive/non-controlling RDA channel. Repeat steps 9 through 29.	

ATTACHMENT 2

GENERATING A CLUTTER BYPASS MAP USING RDASOT

Initial Conditions:

Ensure the RDA is up, operating, and in local control.

Ideally, generation of a new clutter map should be accomplished at mid-afternoon on a sunny day when the lower atmosphere is well mixed. Weather conditions must be considered when selecting a time to accomplish generation of a new clutter map. Weather in your area at the time of clutter map generation should include the following conditions:

- No precipitation
- No heavy fog
- No anomalous propagation
- Moderate winds

Step	Action/Response	Comments
	NOTE These procedures are performed at the RDA maintenance terminal (applications mode).	
1	For FAA and NWS redundant: Be on the active/controlling RDA channel.	
2	Sites that do not have Archive Level II installed: proceed to Step 3. Sites that have Level II installed: At the command line, enter: **ARCH<Tab>D<Enter>**	Ensures the archive function is not active.
3	At the command line, enter: **STBY<Enter>**	Ensure that the RDA software is up. RDA must be in standby.
4	At the command line, enter: **TERP<Tab>***password***<Enter>**	Terminates the RDA application software.
5	For NWS and DoD: Click on the system console to make it the active screen.	System console mode is displayed.

ATTACHMENT 2 (Continued)

GENERATING A CLUTTER BYPASS MAP USING RDASOT

Step	Action/Response	Comments
6	For FAA only: Press **<Shift><Port>** simultaneously	System Console mode is displayed.
7	At the `*` prompt, enter: **LO COPY32<Enter>**	Loads COPY 32
8	At the `*` prompt, enter: **ST<Enter>**	
9	At the `COPY32>` prompt, enter: **COPY RDABYPAS.DAT,RDABYPAS.OLD<Enter>**	Copies the existing clutter bypass map in case of problems.
10	At the `COPY32>` prompt, enter: **END<Enter>**	Closes COPY32.
11	At the `*` prompt, enter: **RDASOT<Enter>**	RDASOT main menu appears.
12	Redundant sites only: enter: **1<Enter>** to select FULL mode.	Selects FULL mode for this procedure at redundant sites.
13	At the `RDASOTXX:` prompt, enter: **3<Enter>**	RDASOT Calibration menu appears
14	At the `RDASOTXX:` prompt, enter: **1<Enter>**	CLUTRMAP Test Control menu appears.
15	At the `CLUTRMAP:` prompt, enter: **1<Enter>**	There is only one subtest for clutter bypass map generation. There is no need to select any other subtests.

ATTACHMENT 2 (Continued)

GENERATING A CLUTTER BYPASS MAP USING RDASOT

Step	Action/Response	Comments
16	When the following message appears: `CLUTRMAP: HAS RDASC BEEN STARTED AND PUT IN STANDBY STATE?` At the `CLUTRMAP:` prompt, enter: **Y<Enter>**	The Clutter Map Control menu will appear.
17	At the `CLUTRMAP:` prompt, enter: **2<Enter>**	Starts the clutter bypass map generation.
	NOTE The Clutter Bypass Map generation will take approximately 2 to 2.5 hours to complete. Once map generation is completed, the following message appears: CLUTRMAP: DO YOU WISH TO UPDATE FILE WITH NEW CLUTTER MAP?	
18	At the `CLUTRMAP:` prompt, enter: **Y<Enter>**	The new clutter bypass map is stored on disk in file RDABYPAS.DAT.
19	Terminate RDASOT by entering a series of **0<Enter>** at the RDA System Console.	
20	Take a blank SCSI tape and turn the write protect arrow to OFF. Insert the blank SCSI tape in the SCSI tape drive and slide the lever (or turn the lever, if older drive) to secure the tape.	Ensure tape is secured in SCSI tape drive.
	NOTE If the SCSI tape drive has not been cleaned recently, perform the 28-day PMI to clean the drive.	
21	At the RDA System console, at the `*` prompt, enter: **BACKFILE CON:<Enter>** This may take several seconds	Loads the backup utility into memory and starts the program. Allows the manual selection of files.

ATTACHMENT 2 (Continued)

GENERATING A CLUTTER BYPASS MAP USING RDASOT

Step	Action/Response	Comments
22	At the BACKUP> prompt, enter: **-.-<Enter>** **!EXCLUDE UNPACK.CSS<Enter>** **./<Enter>**	Backup process begins. This process could take up to 30 minutes.
23	When the following message appears: `End of Task 0` The backup is complete. Remove the SCSI tape from the SCSI tape drive, and label the tape RDA Build 10.3 Backup. Include the following the following information on the label: - Current Date - Site ID - Channel # Turn write protect arrow to SAFE.	Tape is a backup of the system with new adaptation data and clutter maps. Store tape in a safe but accessible location. The tape should be accessible in case the software must be reloaded.
24	Take a second blank SCSI tape and turn the write-protect arrow to OFF. Insert the blank SCSI tape in the tape drive and slide the lever (or turn the lever, if older drive) to secure the tape.	Ensures tape is secured in the SCSI tape drive.
25	At the RDA System console, at the `*` prompt, enter: **BACKFILE<Enter>**	Loads the backup utility into memory and starts the program. This backs up specific RDA files.
26	When the following message appears: `End of Task 0` The backup is complete. Remove the SCSI tape from the SCSI tape drive. Label the tape RDA Build 10.3, ROC Backup. This tape will be returned to the ROC. Include the following information on the label: - Current date - Site ID - Channel # Turn the write protect arrow to SAFE.	Tape is a backup of pertinent RDA files.

ATTACHMENT 2 (Continued)

GENERATING A CLUTTER BYPASS MAP USING RDASOT

Step	Action/Response	Comments
27	Send the RDA tape(s) labeled RDA Build 10.3, ROC Backup to the following address: Radar Operations Center Configuration Management 3200 Marshall Ave. Norman, OK 73072-8028	
28	At the * prompt, enter: **RDAUP<Enter>**	Starts up the RDA software.
29	For NWS and DoD only: Once the RDA logo/banner is displayed, click on the applications window to make it the active screen. Wait for the screen to refresh.	Application software is displayed.
30	For FAA only: Once the RDA logo/banner is displayed, press the **<Shift><Port>** keys simultaneously. Wait for the screen to refresh.	Application software is displayed.
31	For FAA sites with RMS installed only: At the command line, enter: **RELC<Enter>**	Transfers control.
32	If Archive II is installed, do the following: At the command line, enter: **ARCH<Enter>**	Restarts Archive II.
33	For FAA redundant sites only: Skip to Step 59.	
34	For NWS redundant sites only: Skip to Step 45.	
35	For NWS single-channel sites only: At the active/controlling RDA maintenance terminal, wait for STAT to go to STBY. On the command line, enter: **OPER<Enter>**	This turns the RDA to Operate mode, and the antenna should start rotating.

ATTACHMENT 2 (Continued)

GENERATING A CLUTTER BYPASS MAP USING RDASOT

Step	Action/Response	Comments
36	At the command line, enter: **ENRC<Enter>**	Control of the radar is transferred back to the RPG
37	At the RPG HCI, click on the **Bypass Map Editor**.	Opens `Clutter Bypass Map Editor` window.
38	Click on the padlock and select **URC**, then enter: *password***<Return>** Click on the **Continue** button in the `warning` popup window.	Unlocks the `Clutter Bypass Map Editor` window
39	Click on the **Request** button.	Requests RDA bypass map.
40	Wait for the following message to appear on the status line of the main RPG HCI: `Requested Clutter Filter Bypass Map is Available.` Proceed to the next step.	Confirms RDA bypass map received.
41	Click on the **LOAD BASELINE** button.	Loads baseline RDA clutter bypass maps.
42	Click on the **SAVE** button and answer **Yes** to the `warning_popup` window.	Saves the baseline clutter map to the edited map.
43	Click on **Download**, and answer **Yes** to the `warning_popup` window.	Downloads the map to the RDA, and sends the map to the inactive RPG channel.
44	Click on **Close**. This ends the procedure for NWS single-channel sites.	Closes the window.
45	<u>For NWS redundant sites only</u>: At the RPG HCI, in the RPG box, click on **STATUS.**	Opens `RPG Status` window
46	In the Search box, enter: **Bypass<Return>**	Search for Bypass in status log.

ATTACHMENT 2 (Continued)

GENERATING A CLUTTER BYPASS MAP USING RDASOT

Step	Action/Response	Comments
47	Check the System Log Messages to verify the RDA has sent the new clutter bypass map to the RPG.	
48	At the inactive/non-controlling RDA channel, at the command line, enter: **CONC<Tab>***password***<Enter>** The default password is PINKY.	Makes the inactive channel the active/ controlling channel.
49	At the RPG HCI, click on the **Bypass Map Editor**.	Opens `Clutter Bypass Map Editor` window.
50	Click on the padlock and select **URC**, then enter: *password***<Return>** Click on the **Continue** button in the `warning` popup window.	Unlocks `Clutter Bypass Map Editor` window.
51	Click on the **LOAD BASELINE** button.	Loads the baseline clutter bypass map generated.
52	Click on the **SAVE** button, and answer **Yes** to the `warning_popup` window.	Updates the edited clutter bypass map.
53	Click on the **Down Load** button. Answer **No** to popup window on whether to edit. Answer **Yes** to next popup window to download.	Sends new clutter bypass map.
54	At the active/controlling RDA terminal, at the command line, enter: **NONC<Tab>***password***<Enter>** The default password is PINKY.	The inactive/non-controlling channel becomes the active channel.
55	Repeat steps 21 through 27.	Backs up files on the now inactive channel.
56	Close window.	Closes the `Clutter Bypass Map Editor` window.

ATTACHMENT 2 (Continued)

GENERATING A CLUTTER BYPASS MAP USING RDASOT

Step	Action/Response	Comments
57	At the active/controlling RDA maintenance terminal, wait for STAT to go to `STBY`. On the command line, enter: **OPER<Enter>**	This turns the RDA to Operate mode, and the antenna should start rotating.
58	At the command line, enter: **ENRC<Enter>** This ends the procedure for NWS redundant sites.	Control of the radar is transferred back to the RPG
59	<u>For FAA redundant sites only</u>: At the RDA maintenance terminal, wait for the `STAT` to go to `STBY`. On the command line, enter: **ENRC<Return>**	Returns control of the radar to the RPG.
60	On the active/controlling channel RPG HCI, click on **Bypass Map Editor**.	Opens `Clutter Bypass Map Editor` window.
61	Click on the padlock and select **URC**, then enter: *password***<Return>** Click on the **Continue** button in the `warning` popup window.	Unlocks the `Clutter Bypass Map Editor` window
62	Click on the **Request** button.	Requests RDA bypass map.
63	Wait for the following message to appear on the status line of the main RPG HCI: `Requested Clutter Filter Bypass Map is Available.` This message may only appear momentarily. In the RPG box, click the **Status** button to verify the message appears in the system message log.	Confirms RDA bypass map received.

ATTACHMENT 2 (Continued)

GENERATING A CLUTTER BYPASS MAP USING RDASOT

Step	Action/Response	Comments
64	Click on the **LOAD BASELINE** button.	Loads baseline RDA clutter bypass maps.
65	Click on the **SAVE** button and answer **Yes** to the `warning_popup` window.	Saves the baseline clutter map to the edited map.
66	Click on **Download**, and answer **Yes** to the `warning_popup` window.	Downloads the map to the RDA, and sends the map to the inactive RPG channel.
67	Click on **Close**.	Closes the window.
68	Be on the inactive/non-controlling RPG channel. If there is not an HCI, open one. In a `Terminal` window, at the *user*: prompt, enter: **hci &<Return>**	
69	In the RPG box, click on the **Control** button.	Opens the `RPG Control` window.
70	Under the `Restart` column, click on the **All Tasks** button. Answer Yes to the `warning_pupup` window.	Restarts all RPG tasks.
71	Click on **Close**.	Closes the window.
72	Wait until the `State` and `Mode` change to `OPERATE`, then select the **Control** button in the RDA box.	Opens the `RDA Control/Status` window.
73	Click on the padlock, and select the **URC** button. Enter: *password***<Return>**	Unlocks the `RDA Control/Status` window.
74	Under `Redundant Control`, click on the **Controlling** button under `Local Channel`. Answer **Yes t**o the `warning_popup window.`	Makes the inactive channel the controlling channel.
75	Click on **Close**.	Closes the window.
76	Click on **Bypass Map Editor**.	Opens `Clutter Bypass Map Editor` window.

ATTACHMENT 2 (Continued)

GENERATING A CLUTTER BYPASS MAP USING RDASOT

Step	Action/Response	Comments
77	Click on the padlock, and select **URC**. Enter: *password***<Return>** Click on the **Continue** button in the `warning` popup window.	Unlocks the `Clutter Bypass Map Editor` window.
78	Repeat steps 64 through 67.	
79	On the inactive/non-controlling RPG channel, repeat steps 72 through 75.	
80	Under the `RDA State` column, click on the **Operate** button, and answer **Yes** to the `warning_popup` window.	This turns the RDA to Operate mode, and the antenna should start rotating.
81	Click on **Close**.	Closes the window.
82	On the inactive/non-controlling RDA, repeat steps 21 through 27.	Backs up files on the now inactive channel.

ATTACHMENT 3

EFFECTIVITY

NWS

NEXRAD Site Name	City, ST	EQP	SID	ORG Code
	Eastern Region			
ALBANY	EAST BERNE, NY	RDA	ENX	WN9518
BINGHAMTON	BINGHAMTON, NY	RDA	BGM	WN9515
BOSTON	TAUNTON, MA	RDA	BOX	WN9509
BROOKHAVEN	UPTON, NY	RDA	OKX	WN9912
BUFFALO	BUFFALO, NY	RDA	BUF	WN9528
BURLINGTON	COLCHESTER, VT	RDA	CXX	WN9617
CARIBOU	HOULTON, ME	RDA	CBW	WN9712
CHARLESTON, SC	GRAYS, SC	RDA	CLX	WN9208
CHARLESTON, WV	CHARLESTON, WV	RDA	RLX	WN9414
CINCINNATI	WILMINGTON, OH	RDA	ILN	WN9710
CLEVELAND	CLEVELAND, OH	RDA	CLE	WN9524
COLUMBIA	WEST COLUMBIA, SC	RDA	CAE	WN9310
GREER	GREER, SC	RDA	GSP	WN9312
MOREHEAD CITY	NEWPORT, NC	RDA	MHX	WN9307
NORFOLK	WAKEFIELD, VA	RDA	AKQ	WN9952

ATTACHMENT 3 (Continued)

EFFECTIVITY

NEXRAD Site Name	City, ST	EQP	SID	ORG Code
PHILADELPHIA	FORT DIX, NJ	RDA	DIX	WN9950
PITTSBURGH	CORAOPOLIS, PA	RDA	PBZ	WN9917
PORTLAND, ME	GRAY, ME	RDA	GYX	WN9938
RALEIGH/DURHAM	CLAYTON, NC	RDA	RAX	WN9306
ROANOKE	ROANOKE, VA	RDA	FCX	WN9954
STATE COLLEGE	STATE COLLEGE, PA	RDA	CCX	WN9925
STERLING	STERLING, VA	RDA	LWX	WN9931
WILMINGTON	SHALLOTTE, NC	RDA	LTX	WN9301
	Southern Region			
ALBUQUERQUE	ALBUQUERQUE, NM	RDA	ABX	WP9365
AMARILLO	AMARILLO, TX	RDA	AMA	WP9363
ATLANTA	PEACHTREE CITY, GA	RDA	FFC	WP9219
AUSTIN/SAN ANTONIO	NEW BRAUNFELS, TX	RDA	EWX	WP9253
BIRMINGHAM	ALABASTER, AL	RDA	BMX	WP9957
BROWNSVILLE	BROWNSVILLE, TX	RDA	BRO	WP9250
CORPUS CHRISTI	CORPUS CHRISTI, TX	RDA	CRP	WP9251
DALLAS/FT WORTH	FORT WORTH, TX	RDA	FWS	WP9259

ATTACHMENT 3 (Continued)

EFFECTIVITY

NEXRAD Site Name	City, ST	EQP	SID	ORG Code
EL PASO	SANTA TERESA, NM	RDA	EPZ	WP9270
HOUSTON	DICKINSON, TX	RDA	HGX	WP9935
JACKSON/BRANDON, MS	BRANDON, MS	RDA	DGX	WP9235
JACKSONVILLE	JACKSONVILLE, FL	RDA	JAX	WP9206
KEY WEST	BOCA CHICA KEY, FL	RDA	BYX	WP9201
KNOXVILLE	MORRISTOWN, TN	RDA	MRX	WP9325
LAKE CHARLES	LAKE CHARLES, LA	RDA	LCH	WP9240
LITTLE ROCK	NORTH LITTLE ROCK, AR	RDA	LZK	WP9340
LUBBOCK	LUBBOCK, TX	RDA	LBB	WP9933
MELBOURNE	MELBOURNE, FL	RDA	MLB	WP9204
MEMPHIS	MILLINGTON, TN	RDA	NQA	WP9334
MIAMI	MIAMI, FL	RDA	AMX	WP9918
MIDLAND/ODESSA	MIDLAND, TX	RDA	MAF	WP9265
MOBILE	MOBILE, AL	RDA	MOB	WP9223
NASHVILLE	OLD HICKORY, TN	RDA	OHX	WP9327
NORMAN	MIDWEST CITY, OK	RDA	TLX	WP9921
NORTHEAST ALABAMA	HYTOP, AL	RDA	HTX	WP9914
SAN ANGELO	SAN ANGELO, TX	RDA	SJT	WP9263

ATTACHMENT 3 (Continued)

EFFECTIVITY

NEXRAD Site Name	City, ST	EQP	SID	ORG Code
SHREVEPORT	SHREVEPORT, LA	RDA	SHV	WP9248
SLIDELL	SLIDELL, LA	RDA	LIX	WP9919
TALLAHASSEE	TALLAHASSEE, FL	RDA	TLH	WP9214
TAMPA	RUSKIN, FL	RDA	TBW	WP9961
WESTERN ARKANSAS	CHAFFEE RIDGE, AR	RDA	SRX	WP9356
TULSA	INOLA, OK	RDA	INX	WP9356
Central Region				
ABERDEEN	ABERDEEN, SD	RDA	ABR	WR9659
BISMARCK	BISMARCK, ND	RDA	BIS	WR9764
CHEYENNE	CHEYENNE, WY	RDA	CYS	WR9564
CHICAGO	ROMEOVILLE, IL	RDA	LOT	WR9969
DENVER	FRONT RANGE AP, CO	RDA	FTG	WR9469
DES MOINES	JOHNSTON, IA	RDA	DMX	WR9546
DETROIT	WHITE LAKE, MI	RDA	DTX	WR9954
DODGE CITY	DODGE CITY, KS	RDA	DDC	WR9451
DULUTH	DULUTH, MN	RDA	DLH	WR9745
FARGO/GRAND FORKS	GRAND FORKS, ND	RDA	MVX	WR9750

ATTACHMENT 3 (Continued)

EFFECTIVITY

NEXRAD Site Name	City, ST	EQP	SID	ORG Code
GOODLAND	GOODLAND, KS	RDA	GLD	WR9465
GRAND ISLAND	BLUE HILL, NE	RDA	UEX	WR9552
GRAND JUNCTION (RDA 2)	GRAND JUNCTION, CO	RDA	GJX	WR9476
GRAND JUNCTION (RDA 1)	GRAND JUNCTION, CO	RDA	GJX	WR9476
GRAND RAPIDS	GRAND RAPIDS, MI	RDA	GRR	WR9635
GREEN BAY	GREEN BAY, WI	RDA	GRB	WR9645
INDIANAPOLIS	INDIANAPOLIS, IN	RDA	IND	WR9438
JACKSON, KY	JACKSON, KY	RDA	JKL	WR9956
LA CROSSE	LA CROSSE, WI	RDA	ARX	WR9643
LINCOLN	LINCOLN, IL	RDA	ILX	WR9436
LOUISVILLE	FORT KNOX, KY	RDA	LVX	WR9423
MARQUETTE	NEGAUNEE, MI	RDA	MQT	WR9743
MILWAUKEE	DOUSMAN, WI	RDA	MKX	WR9965
MINNEAPOLIS	CHANHASSEN, MN	RDA	MPX	WR9658
NCL MICHIGAN	GAYLORD, MI	RDA	APX	WR9610
NORTH PLATTE	NORTH PLATTE, NE	RDA	LNX	WR9562
NORTHERN INDIANA	NORTH WEBSTER, IN	RDA	IWX	WR9534
OMAHA	VALLEY, NE	RDA	OAX	WR9553

ATTACHMENT 3 (Continued)

EFFECTIVITY

NEXRAD Site Name	City, ST	EQP	SID	ORG Code
PADUCAH	PADUCAH, KY	RDA	PAH	WR9957
PLEASANT HILL	PLEASANT HILL, MO	RDA	EAX	WR9446
PUEBLO	PUEBLO, CO	RDA	PUX	WR9464
QUAD CITIES	DAVENPORT, IA	RDA	DVN	WR9544
RAPID CITY	NEW UNDERWOOD, SD	RDA	UDX	WR9662
RIVERTON/LANDER	RIVERTON, WY	RDA	RIW	WR9576
SIOUX FALLS	SIOUX FALLS, SD	RDA	FSD	WR9651
SPRINGFIELD	SPRINGFIELD, MO	RDA	SGF	WR9440
ST LOUIS	WELDON SPRING, MO	RDA	LSX	WR9971
TOPEKA	TOPEKA, KS	RDA	TWX	WR9456
WICHITA	WICHITA, KS	RDA	ICT	WR9450
	Western Region			
BILLINGS	BILLINGS, MT	RDA	BLX	WT9677
BOISE	BOISE, ID	RDA	CBX	WT9681
SALT LAKE CITY (RDA 2)	SALT LAKE CITY, UT	RDA	MTX	WT9932
SALT LAKE CITY (RDA 1)	SALT LAKE CITY, UT	RDA	MTX	WT9932
CEDAR CITY (RDA 2)	CEDAR CITY, UT	RDA	ICX	CONCDC

ATTACHMENT 3 (Continued)

EFFECTIVITY

NEXRAD Site Name	City, ST	EQP	SID	ORG Code
CEDAR CITY (RDA 1)	CEDAR CITY, UT	RDA	ICX	CONCDC
ELKO (RDA 2)	ELKO, NV	RDA	LRX	WT9903
ELKO (RDA 1)	ELKO, NV	RDA	LRX	WT9903
EUREKA (BUNKER HILL)	EUREKA, CA	RDA	BHX	WT9594
FLAGSTAFF (RDA 2)	FLAGSTAFF, AZ	RDA	FSX	WT9375
FLAGSTAFF (RDA 1)	FLAGSTAFF, AZ	RDA	FSX	WT9375
GLASGOW	GLASGOW, MT	RDA	GGW	WT9768
GREAT FALLS	GREAT FALLS, MT	RDA	TFX	WT9950
LAS VEGAS	LAS VEGAS, NV	RDA	ESX	WT9386
LOS ANGELES	LOS ANGELES, CA	RDA	VTX	WT9295
MEDFORD (RDA 2)	MEDFORD, OR	RDA	MAX	WT9597
MEDFORD (RDA 1)	MEDFORD, OR	RDA	MAX	WT9597
MISSOULA (RDA 2)	MISSOULA, MT	RDA	MSX	WT9773
MISSOULA (RDA 1)	MISSOULA, MT	RDA	MSX	WT9773
PENDLETON	PENDLETON, OR	RDA	PDT	WT9688
YUMA (RDA 2)	YUMA, AZ	RDA	YUX	WT9278
YUMA (RDA 1)	YUMA, AZ	RDA	YUX	WT9278
PHOENIX	PHOENIX, AZ	RDA	IWA	WT9278

ATTACHMENT 3 (Continued)

EFFECTIVITY

NEXRAD Site Name	City, ST	EQP	SID	ORG Code
POCATELLO	SPRINGFIELD, ID	RDA	SFX	WT9578
PORTLAND, OR	PORTLAND, OR	RDA	RTX	WT9698
RENO (RDA 2)	NIXON, NV	RDA	RGX	WT9488
RENO (RDA 1)	NIXON, NV	RDA	RGX	WT9488
SACRAMENTO	DAVIS, CA	RDA	DAX	WT9914
SANTA ANA MTS	SANTA ANA MOUNTAINS, CA	RDA	SOX	WT9918
SAN DIEGO	SAN DIEGO, CA	RDA	NKX	WT9918
SAN FRANCISCO	LOS GATOS, CA	RDA	MUX	WT9933
SAN JOAQUIN VALY	HANFORD, CA	RDA	HNX	WT9389
SEATTLE	EVERETT, WA	RDA	ATX	WT9922
SPOKANE	SPOKANE, WA	RDA	OTX	WT9785
TUCSON	TUCSON, AZ	RDA	EMX	WT9274
	Miscellaneous			
NRC #2	KANSAS CITY, MO	RDA	NRCM7	WG9163
NRC #1	KANSAS CITY, MO	RDA	NRCM7	WG9163
NSSL (RDA/ONAN GEN/PDST)	NORMAN, OK	RDA	NORO2	MAG000
NWSHQ TESTBED (RDASIM)	SILVER SPRING, MD	RDA		WG9310

ATTACHMENT 3 (Continued)

EFFECTIVITY

NEXRAD Site Name	City, ST	EQP	SID	ORG Code
ROC FAA REDUNDANT (RDA 2)	NORMAN, OK	RDA	CRIO2	WG9410
ROC FAA REDUNDANT (RDA 1)	NORMAN, OK	RDA	CRIO2	WG9410
OSF ENGINEERING (XTMR)	NORMAN, OK	RDA		WG9430
OPEN SYSTEMS (ONAN GEN)	NORMAN, OK	RDA		WG9420
PRC (RDASIM/RPG)	RESTON, MD	RDA	PRCV2	WG9310
SHANGHAI, CHINA	SHANGHAI,	RDA		
TAIPEI, TAIWAN	TAIPEI,	RDA		
TRAINING CENTER #2 NWSTC	KANSAS CITY, MO	RDA	TTCM7	WB9612
TRAINING CENTER #1 NWSTC	KANSAS CITY, MO	RDA	TTCM7	WB9612

DoD

ALTUS AFB	FREDERICK, OK	RDA	FDR	FE4419
ANDERSEN AFB	ANDERSEN AFB, GU	RDA	UAM	FE5240
BEALE AFB	OROVILLE, CA	RDA	BBX	FE4686
CAMP HUMPHREYS	CAMP HUMPHREYS, KO	RDA	KSGR4	FI5294
CANNON AFB	FIELD, NM	RDA	FDX	FE4855
COLUMBUS AFB	GREENWOOD SPRINGS, MS	RDA	GWX	FE3022
DOVER AFB	ELLENDALE STATE FOREST, DE	RDA	DOX	FE4497

ATTACHMENT 3 (Continued)

EFFECTIVITY

NEXRAD Site Name	City, ST	EQP	SID	ORG Code
DYESS AFB	MORAN, TX	RDA	DYX	FE4661
EDWARDS AFB	BORON, CA	RDA	EYX	FE2805
EGLIN AFB	RED BAY, FL	RDA	EVX	FE2823
FT CAMPBELL	TRENTON, KY	RDA	HPX	FY4812
FT DRUM	MONTAGUE, NY	RDA	TYX	FY4846
FT HOOD	GRANGER, TX	RDA	GRK	FY4824
FT POLK	FT POLK, LA	RDA	POE	FY4825
FT RUCKER	ECHO, AL	RDA	EOX	FY4805
HOLLOMAN AFB	RUIDOSO, NM	RDA	HDX	FE4801
KADENA AB	KADENA AB, JA	RDA	ODNR5	FH5270
KEESLER AFB MNTC TRNG B	KEESLER AFB, MS	RDA	BIX	FE3010
KEESLER AFB MNTC TRNG A	KEESLER AFB, MS	RDA	BIX	FE3010
KUNSAN AB	KUNSAN AB, KO	RDA	KJKR4	FH5284
LAJES AB	SANTA BARBARA, AZR	RDA	PLAL3	FE4486
LAUGHLIN AFB	BRACKETVILLE, TX	RDA	DFX	FE3099
MAXWELL AFB	CARRVILLE, AL	RDA	MXX	FE3300
MINOT AFB	DEERING, ND	RDA	MBX	FE4528
MOODY AFB	SOUTH STOCKTON, GA	RDA	VAX	FE4830

ATTACHMENT 3 (Continued)

EFFECTIVITY

NEXRAD Site Name	City, ST	EQP	SID	ORG Code
ROBINS AFB	JEFFERSONVILLE, GA	RDA	JGX	FE2067
VANCE AFB	CHEROKEE, OK	RDA	VNX	FE3029
VANDENBERG AFB	ORCUTT, CA	RDA	VBX	FE4610

FAA

ANCHORAGE FAA (RDA 2)	KENAI, AK	RDA	AHG	6901AJ
ANCHORAGE FAA (RDA 1)	KENAI, AK	RDA	AHG	6901AJ
BETHEL FAA (RDA 2)	BETHEL, AK	RDA	ABC	690112
BETHEL FAA (RDA 1)	BETHEL, AK	RDA	ABC	690112
FAIRBANKS FAA (RDA 2)	FAIRBANKS, AK	RDA	APD	690178
FAIRBANKS FAA (RDA 1)	FAIRBANKS, AK	RDA	APD	690178
KAMUELA/KOHALA APT (RDA 2)	KAMUELA, HI	RDA	HKM	699235
KAMUELA/KOHALA APT (RDA 1)	KAMUELA, HI	RDA	HKM	699235
KING SALMON FAA (RDA 2)	KING SALMON, AK	RDA	AKC	690137
KING SALMON FAA (RDA 1)	KING SALMON, AK	RDA	AKC	690137
MIDDLETON ISLAND (RDA 2)	MIDDLETON ISLAND, AK	RDA	AIH	690140
MIDDLETON ISLAND (RDA 1)	MIDDLETON ISLAND, AK	RDA	AIH	690140
MOLOKAI FAA (RDA 2)	MOLOKAI, HI	RDA	HMO	699213

ATTACHMENT 3 (Continued)

EFFECTIVITY

NEXRAD Site Name	City, ST	EQP	SID	ORG Code
MOLOKAI FAA (RDA 1)	MOLOKAI, HI	RDA	HMO	699213
NOME FAA (RDA 2)	NOME, AK	RDA	AEC	690147
NOME FAA (RDA 1)	NOME, AK	RDA	AEC	690147
SAN JUAN FAA (RDA 2)	SAN JUAN, PR	RDA	JUA	69F362
SAN JUAN FAA (RDA 1)	SAN JUAN, PR	RDA	JUA	69F362
SITKA FAA (RDA 2)	BIORKA ISLAND, AK	RDA	ACG	690141
SITKA FAA (RDA 1)	BIORKA ISLAND, AK	RDA	ACG	690141
SOUTH KAUAI FAA (RDA 2)	SOUTH KAUAI, HI	RDA	HKI	699211
SOUTH KAUAI FAA (RDA 1)	SOUTH KAUAI, HI	RDA	HKI	699211
SOUTH SHORE FAA (RDA 2)	NAALEHU, HI	RDA	HWA	699201
SOUTH SHORE FAA (RDA 1)	NAALEHU, HI	RDA	HWA	699201

NWS: EHB-6, Software Note 23
DoD: TO 31P1-4-108-617
FAA: EEM Modification Handbook 6345.1 CHG 48, Chap 44

ATTACHMENT 4

CORRECTION OF HIGH/LOW CLUTTER MAP BOUNDARY ELEVATION FOR RADAR DATA ACQUISITION (RDA) COMPLETION FORM

DoD and FAA only will complete this form

Site Name: _____

Site Identifier: _____

Total Time to Complete this Modification Document: _____

Technician's Name(s): _____

Technician's Phone Number: _____

Date Completed: _____

Equipment Modified (SID) RPG _____ MSCF _____ (R)BDDS _____
FAA Only: RPG(2) _____

Problem(s) Encountered:

_____

_____

_____

_____

Upon completion of this form, return the information to the ROC using one of the four methods below:

1. Mailing Address: Program Branch, Configuration Management Team
   WSR-88D Radar Operations Center
   3200 Marshall Ave., Suite 101
   Norman, OK 73072-8028

2. FAX Number: (405) 366-6553
   ATTN: Configuration Management Team

3. E-mail Address: NEXRAD.CM.comments@noaa.gov

4. Web Version: http://www.roc.noaa.gov/ssb/logistics/completion.asp

ATTACHMENT 5

SAMPLE EMRS FORM

A26 Detail Form - ESCM2, SILVER SPRING, MD :: JOHN MERHI - Microsoft Internet Explorer

GENERAL INFORMATION

NEW RECORD | WFO* TBW | Document No.* TBW31223008

1. Open Date: 12/23/2003 | Open Time: 08:00 | 2. Op Initials: WSH | 3. Response Priority: ○ Immediate ○ Low ○ Routine ◉ Not Applicable | 4. Close Date: 12/23/2003 | Close Time: 13:00

5. Maintenance Description 413 characters left — RADAR, WSR-88D

Correction of High/Low Clutter Map Boundary Elevation for Radar Data Acquisition (RDA).

EQUIPMENT INFORMATION

6. Station ID*	7. Equipment Code	8. Serial Number	9. TM	10. AT	11. How Mal
TBW	RDA	AA361143	M	M	999

Alert: | Time Remaining: 5:00 (For Block 12 use only)

12. EQUIPMENT OPERATIONAL STATUS TIMES

a. Fully Operational		Partially Operational				Not Operational			
		b. Logistic Delay		c. All Other		d. Logistic Delay		e. All Other	
Hours	Minutes	Hours	Minutes	Hours	Minutes	Hours	Minutes	Hours	Minutes

13. PARTS USAGE and CONFIGURATION MANAGEMENT REPORTING

ASN	Vendor Part No. (New Part)	Serial Number (Old Part)	Serial Number (New Part)	New Row
				Delete Row

14. WORKLOAD INFORMATION

a. Routine		b. Non-Routine		c. Travel		d. Misc		e. Overtime	
Hours	Minutes	Hours	Minutes	Hours	Minutes	Hours	Minutes	Hours	Minutes
						5			

MISCELLANEOUS INFORMATION

15. Maintenance Comments 661 characters left

Corrected High/Low clutter map boundary elevation and generated a new clutter bypass map.

16. Tech Initials: GAF

17. SPECIAL PURPOSE REPORTING INFORMATION

a. Mod No.	b. Mod Act/Deact Date	c. Block C	d. Trouble Ticket No.	e. Block E
S23	12/23/2003			

Commit A26 | Place on Hold | Copy A26 | New A26 | Cancel

Done | Internet