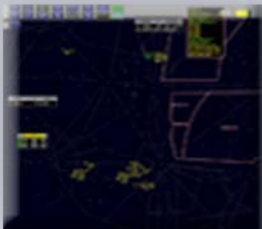




FAA Lesson Plan



En Route Stage 4 Radar Controller Training

H	DEPT	
JFK		
AAL321	60	
SWA123	150	
LGA		
N2234	340	
PHL		
UAL167	50	
N133A	120	
N12A	UFR	
N11A	0TP	

Instructor

R-Position Equipment Lesson 3



55055
V.1.06



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LESSON PLAN DATA SHEET

COURSE NAME: RADAR CONTROLLER TRAINING
COURSE NUMBER: 55055

LESSON TITLE: R-POSITION EQUIPMENT

DATE REVISED: 2014-04
VERSION: V.1.06

REFERENCES: JO 7110.65V, Air Traffic Control; TI 6110.100, En Route Automation Modernization (ERAM) Air Traffic Manual (ATM): R-Position User Manual; ERAM EDSM SRS 210.04 VIB1, En Route Automation Modernization (ERAM) En Route Display Management (EDSM) R-Position and General EDSM Requirements, Volume 1, Book 1; En Route Automation Modernization (ERAM) En Route Display Management (EDSM) Appendices for R-Position and General EDSM Requirements, Volume 1, Book 2; ERAM SIG 884, Hold View Issues Part 1; ERAM SIG 1380, Hold View Issues Part 2; ERAM SIG 1536, Beacon Code Display to Controllers - Situation Display; ERAM SIG 1493, Add Messaging Capability to AT Specialist Position

HANDOUTS: 55055-HO3, REFERENCE GUIDE AND PRACTICE EXERCISES

EXERCISES: YES

PRACTICE EXERCISE 1: R-POSITION CHI CHECKLIST, PAGE 64; REFER TO 55055-HO03.PDF.

PRACTICE EXERCISE 2: R-POSITION CHI CHECKLIST, PAGE 144; REFER TO 55055-HO03.PDF

LAB SCENARIOS ARE REQUIRED FOR THESE EXERCISES. EACH EXERCISE IS ESTIMATED TO TAKE 1 HOUR LAB TIME PER STUDENT.

END-OF-LESSON TEST: YES (REFER TO ELT03.PDF)

PERFORMANCE TEST: NONE

MATERIALS: NONE

OTHER PERTINENT INFORMATION: THIS LESSON IS BASED ON ERAM BUILD EAC1500. THE LESSON HAS BEEN REVIEWED AND REFLECTS CURRENT ORDERS AND MANUALS AS OF APRIL 2014.

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INTRODUCTION



The radar console is your primary tool. It is a complex piece of electronic equipment made up of several components. To properly display the required information, you need to understand the function and adjustment of each component.

Purpose

This lesson prepares you to operate the R-Position console by presenting information about the console equipment and how to use the functions to provide air traffic service.

INTRODUCTION *(Continued)*

Objectives



Objectives

At the end of this lesson, you will be able to:

1. Identify radar console hardware components and their functions
2. Identify R-Position Computer Human Interface (CHI) elements and their functions
3. Identify Map Display management features and attributes
4. Identify functions for customizing the Situation View Display
5. Explain how to access and manage Situation Display views



R-Position Equipment

2

 **NOTE:** Review the lesson objectives.

 **NOTE:** Direct students to Reference Guide: R-Position Keyboard and Function Keys in student handout 55055-HO3. Explain that students may want to refer to this reference guide throughout this and the next lesson.

R-POSITION KEYBOARD

R-Position Keyboard

TI 6110.100,
par. 1.3.2



⦿ The R-Position keyboard:

- Is used to interface with, and input data to, the primary and backup systems
- Is not in a fixed position - can be positioned according to controller preference
- Cannot be exchanged for an RA- or A-Position keyboard

NOTE: Keys with a dot centered on the slope require you to simultaneously press the key and the MULTI-FUNC key.

👉 **NOTE:** Explain why some keys are orange and some are raised.

R-POSITION KEYBOARD (Continued)

Function Keys

TI 6110.100,
pars. 1.3.2
and 1.3.2.2;
ERAM EDSM SRS
210.04 V1B1, par.
3.2.3.2.1.2.1.5.1



⦿ Function keys

- 24 hard-labeled keys
- Used to enter the most commonly used commands
- Immediate action keys invoke the associated action when pressed; actions mapped to them do not have a typed equivalent

Examples:

- CLEAR: clears the content of the Message Composition Area
 - RECALL: recalls previous commands entered into the system to be redisplayed in the Preview Area
 - MULTI-FUNC plus PSET MAP: center map on adapted location
 - MULTI-FUNC plus MAN MAP: center map on trackball cursor
 - MULTI-FUNC plus A/B: switches channels
 - MULTI-FUNC plus F1: switches to EBUS
 - MULTI-FUNC plus SISO: displays "SO" in Preview Area
 - HOME: Positions trackball cursor on a pick area or to an adapted home position
- Non-immediate action keys can be adapted to correspond either to part of a command or to a complete command.

RADAR POSITION KEYBOARD (Continued)

Category Keys

TI 6110.100,
par. 1.3.2.3



⦿ Category keys

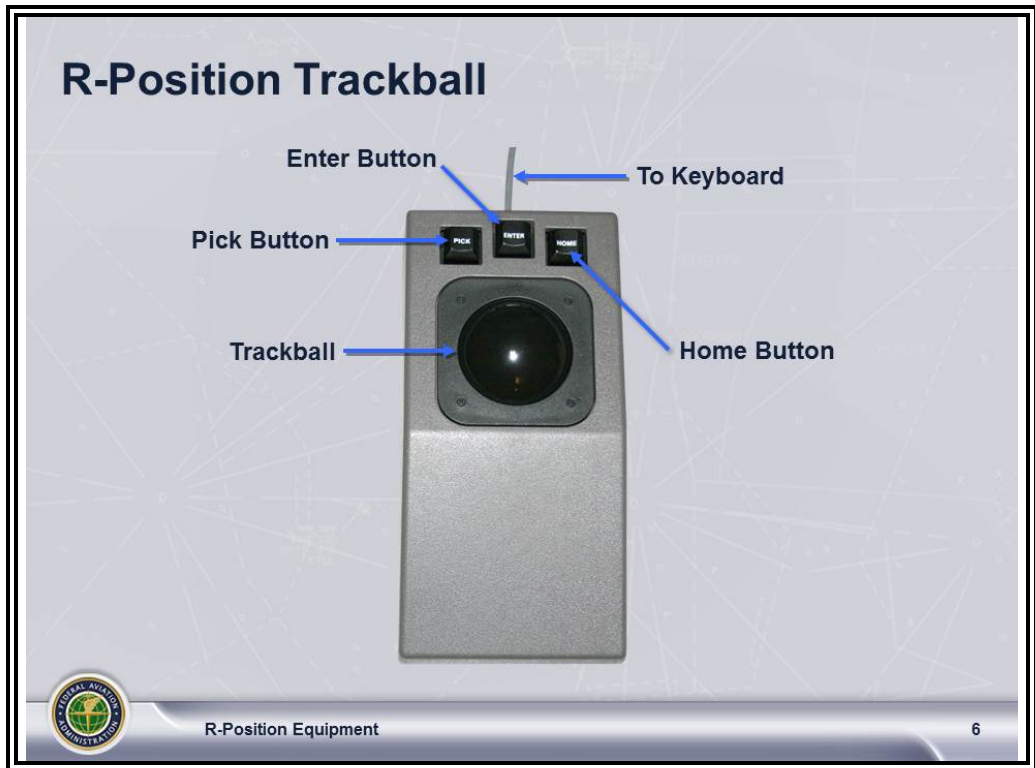
- Six keys can be adapted to be category keys.
- Pressing a category key brings up a list of commands (category function menus).

👉 **NOTE:** Explain how keys open category selection areas.

R-POSITION TRACKBALL

R-Position Trackball

TI 6110.100,
par. 1.3.1;
ERAM EDSM SRS
210.04 V1B1,
pars. 3.2.2.6.2.3.1
and 3.2.2.6.2.3.2



- ⦿ The R-Position Trackball is used to:
 - Select items from displays and menus.
 - Initiate actions.
 - Move display objects.
 - Center the Situation Display on a geographic position when used in conjunction with the keyboard.

R-POSITION TRACKBALL *(Continued)*

R-Position Trackball (Cont'd)

TI 6110.100,
pars. 1.3.1, 4.6;
ERAM EDSM SRS
210.04 V1B1,
par. 3.2.3.2.1.2.6

- ⊙ The R-Position Trackball consists of:
 - Trackball
 - Controls a movable cursor
 - PICK button
 - Selects display objects to be used in commands
 - When pressed, a trackball pick symbol (upside down triangle) is echoed into the R-Position Message Composition Area (MCA) Preview Area
 - Can select points and objects without entering a command
 - Decrements settings on the display (e.g., range, brightness)
 - ENTER button
 - Selects display objects to be used in commands
 - When pressed, a trackball pick symbol (upside down triangle) is echoed into the R-Position MCA Preview Area **and** command closure occurs
 - Equivalent to pressing the trackball PICK button and the keyboard ENTER key
 - Used to increment settings on the display (e.g., range, brightness)
 - Used for implied flight plan readout
 - HOME button
 - Positions the trackball cursor in the Velocity Vector pick area
 - If held down, moves the trackball cursor to a cursor location with each successive trackball ENTER in the following sequence: Range pick area, adapted trackball Home position, Velocity Vector pick area

 **NOTE:** *Identify the adapted trackball home position for your facility.*

R-POSITION TRACKBALL (Continued)

Map Offset

TI 6110.100,
par. 6.5;
ERAM EDMS SRS
210.04 V1B1,
pars. 3.2.2.6.2.3.1
and 3.2.2.6.2.4



- ⦿ The Trackball is used with the keyboard to center the Situation Display on the user-specified geographic position. To specify a map offset:
 - Position the trackball cursor on the Situation Display map.
 - Press the MULTI-FUNC and MAN MAP function keys simultaneously.
- ⦿ To offset the Situation Display to an adapted geographic location, press the MULTI-FUNC and PSET MAP function keys simultaneously.

*Click twice to
reposition the
viewpoint.*

KEYPAD SELECTION DEVICE (KSD)

Keypad Selection Device

TI 6110.100,
par. 1.3.3



- ⊙ The Keypad Selection Device (KSD) may be located anywhere on the radar console or the corresponding RA console, and allows quick access to functions on the R-Position console without using the trackball or keyboard.
- ⊙ The KSD has:
 - Nine filter keys:
 - Locally adapted
 - Used to select/suppress display filter options
 - Four vector/range keys:
 - Increase/decrease Situation Display range
 - Increase/decrease velocity vector length

LOUDSPEAKER PANEL ASSEMBLY

Loudspeaker Panel Assembly

TI 6110.100,
par. 1.3.4



⦿ The Loudspeaker Panel Assembly is located above the Situation Display.

⦿ The Loudspeaker Panel Assembly consists of:

- Switches used to turn the following on/off:
 - R-Position console
 - Voice Switching and Control System (VSCS)
 - Chime feature

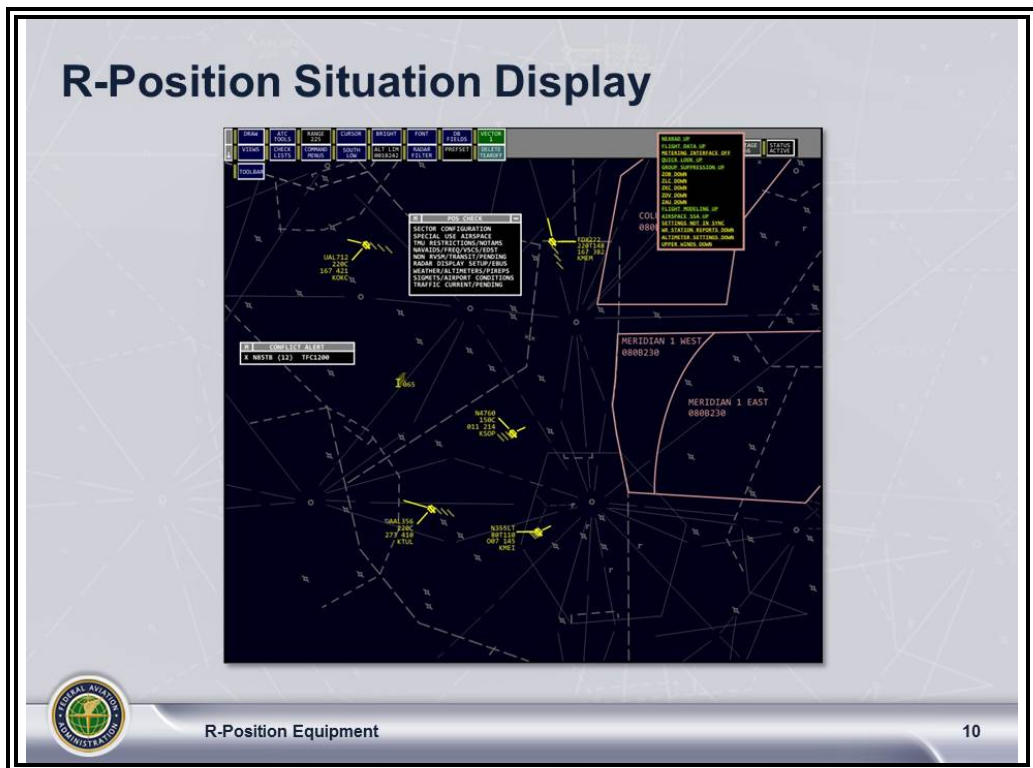
NOTE: Power switches are shielded to prevent inadvertent selection.

- Speakers used for:
 - Ground-to-Ground (G/G) interphone communications (one speaker)
 - Air-to-Ground (A/G) radio communications (one speaker)
- Volume controls used for loudspeakers, headsets, and chimes

R-POSITION SITUATION DISPLAY

R-Position Situation Display

TI 6110.100,
par. 1.4



- ⦿ The Situation Display is used to display the geographic area of jurisdiction being controlled by the sector team, including sector boundaries, airways, fixes, airports, targets, track data, weather, and other selected information.
- ⦿ The system gives you the ability to personalize the presentation of data and save the settings in personal Preference Sets (Pref Sets) with:
 - Customizable toolbars
 - Tear-off buttons and sublists that enable efficient placement of frequently-used functions and features
 - Interactive views; for example, the Hold View is used to quickly generate hold commands
 - Macros, which are user-stored frequently-used commands
 - An alarm to indicate input errors

REVIEW: R-POSITION HARDWARE

Review



Response Item

The function of the trackball HOME key is to _____.

- A. control the movement of the trackball cursor
- B. return the trackball cursor to the adapted position
- C. activate the trackball cursor for the desired function
- D. select objects under the trackball cursor



R-Position Equipment

[Click to Show Answer](#)

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SLIDE ANSWER: B

REVIEW: R-POSITION HARDWARE *(Continued)*

Review



Response Item

Which of the following is NOT a function of the Keypad Selection Device (KSD)?

- A. Select/inhibit filter options
- B. Activate category keys
- C. Adjust radar display range
- D. Adjust velocity vector length



R-Position Equipment

[Click to Show Answer](#)

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SLIDE ANSWER: B

REVIEW: R-POSITION HARDWARE *(Continued)*

Review



Response Item

The R-Position console power switch is located on the _____.

- A. Master Toolbar
- B. Keypad Selection Device (KSD)
- C. Loudspeaker Panel Assembly
- D. Panel Control Area



R-Position Equipment

[Click to Show Answer](#)

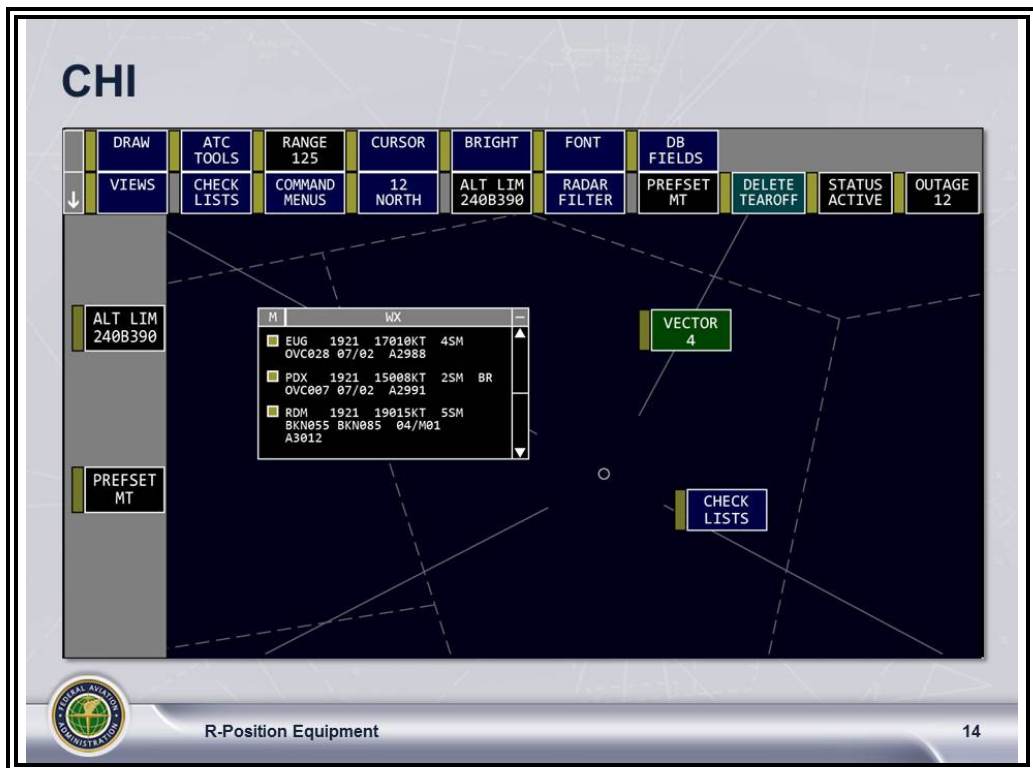
13

SLIDE ANSWER: C

R-POSITION CHI

Buttons

TI 6110.100,
par. 2.1



⦿ The R-Position Computer Human Interface (CHI) consists of:

- Buttons
- Toolbars
- Tear-offs
- Views

👉 **NOTE:** Elaborate on buttons, toolbars, tear-offs, and views, pointing out each in the slide. Note that each item is discussed in more detail as the lesson proceeds.

⦿ You interface with the computer by using buttons that are either:

- Grouped on toolbars
- Strategically placed on the display by you (tear-off buttons)

⦿ Color-coding defines the functions and attributes of each button's associated view or activity.

Continued on next page

R-POSITION CHI (Continued)

Buttons (Cont'd)

TI 6110.100,
pars. 2.1.1, 2.1.2,
2.3;
ERAM SIG 1536



Button Types and Colors			
Name	Background Color	Sample Button	Meaning
Menu Buttons	Blue		The Toolbar menu is closed.
	Burnt Coral		The Toolbar menu is open.
Toggle Buttons	Black		The view or feature is not currently displayed.
	Gray		The view or feature is currently displayed.
Increment/ Decrement Buttons	Green		Increments and decrements the indicated feature.
Command Buttons	Teal		Command button is deactivated.
	Burnt Coral		Command button is activated.
Press and Hold Buttons	Black with Gray cutout		Data not displayed, button not depressed.
	Gray with Black cutout		Data is displayed, button is depressed.

- ⊙ The system supports five types of interactive buttons:
 - Menu buttons display/suppress a toolbar menu.
 - Blue = The toolbar menu is closed.
 - Burnt Coral = The toolbar menu is open.
 - Toggle buttons display/suppress data on the display.
 - Black = The view or feature is not currently displayed.
 - Gray = The view or feature is currently displayed.
 - Increment/decrement buttons set the value of an attribute that is associated with the button (e.g., font size, brightness, length).
 - Green = Increments or decrements the indicated feature.
 - Command buttons start the composition of a command.
 - Teal = The command button is deactivated.
 - Burnt Coral = The command button is activated (and command composition can continue).

Continued on next page

R-POSITION CHI *(Continued)*

Buttons (Cont'd)

TI 6110.100,
pars. 2.1.1, 2.1.2,
2.3

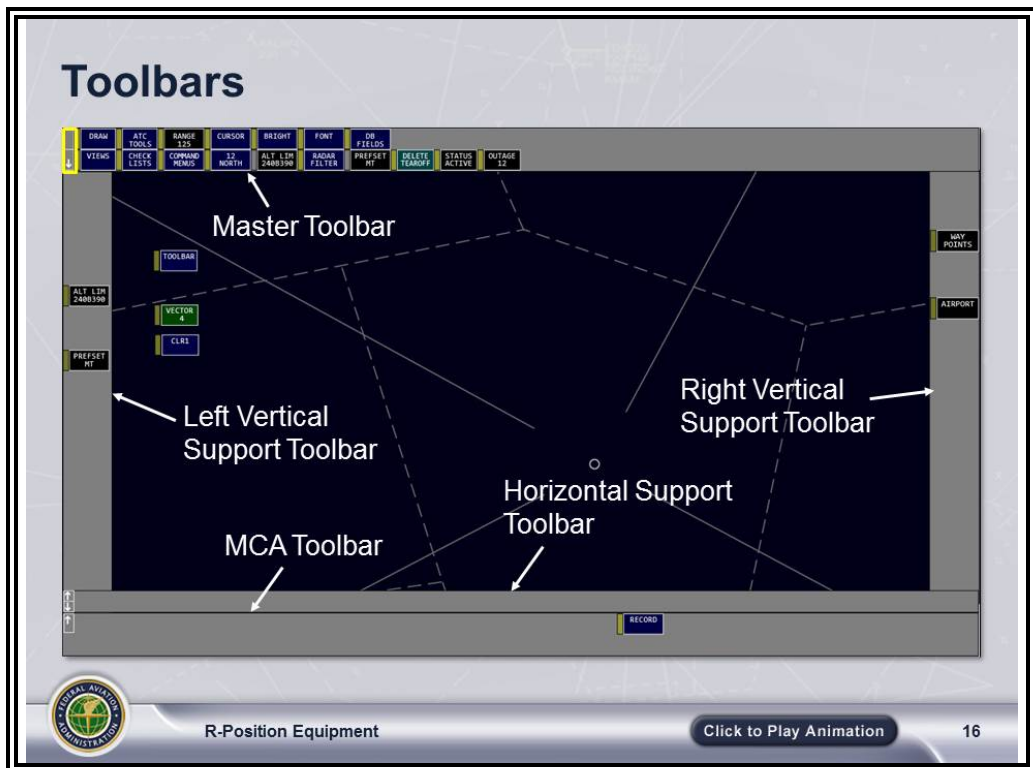
- Press and hold buttons display/suppress data on the display as long as the button is clicked and held (depressed).
 - Black with gray cutout = Data is not displayed; the button is not depressed.
 - Gray with black cutout = Data is displayed; the button is depressed.
- ⊙ Buttons that can be torn-off (copied) have a gold bar on the left side.
 - Tear-offs can be placed on other toolbars (left, right, horizontal, or MCA) or on the Situation Display.
 - Use the gold bar to create and/or move tear-offs.
 - A copy of the button is torn off; the main button remains on the toolbar.
 - A button can be torn-off only once.
 - When torn off, the gold bar turns grey on the Master Toolbar.
 - Both a button and its tear-off are functional.
- ⊙ Some sublists and list entries can also be torn-off from Situation Display views.
 - Sublists or list entries that can be torn-off are designated with a gold bar.
 - Tear-off sublists and list entries cannot be placed on a toolbar.

NOTE: We'll discuss more about sublists later in this lesson.

R-POSITION CHI (Continued)

Toolbars

TI 6110.100,
par. 2.2



- ⦿ There are five basic toolbars.
- ⦿ The Master Toolbar contains a core set of tear-off buttons and can hold additional tear-off buttons added by the controller.
 - You will use the Master Toolbar buttons to access associated views, commands, or lists.
 - Only one Master Toolbar Menu can be used at a time. You must close the open menu to display the Master Toolbar and access another function.
 - We'll discuss the Master Toolbar in more detail later.
- ⦿ The MCA Toolbar:
 - Contains the Record Macro Menu button by default
 - Has arrows on the left side that you can use to move the toolbar to the top or bottom of the display

NOTE: Unlike the Master Toolbar, multiple views or toolbar menus can be open at the same time on the MCA Toolbar.

Continued on next page

R-POSITION CHI *(Continued)*

Toolbars (Cont'd)

TI 6110.100,
par. 2.2

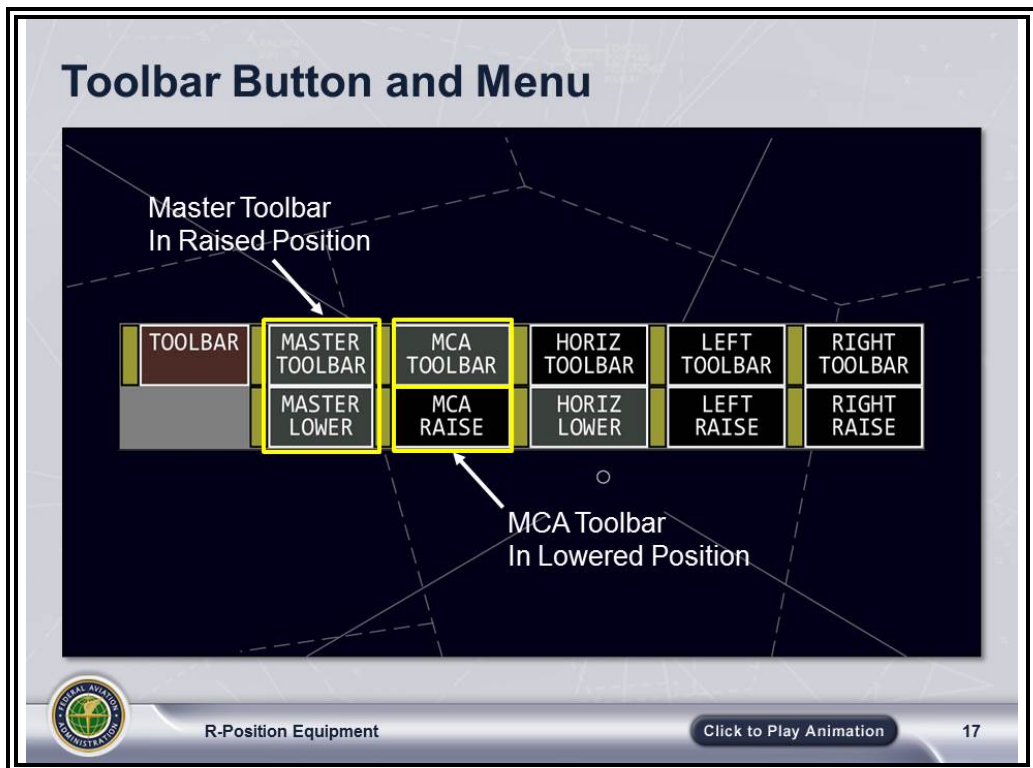
- ⊙ The left vertical, right vertical, and horizontal toolbars are empty initially.
 - You can move and/or tear off buttons from the Master Toolbar and MCA Toolbar to these support toolbars.
 - Multiple views or toolbar menus can be open at one time on the three support toolbars.
- ⊙ The vertical support toolbars are at fixed positions at the left or right margin of the display.
- ⊙ Each of the three horizontal toolbars (Master, MCA, and Horizontal Support) can be displayed in one of four locations (slots) on the Situation Display:
 - Slot 4 is displayed directly below the top Situation Display border.
 - Slot 3 is displayed directly below slot 4.
 - Slot 2 is displayed directly above slot 1.
 - Slot 1 is displayed directly above the bottom Situation Display border.
- ⊙ The three horizontal toolbars can be repositioned into these four slots by left/middle-clicking the **Up/Down arrow** along the left margin of the toolbar to move a toolbar up or down one position.

*Click 2 to
highlight
up/down
arrow.*

R-POSITION CHI (Continued)

Toolbar Button and Menu

TI 6110.100,
pars. 2.2.1, 2.2.5



- ⦿ The TOOLBAR button is always displayed; it cannot be suppressed.
 - It is a permanent button that you can reposition anywhere on the screen.
- ⦿ Clicking the TOOLBAR button displays a menu of the five R-position toolbars.
 - Left-click the TOOLBAR button to view this menu horizontally, as shown here.
 - Middle-click the TOOLBAR button to view the menu vertically.
- ⦿ The buttons in the top row of the menu are used to display or suppress the toolbars.
 - Left/middle-click any button in the top row.
 - The button color will change from a black background to a gray background when the tool bar is displayed.
 - A black background means the toolbar is suppressed.

*Click 1 to
display toolbar
menu.*

*Click 2 to add
highlight.*

Continued on next page

R-POSITION CHI (Continued)

Toolbar Button and Menu (Cont'd)

- ⊙ The buttons in the bottom row of the menu are used to raise or lower the toolbars.
 - If a toolbar is displayed behind an object or view, it can be raised; that is, brought to the front of the display. When a toolbar is raised, it will overlay other data except for the Status, Outage, and Toolbar buttons.
 - When the toolbar is displayed in front of an object or view, it can be lowered; that is, sent behind the object or view.
- ⊙ To raise or lower a toolbar, left/middle-click any button in the bottom row.
 - When the desired toolbar is raised, that toolbar button will be gray shaded and will show the word LOWER.
 - When the desired toolbar is lowered, that toolbar button will be shaded black and show the word RAISE.

Click 3 to add highlight and callouts.

Review



Response Item

Toggle buttons are _____ when a view or feature is currently displayed.

- A. blue
- B. gray
- C. black
- D. brown

R-Position EquipmentClick to Show Answer18

SLIDE ANSWER: B

Continued on next page

R-POSITION CHI (Continued)

Review (Cont'd)



Response Item

The controller uses the Master Toolbar to _____.

- A. type command messages
- B. reposition the map display
- C. access associated views, commands, or lists
- D. do all of the actions above



R-Position Equipment

[Click to Show Answer](#)

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Response Item

The toolbar button _____.

- A. is a permanent button that cannot be suppressed
- B. is used to access the five R-position toolbars
- C. can be repositioned anywhere on the Situation Display
- D. all of the above



R-Position Equipment

[Click to Show Answer](#)

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SLIDE ANSWERS: Slide 19 = C; Slide 20 = D

THE MASTER TOOLBAR: MANAGING THE MAP DISPLAY

Introduction

TI 6110.100,
par. 2.2.2



Master Toolbar

	DRAW	ATC TOOLS	RANGE 225	CURSOR	BRIGHT	FONT	DB FIELDS	VECTOR 4
↓	VIEWS	CHECK LISTS	COMMAND MENUS	12 NORTH	ALT LIM 240B390	RADAR FILTER	PREFSET MT	DELETE TEAROFF

- Manage and manipulate the map display elements and attributes
- Customize the view display
- Access associated views, commands, or lists

 R-Position Equipment 21

- ⊙ The Master Toolbar contains buttons you use to:
 - Manage and manipulate the map display elements and attributes.
 - Customize the view display.
 - Access associated views, commands, or lists.
- ⊙ Only one view or toolbar menu can be used at a time.
 - You must close the open menu to display the Master Toolbar and access another function.

THE MASTER TOOLBAR: MANAGING THE MAP DISPLAY *(Continued)*

Cursor,
Brightness,
and Font
Controls
TI 6110.100,
pars. 5.4, 3.2, 4.16



Cursor, Brightness, and Font Controls

MAP BRIGHT	SECTOR 80	HI SEC 48	Q RTE 54	JET RTE 40	FIXES 54	MSAW 40	3 MILE 54	SIDS 50	APCH 76	CTGYMAP 65
	FACIL 42	LOW SEC 54	SUA/RDR 60	VICTOR 50	ARPTS 54	M90 56	IR/AR 40	RNGMRK 40	EMERG 50	NRS FIX 58

R-Position Equipment
Click to Play Animation
22

- ⦿ You can use the CURSOR, BRIGHT, and FONT buttons to customize various Situation Display features.

👉 **NOTE:** Click 1 to display Cursor menu.

- ⦿ The CURSOR button lets you customize the speed and size of the cursor on the Situation Display. The Volume control adjusts a tone that sounds when a value is at its upper or lower limit, or when an input is invalid.
 - Middle-click a button to increase the speed, size, or volume.
 - Left-click a button to decrease the speed, size, or volume.

Continued on next page

THE MASTER TOOLBAR: MANAGING THE MAP DISPLAY *(Continued)*

Cursor, Brightness, and Font Controls (Cont'd)

TI 6110.100,
pars. 5.4, 3.2,
4.16;
ERAM EDSM
SRS 210.04
V1B1, pars.
3.2.3.1.2.1.14.1-6

 **NOTE:** Click 2 to display Brightness menus.

- ⦿ The brightness controls for many of the Situation Display and Data Block items are situated in the BRIGHT and MAP BRIGHT menus.
 - Middle-click a button to increase the brightness of the selected feature or element. Brightness increases in increments of 2.
 - Left-click a button to decrease the brightness of the selected feature or element. Brightness decreases in increments of 2.

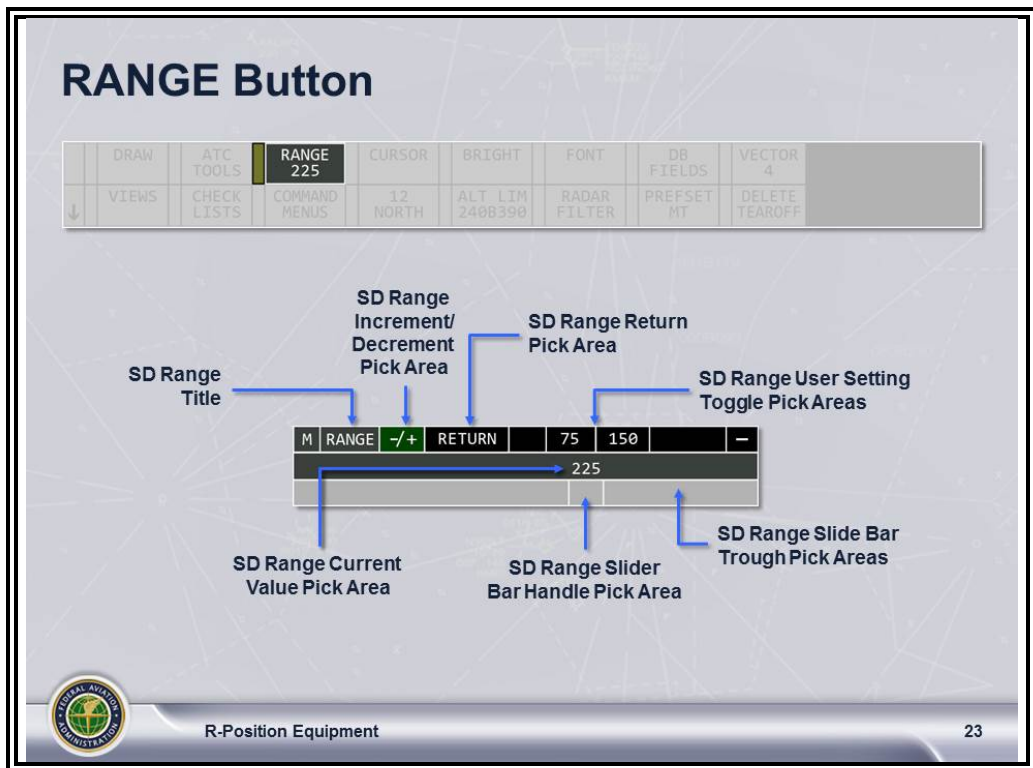
 **NOTE:** Click 3 to display Font menu.

- ⦿ The FONT button opens a menu that lets you increase and decrease the font size of the text in:
 - Full data blocks (font size 1-5)
 - Line 4 of the full data block (can be set equal to FDB font size setting, or 1-2 font sizes smaller than the FDB font size setting)
 - Toolbars (font size 1-2)
 - Range data blocks (font size 1-3)
 - Limited data blocks (font size 1-5)
 - Outage list (font size 1-3)
 - ⦿ Middle-click a button to increase the font size.
 - ⦿ Left-click a button to decrease the font size.
-

THE MASTER TOOLBAR: MANAGING THE MAP DISPLAY *(Continued)*

RANGE Button

TI 6110.100,
par. 3.1;
ERAM EDSM SRS
210.04 V1B1, pars.
3.2.2.6.2.1.1,
3.2.2.6.2.1.6,
3.2.2.6.2.1.8,
3.2.2.6.2.1.9,
3.2.2.6.2.1.10,
3.2.2.6.2.1.13.1;
ERAM EDSM SRS
210.04 V1B2,
Figure B.27



- ⦿ The RANGE button is a toggle button you use to display or suppress the Range View, OR
- ⦿ You can hold down the Trackball HOME button and press the Trackball ENTER button.
 - The Range View is displayed in its previous location.
 - The cursor is placed on the Increment/Decrement pick area.
 - You can adjust the range immediately.

Continued on next page

THE MASTER TOOLBAR:

MANAGING THE MAP DISPLAY *(Continued)*

RANGE Button

(Cont'd)

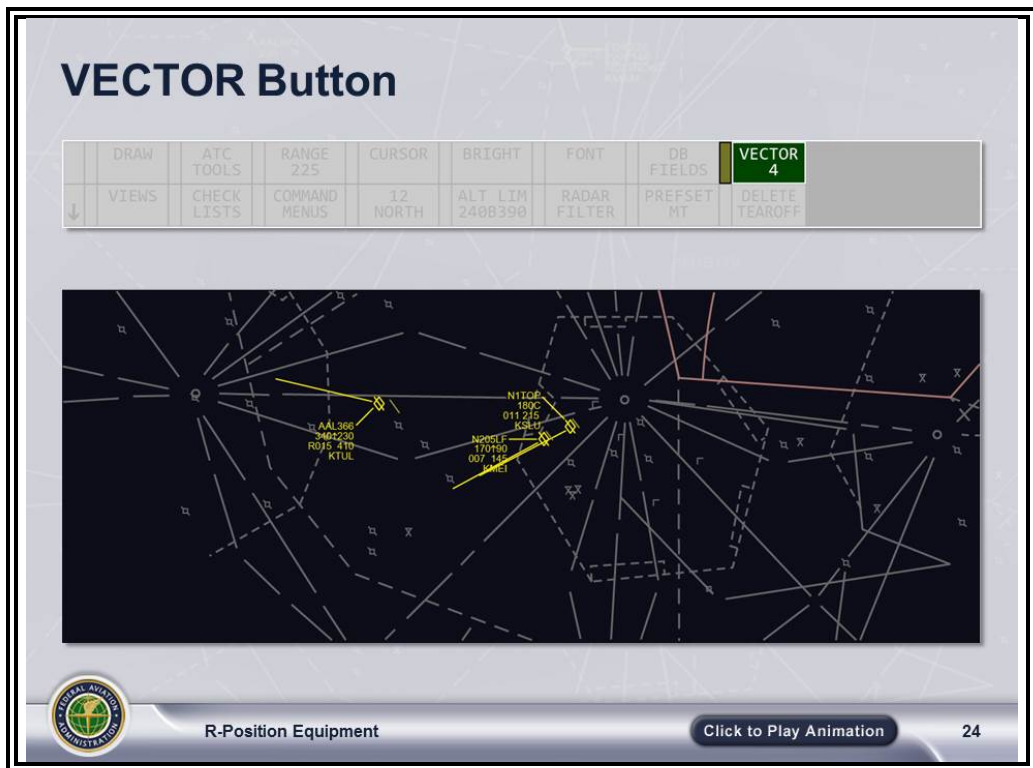
TI 6110.100,
par. 3.1;
ERAM EDSM
SRS 210.04
V1B1, pars.
3.2.2.6.2.1.1,
3.2.2.6.2.1.6,
3.2.2.6.2.1.8,
3.2.2.6.2.1.9,
3.2.2.6.2.1.10,
3.2.2.6.2.1.13.1;
ERAM EDSM
SRS 210.04
V1B2, Figure B.27

- ⦿ Methods for adjusting the map range:
 - Use the green Increment/Decrement button to increase (middle-click) or decrease (left-click) the range setting by 25 NM at a time.
 - Use the RETURN pick area to return the Situation Display range value to the previous range setting.
 - Use the User Setting Toggle pick areas to toggle between the current Situation Display range value and the range value of the selected pick area.
 - You can change the range value associated with each of the User Setting Toggle pick areas.
 - Use the Range Current Value pick area to change the current range value by typing a new value.
 - Use the Range Slider Bar Handle (left/middle-click) to initiate the drag mode and then move the slider to increase or decrease the range.

 **NOTE:** Discuss how to type a range value, specify a pre-set range value, and return to a previous range value.

THE MASTER TOOLBAR: MANAGING THE MAP DISPLAY (Continued)

**VECTOR
Button**
TI 6110.100,
par. 4.17



- ⦿ The VECTOR button lets you control the display of vector lines and specify their lengths.
- ⦿ When you select the Trackball HOME button (right-click):
 - The cursor is placed over the VECTOR button, and
 - The VECTOR button is temporarily displayed at the highest display precedence wherever it is located, and
 - You can make adjustments immediately.

👉 **NOTE:** Click twice to show the vector lines increasing.

Continued on next page

THE MASTER TOOLBAR:

MANAGING THE MAP DISPLAY *(Continued)*

VECTOR Button (Cont'd)

TI 6110.100,
par. 4.17

- ⦿ Use the green Increment/Decrement button to increase (middle-click) or decrease (left-click) the vector line length.
 - Vector lengths have 5 facility adapted values (defaults are minutes of 0, 1, 2, 4 or 8 minutes, or miles of 0, 5, 10, 20 or 40).

 **NOTE:** *Indicate if the vector length values have been adapted at your facility and, if so, what the values are.*

- Setting the length to 0 turns off vector lines.

NOTE: There is only one VECTOR button; a copy of it cannot be torn off, but the button can be moved.

THE MASTER TOOLBAR: MANAGING THE MAP DISPLAY *(Continued)*

ALT LIM Button

JO 7110.65,
par. 5-14-5;
ERAM EDSM SRS
210.04 V1B2,
Appendix C,
Section C.2;
ERAM EDSM SRS
210.04 V1B1,
par. 3.2.3.1.2.5



ALT LIM Button



Format	Examples
CRD Key <i>or</i> QD (d)ddB(d)dd	QD 40B90 QD 000B242 QD 228B999

R-Position EquipmentClick to Play Animation25

- ◎ The ALT LIM button displays the current Beacon Target Altitude and Limited Data Block (LDB) Altitude Filtering Limits on the Master Toolbar, which include, as a minimum:
 - 1,200 feet above the highest and below the lowest altitude or flight level of the sector where 1,000 feet vertical separation is applicable, and
 - 2,200 feet above the highest and below the lowest flight level of the sector where 2,000 feet vertical separation is applicable
 - Entered limits appear and remain on the ALT LIM button until changed.

NOTE: Typically a single altitude limits value is used for both targets and LDBs.

NOTE: If seven Xs are displayed on the ALT LIM button, different values have been entered for targets and LDBs.

Continued on next page

THE MASTER TOOLBAR: MANAGING THE MAP DISPLAY *(Continued)*

ALT LIM Button (Cont'd)

JO 7110.65,
par. 5-14-5;
ERAM EDSM
SRS 210.04
V1B2,
Appendix C,
Section C.2;
ERAM EDSM
SRS 210.04
V1B1,
par. 3.2.3.1.2.5

 **NOTE:** Click 1 to display Altitude Limits Menu.

- ⦿ The Altitude Limits Menu gives you the capability to set the altitude limits for filtering Beacon Targets and LDBs. The menu contains two settings:
 - A single altitude limits setting for filtering both Beacon Targets and LDBs
 - Two altitude limit settings - one for Beacon Targets and one for LDBs
- ⦿ To set or change the limits for both Beacon Targets and LDBs (same values for both):
 - Click the ALT LIM button.
 - Click on the Altitude Limits Setting pick area, and begin typing a new value.
 - Press keyboard ENTER when finished.
- ⦿ To set or change the limits for the targets and/or the LDBs independently:
 - Click on the ALTITUDE LIMITS pick area.

 **NOTE:** Click 2 to display TARGETS and LDBs menu.

- Click the setting pick area for either TARGETS or LDBS and begin typing a new value.
- Press Keyboard ENTER when finished.

 **NOTE:** Click 3 to display QD command format table.

- ⦿ The LDB Altitude Limits setting can also be changed by entering the Modify Altitude Limits (QD) command in the MCA View.

Continued on next page

THE MASTER TOOLBAR: MANAGING THE MAP DISPLAY *(Continued)*

ALT LIM Button

(Cont'd)

JO 7110.65,
par. 5-14-5;
ERAM EDSM
SRS 210.04
V1B2,
Appendix C,
Section C.2;
ERAM EDSM
SRS 210.04
V1B1,
par. 3.2.3.1.2.5

⦿ Results:

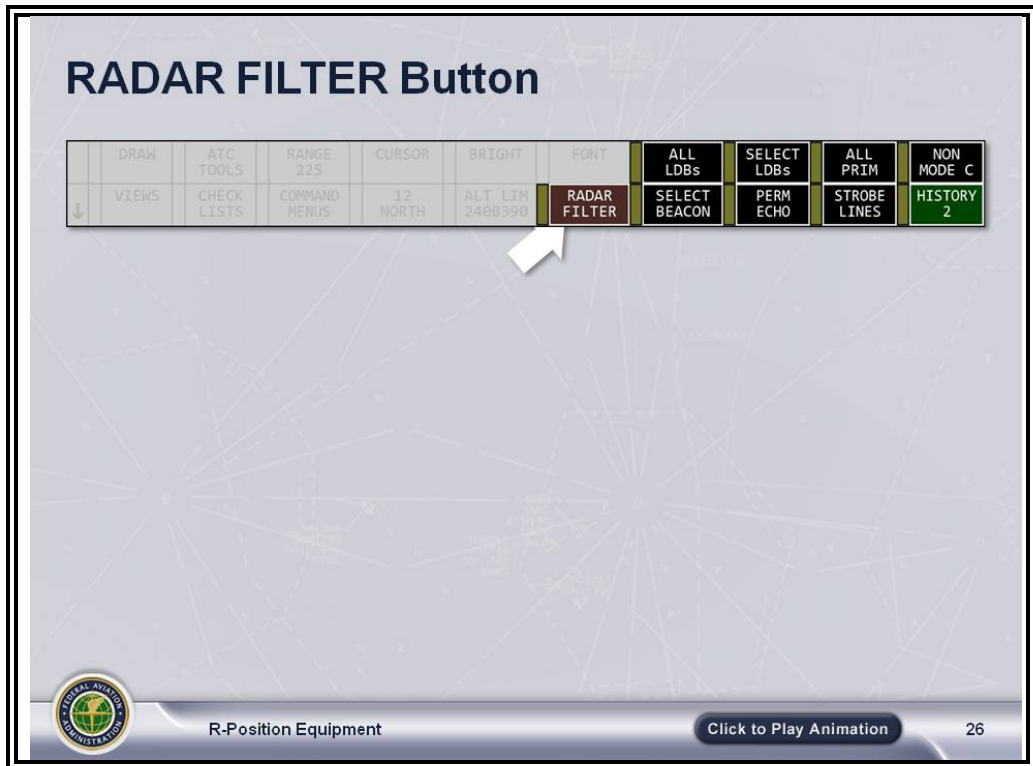
- The Beacon Targets Altitude Limits setting filters beacon targets based on the altitude associate with the beacon target.
- The LDB Altitude Limit setting filters LDBs sent to the sector position.

⦿ The limits can be saved with your Pref Sets.

NOTE: We will discuss Pref Sets later in this lesson. More information on command composition is provided in another lesson.

THE MASTER TOOLBAR: MANAGING THE MAP DISPLAY *(Continued)*

**RADAR
FILTER Button**
TI 6110.100,
pars. 4.14, 4.18;
ERAM EDSM SRS
210.04 V1B1,
par. 3.2.3.1.2.18.8



*Click to display
toolbar menu.*

- The Radar Filter Toolbar Menu lets you display or suppress Limited Data Blocks and various classes of radar data. Left/middle-click a button to toggle the display of the desired radar data ON or OFF.
 - ALL LDBs button displays all limited data blocks.
 - SELECT LDBs displays LDBs which have beacon codes in the Beacon Code View.
 - ALL PRIM displays a primary target symbol for all non-beacon returns and a beacon target symbol for all radar-reinforced beacon data that does not contain Mode C.
 - NON MODE C displays a target symbol for beacon aircraft without Mode C.
 - SELECT BEACON displays a target symbol for all aircraft with beacon codes in the Beacon Code View.

Continued on next page

THE MASTER TOOLBAR: MANAGING THE MAP DISPLAY *(Continued)*

RADAR FILTER Button (Cont'd)

TI 6110.100,
pars. 4.14, 4.18;
ERAM EDSM
SRS 210.04
V1B1,
par. 3.2.3.1.2.18.

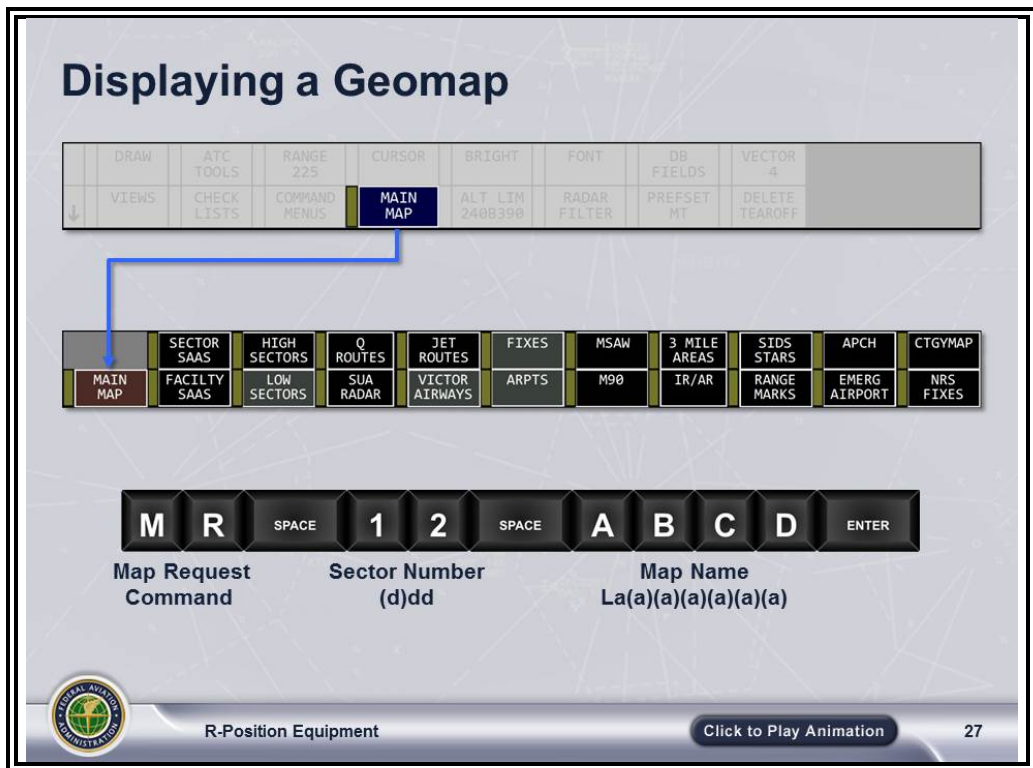
- PERM ECHO (PE) button controls the filtering of PE primary targets, primary test targets, PE beacon targets, and PE LDBs. Permanent Echoes are used by Tech Ops personnel for radar certification.

NOTE: Controllers typically do not display Permanent Echoes.

- STROBE LINES displays strobe lines.
 - ⦿ You can adjust the number of target histories displayed by left/middle-clicking the HISTORY button.
 - To suppress histories, select a value of 0.
 - The button has a range of 0-5.
-

THE MASTER TOOLBAR: MANAGING THE MAP DISPLAY *(Continued)*

Displaying a Geomap
TI 6110.100
par. 3.3
ERAM EDSM SRS
210.04 V1B2,
Appendix C,
Section C.2



- ⊙ Geomaps are the facility maps used by the system.
 - The MAP button on the Master Toolbar is labeled with the name of the currently selected map.
 - The button opens a menu that is used to select the map elements to be displayed at the position.
 - Different filter and brightness button labels can be specified for each geomap.
 - The MAP button accesses up to 20 facility-adapted filter buttons that can be toggled on or off (left/middle-click).
- ⊙ You can also use the map request command (MR) to access various maps, or can invoke a Pref Set.

*Click 1 to
display menu.*

*Click 2 to
display MR
command.*

THE MASTER TOOLBAR: MANAGING THE MAP DISPLAY *(Continued)*

Review



Response Item

How many views and/or toolbar menus can be displayed at one time on the Master Toolbar?

- A. One
- B. Three
- C. Five
- D. Six



R-Position Equipment

[Click to Show Answer](#)

28



Response Item

A _____ increases the font size or brightness of a feature or element.

- A. left-click
- B. right-click
- C. middle-click
- D. left/middle-click



R-Position Equipment

[Click to Show Answer](#)

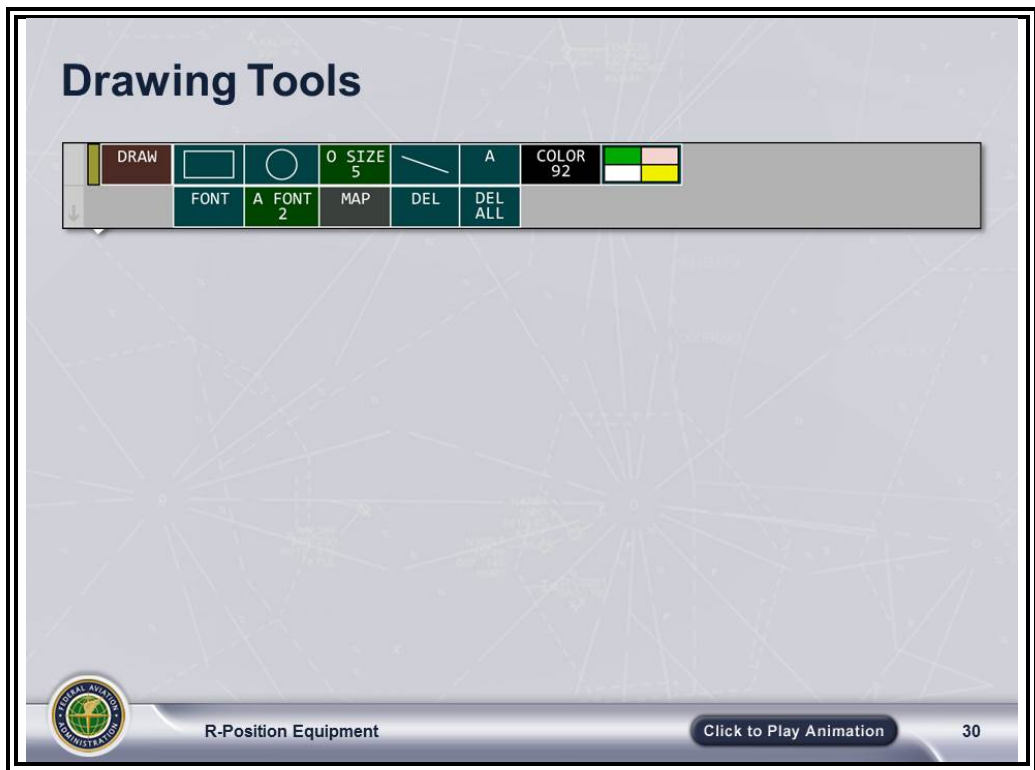
29

SLIDE ANSWERS: Slide 28 = A; Slide 29 = C

THE MASTER TOOLBAR: CUSTOMIZING THE VIEW DISPLAY

Drawing Tools

TI 6110.100,
pars. 5.2, 5.3, 5.5



- ⦿ The Draw Tools Menu lets you create, move, customize, delete, and anchor graphic annotations.
 - These tools let you mark specific areas with temporary scratch pad symbols for reference.

Continued on next page

THE MASTER TOOLBAR:

CUSTOMIZING THE VIEW DISPLAY *(Continued)*

Drawing Tools (Cont'd)

TI 6110.100,
pars. 5.2, 5.3, 5.5

☞ **NOTE:** Click to display Draw Menu Toolbar.

- ☉ You can create rectangles, circles, line shapes, and text customizable to color, size, and font.
 - Rectangle shape - Draws rectangle shape placed over the selected area of the display
 - Circle shape = Draws circle shape placed over the selected area of the display
 - O Size = Circle (radius) size setting (increment/decrement)
 - Line shape = Draws a line at the selected display area
 - A = Creates text at the selected display area
 - COLOR = Changes annotation color brightness control group (increment/decrement)
 - Color Selection = Changes the color of annotation between 4 colors (green, white, coral, yellow)
 - FONT = Text font default size
 - A FONT = Controls the font size (increment/decrement)
 - DISP/MAP = Anchors annotation to the Situation Display (DISP) or map coordinates (MAP)
 - DEL = Deletes a single annotation
 - DEL ALL = Deletes all annotations

Continued on next page

THE MASTER TOOLBAR:

CUSTOMIZING THE VIEW DISPLAY *(Continued)*

Drawing Tools (Cont'd)

TI 6110.100,
pars. 5.2, 5.3, 5.5

- ⊙ Before creating any annotations, you must set the desired anchor.
 - The annotation must be anchored to the map or the Situation Display, and cannot be changed from one to the other after it has been created.
 - If the annotation is anchored to the map, the size and position of the object will be modified on the Situation Display as the map range or offset changes.
 - If the annotation is anchored to the Situation Display, the size and position do not change as the map range or offset changes.
 - For Line Annotations, open the Draw Menu and click on the Line button. Then left-click (Anchor Point) where you want the drawing to begin. The maximum number of points in a single line annotation is 30.
 - Press the CLEAR key on the keyboard to cancel the Draw function.
- ⊙ There is also a function available with the circle annotation to locate the center of a circle at a specific point.
 - You can designate the center be at a fix, a radial/distance, or latitude/longitude.
 - First adjust the circle size in the Draw Menu to fit your needs, then click on the Circle button and begin typing a fix name, FRD or latitude/longitude.
 - A Circle Location Input Area Box will display.
 - After entering a valid point, press the “ENTER” key on the keyboard.
- ⊙ To create a text annotation:
 - Left/middle-click the A button on the Draw Toolbar.
 - Left-click the location where text is to be placed. A text composition box displays.

Continued on next page

THE MASTER TOOLBAR:

CUSTOMIZING THE VIEW DISPLAY *(Continued)*

Drawing Tools (Cont'd)

TI 6110.100,
pars. 5.2, 5.3, 5.5

- Type the desired text using the keyboard.
- Press the ENTER key. The text box disappears; only the annotation displays.

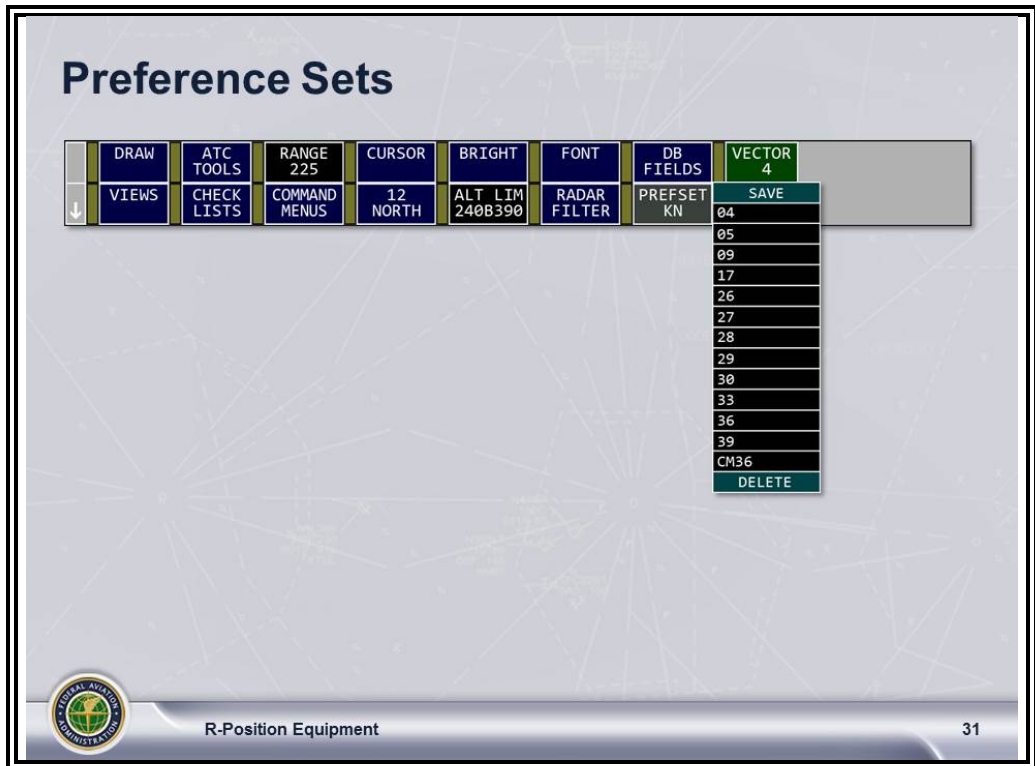
NOTE: The Preview Area in the MCA should not have text present when creating text annotations.

- ⊙ To delete an annotation:
 - Left/middle-click the DEL button to activate the single deletion mode; then middle-click the annotation handle to delete the annotation.
 - ⊙ To delete all text annotations:
 - Left/middle-click the DEL ALL button to activate the delete all mode.
 - Left/middle-click the DEL ALL button to confirm/delete all annotations.
 - ⊙ Modifying annotations:
 - Move the annotation by opening the Draw Menu, clicking on the Anchor Point, and dragging the annotation to the desired area.
 - Resize circles and squares by double left-clicking the anchor point and moving the trackball.
 - To change the annotation color:
 - Left/middle-click the Color Selection button to select one of four colors (green, white, coral, yellow).
 - Middle-click the handle for the annotation. The graphic annotation buttons will change accordingly and annotations will display that color.
 - Change the font size of a text annotation by left-clicking the FONT button to decrease the font size and middle-clicking the FONT button to increase the font size.
-

THE MASTER TOOLBAR: CUSTOMIZING THE VIEW DISPLAY *(Continued)*

Preference Sets

TI 6110.100,
par. 5.1;
ERAM EDSM SRS
210.04 V1B1,
par. 3.2.8.2.1.2.1

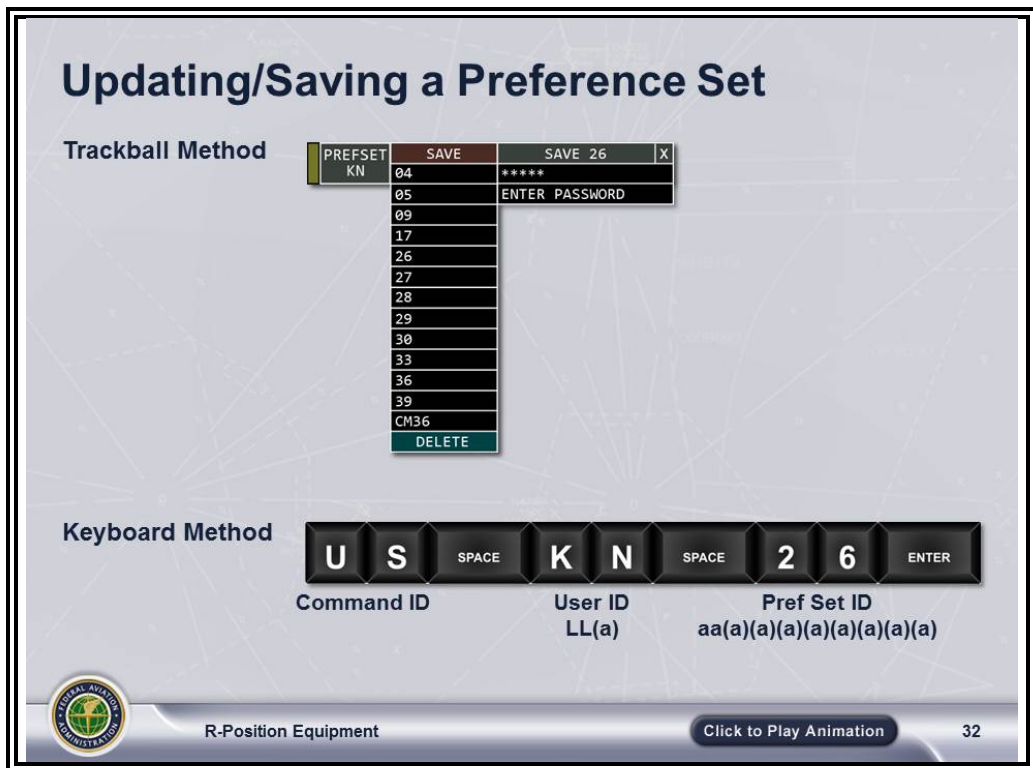


- ⦿ Preference Sets allow you to save a snapshot of ALL display settings.
- ⦿ You can create as many as 20 Pref Sets.
 - If you attempt to create more than 20 Pref Sets, the system will display a reject message in the Feedback Area of the requesting position.
- ⦿ To access the Preference Set Menu, left/middle-click the PREFSET button on the Master Toolbar.

NOTE: The PREFSET button contains the operating initials of the person who is signed in.

THE MASTER TOOLBAR: CUSTOMIZING THE VIEW DISPLAY *(Continued)*

Updating/
Saving a New
Preference Set
TI 6110.100,
pars. 5.1.1
and 5.1.3



- ⦿ To update or save a new a Preference Set:
 - Left/middle-click the PREFSET button to open the Pref Set Menu.
 - Left/middle-click the SAVE menu item; you will receive a prompt to enter a Pref Set name.
 - Type a desired name for the Pref Set in the input box, *OR*
 - Left-click the desired name from the existing Pref Set menu list.
 - Press the ENTER key.
 - Enter the password when prompted and press the ENTER key.
- ⦿ You can also use the US command to update or save a new Pref Set.
 - Enter your password when prompted and press the ENTER key.

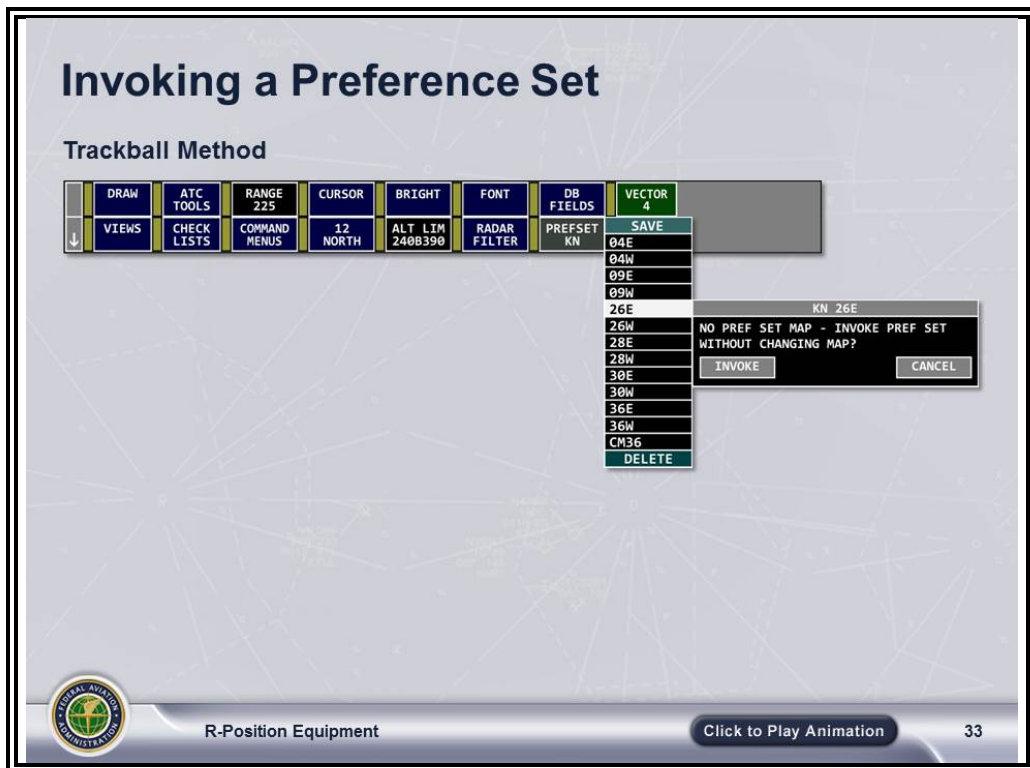
*Click 1 to
display pw
prompt.*

*Click 2 to
display US
command.*

NOTE: If a new Pref Set name is entered, a new Pref Set is created. If the Pref Set name already exists, the Pref Set will be updated with the current display settings. You may save a Pref Set to your User ID from the MCA even if you are not signed in. A password is required.

THE MASTER TOOLBAR: CUSTOMIZING THE VIEW DISPLAY *(Continued)*

Invoking a
Preference Set
TI 6110.100,
par. 5.1.2



- ⊙ To invoke a Preference Set, left/middle-click the PREFSET button on the Master Toolbar and select the Pref Set name from the menu list. The Situation Display presentation will change to the settings contained in the selected Pref Set.
- ⊙ If the geomap in the selected Pref Set does not match the currently loaded map:

*Click 1 to
display
confirmation
pop-up.*

- A confirmation pop-up displays.
- Select either INVOKE & CHANGE to select the Pref Set or CANCEL to cancel your selection.

- ⊙ If the Pref Set does not contain a geomap name or if the geomap name in the Pref Set does not exist:

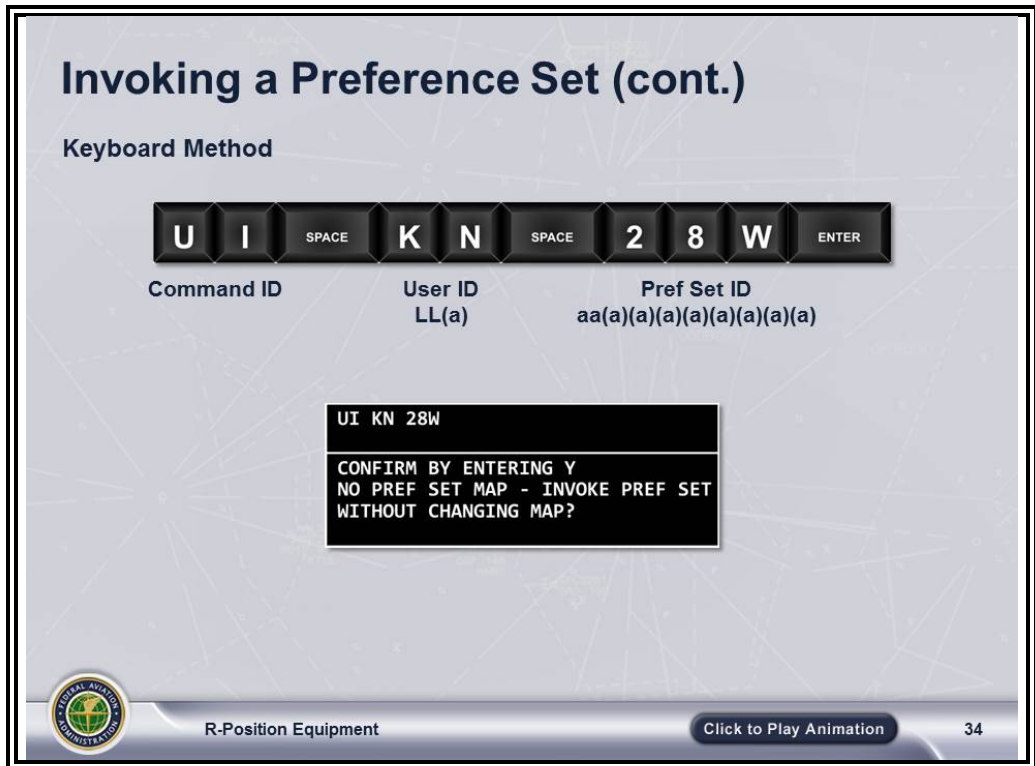
*Click 2 to
display
confirmation
pop-up.*

- A confirmation pop-up displays.
- Select either INVOKE to select the Pref Set or CANCEL to cancel your selection.

THE MASTER TOOLBAR: CUSTOMIZING THE VIEW DISPLAY *(Continued)*

Invoking a Preference Set (Cont'd)

TI 6110.100,
par. 5.1.2

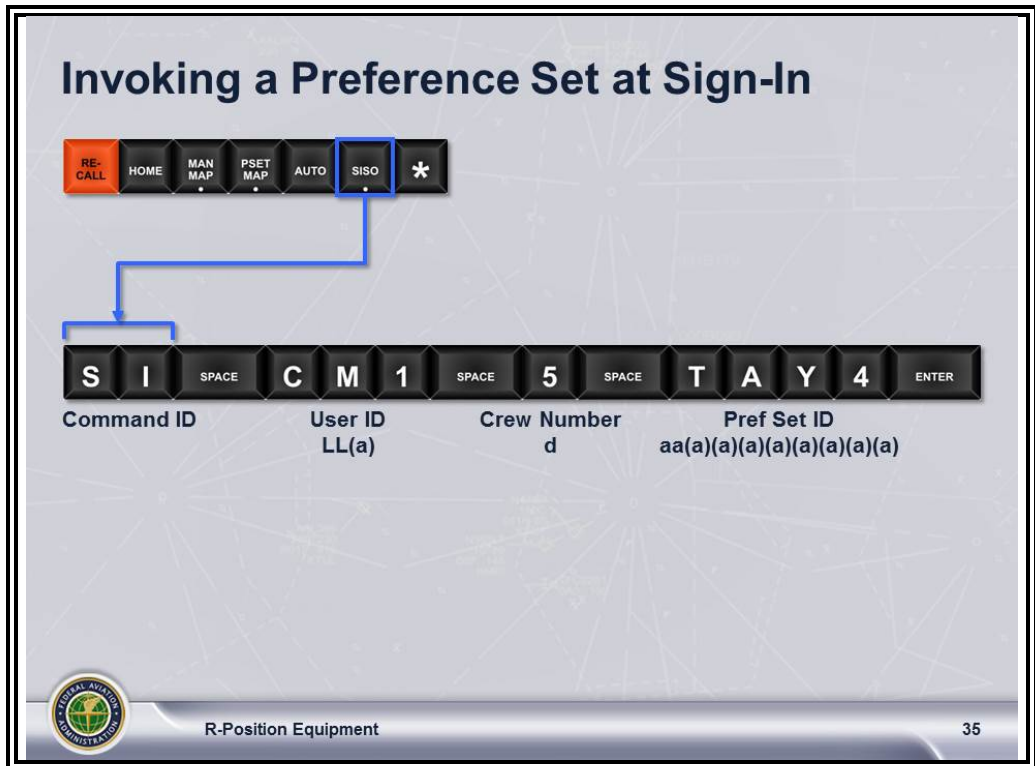


- ⦿ You can also use the UI command to invoke a Pref Set.
- ⦿ Again, if the geomap in the selected Pref Set does not match the currently loaded map, or if the Pref Set does not contain a geomap name, a confirmation prompt displays in the Feedback Area requiring the user to enter Y to confirm.

*Click twice to
display the two
types of
confirmation
prompts.*

THE MASTER TOOLBAR: CUSTOMIZING THE VIEW DISPLAY *(Continued)*

Invoking a
Preference Set
at Sign In
TI 6110.100
par. 5.1.2



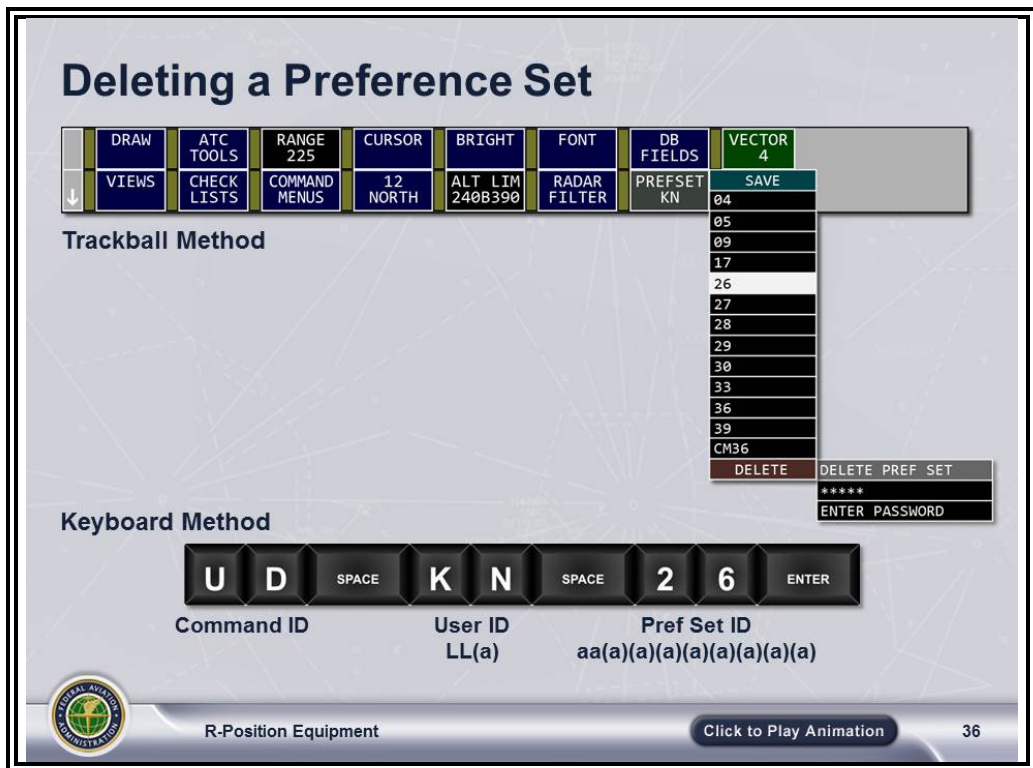
- To invoke a Preference Set at sign-in:
 - Select the SISO key on the R-position keyboard or enter SI in the MCA.
 - Type your initials followed by your crew number.
 - Then type the Pref Set name and press ENTER.

NOTE: As with the UI command, a confirmation prompt displays in the MCA Feedback Area if the geomap in the selected Pref Set does not match the currently loaded map, or if the Pref Set does not contain a geomap name.

THE MASTER TOOLBAR: CUSTOMIZING THE VIEW DISPLAY *(Continued)*

Deleting a Preference Set

TI 6110.100,
par. 5.1.4



⦿ To delete a Preference Set:

- Left/middle-click the DELETE menu item.
- Middle-click the Pref Set that you want to delete.
- Type the password when prompted.
- Press the ENTER key.

Click 1 to display password prompt.

NOTE: A similar process may be used to delete multiple Pref Sets. The only difference is that you left-click all but the last Pref Set to be deleted, then middle-click the final one.

Click 2 to display UD command.

⦿ You can also use the UD command to delete a Pref Set.

- Enter your password when prompted and press the ENTER key.

THE MASTER TOOLBAR: CUSTOMIZING THE VIEW DISPLAY *(Continued)*

Changing the Passwords for Preference Sets

TI 6110.100,
par. 5.1.6



Changing a Preference Set Password

Command ID: P W SPACE User ID: C M 1 ENTER
LL(a)

Old Password: C M 3 7 / New Password: C T 4 4 / C T 4 4 ENTER
aaa(a)(a)(a)(a)(a)(a)(a)(a)

FEDERAL BUREAU OF INVESTIGATION
R-Position Equipment 37

⦿ To change passwords for Preference Sets:

- Type the command ID PW, space, and your User ID in the MCA.
- Press the ENTER key.

NOTE: ENTER CURRENT PW/NEW PW/NEW PW appears in the Feedback Area.

- Type the current password, forward slant (/), the new password, forward slant (/), the new password again.

NOTE: Passwords can be 3-12 alphanumeric characters.

- Press the ENTER key.

NOTE: If the entry syntax is correct, you will receive an Accept message. A PASSWORD CHANGE FAILED message appears if the password is not changed.

⦿ **REMEMBER** your new password; they are **VERY DIFFICULT** to recover.

THE MASTER TOOLBAR: CUSTOMIZING THE VIEW DISPLAY *(Continued)*

Closing the Pref Set Menu

TI 6110.100,
par. 5.1.5

- ☉ To close the Preference Set Menu:
 - Left/middle-click the PREFSET button on the Master Toolbar, or
 - Left/middle-click anywhere on the display, or
 - Press the CLEAR key or any hard-labeled function key.
-

Review



Response Item

To add a new Preference Set to the menu list after entering a Preference Set name, _____.

- A. click the SAVE menu item
- B. click the PREFSET button
- C. type the password and press the ENTER key
- D. type the password and press the INSRT key

 R-Position Equipment [Click to Show Answer](#) 38

SLIDE ANSWER: C

THE MASTER TOOLBAR: OTHER BUTTONS

ATC TOOLS Button

TI 6110.100,
par. 3.4



Click 1 to display buttons.

- ⦿ The ATC TOOLS button accesses a menu of 3 buttons, CRR FIX, SPEED ADVSRY, and WX.
 - The CRR FIX button is a toggle to display/suppress the fix, or fixes, used for the Continuous Range Readout.
 - The SPEED ADVSRY button is a toggle used to display or suppress Ground Based Interval Management-Spacing (GIM-S) data at the sector.

NOTE: The SPEED ADVSRY button will not affect the sector display until GIM-S is fully deployed at your facility.

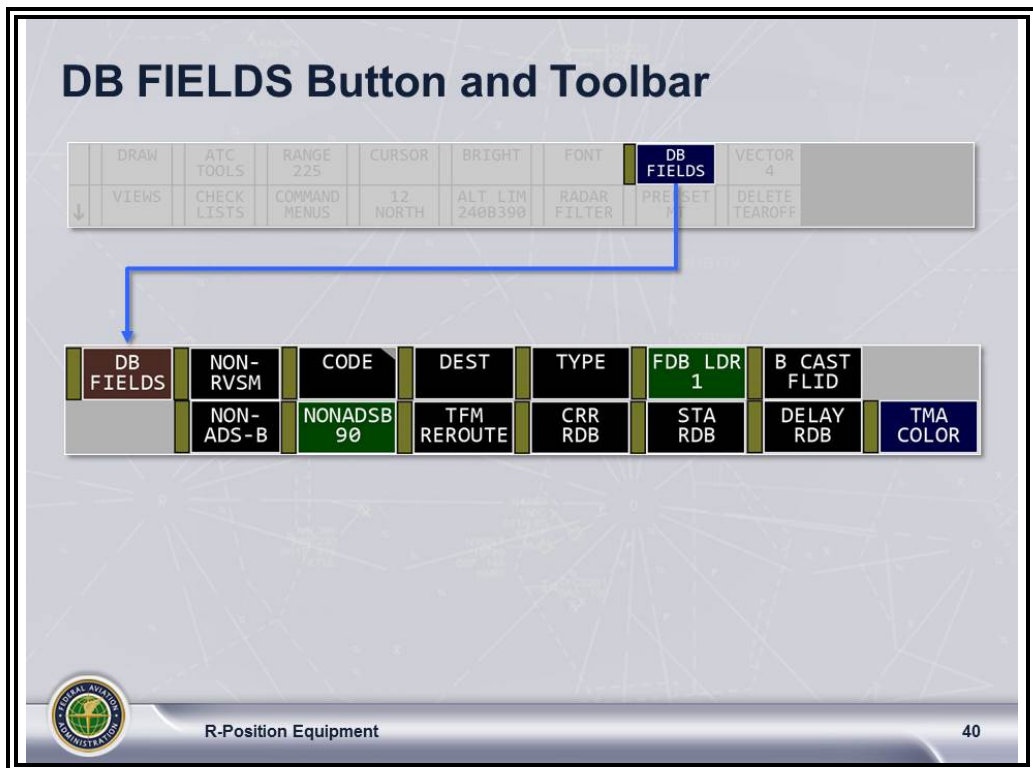
Click 2 to display WX Toolbar.

- Clicking the Weather (WX) button displays the Weather Toolbar.
 - To set the NEXRAD altitudes, left/middle-click the NX Altitude button, which will increment/decrement through the available options.
 - To set the NEXRAD levels, left/middle-click the NX LVL button, which will increment/decrement through the available options.
 - To display ATC weather intensity, left/middle-click WX 1, 2, or 3.

THE MASTER TOOLBAR: OTHER BUTTONS *(Continued)*

Data Block Fields Button and Toolbar

TI 6110.100,
pars. 4.8, 4.11.2,
4.13; ERAM EDSM
SRS 210.04 V1B1,
pars. 3.2.2.1.2.2.5,
3.2.2.3.2.1,
3.2.3.1.2.13.2



- ⊙ The DB FIELDS button opens a submenu of buttons that you can use to:
 - Toggle (left/middle-click) various data block indicators on and off.
 - Control the information displayed in Range Data Blocks (RDBs).

- ⊙ Button functions:

- NON-RVSM: toggles the Non-RVSM Aircraft Indicator for all data blocks (FDB and E-LDBs) and views (Hold, Inbound List, Departure List)

NOTE: The Non-RVSM Indicator is always on if the sector contains RVSM airspace (i.e., the NON-RVSM button always has grayed out text.)

- CODE: temporarily displays the aircraft beacon code in FDBs and LDBs
 - DEST: toggles the aircraft destination data in FDBs
 - TYPE: toggles the aircraft type information in FDBs

NOTE: Aircraft destination and type cannot be displayed at the same time.

Continued on next page

THE MASTER TOOLBAR: OTHER BUTTONS *(Continued)*

Data Block Fields Button and Toolbar (Cont'd)

TI 6110.100,
pars. 4.8, 4.11.2,
4.13;
ERAM EDSM SRS
210.04 V1B1,
pars. 3.2.2.1.2.2.5,
3.2.2.3.2.1,
3.2.3.1.2.13.2-6

- FDB LDR: controls the leader line length for all FDBs
 - Left-click to decrease leader line length.
 - Middle-click to increase the leader line length.

NOTE: Commands may also be used to adjust the leader line length for individual FDBs and to offset individual FDBs (discussed in another lesson).

- B CAST FLID: toggles display format of ADS-B supported, unpaired limited data blocks (LDBs) between standard and enhanced format

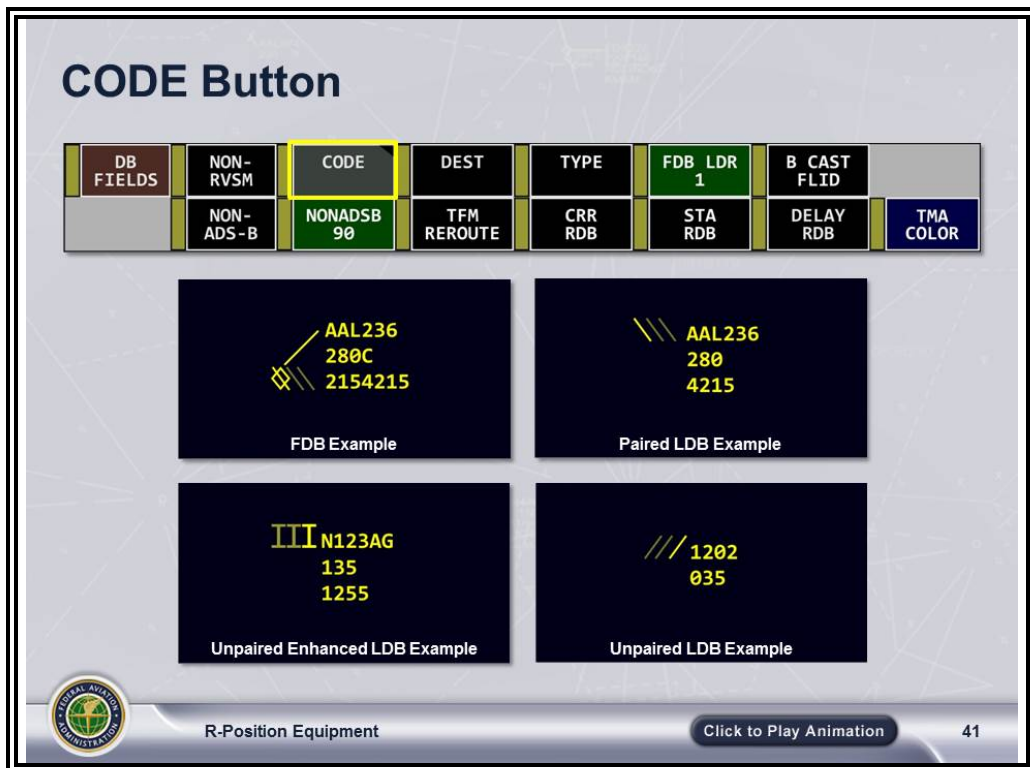
NOTE: If an ADS-B equipped aircraft is broadcasting its FLID and this filter is active, the unpaired LDB of the aircraft will display the FLID rather than a beacon code.

- NON-ADS-B : toggles display of the Non-ADS-B aircraft indicators for FDBs and some views (Continuous Flight Plan Readout View, Continuous Range Readout View, Inbound List, Departure List)
- NONADSB: controls the brightness level of the Non-ADS-B Indicator
 - Left-click to decrease brightness.
 - Middle-click to increase brightness.
- TFM REROUTE: toggles Traffic Flow Management (TFM) Route indicators in the first line of the RDB
- CRR RDB: toggles the Continuous Range Readout information in the RDB
- STA RDB: toggles the TMA Scheduled Time of Arrival information in the RDB
- DELAY RDB: toggles the TMA Delay Countdown Time of Arrival information in the RDB
- TMA COLOR: changes the color of the STA RDB and DELAY RDB

Continued on next page

THE MASTER TOOLBAR: OTHER BUTTONS *(Continued)*

Data Block Fields Button and Toolbar (Cont'd) ERAM SIG1536



- ⦿ To temporarily display a beacon code, press and hold the CODE button on the DB FIELDS Toolbar. The beacon code is displayed as long as the button is pressed.

NOTE: The CODE button is a press and hold button, designated by the small triangle in the upper right corner. When not selected, the button is black with a gray triangle; when selected, the button is gray with a black triangle.

- ⦿ In a Full Data Block:

Click to display beacon codes.

- The surveillance reported beacon code is displayed in Field E, temporarily overriding all currently displayed Field E items.
- If there is no surveillance reported beacon code, Field E will be blank as long as the CODE button is pressed.

Continued on next page

THE MASTER TOOLBAR: OTHER BUTTONS *(Continued)*

**Data Block
Fields Button
and Toolbar
(Cont'd)**
ERAM1536

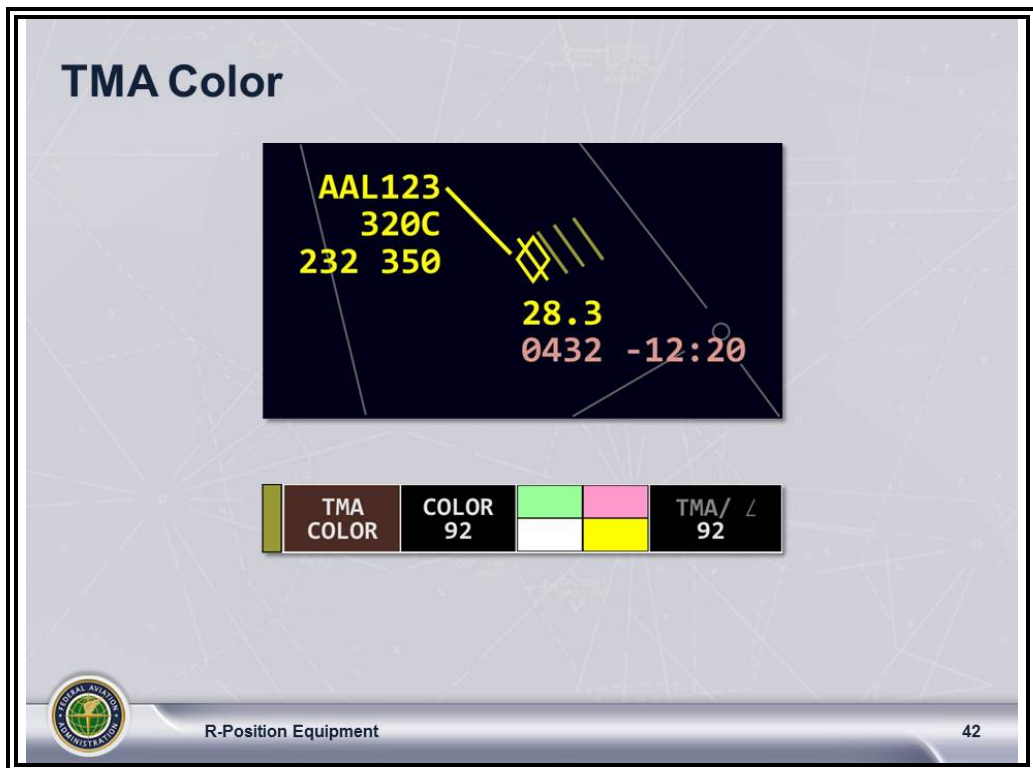
- ⦿ In a Paired LDB and Unpaired Enhanced LDB:
 - The surveillance reported beacon code is displayed on line 3.
 - This allows the ACID to remain displayed during the override.
 - If there is no surveillance reported beacon code, Line 3 will not be displayed.
- ⦿ In an Unpaired LDB, the beacon code is already displayed on Line 1, so Line 3 is not displayed.

Continued on next page

THE MASTER TOOLBAR: OTHER BUTTONS *(Continued)*

Data Block Fields Button and Toolbar (Cont'd)

TI 6110.100,
pars. 4.8, 4.11.2,
4.13, 9.6;
ERAM EDSM SRS
210.04 V1B1,
pars. 3.2.2.1.2.2.5,
3.2.2.3.2.1,
3.2.3.1.2.13.2-6



- ⦿ To change the color of the STA/DELAY data on the Situation Display:
 - Left/middle-click the TMA COLOR button on the DB FIELDS Toolbar.
 - Left/middle-click the desired color. The font color and the STA and DELAY data changes.
 - Left-click the COLOR button to decrease brightness of the data blocks.
 - Middle-click the COLOR button to increase brightness of the data blocks.
- ⦿ To adjust the offset direction for the RDB:
 - Hold down the MULTI-FUNC and press the O key to cycle the RDB offset angle in relation to the leader line.
 - The offsets are in 45 degree increments from 45 to 315 degrees (e.g., 45, 90, 135, 180, 225, 270, 315).

NOTE: The RDB default offset is 180 degrees from the FDB leader line.

Continued on next page

THE MASTER TOOLBAR: OTHER BUTTONS *(Continued)*

Data Block Fields Button and Toolbar (Cont'd)

TI 6110.100,
pars. 4.8, 4.11.2,
4.13, 9.6;
ERAM EDSM
SRS 210.04
V1B1,
pars.
3.2.2.1.2.2.5,
3.2.2.3.2.1,
3.2.3.1.2.13.2-6

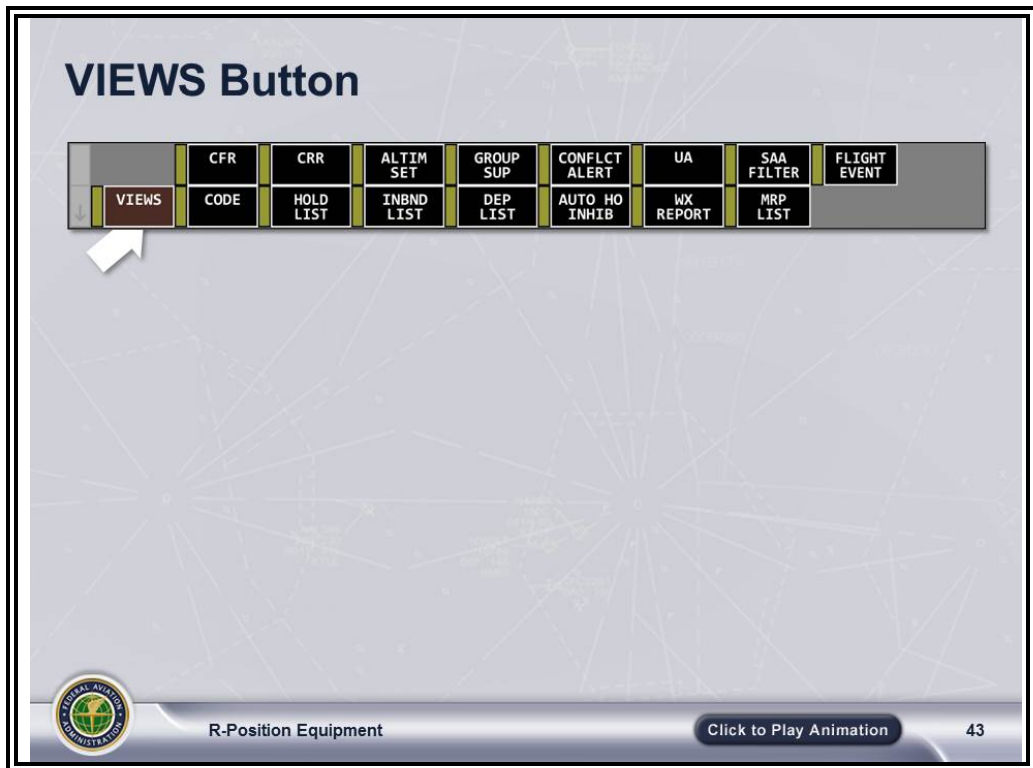
- ☉ The TMA/ button adjusts the brightness of the STA/DELAY RDB when the TMA data is de-emphasized.

NOTE: The TMA/brightness functionality is also part of the GIM-S implementation and will become operational when the system is fully deployed at your facility.

THE MASTER TOOLBAR: OTHER BUTTONS *(Continued)*

VIEWS Button

TI 6110.100,
par. 2.4



*Click to display
Views Toolbar.*

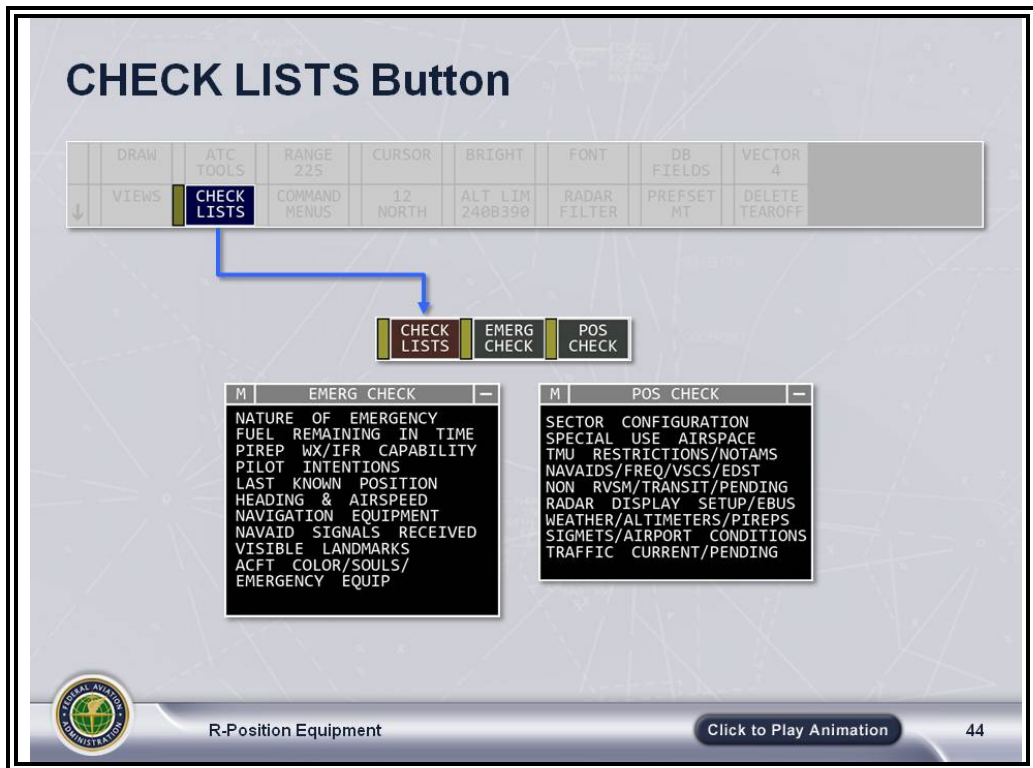
- ☉ The VIEWS button accesses the Views Toolbar.
 - Each of the buttons on the Views Toolbar accesses the associated view.

NOTE: We'll discuss how to manage views later in this lesson.

THE MASTER TOOLBAR: OTHER BUTTONS *(Continued)*

CHECK LISTS Button

TI 6110.100,
par. 13.6



- ⦿ The CHECK LISTS button opens a menu that can access up to 10 facility-adapted checklists.

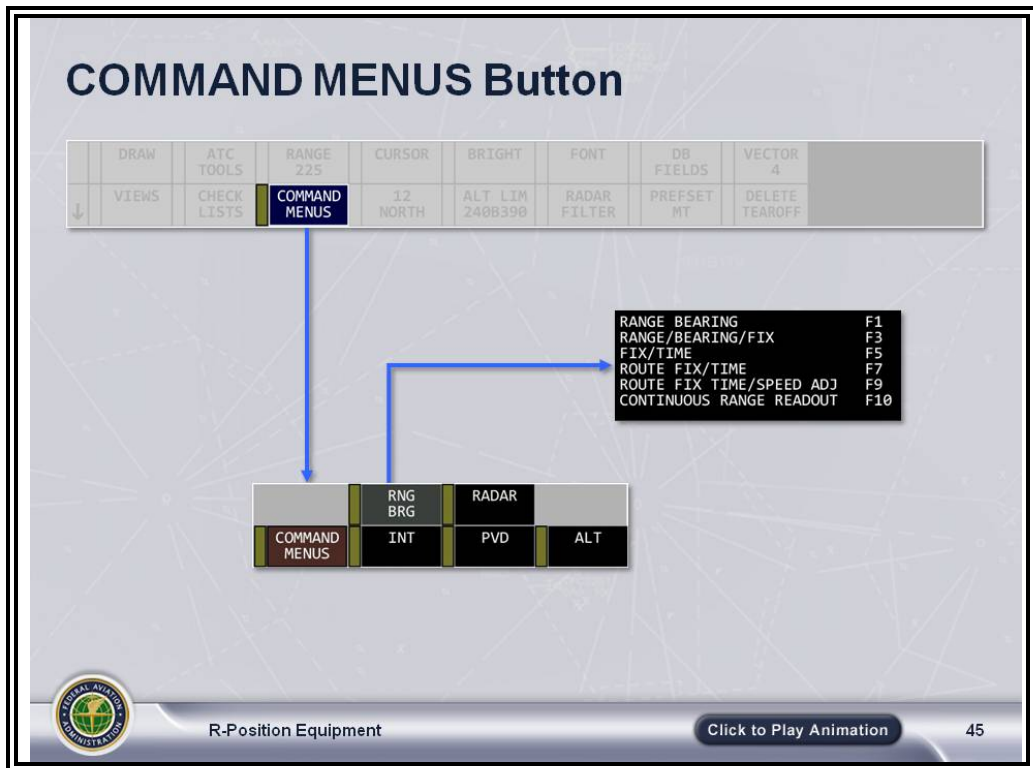
*Click to display
checklist
examples.*

- Left/middle-click a button to display the two checklist views.
- Here are examples of an Emergency Checklist and Position Relief Checklist.

THE MASTER TOOLBAR: OTHER BUTTONS *(Continued)*

COMMAND MENUS Button

TI 6110.100,
par. 1.3.2.3;
ERAM EDSM
SRS V1B1,
pars. 3.2.3.1.2.4.6
and 3.2.3.1.2.11



- ⦿ The COMMAND MENUS button opens a menu that can access up to 10 facility-adapted category function menus, such as Range Bearing and Radar.

*Click to display
RNG BRG sub
menu.*

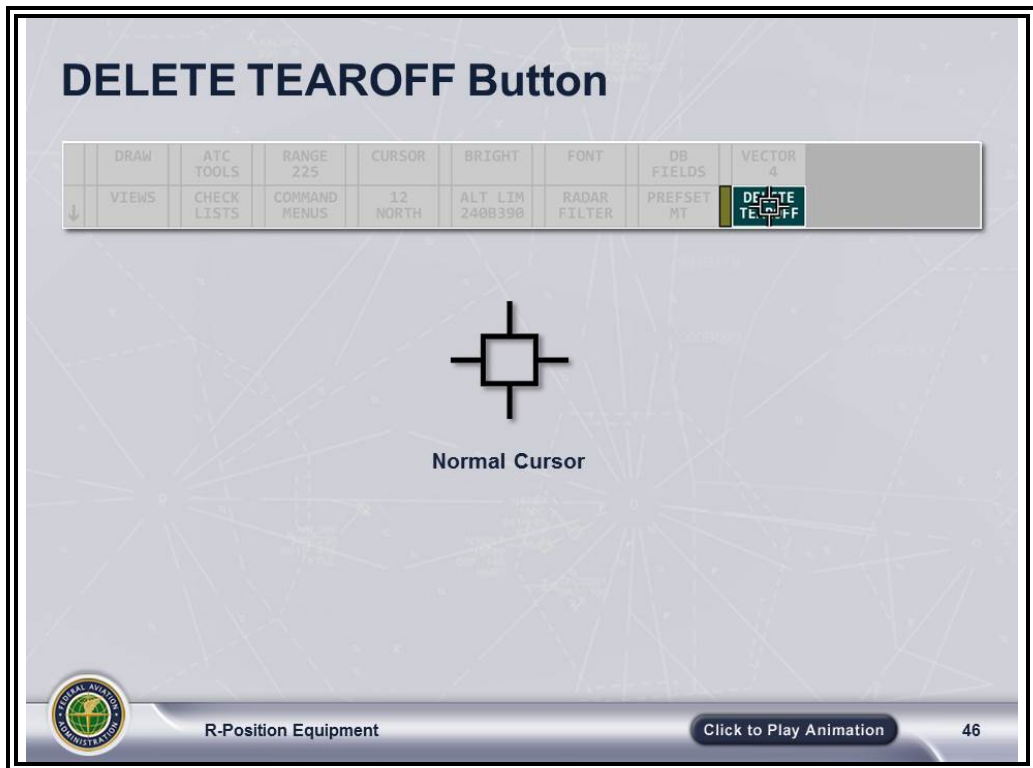
- Clicking the desired function menu item (for example, F1, F3, F5, F7, F9, or F10 in the slide example) initiates a command in the Preview Area of the MCA.

NOTE: More information on category function menus and commands are discussed later in this lesson and in other lessons.

THE MASTER TOOLBAR: OTHER BUTTONS *(Continued)*

DELETE TEAROFF Button

TI 6110.100,
par. 2.3.1.2;
ERAM EDSM
SRS 210.04,
par. 3.2.3.1.2.4.9



- ⦿ The DELETE TEAROFF button lets you delete the copy of a button. It also removes torn-off list entries and sublists from the Situation Display.

- To delete a single tear-off button:

- Left/middle-click the DELETE TEAROFF button on the Master Toolbar.

NOTE: The trackball cursor changes to a deletion cursor.

- Middle-click the button to be deleted.

- To delete multiple tear-off buttons:

- Left/middle-click the DELETE TEAROFF button on the Master Toolbar.
- Left-click each button to be deleted except the last one. The selected items will be covered by a white X.
- Middle-click the last button to be deleted; the tear-offs are deleted.

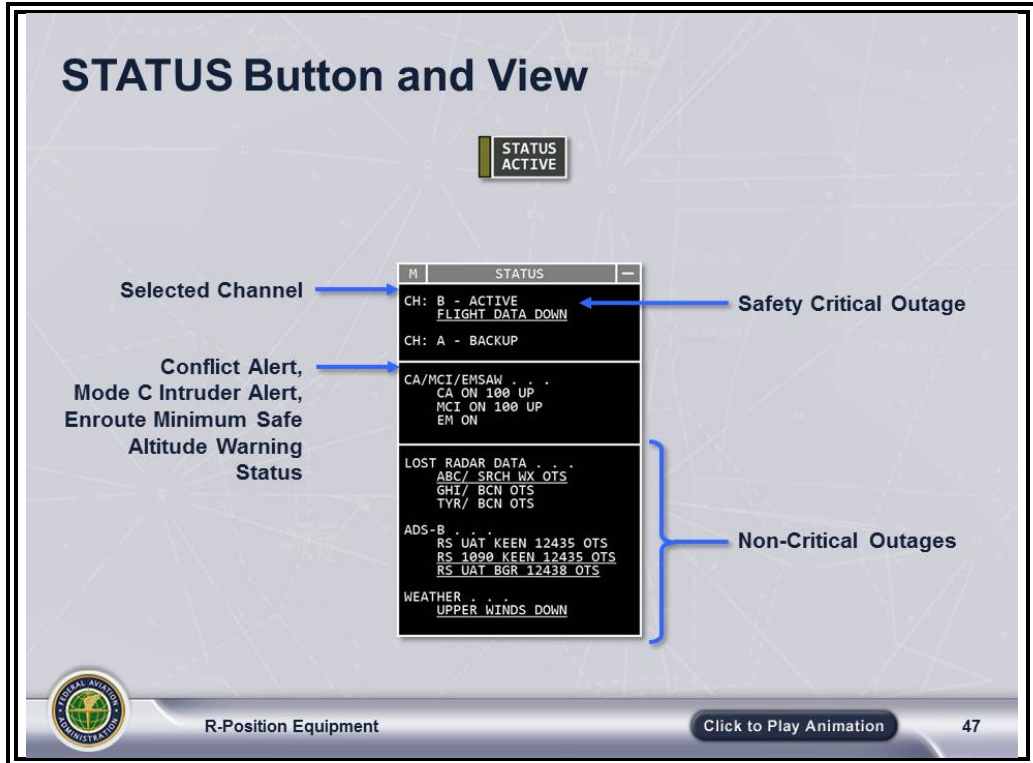
- ⦿ Torn-off sublists and list entries are deleted using the same steps.

Click twice to display normal and deletion cursors.

THE MASTER TOOLBAR: OTHER BUTTONS *(Continued)*

STATUS Button and View

TI 6110.100,
par. 14.1;
ERAM EDSM
SRS V1B1,
par. 3.2.4.3.2;
ERAM EDSM SRS
V1B2, Appendix B,
Section B.28



- ⦿ The STATUS button can be located anywhere on the display; however:
 - No tear-off (copy) can be made.
 - The button cannot be suppressed.
- ⦿ The STATUS button displays the mode of the selected channel - ACTIVE, BACKUP, PENDING, OR TEST.
 - When there is a change to the Status View, the button turns yellow.
 - A banner appears across the display if the currently selected channel is in PENDING or TEST mode.
- ⦿ To access the Status View, left/middle-click the STATUS button to toggle the view on and off. The Status View contains system information consisting of:
 - The current Channel ID and channel mode
 - Safety Critical Outage Area (when entries exist)
 - Alternate Channel Indicator (when applicable)
 - CA/MCI/EMSAW status
 - Non-Critical Outage Area (when entries exist)

*Click to display
Status View.*

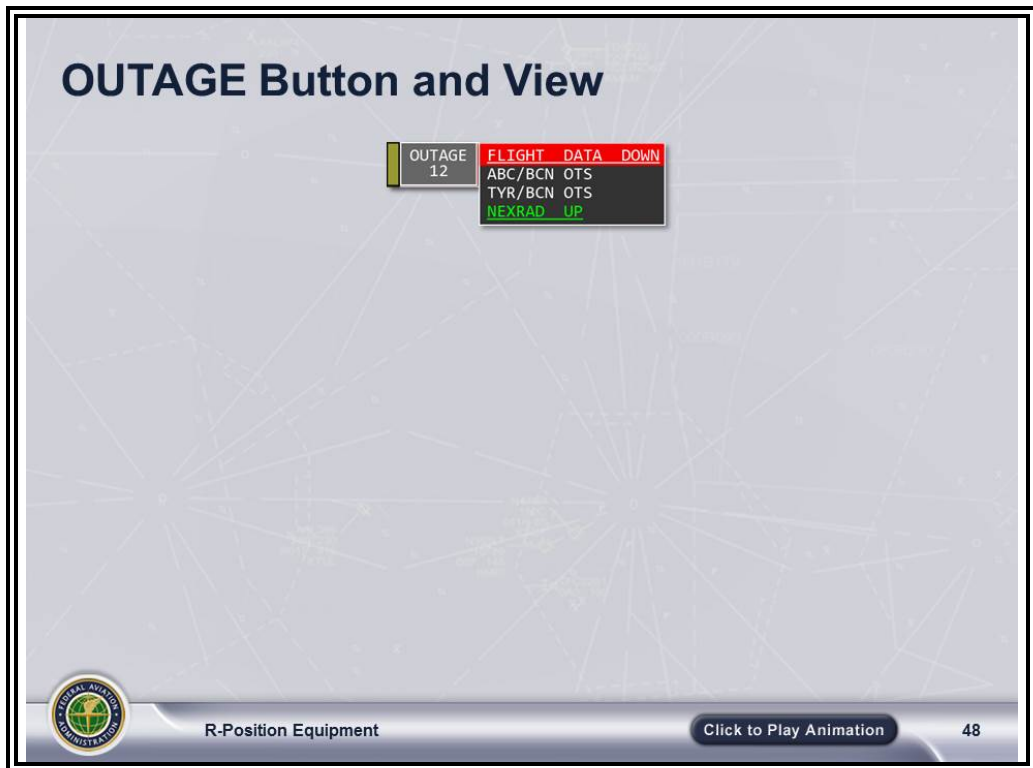
NOTE: Changes are underlined for emphasis.

- ⦿ System Outages are displayed in *both* the Outage and Status Views.

THE MASTER TOOLBAR: OTHER BUTTONS *(Continued)*

OUTAGE Button and View

TI 6110.100,
par. 14.2;
ERAM EDSM
SRS V1B1,
par. 3.2.3.1.2.17;
ERAM EDSM
SRS V1B2,
Appendix B,
Section B.25.2



⦿ The OUTAGE button can be located anywhere on the display; however:

- No tear-off (copy) can be made.
- The button cannot be suppressed.

CAUTION: The OUTAGE and STATUS buttons have equal display precedence. They can inadvertently be placed in a way where they cover one another. When that occurs, the button that is covered cannot be seen or accessed.

⦿ The button may appear in four colors, each having a specific meaning:

- **Black** – No list entries exist or the outage list is suppressed and contains acknowledged information.
- **Yellow** – Outage list is suppressed and contains unacknowledged, noncritical information.
- **Red** – Outage list is suppressed and contains unacknowledged critical information (Flight Data Down outage).
- **Gray** – Outage list is displayed (active).

Continued on next page

THE MASTER TOOLBAR: OTHER BUTTONS *(Continued)*

OUTAGE Button and View (Cont'd)

TI 6110.100,
par. 14.2;
ERAM EDSM
SRS V1B1,
par. 3.2.3.1.2.17;
ERAM EDSM
SRS V1B2,
Appendix B,
Section B.25.2

 **NOTE:** Click to display Outage List.

- ⦿ To access the Outage List, left/middle-click the OUTAGE button (toggle OFF/ON).
 - ⦿ The messages on the Outage List are color coded.
 - **White text on red background** – Flight Data Down or Standby that has not been acknowledged
 - **Yellow text on gray background** – Outage list entry (except Flight Data Down) of a down state (Down, Off, OTS, Not in Sync) that has not been acknowledged
 - **Green text on gray background** – Outage list entry of an up state (Up, On, RTS, In Sync) that has not been acknowledged
 - **White text on gray background** – Outage list entry that has been acknowledged
 - ⦿ To acknowledge an outage, left/middle-click the entry.
 - A green entry is deleted.
 - A yellow entry changes to white on gray, and the underline is deleted (acknowledged).
 - A critical outage changes to white on gray, and the underline is deleted (acknowledged).
 - New coding (underlines) are also removed in the Status View.
 - ⦿ The Outage List displays outages for:
 - Radar sites
 - ADS-B status
 - System services
 - Neighboring facilities
-

THE MASTER TOOLBAR: OTHER BUTTONS *(Continued)*

Review



Response Item

The _____ button cannot be suppressed.

- A. Checklists
- B. Command Menus
- C. ATC Tools
- D. Status



R-Position Equipment

[Click to Show Answer](#)

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Response Item

If the OUTAGE button is _____, the outage list is suppressed and contains unacknowledged, noncritical information.

- A. black
- B. yellow
- C. red
- D. gray



R-Position Equipment

[Click to Show Answer](#)

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SLIDE ANSWERS: Slide 49 = D; Slide 50 = B

PRACTICE EXERCISE 1

Practice Exercise 1

- ⦿ Practice Exercise 1: R-Position CHI Checklist, is located in 55055-HO3.
- ⦿ You will complete this exercise in the lab.

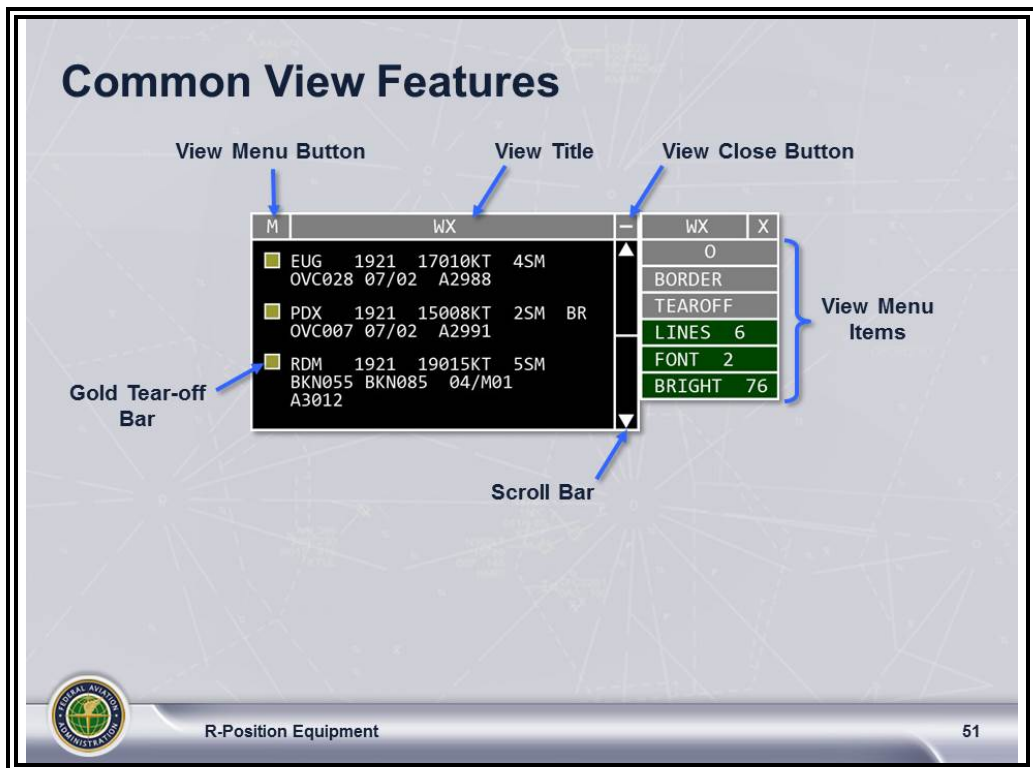
 NOTE:

- *Have students complete this practice exercise in the lab.*
 - *The exercise is estimated to take 1 hour lab time per student.*
 - *The recommended environment is in the TTL at a simulated position in the student's area of specialization with a scenario (labeled for Lesson 3, Exercise 1) running. No ghost pilots are required.*
 - *An instructor must be present in the lab to assist.*
 - *The student may refer to notes, user manuals and course materials.*
-

MANAGING VIEWS: COMMON VIEW FEATURES

Common View Features

TI 6110.100,
pars. 2.4, 2.4.1,
2.4.1.1



- ⊙ Most of the R-Position views share the features shown on this slide of the Weather Station Report View.
- ⊙ Common view features include:
 - View Header, which contains:
 - View Title (WX in the example)
 - View Menu button (M)
 - View Suppress/Close button (–)

NOTE: If you see the word OLD prefixed to the title of a view and the color of the title bar changes to yellow, the view is not updating and the information it contains should be verified.

- Scroll Bars - display if the information selected in the menu exceeds the number of display lines currently selected in the menu for the view

NOTE: Scroll bars are often the only indication that a view contains more information than is currently being displayed. In many views (e.g., WX REPORT, HOLD, MRP, etc.), it may be desirable to set the number of lines to 21+ and save the setting in your Pref Sets. This will ensure that all data is displayed when needed.

Continued on next page

MANAGING VIEWS: COMMON VIEW FEATURES

(Continued)

Common View Features (Cont'd)

TI 6110.100,
pars. 2.4, 2.4.1,
2.4.1.1

- Tear-offs:
 - Feature of some views; not all views have tear-off items.
 - Gold bar to the left of the item indicates that a sublist or list entry may be torn-off and placed elsewhere on the Situation Display.
 - As information is updated in the entries or sublists of the main view, the torn-off copy is also updated accordingly.
- View menu items - change aspects of the view:
 - O / T - switches between an opaque or semi-transparent view
 - BORDER - turns the view border on/off
 - TEAR-OFF - displays or suppresses the tear-off buttons
 - LINES - increments/decrements the number of lines in the view
 - FONT - increments/decrements the font size in the view
 - BRIGHT - increments/decrements the brightness of the view

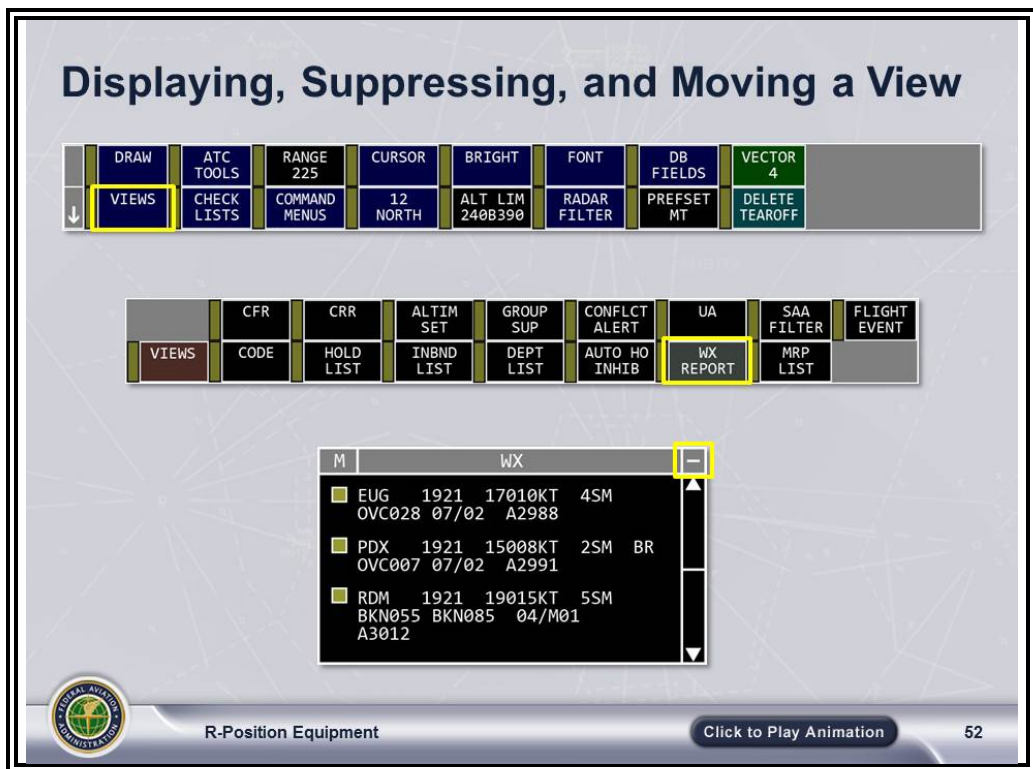
NOTE: Additional items that change view-specific features will be discussed as we discuss each view.

MANAGING VIEWS: COMMON VIEW FEATURES

(Continued)

Displaying and Suppressing a View

TI 6110.100,
pars. 2.4.2, 2.4.3,
2.4.4



Click 1 to
display Views
Menu Toolbar.

Click 2 to
display WX
View.

Click 3 to
display
highlight.

- ⊙ Most views are accessed via the Views Menu Toolbar.
 - The Views Menu Toolbar button resides on the Master Toolbar.
 - The Time View, MCA View, and RA View are always displayed; therefore, these views are not accessed through a toolbar.
- ⊙ To display a view, left/middle-click the desired view name, for example, WX Report.
- ⊙ To suppress a view, left/middle-click the dash button at the top right corner of the view header.
- ⊙ To move a view with a view header:
 - Left/middle-click in the view title; otherwise left-click within the view.
 - Use the trackball to position the view outline at the desired location.
 - Left/middle-click to place the view.

MANAGING VIEWS: COMMON VIEW FEATURES

(Continued)

Review



Response Item

The View Suppress/Close pick area is located on the _____.

- A. View Menu
- B. View header
- C. View display area
- D. Views Menu toolbar



R-Position Equipment

[Click to Show Answer](#)

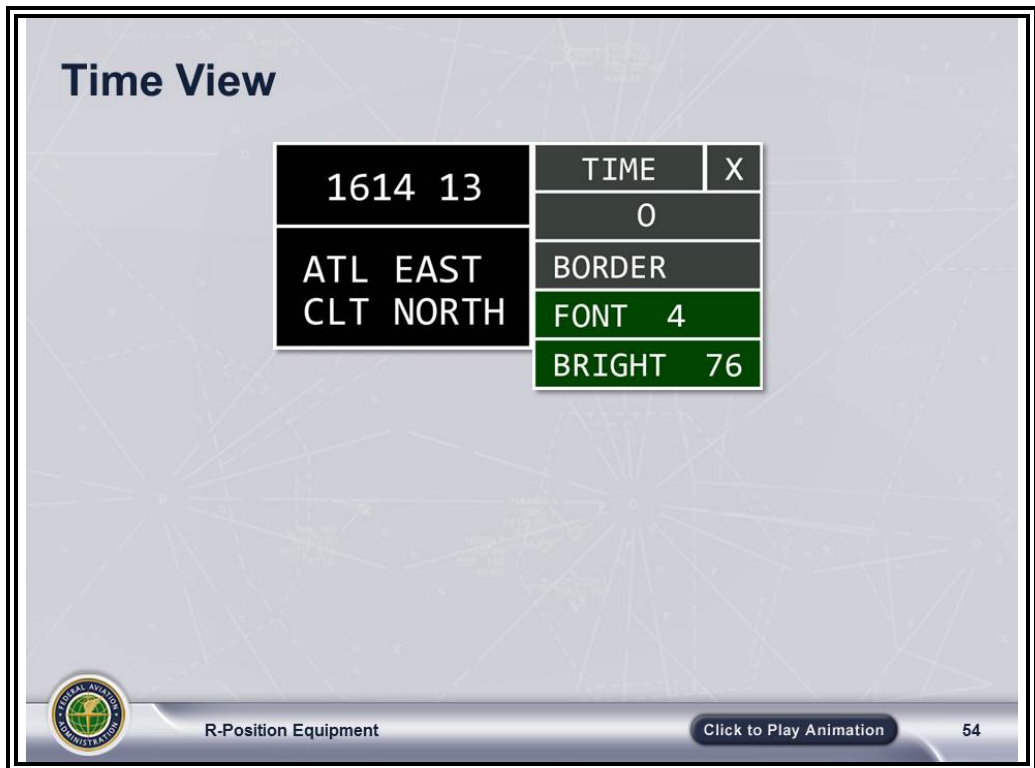
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SLIDE ANSWER: B

TIME VIEW

Time View

TI 6110.100,
par. 3.5;
ERAM SIG 1493



- ⦿ The Time View includes two display areas:
 - Clock Time Area
 - Sector Message Notification Area
 - The Sector Message Notification Area is displayed only when sector message text is eligible for display at the sector position.
 - When the Sector Message Notification Area is displayed, it will be separated from the Clock Time Area by a separator line (subject to the border filter setting).

*Click to display
Time View
Menu.*

- ⦿ To customize the Time View:
 - Middle-click the Time View to display the Time View Menu.
 - Click the desired item to change it.

NOTE: The settings are applicable to both areas.

TIME VIEW *(Continued)*

Time View

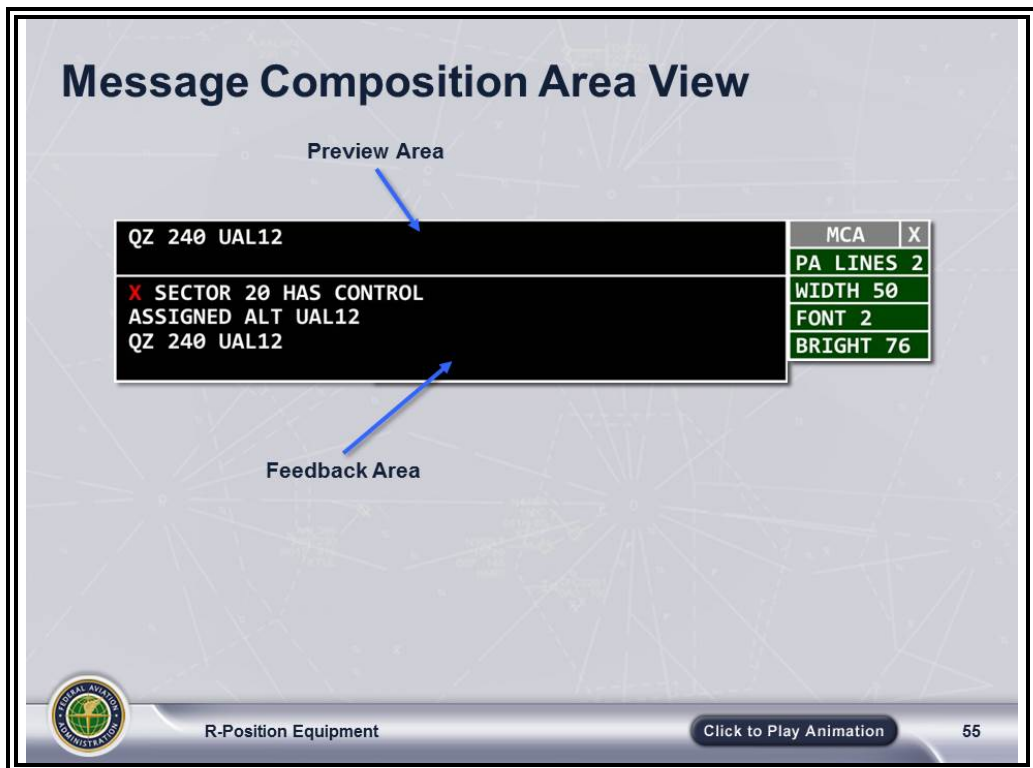
TI 6110.100
par. 3.5;
ERAM SIG 1493

- ⊙ The Time View can be located anywhere on the display, but cannot be suppressed.
 - ⊙ Left-click the Time View to move it.
 - A move frame (white view outline) will be displayed and the trackball cursor will be attached to the upper left corner of the display.
 - Move the frame to the desired location on the Situation Display.
 - Left/middle-click to drop the frame and place the Time View.
 - ⊙ When a sector message is initially displayed or updated, the text will be yellow and underlined.
 - Acknowledge the message with TBP or TBE.
 - The system automatically acknowledges the message in an adapted period of time (default is 10 seconds).
 - ⊙ When a sector message has been acknowledged (text is white):
 - TBP will initiate a move of the Time View.
 - TBE will open the Time View Menu.
-

MESSAGE COMPOSITION, RESPONSE, AND UPDATE AREA VIEWS

Message Composition Area View

TI 6110.100,
par. 6.1;
ERAM EDSM SRS
210.04 V1B1,
3.2.3.2.1.2.1.6



- ⊙ The Message Composition Area (MCA) is used to enter commands at the R-Position.
 - This area does not have a View Header but does contain two distinct areas: the Preview Area on the top and the Feedback Area on the bottom.
 - The MCA View is always displayed; it cannot be suppressed.
- ⊙ You use the Preview Area to compose commands.
 - This area is initially displayed as two lines and can expand as more characters are entered.
 - The number of lines displayed is set from the MCA View Menu, which is accessed by middle-clicking anywhere in the MCA View.
 - Use the PA LINES button to set the number of lines (2-10).
 - Use the WIDTH button to control the width of the MCA (30 or 50 characters).
 - You can use the trackball, cursor arrow keys, or the scroll bar to scroll the Preview Area.

*Click 1 to add
MCA View
Menu.*

*Click 2 to show
wide MCA
View.*

Continued on next page

MESSAGE COMPOSITION, RESPONSE, AND UPDATE AREA VIEWS *(Continued)*

Message Composition

Area View

(Cont'd)

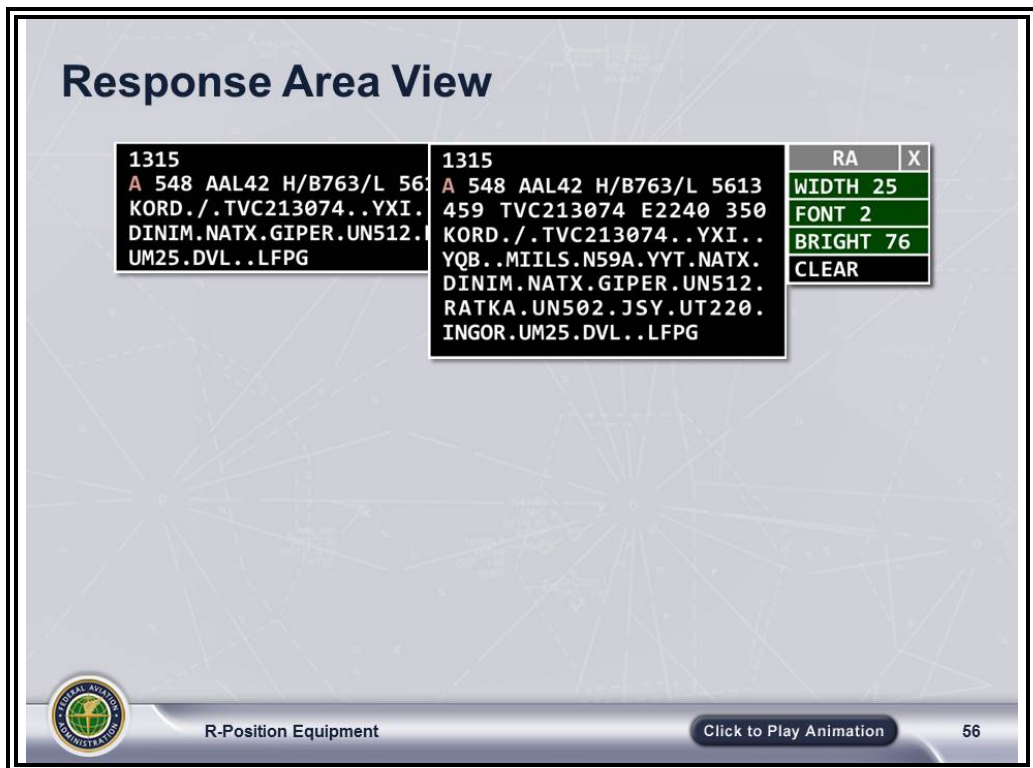
TI 6110.100,
par. 6.1;
ERAM EDSM SRS
210.04 V1B1,
3.2.3.2.1.2.1.6

- The Preview Area displays two types of cursors:
 - The Ready Cursor, an underscore (–), indicates the Preview Area is unlocked and can accept a command.
 - The Busy Cursor ($\times$) indicates the system is processing a command.
 - ⊙ The Feedback Area displays Accept, Reject, or Error Messages from the command entered in the Preview Area.
 - This area is initially displayed as four lines and will expand vertically based on the contents of the message/feedback received.
 - Accept Messages are preceded by a green check.
 - Reject or Error Messages are preceded by a red X.
 - ⊙ When you invoke the Recall function (RECALL key on the keyboard) each entered command and its associated feedback is recalled and displayed.
 - ⊙ To move the MCA View:
 - Left-click anywhere in the view except scroll bars and arrows. A view outline appears.
 - Move the trackball to place the outline in the desired location.
 - Left/middle-click to select the new location.
 - ⊙ Use the font and brightness buttons on the MCA View Menu to adjust the font size and brightness of both areas.
-

MESSAGE COMPOSITION, RESPONSE, AND UPDATE AREA VIEWS *(Continued)*

Response Area View

TI 6110.100,
par. 6.2



- ⊙ The Response Area View displays system responses to information request commands, such as responses to a code request, range-bearing commands, route readout request amendments, emergency airport information, etc.
 - The RA View is always displayed; it cannot be suppressed.
 - It has four lines, but will expand automatically to 10 lines.
 - After 10 lines, the scroll pick areas are displayed allowing a maximum of 300 lines.
 - Only one message (or response) is displayed at a time; new data replaces currently displayed data.

Continued on next page

MESSAGE COMPOSITION, RESPONSE, AND UPDATE AREA VIEWS *(Continued)*

Response Area View (Cont'd)

TI 6110.100,
par. 6.2

 **NOTE:** Click 1 to add RA View Menu.

- ☉ To access the RA View Menu, middle-click anywhere in the view area.

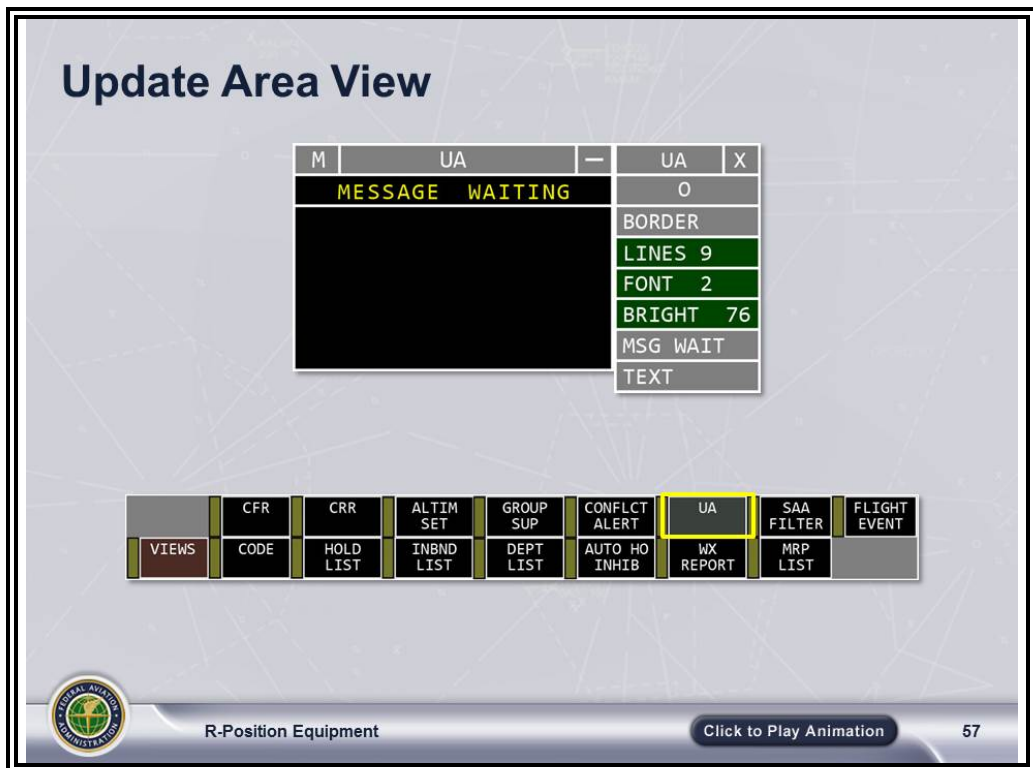
 **NOTE:** Click 2 to show wide RA View.

- Use the menu to adjust the width (25 or 50 characters), font size, and brightness.
 - Middle-click the CLEAR menu item to clear the view, or press the MSG ACK key on the keyboard.
- ☉ To move the RA View:
 - Left-click anywhere in the view except scroll bars and arrows. A view outline appears.
 - Move the trackball to place the outline in the desired location.
 - Left/middle-click to select the new location.
-

MESSAGE COMPOSITION, RESPONSE, AND UPDATE AREA VIEWS *(Continued)*

Update Area View

TI-6110.100,
par. 6-3



- ⦿ The Update Area (UA) View is a display of the RA-Position UA View.
- ⦿ This view lets you acknowledge waiting messages.
 - It is accessed with the UA button on the Views Menu.
 - If the message text exceeds the number of lines currently selected for the view, scroll bars will display.
- ⦿ The Message Waiting Indicator is emphasized when a message needs acknowledgement. To acknowledge waiting messages:
 - Left/middle-click the Message Waiting Indicator to display the message in the view.

NOTE: Acknowledging (or clearing) a message at the R- or RA-Position will update the view at both positions.

Continued on next page

MESSAGE COMPOSITION, RESPONSE, AND UPDATE AREA VIEWS *(Continued)*

Update Area View (Cont'd)

TI-6110.100,
par. 6-3

☞ **NOTE:** Click to display Update Area View Menu.

- ☉ To access the Update Area View Menu, left/middle-click the M button in the view header.

- To display/suppress the Message Waiting Area, left/middle-click the MSG WAIT menu item.
- To display/suppress the Update Area Text Area, left/middle-click the TEXT menu item.

NOTE: The MSG WAIT and TEXT menu items are toggles. When the MSG WAIT or TEXT area is displayed, the menu item background is shaded grey. When the area is suppressed, the menu item background is shaded black.

MESSAGE COMPOSITION, RESPONSE, AND UPDATE AREA VIEWS *(Continued)*

Review



Response Item

A red X in the Feedback Area of the MCA View means the _____.

- A. system is busy
- B. command is waiting to be accepted
- C. command was accepted
- D. command was rejected



R-Position Equipment

[Click to Show Answer](#)

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Response Item

Which of the following views is accessed by clicking a button on the Views Menu?

- A. MCA
- B. RA
- C. UA
- D. All of the above



R-Position Equipment

[Click to Show Answer](#)

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SLIDE ANSWERS: Slide 58 = D; Slide 59 = C

CONTINUOUS FLIGHT PLAN READOUT (CFR) VIEW

CFR View

TI 6110.100,
par. 8



Continuous Flight Plan Readout View

Deletes All Flight Plan Entries

M	CFR						DEL ALL	SHOW FIELDS	—	
FLID	TYP	BCN	SPD	FIX	TIM	ALT	RTE/RMK			
A	243	UAL6723	DELETE	UAL6723	3 475	SLC	E1615 330	KSFO./.	SLC./.	MCW.JVL6.KORD
A	245	AAL6766(34)	MD83/L	4443	475	SLC	E1625 330	KSFO./.	SLC./.	MCW.JVL6.KORD
A	099	BAW286(41)	H/B773/L	3101	490	MMM	E1558 310	KLAX./.	MMM./.	RECAP..*EGLL * R

Additional Route Indicator
Flight Plan Remarks Indicator

R-Position Equipment
Click to Play Animation
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- ⦿ You use the Continuous Flight Plan Readout (CFR) View to display and manage flight plan readouts.
- ⦿ The CFR View displays up to ten different flight plans.
 - The information in the CFR View is automatically updated.
 - The ACID and CID are displayed in green text for a preset period of time, whether or not the CFR was displayed previously.
 - The green coding displays when a flight plan is initially added to the view, as well as any time the flight plan is updated.
 - The coral-colored A to the left of the FLID is a non-ADS-B Indicator.

NOTE: Whether or not the coral A is displayed is controlled by the NON ADSB filter in the DB FIELDS Toolbar.

Continued on next page

CONTINUOUS FLIGHT PLAN READOUT (CFR) VIEW

(Continued)

CFR View (Cont'd)

TI 6110.100,
par. 8

*Click to display
delete pop-up
menu.*

- ⦿ Managing Information on the CFR View:
 - To display additional route information, left/middle-click the Additional Route Indicator (boxed asterisk).
 - To display remarks, left/middle-click the Flight Plan Remarks Indicator (boxed R).
 - To delete all flight plan entries, left/middle-click DEL ALL in the view header.
 - To delete a single flight plan entry, middle-click the desired CID or ACID.
 - A delete pop-up menu displays.
 - Left/middle-click DELETE to delete the entry.
-

CONTINUOUS FLIGHT PLAN READOUT (CFR) VIEW

(Continued)

CFR View Menu

TI 6110.100,
Chap. 8;
ERAM EDSM SRS
210.04 V1B1,
par. 3.2.5.4.2.1.1.4



CFR View Menu

M	CFR						DEL ALL	SHOW FIELDS	CFR	X
FLID	TYP	BCN	SPD	FIX	TIM	ALT	RTE/RMK			
A 243	UAL6723	A319/L	2453	475	SLC	E1615	330 KSFO./.	SLC	MCW	JVL6.KORD
A 245	AAL6766(34)	MD83/L	4443	475	SLC	E1625	330 KSFO./.	SLC	MCW	JVL6.KORD
A 099	BAW286(41)	H/B773/L	3101	490	MMM	E1558	310 KLAX./.	MM	..RECAP..*	EGLL * R

Show Fields

CFR	X
O	
BORDER	
ENTRIES	2
FONT	2
BRIGHT	76
RTE	35
FILTERS	

FILTERS	X
LBL	FIX
CID	TIM
TYP	ALT
BCN	RTE
SPD	

R-Position Equipment

[Click to Play Animation](#)

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☉ Menu items specific to the CFR View:

- ENTRIES sets the number of flight plans displayed.
 - The number of entries in the CFR View is 1-10. There is no scrolling in this view.
 - As the number of entries is decremented, the oldest entries are deleted.
- RTE sets the number of characters displayed in the Route Field.
 - The RTE range is 30-100 characters.
 - This button supports auto repeating for incrementing/decrementing.

Continued on next page

CONTINUOUS FLIGHT PLAN READOUT (CFR) VIEW

(Continued)

CFR View Menu (Cont'd)

TI 6110.100,
par. 8;
ERAM EDSM SRS
210.04 V1B1,
par. 3.2.5.4.2.1.1.4

- FILTERS allows you to customize the flight plans display.
 - Left/middle-click FILTERS to display the Filters Pop-up Menu.
-  **NOTE:** Click 1 to display Filters Pop-up Menu.
- Left/middle-click the toggle buttons in the menu to display/suppress columns and column data.
 - LBL toggles the column labels
 - ALT toggles altitude column/column data
 - BCN toggles beacon code column/column data
 - CID toggles computer ID column/column data
 - FIX toggles fix column/column data
 - RTE toggles route column/column data
 - SPD toggles speed column/column data
 - TIM toggles time column/column data
 - TYP toggles aircraft type column/column data
 - When one or more fields are suppressed and you want to show all fields in the flight plans display, left/middle-click SHOW FIELDS in the view header.

 **NOTE:** Click 2 to display SHOW FIELDS button.

NOTE: When a filter is selected and SHOW FIELDS has been activated, the word RETURN displays in the pick area. You can toggle between SHOW FIELDS and RETURN to apply/remove the selected filters.

- ⦿ Click anywhere on the Situation Display to close the view menu.
-

CONTINUOUS FLIGHT PLAN READOUT (CFR) VIEW

(Continued)

QF - Flight Plan Readout Request Command
 ERAM EDSM SRS
 210.04 V1B2,
 Appendix C,
 Section C.2;
 TI 6110.100,
 par. 8.



QF - Flight Plan Readout Request

Element	Format
Command ID	FR or QF
(Output Routing)	R
FLID	La(a)(a)(a)(a)(a) ddd or daa dddd <TBE>

Command Input Examples

QF 312
QF R 312

FR

DAL017

FR

▽
QF AAL36

Q

F

SPACE

R

SPACE

A

A

L

3

6

ENTER

R-Position Equipment

Click to Play Animation

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- ⦿ The QF command displays flight plan information in the CFR View or in the Response Area.

👉 **NOTE:** Discuss the command format and examples.

- If the CFR View is suppressed, flight plans are displayed in the Response Area (RA) View.
- The RA View automatically expands to display the requested data.

Click to display
 QFR
 command.

- ⦿ If the CFR View is open, flight plans can be directed to RA View using the QF R command.
- ⦿ A flight plan readout can also be displayed by positioning the trackball cursor on the first line of the FDB and pressing trackball ENTER.

Continued on next page

CONTINUOUS FLIGHT PLAN READOUT (CFR) VIEW

(Continued)

QF - Flight Plan Readout Request Command (Cont'd)

ERAM EDSM SRS
210.04 V1B2,
Appendix C,
Section C.2;
TI 6110.100,
par. 8.



QF - Flight Plan Readout Request ICAO Format

Element	Format
Command ID	 or QF
ICAO Flight Data Selection	1, 2, A, C, or I
FLID	La(a)(a)(a)(a) ddd or daa dddd <TBE>

Command Input Examples

QF C 312 QF A DAL017 QF 2 UAL24

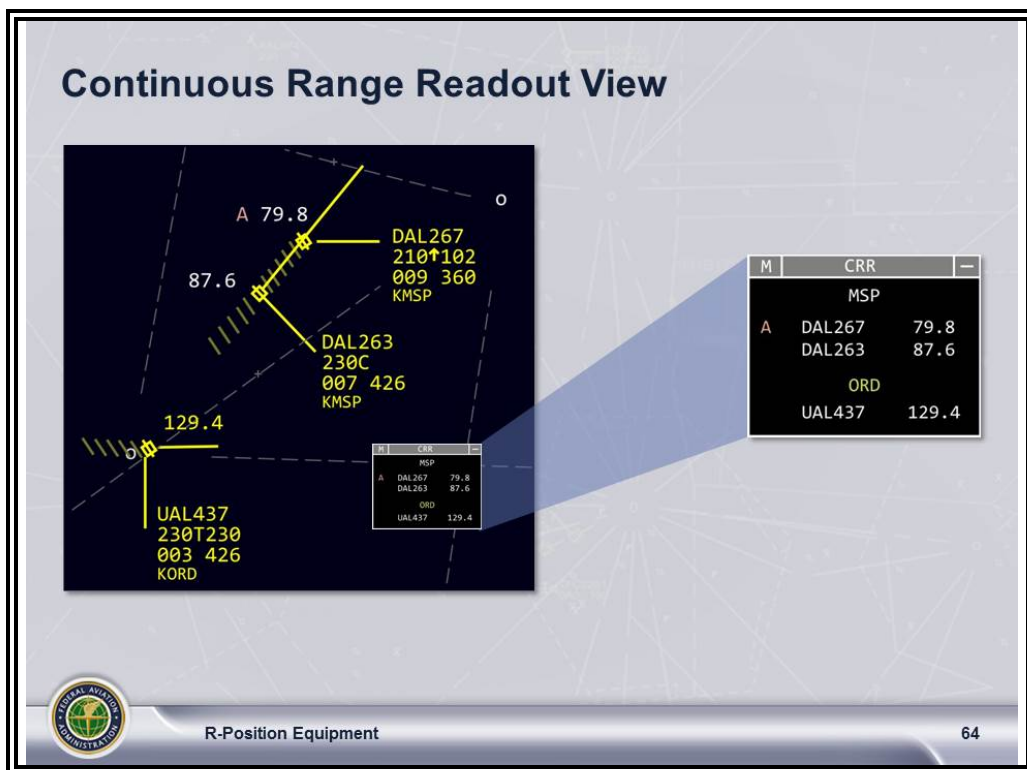
 R-Position Equipment 63

- ⦿ Flight plan readouts requested in the ICAO format always display in the RA View.
- ⦿ When used with the QF command, ICAO flight plan data can be 1, 2, A, C, or I.
 - Each selection returns a slightly different version of the ICAO data.

CONTINUOUS RANGE READOUT (CRR) VIEW

CRR View

TI 6110.100,
pars. 9.1, 9.3, 9.4



- ⦿ The Continuous Range Readout (CRR) View displays the target distance from a controller determined fix.
 - You use the CRR View to manage and control the continuous range readout display to monitor aircraft spacing and sequencing.
 - Each group name is displayed in the information list with associated entries listed below the group name.
 - The view contracts/expands automatically up to the set number of lines (3-20) as entries are added and deleted.
 - If the number of lines is set to 21+, the view expands/contracts to accommodate all entries.

Continued on next page

CONTINUOUS RANGE READOUT (CRR) VIEW

(Continued)

CRR View (Cont'd)

TI 6110.100,
pars. 9.1, 9.3, 9.4

☉ To create a group:

- Type LF.
- Left-click the group reference point on the display.
- Type the group name.
- Click ENTER. The new group name appears in the CRR view.

NOTE: Group name can be 1-5 alphanumeric characters.

☉ When a new Situation Display Location Group (SDLG) is created, you can specify a location of the group by:

- Selecting a trackball point on the Situation Display, or
- Entering a Fix name, Fix Radial Distance (FRD) or Latitude/Longitude

☉ To add one or more flights to a location:

- Left-click the group label in the CRR view or on the Situation Display.
- Left-click the track symbols of all but the last AID to be added to the group.

NOTE: You can add one to four flights at a time.

- Middle-click the final track symbol to complete the procedure.

NOTE: More information on creating and adding groups is presented in the next lesson.

CONTINUOUS RANGE READOUT (CRR) VIEW

(Continued)

Deleting Information in the CRR View

TI 6110.100,
par. 9.5



Delete Information in the CRR View

M	CRR	
GSG		
AAL321	60.1	
SWA1233	150.3	DELETE SWA1233
POT		
UAL456	30.3	
ABBEY		
UAL167	5.1	
N133A	12.5	
N12A	34.8	
N11A	79.9	



R-Position Equipment

Click to Play Animation

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☉ To delete information in the CRR View:

Click to display delete pop-up box.

- One entry in a group: Left/middle-click the entry in the CRR View. Left/middle-click the DELETE <entry name>.
- All entries from a group: Middle-click the Group Label. Left/middle-click the DELETE ALL pop-up.
- Group label: Left/middle-click the DELETE <group label>.

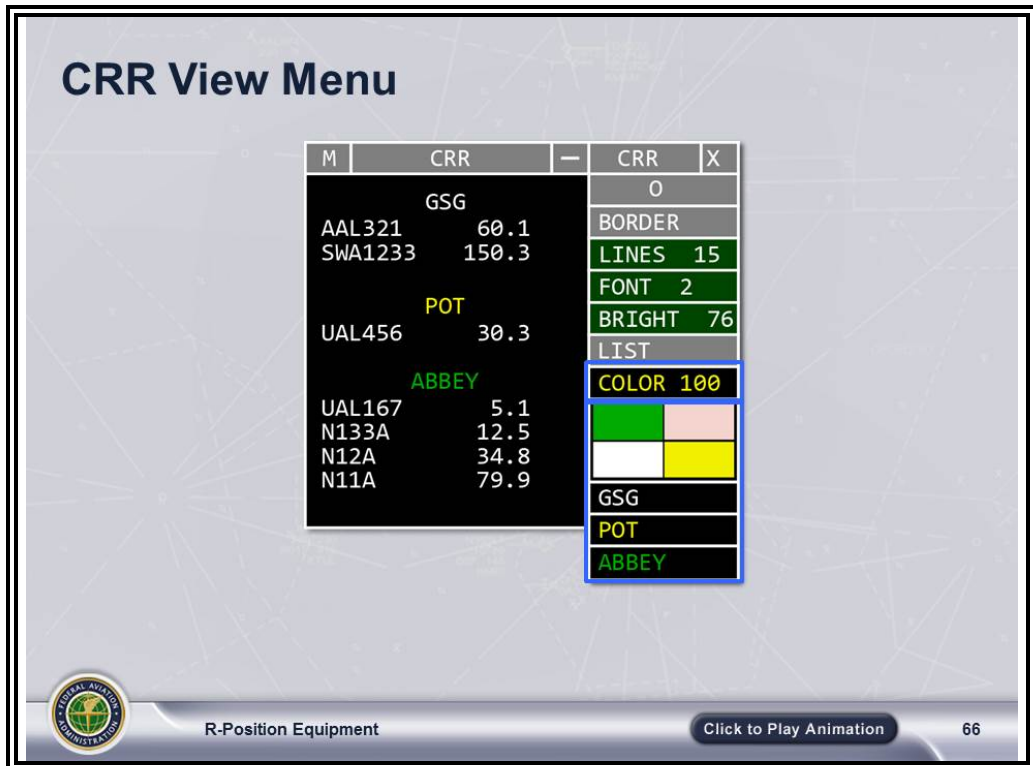
NOTE: A CRR group can only be deleted when the group has no flight entries.

CONTINUOUS RANGE READOUT (CRR) VIEW

(Continued)

CRR View Menu

TI 6110.100,
pars. 9.2, 9.5



☉ Menu items specific to the CRR View:

- Use Range Color Selection buttons (green, coral, white, yellow) to change the color of the group labels.
 - Left/middle-click the desired color button.
 - Left/middle-click one or more of the group labels in the View Menu to assign the selected color.
- Use the COLOR pick area to change the group color brightness.
 - Left/middle-click one of the four color buttons on the CRR View Menu.
 - Left-click the COLOR menu item to decrease the color brightness of all groups in the CRR View with that color.
 - Middle-click the COLOR menu item to increase the color brightness of all groups in the CRR View with that color.
- Use LIST to switch the CRR View from the Range Readout View Information List to the Situation Display Location Group Panel.

Click 1 to move highlight box.

Click 2 to move highlight box and display SDLG Panel.

NOTE: When the LIST menu item is grey, the information list is shown. When LIST menu item is black, the location group panel is shown.

ALTIMETER SETTING VIEW

Altimeter Setting View

TI 6110.100,
par. 10.1



M	ALTIM SET	
TLH	1530	994
NIP	1555	993
GNV	1558	-M-
DAB	1556	<u>991</u>
OCF	<u>1355</u>	993

Signifies Station Is Missing Data

Signifies Setting Is Below 2992

Station Name

Signifies Time Entry Is More Than 1 Hour Old

FEDERAL AVIATION ADMINISTRATION

R-Position Equipment

Click to Play Animation

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- ⊙ The Altimeter Setting View displays the altimeter station name, time of altimeter reading, and the altimeter setting.
 - Each altimeter station name you enter is displayed in the view.
 - The gold box in front of each station name indicates that the item can be torn off and placed in another location on the display.
 - The time of the reading follows the station name. Time is underlined if the entry is more than one hour old.
 - The altimeter setting is underlined if it is below 2992. The letter -M- appears if the reporting station is missing altimeter data.
- Click to display menu. ⊙ The Altimeter Setting View Menu allows you to:
 - Change aspects of the view.
 - Access a template that you can use to add and delete altimeter stations, and arrange the list.

ALTIMETER SETTING VIEW *(Continued)*

Altimeter Setting View Template

TI 6110.100,
par. 10.1



Altimeter Setting View Menu

M	ALTIM SET		—	AS	X
☐	TLH	1530	994		TLH
☐	NIP	1555	993		NIP
☐	GNV	1558	-M-		GNV
☐	DAB	1556	<u>991</u>		DAB
☐	OCF	<u>1355</u>	993		OCF

 R-Position Equipment 68

- ⦿ To display the Altimeter Setting View template, left/middle-click TEMPLATE on the view menu.
 - ⦿ To add an altimeter station name:
 - Left/middle-click the desired cell.
 - Type the altimeter station ID and press ENTER.
- NOTE:** You can update multiple altimeter station IDs while the template is open; however, you must press ENTER after typing each ID.
- ⦿ To move an altimeter station name:
 - Left/middle-click the entry to be moved. Entry will be highlighted.
 - Left/middle-click the desired cell. Entry is relocated.
 - Left/middle-click X or press the ENTER key to close the template.

Continued on next page

ALTIMETER SETTING VIEW *(Continued)*

Altimeter Setting View Template (Cont'd)

TI 6110.100,
par. 10.1

⦿ To delete an altimeter station:

- Left/middle-click the desired cell and backspace to remove the entry.
- Press ENTER.

NOTE: The template can contain up to 24 cells arranged in one line or up to four rows of six lines. You control the number of lines and rows in the Altimeter Setting View Menu. The layout of the Altimeter Setting View mimics the Altimeter Setting View template.

ALTIMETER SETTING VIEW *(Continued)*

Using the Altimeter Setting View to Add/Delete Altimeter Stations

TI 6110.100,
par. 10.1



Using the Altimeter Setting View to Delete an Altimeter Station

M	ALTIM SET	—
☐ TLH	1530	994
☐ NIP	1555	993
☐ DAB	1556	<u>991</u>
☐ OCF	<u>1355</u>	993

DELETE GNV

R-Position EquipmentClick to Play Animation69

- ⦿ You can also add or delete an altimeter station using the Altimeter Setting View.
- ⦿ To add an altimeter station:
 - Left/middle-click the menu button and begin typing.
 - A pop-up box will appear to accept your entry.
 - Press ENTER.
 - The station ID will be added to the view; if the station ID was already displayed, it will be removed from the view.
- ⦿ To delete an altimeter station:
 - Left/middle-click the desired entry. A delete pop-up menu appears.
 - Left/middle-click the DELETE menu item.

Click 1 to display pop-up menu.

Click 2 to show updated view.

ALTIMETER SETTING VIEW *(Continued)*

QD - Altimeter Setting Request Command

ERAM EDSM SRS
210.04 V1B2,
Appendix C,
Section C.2;
TI 6110.100,
par. 10.1



QD - Altimeter Setting Request Command

Element	Format
Command ID	 or QD
Altimeter Station ID	aaa

Command Input:
QD TLH NIP GNV DAB OCF <KBE>

M	ALTIM SET	—
	TLH	1530 994
	NIP	1555 993
	GNV	1558 -M-
	DAB	1556 <u>991</u>
	OCF	<u>1355</u> 993

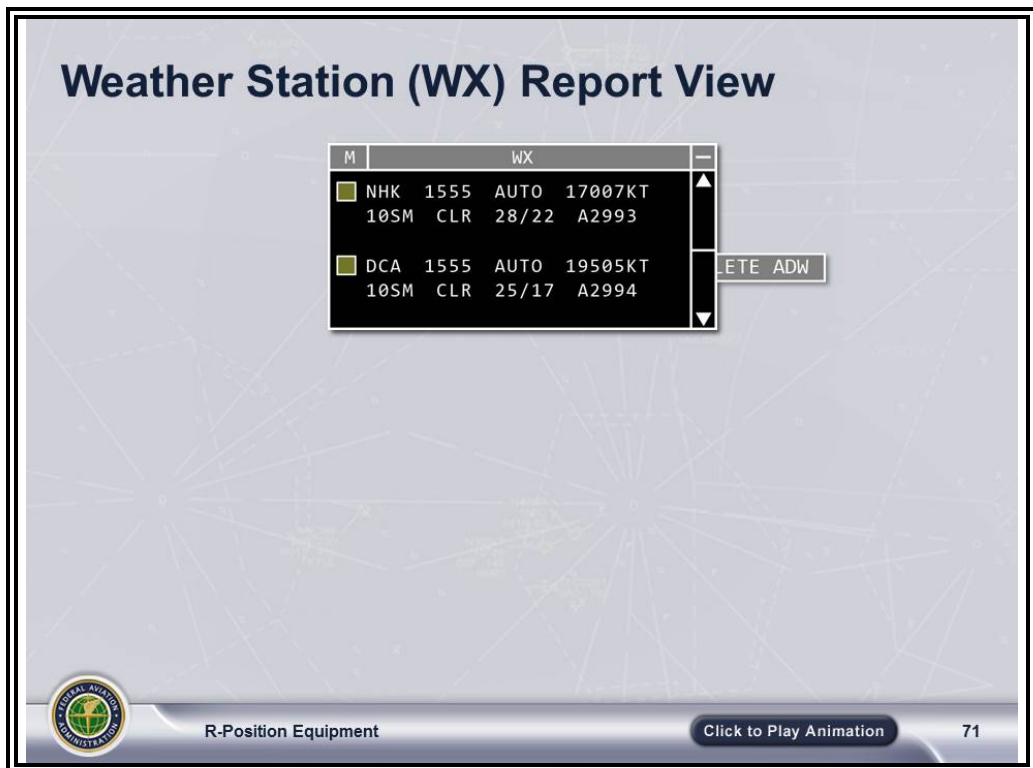
 R-Position Equipment 70

- ⦿ You can also use the QD command to add or delete altimeter stations to the Altimeter Settings View.
- ⦿ To enter an Altimeter Setting Request command:
 - Press the CRD Function Key or type QD in the MCA.
 - Type the altimeter station identifier (three alphanumeric characters).
 - A maximum of six stations may be entered at one time.
 - Typing a station ID that is already in the list will delete the station from the Altimeter Setting View.
 - Press ENTER.

WEATHER STATION (WX) REPORT VIEW

Weather Station Report View

TI 6110.100,
par. 10.2



- ⊙ The Weather Station Report View displays weather station names, time of weather station reading, and the coded weather report.
 - The gold box to the left of the weather data indicates that the item can be torn off and placed on the Situation Display.
 - Entries are updated automatically when new weather data is received; the last requested reporting station is displayed at the top of the report view.
 - As with the Altimeter Setting View, time is underlined if the entry is more than one hour old, and the letter -M- appears if the weather station is missing data.
- ⊙ To delete a weather station report:
 - Left/middle-click the desired entry. A delete pop-up menu appears.
 - Left/middle-click the DELETE menu item.

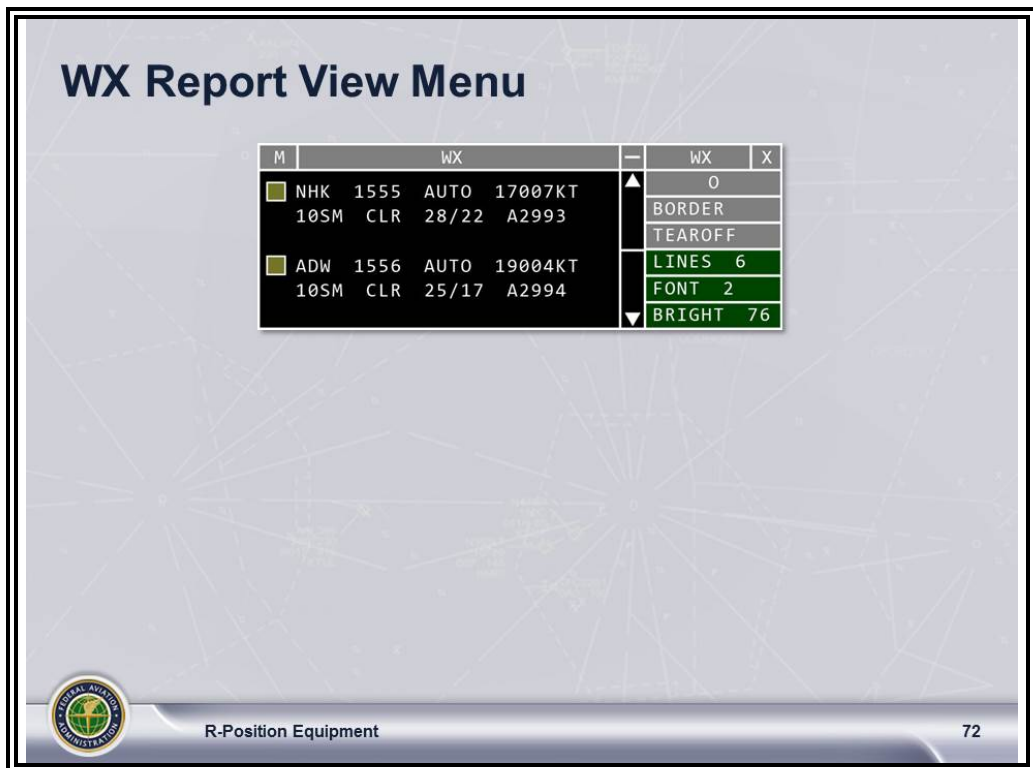
*Click 1 to
display pop-up
menu.*

*Click 2 to
display
updated view*

WEATHER STATION (WX) REPORT VIEW *(Continued)*

Weather Station Report View Menu

TI 6110.100,
par. 10.2



- ⦿ To add a weather station report:
 - Left/middle-click the M button in the Weather Station Report View Header to show the view menu.
 - Type a valid weather station ID. When you start typing, a pop-up input box will appear.
 - Press the ENTER key to add the weather station.
- ⦿ If the weather station ID entered is:
 - An invalid format - The input box will remain open and display INVALID.
 - Not adapted - The Feedback Area of the MCA will display an error response.
 - Already displayed - The entry is deleted from the view.

WEATHER STATION (WX) REPORT VIEW *(Continued)*

WR - Weather Request Command

ERAM EDSM SRS
210.04 V1B2,
Appendix C,
Section C.2;
TI 6110.100,
par. 10.2



WR - Weather Request Command

Element	Format
Command ID	WR
Weather Reporting Station ID	aa(a)(a)(a)

W

R

SPACE

N

H

K

SPACE

A

D

W

ENTER

R-Position Equipment73

- ⦿ You can also use the WR command to add or delete weather station reports to the Weather Station Report View.
- ⦿ To enter a Weather Request command:
 - Type WR in the MCA.
 - Type the weather reporting station identifier.
 - A maximum of three stations may be entered at one time.
 - Typing a station ID that is already in the list will delete the station from the Weather Station Report View.
 - Press ENTER.

GROUP SUPPRESSION VIEW

Group Suppression View

TI 6110.100,
pars. 11.1.1 and
11.1.2;
JO 7110.65,
par. 5-14-1 (b)



M	GROUP	SUP
01/25	SPOOKY3	
	SPOOKY4	
	TANKER6	
02/25	10	12
03/25	10	
04/25		
	TIGER2	
	TIGER3	

- ⦿ The Group Suppression View allows you to view and manage conflict alert suppression groups and manipulate group suppression information.
- ⦿ This function must be applied exclusively to inhibit the displaying of alerts among military aircraft engaged in special military operations for which standard separation criteria do not apply. Examples: refueling operations; ADC practice intercept operations.
 - The first column displays the group suppression number followed by a slant (/).
 - The second column lists the sector IDs of all the subscribed sectors. Your sector is listed first.
 - The flights in the Group are displayed underneath the Group Suppression sublist.
- ⦿ To display/suppress the group contents, left-click the Group Suppression ID, which toggles the contents on and off.

NOTE: The view cannot be suppressed if the sector is suppressing at least one group entry on the list.

- ⦿ If a sector is displaying a FDB due to a handoff or point out and that flight is a member of a suppression group, that group will be forced to the sector's view.

GROUP SUPPRESSION VIEW *(Continued)*

Creating a Suppression Group

TI 6110.100,
par. 11.1.5;
ERAM EDSM
SRS V1B2,
Appendix C,
Sections C.1
and C.2



Create a Suppression Group

Trackball Method

M	GROUP	SUP	GS	X
01/25			336/315_	
	SPOOKY3		BURDER	
	SPOOKY4		LINES 15	
	TANKER6		FONT 2	
02/25	10	12	BRIGHT 76	
03/25	10			
04/25				
	TIGER2			
	TIGER3			
05/25				

Keyboard Method

S

G

SPACE

3

3

6

/

3

1

5

ENTER

or

S

G

SPACE

A

SPACE

3

3

6

/

3

1

5

ENTER

Group Suppression
Action Indicator

R-Position Equipment

[Click to Play Animation](#)

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- ⦿ The Group Suppression View Menu can be used to manage group suppression information.
 - ⦿ To create a new group:
 - With the view menu displayed, begin typing. The Group Suppression Input Box opens automatically and replaces the view menu.
 - Type the aircraft ID of one aircraft, a slant (/), followed by the aircraft ID of a second aircraft to be added to the group.
 - Press the ENTER key to add the group and close the input box. The group label is displayed but the members of the group are not.
- NOTE:** A minimum of two and a maximum of 15 aircraft IDs are permitted. Aircraft IDs must be separated by slants (/), not spaces.
- ⦿ If you also want to subscribe to the group when you create it, type the letter A before entering the aircraft IDs.
 - ⦿ You can also use the SG command to create a group and, optionally, subscribe to it.

Click 1 to display input box.

Click 2 to display entry.

Click 3 to display updated view.

Click 4 to display command entry.

GROUP SUPPRESSION VIEW *(Continued)*

Add/Delete an Aircraft to a Group

TI 6110.100,
pars. 11.1.6 and
11.1.7;
ERAM EDSM
SRS V1B2,
Appendix C,
Sections C.1
and C.2



⦿ To add an aircraft ID to a group:

- With the view menu displayed, begin typing.
- Type the two-digit group ID, a space, followed by the aircraft ID.
- Press the ENTER key to add the aircraft ID and close the input box.

*Click 1 to
display entry.*

*Click 2 to
display
updated view.*

NOTE: When an aircraft ID is not in the group, it will be added. When an aircraft ID is entered that already exists in the group, it will be deleted. Adding an A or a D in the command will explicitly add or delete the aircraft ID.

⦿ To delete an aircraft ID from a group using the view:

- Left/middle-click the aircraft ID. A delete pop-up menu appears.
- Left/middle-click the DELETE menu item.

*Click 3 to
display pop-up
menu.*

*Click 4 to
display
updated view.*

NOTE: You can only delete an aircraft ID from a group if the sector has track control of the aircraft.

Continued on next page

GROUP SUPPRESSION VIEW *(Continued)*

Add/Delete an Aircraft to a Group (Cont'd)

TI 6110.100,
pars. 11.1.6 and
11.1.7;
ERAM EDSM
SRS V1B2,
Appendix C,
Sections C.1
and C.2



Add/Delete an Aircraft to a Group (cont.)



Command Inputs (Add):

S G SPACE 0 4 SPACE 3 5 7 ENTER *or*

S G SPACE A SPACE 0 4 SPACE 3 5 7 ENTER

Command Inputs (Delete):

S G SPACE 0 4 SPACE 3 5 7 ENTER *or*

S G SPACE D SPACE 0 4 SPACE 3 5 7 ENTER



R-Position Equipment

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- ⦿ Aircraft can also be added to or deleted from a suppression group using the SG command.
- ⦿ To add or delete an aircraft:
 - Press the SG function key or type SG space in the MCA.
 - Type the two-digit group ID, a space, followed by the aircraft ID, and press ENTER.
- ⦿ When an aircraft ID is entered that is not in the group, it will be added; when an aircraft ID is entered that already exists in the group, it will be deleted.
- ⦿ Adding an A or a D in the command will explicitly add or delete the aircraft.

GROUP SUPPRESSION VIEW *(Continued)*

Displaying a Group Not in the View

TI 6110.100,
par. 11.1.8;
ERAM EDSM
SRS V1B2,
Appendix C,
Sections C.1
and C.2



Display a Group Not in the View

Trackball Method

M	GROUP	SUP	—	GS	X
01/05				05	
02/05	10	12			
SPOOKY5 TANKER7					
03/05	10				
04/05					
05/10					

Keyboard Method

S G SPACE 0 5 ENTER

R-Position Equipment [Click to Play Animation](#) 78

- ⦿ A group created at another sector can be displayed in the Group Suppression View. To display a group:

Click 1 to display input box.

- With the view menu displayed, begin typing. The Group Suppression Input Box opens automatically and replaces the view menu.
- Type the group ID; for example 05.
- Press the ENTER key to add the group and close the input box.

Click 2 to display added group.

NOTE: Adding a group to your view does not automatically subscribe the sector to the group.

Click 3 to display command entry.

- ⦿ You can also use the SG command to display a group created at another sector.
- Press the SG function key or type SG space in the MCA.
- Type the two-digit group ID, a space, and press ENTER.

GROUP SUPPRESSION VIEW *(Continued)*

Subscribing/ Unsubscribing

TI 6110.100,
pars. 11.1.9
and 11.1.10



Subscribe to/Unsubscribe from a Group

Trackball Method

M	GROUP	SUP	—
01/05			
02/05	10	12	
03/05	10		
04/05			
05/	ADD 05		
	DELETE 05		

Keyboard Method

R-Position Equipment

[Click to Play Animation](#)
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☉ To subscribe to or unsubscribe from a group:

- Middle-click the group ID. The add/delete pop-up menu displays.
- Left/middle-click the ADD or DELETE menu item. The group is added to or deleted from the sector.

NOTE: When the Group ID field is selected and:

- The sector is not subscribed to the selected suppression group and the user requested display of the suppression group, both the Add and Delete pick areas are displayed.
- The sector is not subscribed to the suppression group and the suppression group is displayed in the view by the system (no manual request), only the Add pick area is displayed.
- The sector is subscribed to the suppression group, only the Delete pick area is displayed.

*Click to display
command
entry.*

☉ You can also use the SG command to subscribe to or unsubscribe from a group.

- Press the SG function key or type SG space in the MCA.
- Type A or D, the group number, and press ENTER.

CONFLICT ALERT VIEW

Conflict Alert View and Menu

TI 6110.100,
par. 11.2



Conflict Alert View and Menu

M	CONFLICT ALERT				CA	X
	N6453	N85TB		10.12M	O	
	RAWLY62	ORCA11 (47)		15.01M	BORDER	
X	DAL25	TFC1200		6.22M	FONT 2	
X	ASA31	(PPP) SKW2534 (PPP)		4.75M	BRIGHT 76	

Suppression Indicator

Controlling Facility/Sector

 R-Position Equipment 80

- ⦿ The Conflict Alert View allows you to view and manage entries for the display of conflicting aircraft pairs.
 - If set to opaque, the view automatically displays on top of all other views when a new entry is added and/or an entry's conflict status changes from suppressed to unsuppressed.
 - If set to semi-transparent, the view will continue to be covered by any opaque view when an entry is added.

NOTE: The Conflict Alert View can be suppressed only when it is empty. Only the view header displays if the Conflict Alert View is empty.

- ⦿ To suppress a conflict pair, middle-click the entry to be suppressed. An X will appear to the left of the entry.
- ⦿ To unsuppress a conflict pair, middle-click anywhere on the list entry. The X is removed from the view.

NOTE: Aircraft in immediate Alert status cannot be suppressed. Similarly, if a conflict alert pair is suppressed and subsequently becomes an immediate Alert, the suppression indicator will be automatically removed and the alert will be re-displayed on the Situation Display.

HOLD VIEW

Hold View

TI 6110.100,
par. 12.1;
ERAM SIG 884;
ERAM SIG 1380



Hold View

M	HOLD 000B240					
AID	ALT	EFC	DEST	RVR	CAT	
GLH						
AAL3212	200B240	1700	KATL		I	
DAL003	200	1703	KATL	1200		
MON						
UAL4562 (67)	240	1703	KATL		II	
AAL2342	220L	1705	KATL	1200		
AAL2453	170	1701	KATL			
DAL42	150	1705	KATL		IIIA	
MHZ						
N12A (AAA)	130	1630	KJAN	2400		
N11A	130T	1535	KJAN	2400		
P/P						
UAL1672	200B230	1625	KJAN	1800		

R-Position Equipment

[Click to Play Animation](#)

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- ⊙ The Hold View allows you to view, alter, and manage the holding information for a flight.
- ⊙ A flight with a hold entry is displayed in your Hold View if:
 - You have track control of the flight.
 - Your sector overlies the holding fix and the Hold View Altitude Limits are set to include the flight's:
 - Local interim altitude (LIA)
 - Interim altitude
 - Assigned altitude
 - Any altitude that is part of a block altitude
 - The numeric value of an ABV altitude clearance (ABV/180 uses 180)
 - The entered numeric altitude of VFR (VFR/155 uses 155)
 - The entered numeric altitude of OTP (OTP/165 uses 165)
 - The altitude after a fix that is part of an altitude/fix/altitude clearance (if the fix that is part of the altitude clearance is before or is the holding fix)
 - The altitude before a fix that is part of an altitude/fix/altitude clearance (if the fix that is part of the altitude clearance is after the holding fix)

Continued on next page

HOLD VIEW *(Continued)*

Hold View (Cont'd)

TI 6110.100,
par. 12.1;
ERAM SIG 884;
ERAM SIG 1380

 **NOTE:** Click 1 to display call out arrows.

- ⦿ The view displays sublists that identify the name of a holding fix or present position (P/P).

 **NOTE:** Click 2 to display highlight box.

- ⦿ Data for each entry is displayed in six columns:
 - Aircraft ID (AID)
 - Altitude (ALT)
 - Expected Further Clearance (EFC) time
 - Destination (DEST)/Alternate Airport (ALA)
 - Runway Visual Range (RVR)
 - Aircraft Landing Category (CAT)
 - ⦿ All data columns are a fixed width, with the exception of the altitude column. This column is displayed with a width large enough to accommodate the longest altitude of all entries in the view.
 - The AID, ALT, and EFC columns are always displayed.
 - The DEST/ALA, RVR, and CAT columns are optional; you can select whether you want to display them using the FILTERS option on the view menu.
 - Whether or not to display the column labels is also selectable using the FILTERS option on the view menu.
-

HOLD VIEW (Continued)

Key Information on the Hold View

TI 6110.100,
par. 12.1;
ERAM SIG 884;
ERAM SIG 1380



Hold View – Key Information

Gold Tear-off Bar →

Aircraft Control Designator →

M	HOLD 000B240	ALT	EFC	ALA	RVR	CAT
AID	GLH					
AAL3212		200B240	1700	KMSY		I
DAL003		200	1703	KMSY	1200	
MON						
UAL4562 (67)		240	1703	KMSY		II
AAL2342		220L	1705	KMSY	1200	
AAL2455		170	1701	KMSY		
DAL42		150	1705	KMSY		IIIA
MHZ						
N12A (AAA)		130	1630	KBTR	2400	
N11A		130T	1535	KBTR	2400	
P/P						
UAL1672		200B230	1625	KBTR	1800	

Highlighted Entry →

Scanning Line →

EFC Time Alert →

R-Position Equipment

Click to Play Animation

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- ⦿ Gold tear-off bars are displayed to the left of each hold fix name or P/P group. Torn-off sublists can be placed anywhere on the display.
- ⦿ The Hold View Header displays the currently selected hold altitude limits.
- ⦿ Aircraft Control Designator information is appended to the AID for entries where the sector is not the controlling sector for the flight.
 - Displays the intra- or inter-facility sector that has control of the flight; sector number displayed in parentheses
 - Is kept current as control changes occur
 - Does NOT display when a handoff is in progress
 - Is NOT selectable to make or take handoffs

Continued on next page

HOLD VIEW *(Continued)*

Key Information on the Hold View (Cont'd)

TI 6110.100,
par. 12.1;
ERAM SIG 884;
ERAM SIG 1380

- ⦿ Assigned altitude, interim altitude, or local interim altitude of the aircraft is displayed in the altitude (ALT) column.

- A red-filled circle preceding the altitude field indicates that two or more flights in a sublist have the same altitude or altitude within the same altitude block.

NOTE: Entries in Present Position Hold will not display the red circle indicating the same altitude due to the possibility that the aircraft may be holding at different geographical locations.

- A coral outline around the altitude field indicates a non-RVSM-equipped flight in RVSM airspace.

- ⦿ EFC times are inserted automatically by the system if you do not input an EFC time when placing an aircraft in hold.

- EFC time is determined by adding an adapted offset time to the expected time at the holding fix.
- An underlined EFC time indicates that the EFC time has expired or will soon expire.
- When an aircraft in hold reaches the EFC time, EFC is also displayed in Field E of the data block.

- ⦿ Destination and Alternate Airport data share a column.

*Click to change
DEST column
to ALA.*

- Click the column label to toggle between DEST data or ALA data.
- If the column labels are not displayed, you can place the cursor over the position that the DEST/ALA label would occupy to display the label and then select it to toggle the column contents.
- Destination data is displayed as either the ICAO identifier of the airport or a destination as filed.
 - If an as filed destination is more than five characters, the field will be blank.
- ALA data is underlined to distinguish it from destination data.

- ⦿ RVR data is for annotation only; it can be entered, modified, and viewed only in the Hold View.

Continued on next page

HOLD VIEW *(Continued)*

Key Information on the Hold View (Cont'd)

TI 6110.100,
par. 12.1;
ERAM SIG 884;
ERAM SIG 1380

- ⦿ CAT data for an aircraft can only be entered or modified from the Hold View; therefore, a flight must have a hold specified to include this data.

NOTE: Once specified, the CAT data remains even if the hold is canceled and will be available to display if a new hold is specified for the aircraft.

- ⦿ A gray scanning line is displayed after every third entry in a sublist if there are more than three entries in the sublist.
 - Displays only if the DEST/ALA, RVR and/or CAT columns are displayed
 - Displays in torn-off sublists if the sublist has more than three entries
- ⦿ Individual entries can be highlighted.
 - To highlight an entry, middle-click the aircraft ID.
 - To remove a highlight, middle-click the aircraft ID again.

NOTE: The highlight remains on the entry when the aircraft is handed off or grayed out for deletion. A highlighted entry is only displayed at the sector that requested the highlight.

HOLD VIEW (Continued)

Hold View Menu

TI 6110.100,
par. 12.2;
ERAM SIG 884;
ERAM SIG 1380



Hold View Menu

M	HOLD 000B240						—	HOLD	X
AID		ALT	EFC	DEST	RVR	CAT	0		
☐ GLH							BORDER		
AAL3212	● 200B240	1700	KATL		I		TEAROFF		
DAL003	● 200	1703	KATL	1200			LINES 15		
☐ MON							FONT 2		
UAL4562(67)	240	1703	KATL		II		BRIGHT 76		
AAL2342	220L	1705	KATL	1200			ALT LIM...	242B000	
AAL2453	170	1701	KATL				SORT...	SORT X	
DAL42	150	1705	KATL		IIIA		FILTERS	FILTERS X	
☐ MHZ							FORCE HOLD	LBL	
N12A(AAA)	● 130	1630	KJAN	2400			DEST/ALA		
N11A	● 130T	1535	KJAN	2400			RVR		
☐ P/P							CAT		
UAL1672	200B230	1625	KJAN	1800			MHZ		
							P/P		



R-Position Equipment

[Click to Play Animation](#)

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- ⦿ You use the Hold View Menu to manage the display of and operations performed on the Hold View entries.
- ⦿ Menu items specific to the Hold View Menu are:
 - ALT LIM
 - SORT
 - FILTERS
 - FORCE HOLD
- ⦿ The ALT LIM options allow you to input the lower and upper altitudes that will display aircraft in hold if their:
 - Holding fixes are within the lateral confines of the sector, and
 - Their assigned/interim/local interim altitudes are within the altitude limits you set.

NOTE: A flight for which you have track control will always display in your Hold View, regardless of the altitude limits you set.

Continued on next page

HOLD VIEW (Continued)

Hold View Menu (Cont'd)

TI 6110.100,
par. 12.2;
ERAM SIG 884;
ERAM SIG 1380;
ERAM EDSM
SRS V1B1, par.
3.2.5.6.2.3.6.1.15

 **NOTE:** Click 1 to display ALT LIM submenu.

- ⦿ When you click on the ALT LIM button, an input box displays.
 - Entry format is dddBddd.
 - If left blank, the default setting is 000B600.
 - An INVALID message displays if:
 - The entry is not formatted dddBddd. Example: 120B36p
 - A higher altitude precedes a lower altitude. Example: 360B120

 **NOTE:** Click 2 to display SORT submenu.

- ⦿ The SORT option allows you to display and arrange the sublist entries by fix name or destination.
 - To sort the list alphabetically, left/middle-click the FIX NAME or DEST buttons.
 - Fixes will be sorted alphabetically with the present position sublist at the bottom.
 - Destinations will be sorted alphabetically.
 - To sort the list manually, left/middle-click the MANUAL button:
 - Left-click fixes or destinations (except the last one) in the preferred order.
 - Middle-click the final fix or destination in the list.

NOTE: Additional information on using the Sort Menu is presented in the next section.

Continued on next page

HOLD VIEW *(Continued)*

Hold View Menu (Cont'd)

TI 6110.100,
par. 12.2;
ERAM SIG 884;
ERAM SIG 1380;
ERAM EDSM
SRS V1B1, par.
3.2.5.6.2.3.6.1.15

 **NOTE:** Click 3 to display *FILTERS* submenu.

- ⦿ The *FILTERS* option allows you to select whether or not to display column labels and the optional columns (DEST/ALA, RVR, and CAT) in the Hold View.
 - The submenu items (LBL, DEST/ALA, RVR, and CAT) are toggles you can use to suppress/display these items.
 - If the labels and/or optional columns are selected, they are also displayed in torn-off sublists.
 - ⦿ The *FORCE HOLD* option allows you to force the display of the Hold View to the Situation Display when a flight is added to the Hold View at a fix.
 - Toggle the button between enabled and disabled.
-

HOLD VIEW (Continued)

Destination Sort

TI 6110.100,
par. 12;
ERAM SIG 1380



Destination Sort

M HOLD 000B240							HOLD	X
AID		ALT	EFC	FIX	RVR	CAT	0	
☐ KATL							BORDER	
UAL4562(67)	240	1703	MON		II		TEAROFF	
AAL2342	220L	1705	MON	1200			LINES 15	
AAL3212	200B240	1700	GLH		I		FONT 2	
DAL003	200	1703	GLH	1200			BRIGHT 76	
AAL2453	170	1701	MON				ALT LIM...	
DAL42	150	1705	MON		IIIA			
☐ KJAN							SORT...	SORT X
UAL1672	200B230	1625	P/P	1800			FILTERS	DEST
N12A(AAA)	130	1630	MHZ	2400			FORCE HOLD	FIX NAME
N11A	130T	1635	MHZ	2400				MANUAL
								KATL
								KJAN
								MHZ
								P/P
UAL1672	200B230	1625	KJAN	1800				

R-Position Equipment

[Click to Play Animation](#)

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☉ You can sort the sublists on the Hold View by hold fix or by destination.

- On the Hold View shown here, the sublists are sorted by fix (GLH, MON, MHZ, P/P).
- The destination data is displayed in the DEST column.

*Click to display
destination
sort.*

☉ When you sort by destination:

- The sublists are arranged by destination (KATL, KJAN).
- Within a sublist, the sort order is as follows:
 - By hold fix, from the fix that is farthest from the destination to the fix that is closest to the destination.
 - For flights with the same hold fix, by altitude, from the highest displayed altitude to lowest displayed altitude. For flights with a block altitude, the lower altitude of the block altitude is used.
 - For flights with the same hold fix and altitude, flights in a current hold appear before flights with a future hold.
 - For flights with the same hold fix, altitude, and hold status, by aircraft identification.

Continued on next page

HOLD VIEW *(Continued)*

Destination Sort (Cont'd)

TI 6110.100,
par. 12;
ERAM SIG 1380

- The DEST column changes to FIX and displays hold fixes.
 - The FIX column toggles with the ALA column.
 - Fix data is not changeable in the Hold View.
 - The altitude alert symbol is displayed twice – preceding ALT and FIX.
 - ⊙ When the Hold View sort is switched between DEST and FIX:
 - Any displayed tear-offs are removed from the display.
 - Any previously displayed tear-offs for the new sublists are redisplayed if they had been displayed within the previous 60 minutes and there are current entries in the sublist.
 - ⊙ You can specify a manual sort order for the sublists.
 - If destination sublists are displayed, destination names will appear below the manual pick area on the Sort Menu.
 - If fix name sublists are selected, fix names will appear below the manual pick area on the Sort Menu.
-

HOLD VIEW (Continued)

Hold View Altitude Limits ERAM SIG 884



Hold View Altitude Limits – Example 1

Sector 23
240B360



AAL2342 – FL260

Your Sector 22
240B360



UAL4562 – FL280



UAL7788 – FL260



AAL2453 – FL240

Fix IGN

M	HOLD 240B360					—
AID	ALT	EFC	ALA	RVR		
 IGN						
AAL2342	260T	1205	KBDF			

M	HOLD 240B360					—
AID	ALT	EFC	ALA	RVR		
 IGN						
UAL4562	280	1203	KBDF			
UAL7788	260	1204	KJFK			
AAL2342 (23)	260T	1205	KBDF			
AAL2453	240	1201				



R-Position Equipment

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- ⦿ The Hold View Altitude Limits function allows you to see aircraft that have been issued a hold and have altitudes within the limits you set, whether or not you have track control.
- ⦿ Example 1:
 - Sector 23 has control of AAL2342.
 - AAL2342 has been issued holding at IGN, which is in Sector 22.
 - AAL2342 is displayed in Sector 22's Hold View because the holding fix is in their airspace and AAL2342 is within the Hold View altitude limits.
 - Only Sector 22 sees the same altitude alert (red-filled circles).

Continued on next page

HOLD VIEW (Continued)

Hold View Altitude Limits (Cont'd)

ERAM SIG 884



Hold View Altitude Limits – Example 2

M	HOLD 240B360					—
AID	IGN	ALT	EFC	ALA	RVR	
UAL4562		280	1203	KBDF		
UAL7788		260	1204	KJFK		
AAL2453(25)		240	1201			

Sector 22 retains control of UAL4562 and UAL7788.
Sector 22 hands off AAL2453 to Sector 25.

M	HOLD 000B230					—
AID	IGN	ALT	EFC	ALA	RVR	
AAL2453		240	1201			

M	HOLD 000B240					—
AID	IGN	ALT	EFC	ALA	RVR	
AAL2453		240	1201			

Because Sector 25 has track control of AAL2453, an entry will be displayed in the Hold View regardless of altitude limit settings.

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Example 2:

- Three aircraft are holding at IGN.
- AAL2453 is at the lowest altitude in Sector 22, so the flight is handed off to Sector 25.
- Sector 22 still sees AAL2453 in the Hold View because the assigned altitude is within its Hold View altitude limits.
- Sector 25 will have a Hold View entry on the flight regardless of altitude because they have track control.

NOTE: As soon as Sector 25 changes the altitude (assigned, interim, or local interim) of AAL2453, the Hold View entry for the flight will be deleted from Sector 22, even if the aircraft is still at FL240.

HOLD VIEW (Continued)

Placing an Aircraft in Hold

TI 6110.100,
par. 12.3.1;
ERAM EDSM
SRS 210.04 V1B1,
pars.
3.2.5.6.2.3.7.2,
3.2.5.6.2.3.7.3.3,
3.2.5.6.2.3.7.3.6



Place Aircraft in Hold Using the View Menu

M	HOLD 000B240					—	HOLD	X
AID		ALT	EFC	ALA	RVR		UAL42	
GLH							BORDER	
AAL3212	●	220B240	1700	KMSY			TEAROFF	
DAL003	●	200	1703	KMSY	1200		LINES 15	
MON							FONT 2	
UAL4562(67)		240	1703	KMSY			BRIGHT 76	
AAL2342		220L	1705	KMSY	1200		ALT LIM...	
AAL2453		170	1701	KMSY			SORT...	
DAL42		150	1705	KMSY			FILTERS	
MHZ							FORCE HOLD	
N12A(AAA)	●	130	1630	KBTR	2400			
N11A	●	130T	1635	KBTR	2400			
P/P								
UAL1672		200B230	1625	KBTR	1800			
UAL42		210	1645	KATL				



R-Position Equipment

Click to Play Animation

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- ⦿ You can use the Hold View to place an aircraft in hold.
- ⦿ Trackball Method:
 - Left-click the desired sublist header. The QH command and the fix name or P (for present position), is echoed in the MCA.
 - Left-click all but the last position symbols of selected flight IDs.
 - Middle-click the last position symbol to complete the hold message.

Continued on next page

HOLD VIEW *(Continued)*

Placing an Aircraft in Hold (Cont'd)

TI 6110.100,
par. 12.3.1;
ERAM EDSM
SRS 210.04 V1B1,
pars.
3.2.5.6.2.3.7.2,
3.2.5.6.2.3.7.3.3,
3.2.5.6.2.3.7.3.6

 **NOTE:** Click 1 to display input box.

⦿ Keyboard Method:

- With the Hold View Menu open, begin typing to display the Hold View Input Box.
 - You can enter up to two fields of data, separated by a space.
 - If you enter two fields, the first field identifies the fix name or radial distance; the second field identifies an aircraft ID or computer ID.
 - If you enter one field, it is assumed to be a flight ID.
 - You can enter up to 20 characters:
 - Up to 12 characters for a fix
 - One space character
 - Up to 7 characters for an aircraft ID

NOTE: The system recognizes the input as a hold command, so QH is not part of the syntax.

 **NOTE:** Click 2 to display updated view.

- Press ENTER to close the Hold View Input Box.

NOTE: The entry is displayed in the view as soon as the command is entered.

HOLD VIEW (Continued)

Canceling a Hold

TI 6110.100,
par. 12.3.2



Cancel a Hold in the Hold View

M	HOLD 000B240					—	HOLD	X
AID		ALT	EFC	ALA	RVR		AAL2342	
☐	GLH							
AAL3212		200B240	1700	KMSY				
DAL003		200	1703	KMSY	1200			
☐	MON							
UAL4562(67)		240	1703	KMSY				
AAL2342		220L	1705	KMSY	1200			
AAL2453		170	1701	KMSY				
DAL42		150	1705	KMSY				
☐	MHZ							
N12A(AAA)		130	1630	KBTR	2400			
N11A		130T	1635	KBTR	2400			
☐	P/P							
UAL1672		200B230	1625	KBTR	1800			
UAL42		210	1645	KATL				

 R-Position Equipment [Click to Play Animation](#) 88

☉ You can use the Hold View to cancel and/or delete a hold from the view.

☉ Trackball Method:

- Left-click AID (in example, AAL2342). A pop-up menu displays.
- To cancel the hold, left/middle click the CANCEL option. The hold is canceled and the entry text is grayed out.
- To cancel the hold and immediately remove the entry from the Hold View, select the CANCEL + DELETE option from the pop-up menu.

NOTE: When a hold is canceled, the Hold View entry is typically grayed out until the user specifically deletes it.

☉ Keyboard Method:

*Click to display
input box; then
click again to
show grayed
out text*

- With the Hold View Menu open, type the flight ID of the aircraft in hold to be canceled. The Hold View Input Box will replace the Hold Menu.
- Press the ENTER key to close the input box. The hold is canceled and the text of the entry is grayed out.

HOLD VIEW (Continued)

Changing the Hold Altitude

TI 6110.100,
par. 12.3.4



Change the Altitude in the Hold View

M	HOLD 000B240					
AID	GLH	ALT	EFC	ALA	RVR	
AAL3212		200B240	1700	KMSY		
DAL003		200	DAL003	X	KMSY 1200	
	MON		230	T		
UAL4562 (67)		240	220	T	KMSY	
AAL2342		220L	210	T	KMSY 1200	
AAL2453		170	200	T	KMSY	
DAL42		150	190	T	KMSY	
	MHZ		180	T		
N12A(AAA)		130	1630	KBTR	2400	
N11A		130T	1635	KBTR	2400	
	P/P					
UAL1672		200B230	1625	KBTR	1800	
UAL42		210	1645	KATL		

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☉ To change an altitude:

- Left/middle-click the Altitude field to open the Altitude Menu. The cursor will be placed over the next lower altitude.
- Left/middle-click the desired altitude.
- The new altitude displays in the Hold View and the data block is updated.

NOTE: Any assigned or interim altitude updates to the data block will also be reflected in the Hold View.

HOLD VIEW (Continued)

Changing the EFC Time

TI 6110.100,
par. 12.3.5



Change the EFC Time in the Hold View

M		ALT	EFC	ALA	RVR
GLH					
AAL3212		200B240	1700	KMSY	
DAL003		200	1703	KMSY	1200
MON					
UAL4562(67)		240	1703	KMSY	
AAL2342		220L	1705	DAL42	X
AAL2453		170	1701	EFC TIME	
DAL42		150	1705		
MHZ					
N12A(AAA)		130	1630	KBTR	2400
N11A		130T	1635	KBTR	2400
P/P					
UAL1672		200B230	1625	KBTR	1800
UAL42		210	1645	KATL	



R-Position Equipment

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⦿ To change the Expect Further Clearance (EFC) time:

- Left/middle-click the EFC field of the desired entry.
 - The EFC Input Box displays.

NOTE: If there is no EFC time for the entry, a labeled box appears when the cursor is positioned over the blank area.

- Type the four-digit EFC time.
- Press the ENTER key.
 - EFC time is updated in the Hold View.

HOLD VIEW (Continued)

Changing the ALA

TI 6110.100,
par. 12.3.7



Change the ALA in the Hold View

M	HOLD 000B240					
AID	GLH	ALT	EFC	ALA	RVR	
AAL3212		200B240	1700	KMSY		
DAL003		200	1703	KMSY	1200	
	MON					
UAL4562(67)		240	1703	KMSY	AAL2453 X	
AAL2342		220L	1705	KMSY	ALA	
AAL2453		170	1701	KMSY		
DAL42		150	1705	KMSY		
	MHZ					
N12A(AAA)		130	1630	KBTR	2400	
N11A		130T	1635	KBTR	2400	
	P/P					
UAL1672		200B230	1625	KBTR	1800	
UAL42		210	1645	KATL		



R-Position Equipment

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⦿ To change the Alternate Airport:

- Left/middle-click the ALA field of the aircraft.
 - The ALA Input Box opens.

NOTE: If there is no Alternate Airport ID for the entry, a labeled box appears when the cursor is positioned over the blank area.

NOTE: The Preview Area of the MCA must be empty before the input box can be displayed.

- Type the new Alternate Airport ID. Up to four alphanumeric characters can be entered.
- Press the ENTER key. ALA is added/changed in both the Hold View and the flight plan.

NOTE: You cannot change the destination or fix data from the Hold View.

Continued on next page

HOLD VIEW (Continued)

Changing the ALA (Cont'd)

TI 6110.100,
par. 12.3.7



Change the ALA – AM Command

Element	Format
Command ID	AM
FLID	La(a)(a)(a)(a)
Alternate Airport (ICAO format)	ALA
Alternate Airport ID	aaaa

A M SPACE A A L 1 2 3 SPACE A L A SPACE

K D E N ENTER

 R-Position Equipment 92

- ⦿ You can also use the amendment command (AM) to change the alternate airport.
 - In the MCA, type AM, space, FLID, space, ALA, space, alternate airport ID.

NOTE: This command changes data in the flight plan and the Hold View.

HOLD VIEW (Continued)

Entering or Changing RVR Data

ERAM SIG 1380



Entering or Changing RVR Data

M	HOLD 000B240					
AID		ALT	EFC	ALA	RVR	
☐ GLH						DAL003 X
AAL3212	● 200B240	1700	KMSY			RVR
DAL003	● 200	1703	KMSY		1200	
☐ MON						
UAL4562 (67)	240	1703	KMSY			
AAL2342	220L	1705	KMSY		1200	
AAL2453	170	1701	KMSY			
DAL42	150	1705	KMSY			
☐ MHZ						
N12A (AAA)	● 130	1630	KBTR		2400	
N11A	● 130T	1535	KBTR		2400	
☐ P/P						
UAL1672	200B230	1625	KBTR		1800	
UAL42	210	1625	KATL			

 R-Position Equipment 93

⦿ To enter or change the RVR data:

- Left/middle-click the RVR field of the aircraft to open the RVR Input Box.
- Type the RVR data. Up to four numeric characters can be entered.
- Press the ENTER key. RVR is added/changed in the Hold View.

NOTE: Once set, RVR data remains even if the hold is canceled. It will be available to display if a new hold is specified for the aircraft.

HOLD VIEW (Continued)

Entering or Changing CAT Data

ERAM SIG 1380



Entering or Changing CAT Data

M	HOLD 000B240						—
AID		ALT	EFC	ALA	RVR	CAT	
☐	GLH						
AAL3212		• 200B240	1700	KMSY		I	
DAL003		• 200	1703	KMSY	1200		
☐	MON						
UAL4562 (67)		240	1703	KMSY		II	
AAL2342		220L	1705	KMSY	1200		
AAL2453		170	1701	KMSY			
DAL42		150	1705	KMSY		IIIA	
☐	MHZ						
N12A (AAA)		• 130	1630	KBTR	2400		
N11A		• 130T	1535	KBTR	2400		
☐	P/P						
UAL1672		200B230	1625	KBTR	1800		
UAL42		210	1625	KATL			

N11A

X

CAT

 R-Position Equipment 94

⦿ To enter or change an aircraft's landing category (CAT):

- Left/middle-click the CAT field of the aircraft to open the CAT Input Box.
- Type the CAT number. Up to four alphanumeric characters can be entered.

NOTE: Although procedurally the CAT data is defined with Roman numerals (I, II, III), any text is accepted by the system.

- Press the ENTER key. The landing category is added/changed in the Hold View.

NOTE: Pressing ENTER with no data in the input box will clear any stored CAT data.

NOTE: Once set, CAT data remains even if the hold is canceled. It will be available to display if a new hold is specified for the aircraft.

HOLD VIEW (Continued)

Handoffs

TI 6110.100,
pars. 12.3.8
and 12.3.10;
ERAM SIG 1380



Handoffs

M		HOLD 000B240			
AID		ALT	EFC	ALA	RVR
☐	GLH				
AAL3212		● 200B240	1700	KMSY	
DAL003		● 200	1703	KMSY	1200
☐	MON				
UAL4562(67)		240	1703	KMSY	
AAL2342		220L	1705	KMSY	1200
AAL2453		170	1701	KMSY	
DAL42		150	1705	KMSY	
☐	MHZ				
N12A(AAA)		● 130	1630	KBTR	2400
N11A		● 130T	1535	KBTR	2400
☐	P/P				
UAL1672		200B230	1625	KBTR	1800

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- ⊙ You can hand-off one or more flights in hold from the Hold View.
- ⊙ To hand-off one or more flights in hold:
 - Type the sector.
 - In the Hold View, left-click all but the last AID to be handed off (if selecting more than one aircraft).
 - Middle-click the single AID or the last AID to be handed off.
 - The handoff(s) is/are initiated. The handoff status is available in the FDB for the flight.
- ⊙ Hand-off all flights in hold at a fix:
 - Type the sector.
 - Middle-click the desired fix.
 - The handoff of all flights in hold at that fix is initiated. Handoff status is available in the FDBs for the flights.

NOTE: When an aircraft in the Hold View has been handed off to an adjacent sector, the entry will remain in the view at the previous controlling sector until the FDB is removed.

HOLD VIEW *(Continued)*

Torn Off Hold View Sublists

TI 6110.100,
par. 12.3.11;
ERAM SIG 1380



Torn Off Hold View Sublists

☐ MON HOLD	000B240		
AID	ALT	EFC	ALA
UAL4562 (67)	240	1703	KMSY
AAL2342	220L	.	.
AAL2453	170	1701	KMSY
DAL42	150	1705	.

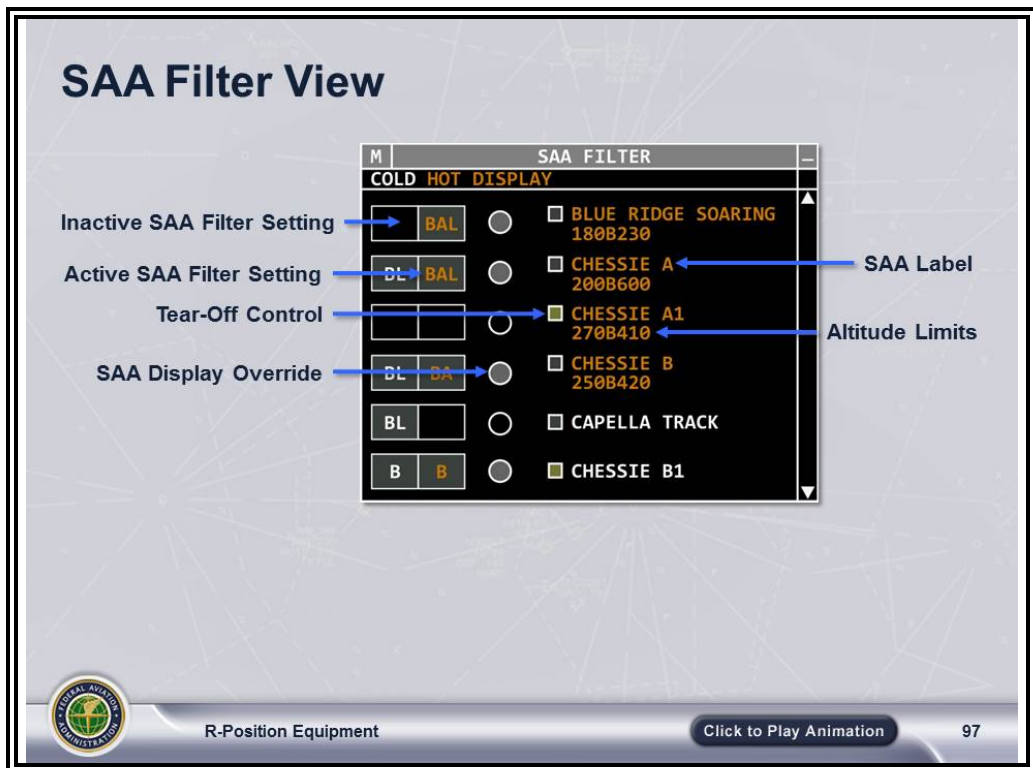
R-Position Equipment96

- ⦿ The fields containing the altitude, EFC time, ALA, RVR, and CAT data can be changed in a torn-off sublist in the same manner as in the main Hold View.
 - If there is no data for EFC, ALA, RVR, or CAT, you will see a period rather than a space (as in the Hold View).
 - If the EFC, ALA, RVR, or CAT periods are selected, a label will be displayed in the field with the input box next to it.

SAA FILTER VIEW

SAA Filter View

TI 6110.100,
par. 13.7



- ⊙ The Special Activity Airspace (SAA) Filter View contains a list of SAAs that can be displayed on the Situation Display.
 - In this view, you can filter each SAA to limit the amount of SAA information shown on the Situation Display.
 - You can also decide if you want to display active SAAs that are outside of your sector's altitude limits.
 - The view includes:
 - Column headers (COLD, HOT, and DISPLAY)
 - SAA entries, including:
 - Inactive SAA Filter Setting pick areas
 - Active SAA Filter Setting pick areas
 - SAA Display Override button
 - Tear-Off Control pick areas
 - SAA Information (SAA Label and Altitude Limits, if active)
 - Active SAAs are listed at the top of the SAA Filter View, alphanumerically by the SAA sort ID; then the inactive SAAs are listed.

*Click to display
call outs.*

Continued on next page

SAA FILTER VIEW *(Continued)*

SAA Filter View (Cont'd)

TI 6110.100,
par. 13.7

- ⊙ The contents of the SAA Filter View may change as sectors are combined or decombined.

NOTE: The SAA Filter View only controls the display of SAA information on the Situation Display. Activating, deactivating, and scheduling SAAs is still accomplished via the EDST at the Mission Coordinator or RA positions.

- ⊙ When an SAA is cold, the display characteristics that can be set from the SAA Filter View for SAAs on the Situation Display are:

- Off: No SAA boundaries or labels are displayed.
- Boundary: The SAA boundaries are displayed, but not the SAA label.
- Boundary-Label: The SAA boundaries and label are displayed.

- ⊙ When an SAA is hot, the display characteristics that can be set from the SAA Filter View for SAAs on the Situation Display are:

- Off: No SAA boundaries, altitude limits, or labels are displayed.

NOTE: The ability to turn a HOT SAA completely off is controlled by adaptation. In some facilities, the ability to turn off the boundaries for a HOT SAA will not be available.

- Boundary: The SAA boundaries are displayed, but not the SAA label or altitude limits.
- Boundary-Altitude: The SAA boundaries and altitude limits are displayed.
- Boundary-Altitude-Label: The SAA boundaries, altitude limits, and label are displayed.

- ⊙ Picking within the COLD SAA filter setting pick areas cycles through:

- No SAA boundaries (outlines) or labels (blank)
- SAA boundaries (B)
- SAA boundaries and labels (BL)

- ⊙ Picking within the HOT SAA filter setting pick areas cycles through:

- No SAA boundaries (outlines) or labels (blank)
- SAA boundaries (B)
- SAA boundaries and altitudes (BA)
- SAA boundaries, altitudes, and labels (BAL)

Continued on next page

SAA FILTER VIEW *(Continued)*

SAA Filter View (Cont'd)

TI 6110.100,
par. 13.7

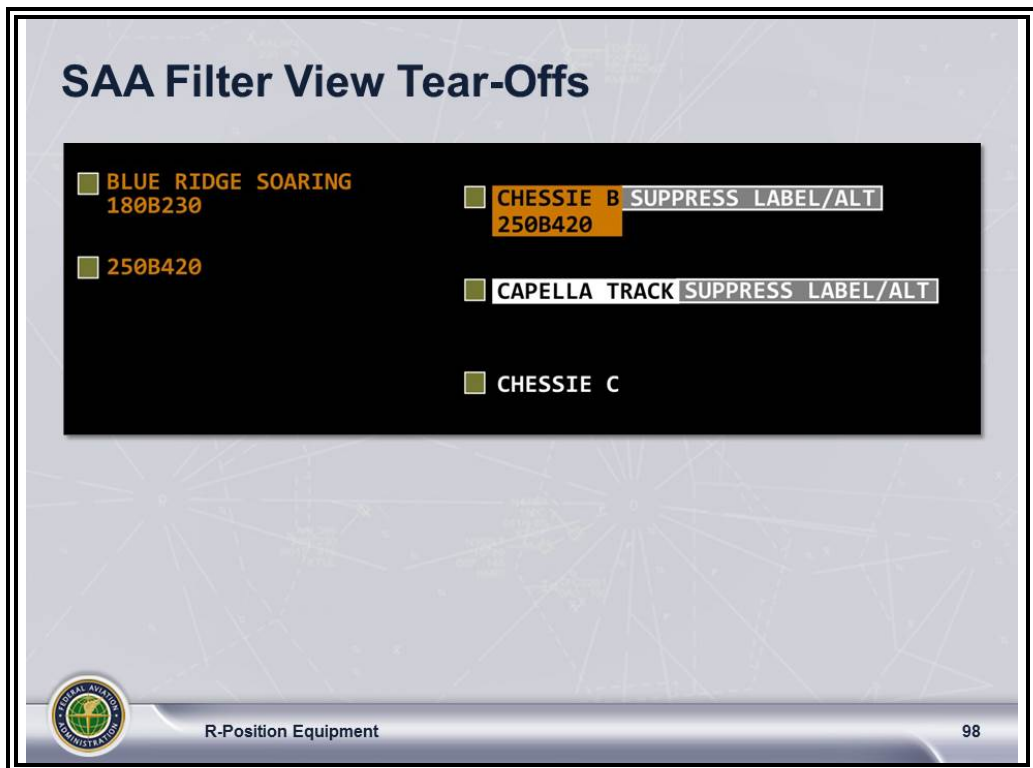
NOTE: Facility adaptation of SAAs includes a filtering function which controls the display of active SAAs at a specific sector. Normally, active SAAs will display at a sector if they are within the sector, or if they are outside the sector and adapted to display.

- ☉ You can override the adapted SAA filter by selecting the SAA Display Override button for an individual active SAA listed in the SAA Filter View.
 - If you set the SAA Display Override button to ON (previously OFF):
 - SAAs filtered off by the system will be displayed.
 - SAAs that you have filtered off (no BAL options selected) will be displayed with boundary and altitude options.
 - If you set the SAA Display Override button set to OFF, the system will revert to the SAA settings in adaptation and in your Pref Sets.
-

SAA FILTER VIEW *(Continued)*

SAA Filter Tear-Offs

TI 6110.100,
par. 13.7



- ⦿ The SAA tear-offs give you the ability to suppress the adapted display of the Label and Altitude, and place them at a location you specify.
 - When a tear-off is initiated, the SAA boundary (outline) is displayed in the system brightness using the current color (white or orange).
 - While the tear-off is in progress, the SAA information currently displayed in the SAA View remains displayed.
 - When the tear-off is complete (placed on the Situation Display), the adapted SAA information is removed and the tear-off button in the SAA Filter View turns grey.

NOTE: The system will not automatically change the Situation Display range to display the SAA boundary; the user may have to range out first and then tear off the label to see the SAA boundary feedback.

Continued on next page

SAA FILTER VIEW *(Continued)*

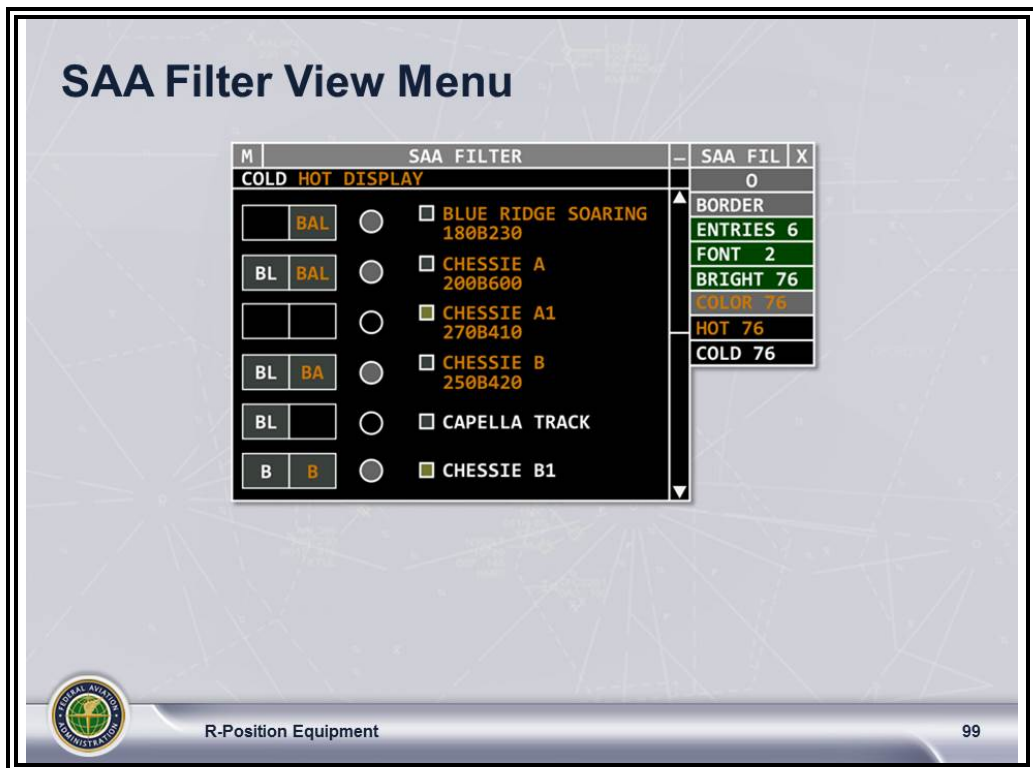
SAA Filter Tear-Offs (Cont'd)

TI 6110.100,
par. 13.7

- ⦿ If you select a torn off label on the Situation Display, a SUPPRESS/LABEL/ALT pop-up pick area opens. If you select that pop-up pick area, the torn off label is suppressed.
 - If the label is inactive (white) when suppressed, the associated SAA Filter View COLD button is set to Boundary.
 - If the label is active (orange) when suppressed, the associated SAA Filter View HOT button is set to Boundary.
-

SAA FILTER VIEW *(Continued)*

**SAA Filter
View Menu**
TI 6110.100,
par. 13.7

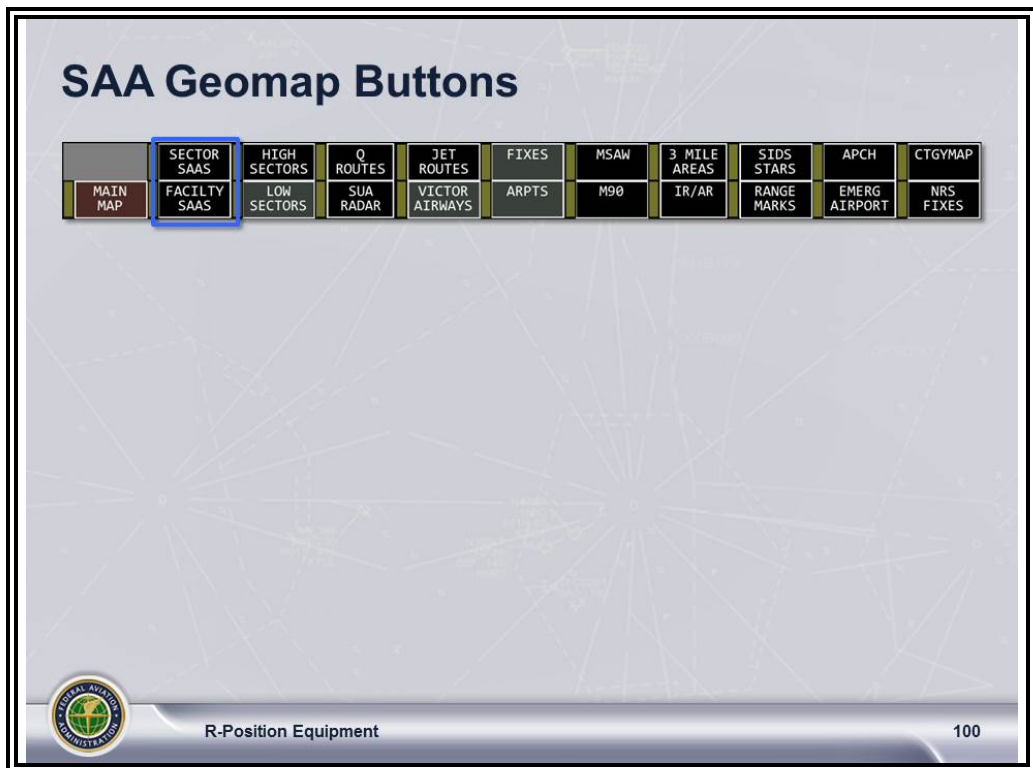


- ⦿ Menu items specific to the SAA Filter View Menu:
 - COLOR (Active Filter Button Text Brightness)
 - Provides the brightness level for the orange characters in the Active SAA Filter setting pick area and the HOT column header in the SAA Filter View
 - HOT (SAA Active Brightness). Provides brightness level for the orange text for:
 - SAA label and altitude limits in the SAA Filter View
 - SAA label and altitude limits in the tear-off on the Situation Display
 - Active SAA boundary on the Situation Display
 - Active SAA label and altitude limits on the Situation Display (non-tear-off)
 - COLD (SAA Inactive Brightness)
 - SAA label in the SAA Filter View
 - SAA label in the tear-off on the Situation Display
 - Inactive SAA boundary on the Situation Display
 - Inactive SAA label on the Situation Display (non-tear-off)

SAA FILTER VIEW *(Continued)*

SAA Geomap Buttons

TI 6110.100,
par. 3.3

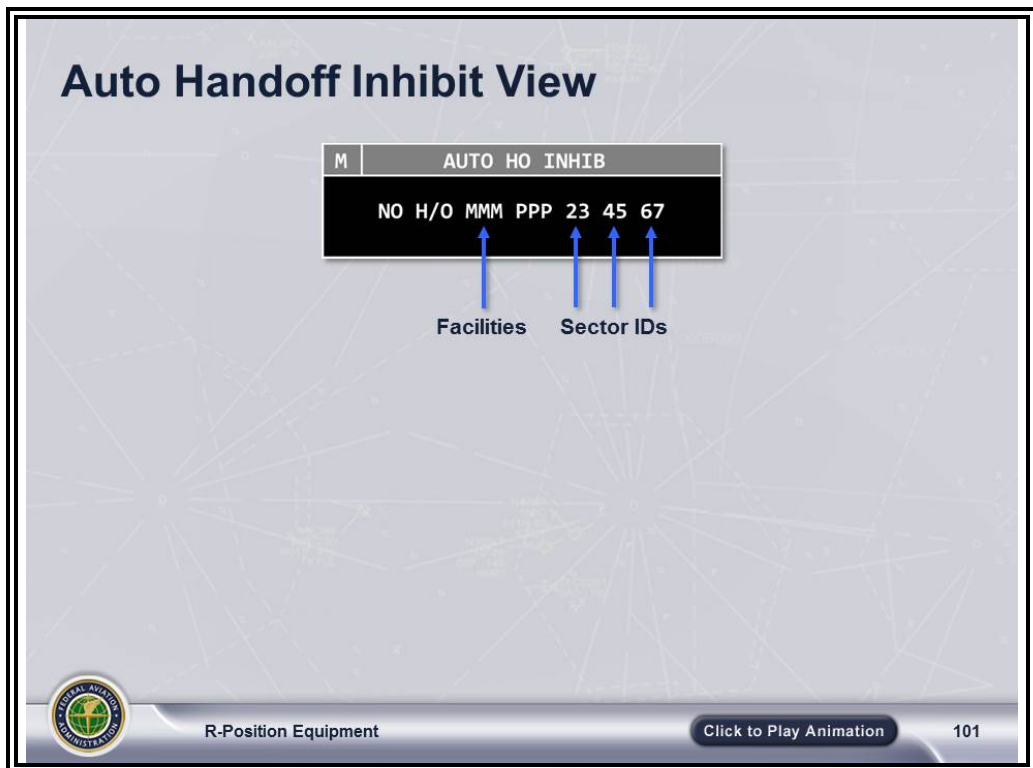


- ⦿ The Geomap Toolbar contains two facility-adaptable buttons related to SAAs.
 - The SECTOR SAAS button toggles the display of boundaries of adapted SAAs relevant to your sector.
 - The FACILITY SAAS button toggles the display of boundaries of all facility adapted SAAs not currently displayed.
 - SAAs currently displayed due to SAA Filter View settings and/or adaptation are not affected.
 - The SECTOR SAAS and FACILITY SAAS buttons can be torn off and placed on the Situation Display for easy access.

OTHER VIEWS

Auto Handoff Inhibit View

TI 6110.100,
par. 13.1



- ⦿ The Auto Handoff Inhibit View allows you to prevent automatic handoffs to adjacent sectors and facilities.
 - If there are any entries in the Auto Handoff Inhibit View, the view cannot be suppressed.
 - After the NO H/O label, facilities are listed first; then sectors.
 - Up to four facilities and sector IDs can be listed per line.
- ⦿ To add a facility or sector using the view menu:
 - Open the view menu.
 - Begin typing a facility or sector ID. The Auto Hand-off Input Box replaces the view menu.
 - Press ENTER to submit the command and close the input box.

*Click to display
call outs.*

Continued on next page

OTHER VIEWS *(Continued)*

Auto Handoff Inhibit View

(Cont'd)

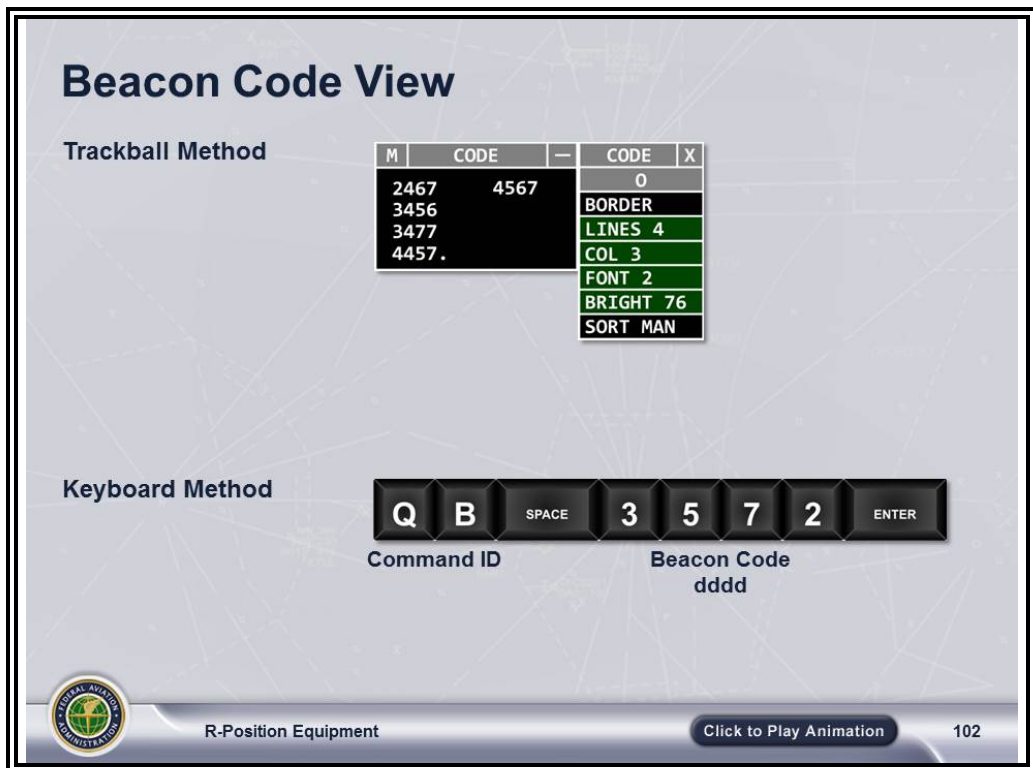
TI 6110.100,
par. 13.1

- ⦿ To delete a facility or sector using the list entry:
 - Left/middle-click the facility or sector ID to be deleted. A delete pop-up is displayed.
 - Left/middle-click DELETE to delete the entry.
 - ⦿ You can also use the QA command to add and delete facilities and sectors.
 - In the MCA, type QA, a space, the facility or sector identifier, and press ENTER.
-

OTHER VIEWS *(Continued)*

Beacon Code View

TI 6110.100,
par. 13.2



- ⦿ The Beacon Code View allows you to manage the beacon code list.

NOTE: Beacon codes with a dot after them have been added manually to the list.

- ⦿ To add or delete a beacon code using the Beacon Code Input Box:
 - Open the view menu.
 - Begin typing a beacon code. The Beacon Code Input Box temporarily replaces the menu.
 - Press ENTER to submit the command and close the input box.

NOTE: If the code is on the list, it is deleted; if it is not on the list, it will be added.

- INVALID will appear below the entry box if an invalid code is entered.

Continued on next page

OTHER VIEWS *(Continued)*

Beacon Code View (Cont'd)

TI 6110.100,
par. 13.2

*Click 1 to
display view
menu.*

*Click 2 to
display
command
entry.*

- ⊙ To delete a beacon code using the list entry:
 - Left/middle-click the beacon code to be deleted. A delete pop-up is displayed.
 - Left/middle-click DELETE to delete the entry.

- ⊙ To sort codes entered manually:

- Open the view menu.
- Left/middle-click the SORT MAN menu item to toggle the list.

NOTE: When toggled on, the list will display manually entered codes at the top. SORT MAN menu item is shaded gray.

- When toggled off, the list will sort all entries in ascending numerical order. SORT MAN menu item is shaded black.

- ⊙ You can also use the QB command to add and delete beacon codes.
 - In the MCA, type QB, a space, the 4-digit beacon code, and press ENTER.

NOTE: If the code is on the list, it is deleted; if it is not on the list, it will be added.

- To explicitly add or delete a beacon code, include the optional IN (insert) or DE (delete) fields.

Examples: QB IN 2000 KBE or QB DE 3451 KBE.

OTHER VIEWS (Continued)

Departure and Inbound List Views

TI 6110.100,
pars. 13.3 and 13.4



Departure and Inbound List Views

M	DEPT	—	DEPT	X
☐	EWR		0	
	AAL321 60		BORDER	
	SWA123 150		TEAROFF	
☐	LGA		LINES 15	
	N2234 170B210		FONT 2	
			BRIGHT 76	
☐	PHL		SORT	
	UAL167 50		NWK	
	N133A 120			
	N12A VFR			
	N11A OTP			

M	INBND	—	INBND	X
☐	ABC		0	
	AAL321 60 2233		BORDER	
	SWA123 150		TEAROFF	
☐	DEF		LINES 15	
	UAL456 170B210		FONT 2	
			BRIGHT 76	
☐	XYZ		SORT	
	UAL167 50		JKL	
	N133A 120			
	N12A VFR			
	N11A OTP			

SORT	X
FIX NAME	
EWR	
LGA	
PHL	

SORT	X
BOUNDARY TIME	
FIX NAME	
ABC	
DEF	
XYZ	

 R-Position Equipment 103

- ⦿ The Departure List and Inbound List Views are very similar. These views allow you to view and manage information about departing and inbound flights. Both views include:
 - Fix Sublist titles
 - Aircraft IDs
 - Filed altitudes, including Non-RVSM Indicators
- ⦿ To suppress a Fix Sublist, left/middle-click the sublist heading.
- ⦿ To redisplay a Fix Sublist:
 - Open the view menu.
 - Left/middle-click the SORT menu item to open the Sort Pop-up Box.
 - Left/middle-click the fix name to redisplay the sublist.

Continued on next page

OTHER VIEWS *(Continued)*

Departure and Inbound List Views (Cont'd)

TI 6110.100,
pars. 13.3, 13.4

- ⊙ To sort alphanumerically by fix name:
 - Open the view menu.
 - Left/middle-click the SORT menu item to open the Sort Pop-up Box.
 - Left/middle-click the FIX NAME button to sort fixes.

NOTE: The sublists in both the view and sort menus are sorted alphanumerically.

- ⊙ To sort manually by fix name:
 - Open the view menu.
 - Left/middle-click the SORT menu item to open the Sort Pop-up Box.
 - Left/middle-click the fixes in the desired order.
 - Middle-click the last fix.

NOTE: The sublists in both the view and sort menus are sorted in the selected order.

- ⊙ To sort the Inbound List by Boundary Crossing Times:
 - Open the view menu.
 - Left/middle-click the SORT menu item to open the Sort Pop-up Box.
 - Left/middle-click the BOUNDARY TIME button to sort the Inbound List by Boundary Crossing Time and close the pop-up box.

NOTE: If Boundary Crossing is selected, all sublists will disappear and the flights will be listed in a straight list. To redisplay sublists, select the Fix Name or sort the fixes manually.

OTHER VIEWS (Continued)

**Meter
Reference
Point List View**
TI 6110.100,
par. 13.5;
ERAM EDSM SRS
210.04 V1B1,
pars. 3.2.5.3.2.1,
3.2.5.3.2.3.4.3



Meter Reference Point List View

M	MRP			MRP	X
	DFW	NORTH	096	0	
	CQY			BORDER	
				TEAROFF	
				LINES 15	
				FONT 2	
				BRIGHT 76	
				RESEQ	
				SPEED	

The "+" indicates heavy aircraft.
The "H" indicates aircraft for which a HOLD command has been entered.

 R-Position Equipment 104

- ⊙ The Meter Reference Point List View informs you of desired MRP crossing times and applicable delay times for TMA metered flights.
- ⊙ To re-sequence flight entries using the MRP List View:
 - Left-click all but the last entry in the desired sequence.
 - Middle-click the last entry.

NOTE: Up to five flight entries can be re-sequenced.

- ⊙ To re-sequence entries using the Position Symbol:
 - Open the view menu.
 - Left/middle-click the RESEQ menu item.
 - Left-click all but the last position symbol in the desired sequence.
 - Middle-click the last position entry in the sequence.

NOTE: Re-sequencing fights can be done only within a sublist. If you try to re-sequence across sublists, you will receive an error message.

- ⊙ To suppress an entry:
 - Middle-click the entry to open the Suppress Pop-up Box.
 - Left/middle-click the pop-up box to suppress the entry and close the pop-up.

Continued on next page

OTHER VIEWS *(Continued)*

**Meter
Reference
Point List
View (Cont'd)**

TI 6110.100,
par. 13.5;
ERAM EDSM SRS
210.04 V1B1,
pars. 3.2.5.3.2.1,
3.2.5.3.2.3.4.3

☉ Alternative keyboard command syntax:

- To re-sequence flight entries:

SQ FLID/FLID/FLID/FLID/FLID
- To manually swap flight entries:

MW FLID/FLID
- To suppress an MRP list entry:

QP R FLID

NOTE: The SPEED menu item on the MRP View Menu toggles the speed advisory column off and on. The speed advisory information will be present in the view and usable when GIM-S is fully deployed at your facility.

REVIEW

Review



Response Item

Which views cannot be suppressed if they have entries?

- A. Message Composition Area, Response Area, and Update Area
- B. Meter Reference Point, Hold, and Conflict Alert
- C. Auto Handoff Inhibit, Group Suppression, and Conflict Alert
- D. Conflict Alert, Response Area, and Update Area



R-Position Equipment

[Click to Show Answer](#)

105



Response Item

A Hold View entry is always displayed at your position when a Hold command has been entered for a flight and _____.

- A. the aircraft is within your sector's altitude limits
- B. the aircraft is within your Hold View altitude limits
- C. the holding fix is in your airspace
- D. you have track control



R-Position Equipment

[Click to Show Answer](#)

106

SLIDE ANSWERS: Slide 105 = C; Slide 106 = D

REVIEW *(Continued)*

Review
(Cont'd)



Response Item

Which views contain alert coding in the form of an underline?

- A. Hold View, WX View, Altimeter Setting View
- B. Hold View, CFR View, Altimeter Setting View
- C. CFR View, WX View, Altimeter Setting View
- D. CFR View, WX View, SAA Filter View



R-Position Equipment

[Click to Show Answer](#)

107

SLIDE ANSWER: A

👉 **NOTE:** Review what the underline alert coding means.

REVIEW (Continued)

Review (Cont'd)



Response Item

The SAA Filter View allows you to control the display of which features of a HOT SAA?

- A. Color, boundaries, and altitude limits
- B. Start/end times, boundaries and labels
- C. Color, boundaries, and labels
- D. Boundaries, altitude limits, and labels



R-Position Equipment

[Click to Show Answer](#)

108



Response Item

All views have entries that can be torn off.

- A. True
- B. False



R-Position Equipment

[Click to Show Answer](#)

109

SLIDE ANSWERS: Slide 108 = D; Slide 109 = B

CONCLUSION

Summary

 **NOTE:** Review and elaborate briefly on the following:

- ⦿ R-Position radar hardware console components and their functions
- ⦿ R-Position CHI elements and functions
- ⦿ Map Display management features and attributes
- ⦿ Functions for customizing the Situation View Display
- ⦿ Accessing and managing Situation Display views

 **NOTE:** Ask students if there are any questions.

Practice Exercise 2

- ⦿ Practice Exercise 2: R-Position CHI Checklist, is located in 55055-HO3.
- ⦿ You will complete this exercise in the lab.

 **NOTE:**

- Have students complete this practice exercise in the lab.
 - The exercise is estimated to take 1 hour lab time per student.
 - The recommended environment is in the TTL at a simulated position in the student's area of specialization with a scenario (labeled for Lesson 3, Exercise 2) running. No ghost pilots are required.
 - An instructor must be present in the lab to assist.
 - The student may refer to notes, user manuals and course materials.
-

End-of-Lesson Test

- ⦿ Your instructor will now administer the End-of-Lesson Test.

 **NOTE:** Distribute and administer the End-of-Lesson Test located in 55055-ELT03.
