Common Constraint Situation Display User Manual

Version 8.4

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Contents

Introduction

Getting Help

To access CCSD help, open the CCSD. Click **Help** on the CCSD Help menu to launch the browser and open the CCSD Help. You can also get specific help by clicking the **Help** button on an individual dialog box. This dialog box feature will be explained later in this document.

The following example shows the Internet Explorer browser open to the default CCSD Help screen.
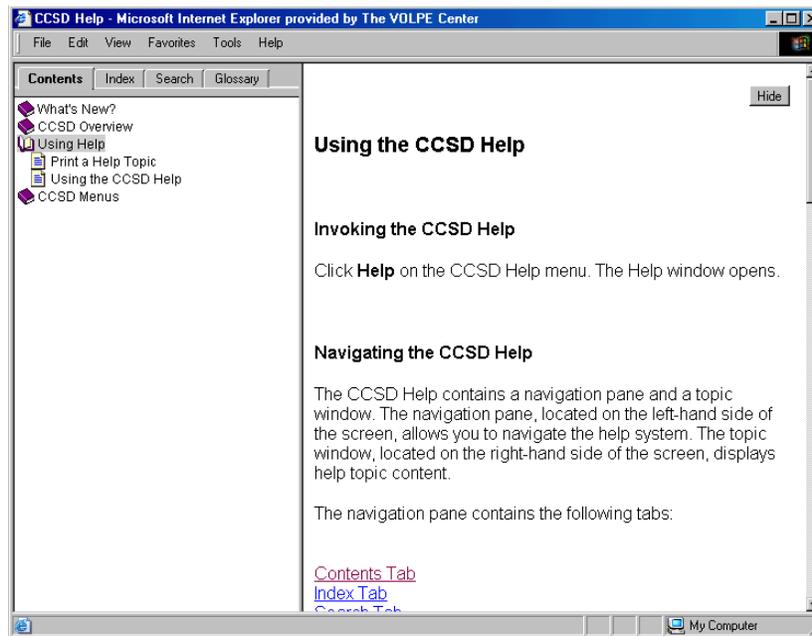
Using Help

The CCSD Help contains a navigation pane and a topic window as shown above. The navigation pane, located on the left-hand side of the screen, allows you to navigate the help system. The topic window, located on the right-hand side of the screen, displays help topic content.

Navigation Pane

The navigation pane contains the following tabs:

- Contents Tab
- Index Tab
- Search Tab
- Glossary Tab

Contents Tab

To scroll through the table of contents for Help, click the **Contents** tab. The Contents tab displays books and topic pages that represent the categories of information in the CCSD Help. When you click a closed book, it opens to display its content (sub-books and topic pages). When you click an open book, it closes. When you click on a topic page, that topic page displays in the topic window.

In the following example, clicking the **CCSD Menus** book and the **Maps Menu** book opens the Maps Menu book.
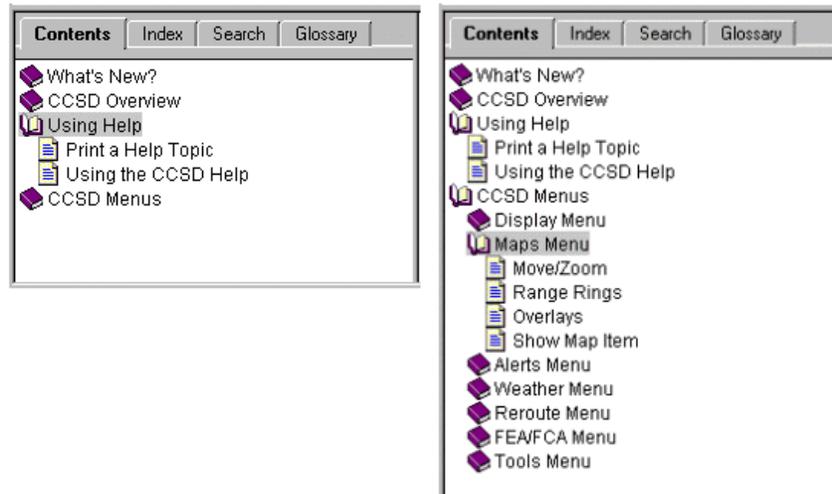
Index Tab

To scroll through or search the index, click the **Index** tab. Type in the search field to find a matching index term or scroll through the list of index terms. Clicking an index term displays its related topic(s). A help topic page will automatically open if there is only one topic related to the index term. If there is more than one related topic, a pop-up menu will open with a list of topics to choose from.

In the following example, every was entered into the Index search field.
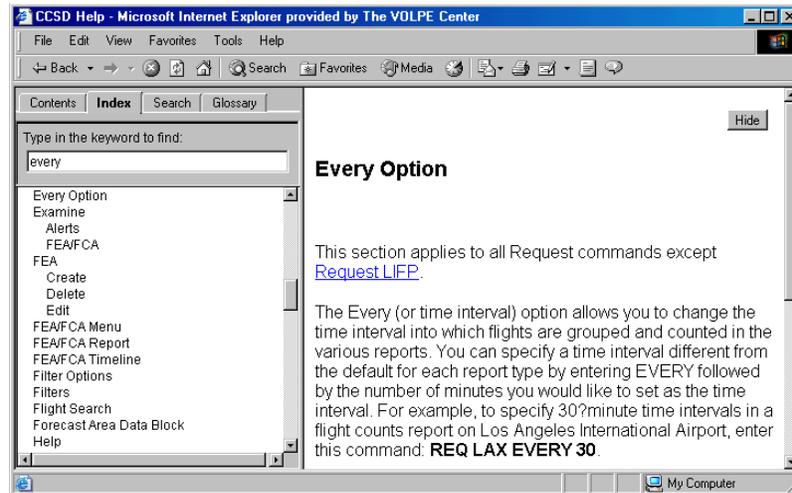
The index display automatically advances to the first entry in the index that matches every. Clicking **Every Option** in the index opens the Every Option topic page in the topic window.

Search Tab

When you want to search for specific terms or phrases, click the **Search** tab. Type a search term in the search field and press **<Enter>**. A list of matching topics is generated. Click a topic title to open that topic.

In the following example, **Edit FEA** was entered into the search field.
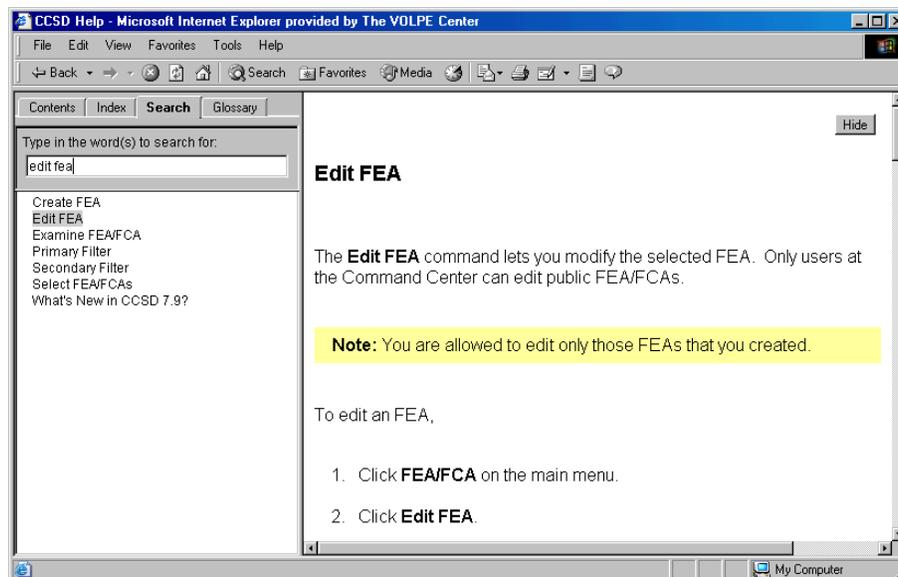
Clicking **Edit FEA** opened the Edit FEA help topic in the topic window.

Glossary Tab

For CCSD terms and definitions, click the **Glossary** tab. The glossary is split into two windows. Click a term in the Term window to view its definition in the Definition window.

In the following example, **command line** is selected in the Term window and the definition for Command Line is displayed in the Definition window.
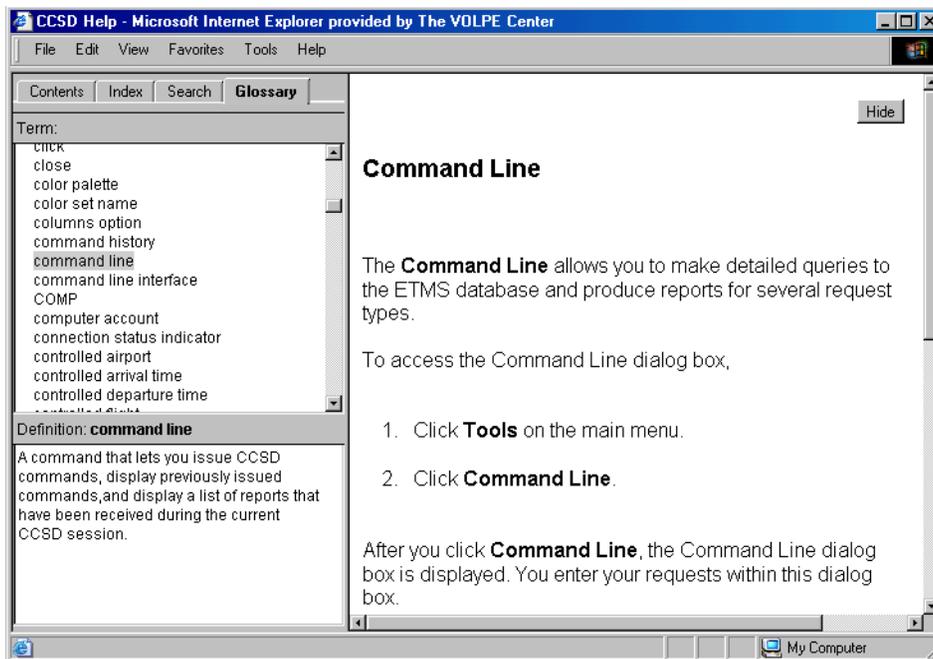
Viewing Related Topics

To view information related to a particular help topic, click the **Related Topics** button at the bottom of a topic page. A related help topic page will automatically open if there is only one related topic. If there is more than one related help topic, a pop-up menu will open with a list of related topics to choose from.

The following example shows the related topics pop-up menu for Redraw command.
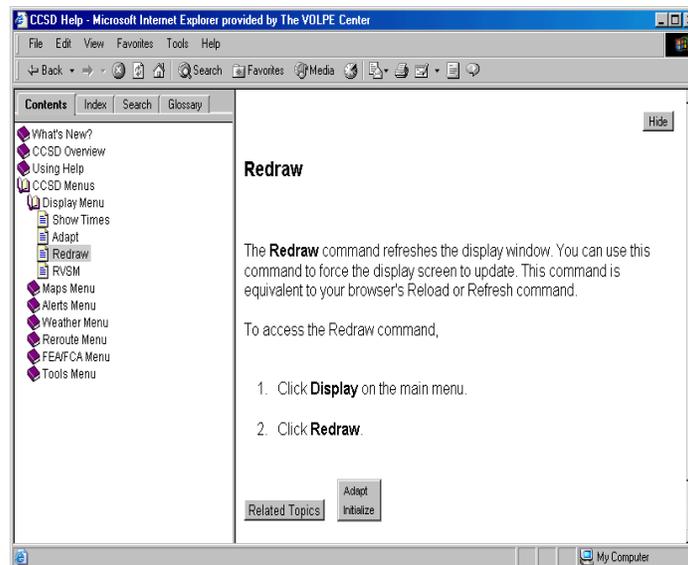
Getting Help from a Dialog Box

As you work in the CCSD, you can obtain information about dialog boxes by using the context-sensitive Help. Clicking the **Help** button on a dialog box opens the CCSD help for the topic associated with that dialog box. The help topic explains how to use the fields and controls in that dialog box. The following example shows the Select Reroutes dialog box.
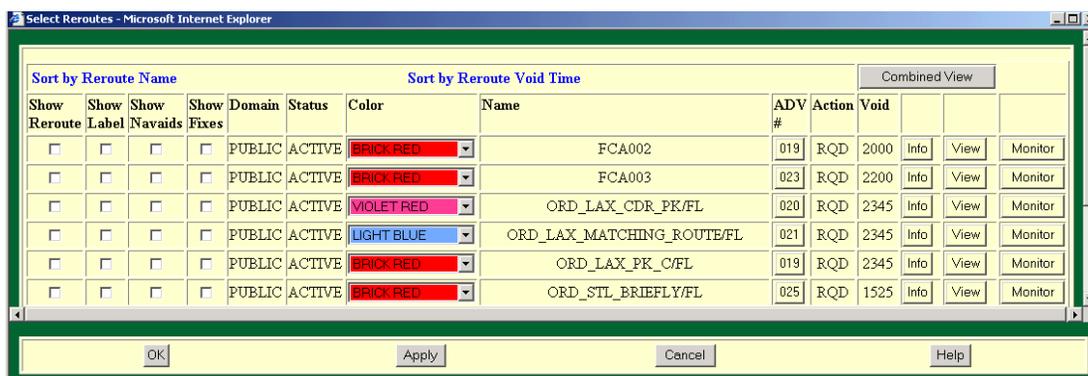
Click **Help** in the Select Reroutes dialog box to open the CCSD Help to the Select Reroutes topic page.

After viewing a specific help topic, you can open the help navigation pane by clicking the **Show** button in the top-right corner of the topic window.

When you click the **Show** button, the navigation pane opens, as in the following example.
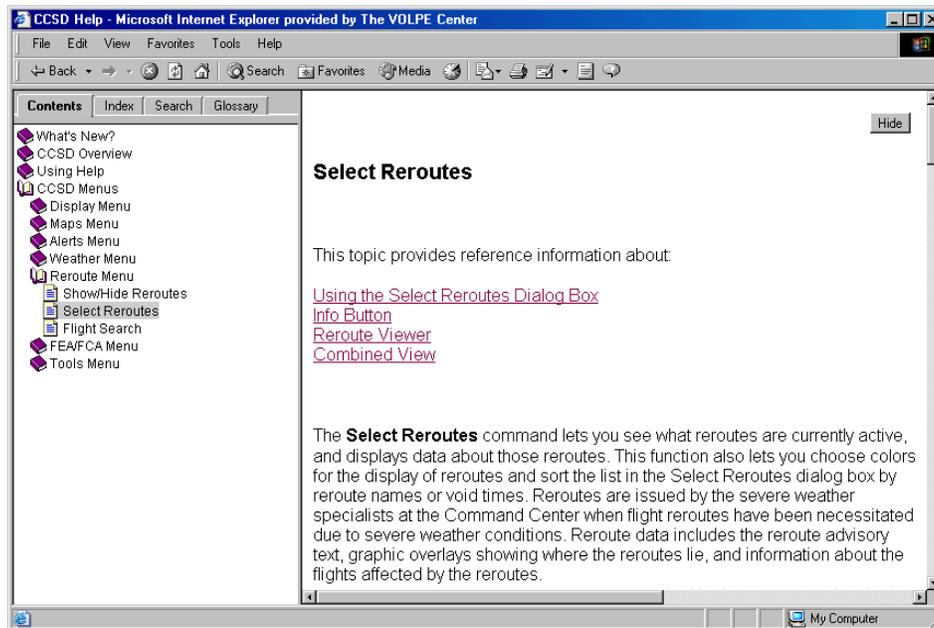
Note: When you click the **Show** button, the navigation pane opens and the Hide button appears. To close the navigation pane again, click the **Hide** button.

CCSD 8.4 Enhancements

Reroute Monitor Enhancements

- You can select a single time interval or a range of time intervals to be displayed on the Reroute Monitor Timeline. The range for the timeline is no longer set on the Reroute Filters dialog box. Instead, use the Select Time Range dialog box.

- You can select a Relative or Absolute Time Range for the Reroute Monitor Timeline. The default selection for the Reroute Monitor Time Range is Relative. The title bar on the Reroute Monitor reflects whether the Time Range is Relative or Absolute.

- The Adapt/Save menu option now saves the Relative/Absolute Time Range selection for the active Reroute Monitor window.

FEA/FCA Enhancements

- You can select a single time interval or a range of time intervals to be displayed on the FEA/FCA Timeline using the Select Time Range dialog box.

- You can select a Relative or Absolute Time Range in the FEA/FCA Timeline.

- There are two new options available when you recall a saved FEA/FCA file: Retain Saved Start Time and Reset Start Time to Current Time.

- Base TRACON NAS option is no longer available on the Create FEA/FCA dialog box.

- You are alerted while examining and FEA/FCA if the FEA/FCA is edited.

Other Enhancements

- NAS Elements change: TRACONs are no longer treated as dynamic elements in the Dynamic Sectorization function. Thus, the Maps Overlays dialog box no longer offers the BASE and CURRENT TRACON options.

1. Welcome to the CCSD

The purpose of the Common Constraint Situation Display (CCSD) is to provide information about the National Airspace System (NAS) to those who must monitor the NAS and make decisions based on what is happening. In particular, the CCSD displays several types of dynamic data.

- Enhanced Traffic Management System (ETMS) predictions of air traffic demand for the next fifteen hours and highlights of the specific airports, sectors, and fixes where excess demand is forecast.

- Selected weather information, such as the current intensity of precipitation.

- Flow-constrained areas (FCAs), which are volumes of airspace that are expected to be special trouble spots, possibly because of severe weather.

- Reroutes that have been issued by the Air Traffic Control System Command Center (ATCSCC).

- The Collaborative Convective Forecast Product (CCFP), which provides forecasts of convective activity that look two, four, and six hours ahead.

- The National Convective Weather Forecast (NCWF), which provides a forecast of convective activity that looks one hour ahead.

In addition, to help interpret this data, the CCSD allows you to display static data such as airports, navaids, fixes, and political boundaries. The following is a CCSD screen graphic that displays the following elements listed below the graphic:
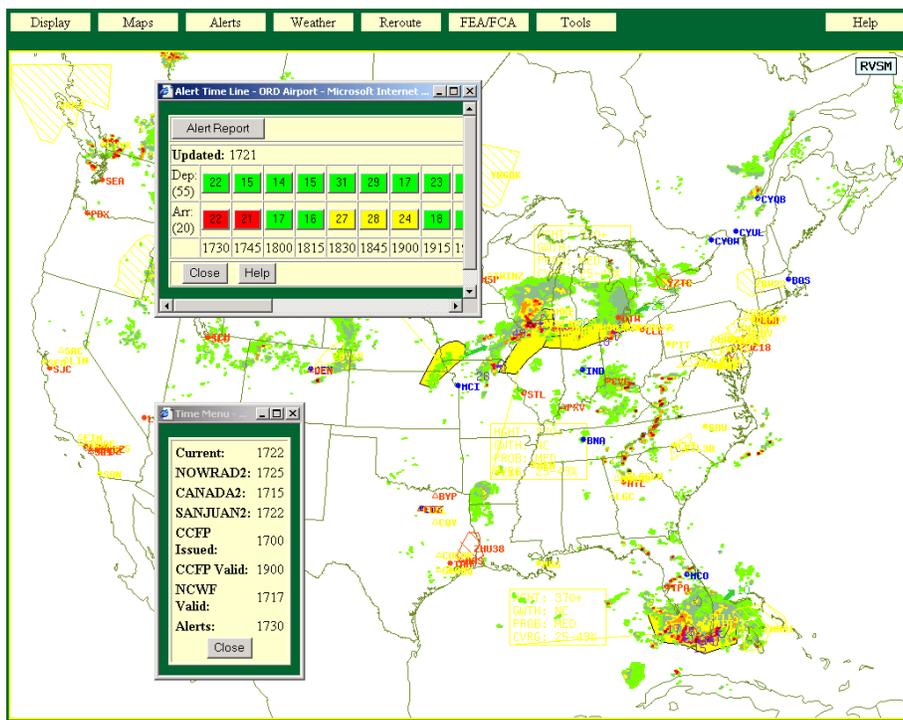
- Six-level weather showing the intensity of precipitation.

- CCFP overlay showing areas where convective weather might occur.

- Alerts that show airports and sectors for which demand is predicted to exceed capacity. These alerts are highlighted in red and yellow.

- A window that shows the predicted demand at Chicago O'Hare Airport in 15-minute intervals.

- FCA drawn around convective weather in Chicago.

- Times Box showing the latest update times.

The data displayed comes from the ETMS, which is the main automation system that the FAA uses for traffic flow management. Flight data, including reports of the current positions of airborne aircraft, comes to ETMS from the twenty-one air route traffic control centers (ARTCCs) and the roughly 190 Terminal Radar Approach Control facilities (TRACONs) in the United States. In addition, data comes from Canada, Great Britain, and Mexico. ETMS receives data on flights that fly under Instrument Flight Rules (IFR).

ETMS typically receives a position update on an airborne flight once a minute. The demand predictions are updated once a minute, with these predictions being based on the latest data that ETMS has received. These predictions are provided to the CCSD. Also, the CCSD receives an update on the precipitation data and on the NCWF once every five minutes, on the CCFP once every two hours, and on FCAs and reroutes whenever an FAA traffic manager issues an update. The most recent data is shown on the CCSD every time its screen refreshes, which is once a minute (or whenever you manually refresh the screen).

The data shown on the CCSD is exactly the same data that is seen by the FAA traffic flow managers that use ETMS, except that data on sensitive flights such as military flights is omitted. What is notable about the CCSD is that it provides access to this data in an inexpensive and easily supported way since a CCSD user only needs a browser and connectivity to the ATCSCC, which hosts the CCSD web server.

If the CCSD is to run in a fully satisfactory way, the browser must be configured as specified in the Configuring the CCSD section in Chapter 2.

Traffic Management, ETMS, and the TSD

The role of an FAA traffic manager who uses ETMS can be explained by imagining a visit to an ARTCC, which provides en route air traffic control services. One would find two types of personnel working with screens that display flights.

First, one would see individual sector controllers performing what might be called classic or tactical air traffic control. They man individual sectors and are responsible for the flights in a specific volume of airspace defined by vertical and lateral limits. They deal in a very detailed way with individual aircraft and tell them to turn, adjust their speed, or undertake whatever other maneuvers are considered necessary to maintain a safe flow of traffic through their sector. These controllers use displays that are driven by the Host computer.

Second, working in a different part of the building one would see traffic managers. Unlike the sector controller who deals with individual aircraft, the traffic manager deals with aggregates or flows of aircraft, especially between major airline hubs or cities. The following is an example of the type of problem that an FAA traffic manager deals with.

The ETMS predicts that one hundred aircraft per hour will want to land at O'Hare Airport in Chicago, and bad weather is predicted that will reduce the capacity of the airport to 60 aircraft per hour. If no action is taken, a large number of aircraft will soon end up circling in holding patterns near Chicago waiting for an opportunity to land.

In a situation like this, to improve safety and efficiency, the FAA would prefer that those aircraft take their delays on the ground rather than in the air. Therefore, the traffic managers will use the weather forecast, the ETMS prediction of demand, and experience to decide what ground delays should be assigned to each flight so that the arriving flow of aircraft matches the airport capacity. This type of traffic management action is called a ground delay program and is typical of the duties of the traffic management personnel.

Another example of a problem that FAA traffic managers might deal with is that thunderstorms might close off routes that aircraft are scheduled to fly. Traffic managers would study the flow of aircraft and the available airspace and decide what combination of ground delays and reroutes is necessary to deal efficiently with this situation.

To help FAA traffic managers deal with traffic flow problems such as these, ETMS provides them with the data and tools they need to anticipate and alleviate problems. The Traffic Situation Display (TSD) is the main tool that FAA traffic managers use to access the ETMS data; in other words, the TSD is the main user interface to ETMS. The TSD displays a variety of data and provides numerous commands for manipulating the data as well as the display. In particular, the TSD provides a graphical display of a geographic area with overlays chosen by the user; for example, flights, weather, alert information, flow-constrained areas, reroutes, airports, sector boundaries, and navaids.

Role of the TSD, WSD, and CCSD

As mentioned above, the TSD is the main tool that FAA traffic managers use to access and display the ETMS data. It is the case, however, that not all FAA sites that need access to ETMS data have the TSD. For example, of roughly 190 TRACONs, only about 31 have the TSD. The reason is cost. The TSD is costly for the following reasons.

- The TSD runs on a high-end workstation (though the cost of the needed workstations has now dropped substantially).

- A great deal of custom ETMS software is installed on this workstation to support the TSD.

- A high level of support, both local and remote, is needed to maintain the software and hardware for ETMS workstations at each site.

The initial vision for the WSD was that it would be used at FAA sites that were not already equipped with TSDs. There are about 190 TRACONs, but currently only 31 are ETMS sites. The FAA would like all TRACONs to have access to ETMS data, but the cost of the hardware and support means that the FAA cannot afford for all of these sites to have the

TSD. The solution to this problem is the WSD. The WSD requires no special hardware or software; all it requires to get access to ETMS data is a standard browser running on a PC with connectivity to the Command Center where the WSD server is located. At first approximation, the WSD provides the same functionality as the TSD, but with the following differences:

- The TSD displays a somewhat wider variety of data than the WSD. This difference will decrease as the development of the WSD continues.

- The TSD accepts a wider range of commands for manipulating this data. This difference will decrease as the development of the WSD continues.

- The TSD runs under X/Motif, which is a standard windowing environment much like Microsoft Windows; whereas, the WSD runs under a browser. In particular, this means that the WSD is somewhat slower than the TSD, and the WSD lacks some of the user convenience features of the TSD.

Although the WSD does not provide all the functionality of the TSD, it does provide the core functionality that is most needed. With the WSD a user can have access to ETMS data and can make decisions based on the data. Moreover, the WSD delivers this functionality at a much lower cost than the TSD since the WSD does not require that custom hardware and software be installed and supported at the user's site.

The WSD is aimed at not only the FAA but also at military and civilian agencies within the federal government. Any government agency interested in receiving the WSD should contact Barry Davis, (703) 326-3837, barry.davis@faa.gov. A side benefit of the web-based approach used for the WSD is that it can easily be modified to realize the long desired goal of providing more ETMS data to the NAS users, in particular the airlines. Therefore, the FAA has developed CCSD, which is aimed at NAS users. The CCSD is, in effect, the same as the WSD except that certain data that is not appropriate for NAS users has been removed. In particular, the CCSD is the same as the WSD except for the following differences.

- The CCSD does not show flight icons since FAA policy is that showing flight icons is a function left to the private sector.

- The CCSD does not show lightning data since this data is very expensive; the NAS users are left to acquire lightning data, if desired, by other means.

- The CCSD does not show detailed data on sensitive flights, for example, military flights.

- The CCSD allows the FAA to share information with the airlines, especially information about constraints in the system such as congested airports or overloaded airspace, and to collaborate in effectively solving traffic flow problems.

In short, the FAA's strategy for disseminating ETMS data is to have three platforms: TSD, WSD, and CCSD. Each platform is aimed at a different audience, depending on the performance and functionality that is required and the cost that can be justified. This strategy promises to give all personnel the data needed for making decisions at the lowest feasible cost.

User Support

For questions and comments, call the ETMS Hotline at (703) 904-4434. If you are having problems with the CCSD, please be prepared to give the Hotline operator the following information:

- The organization you are calling from.
- The URL (web address) you use to connect to the CCSD.
- The browser you are using (e.g., Netscape, Internet Explorer).

2. Common Constraint Situation Display Overview
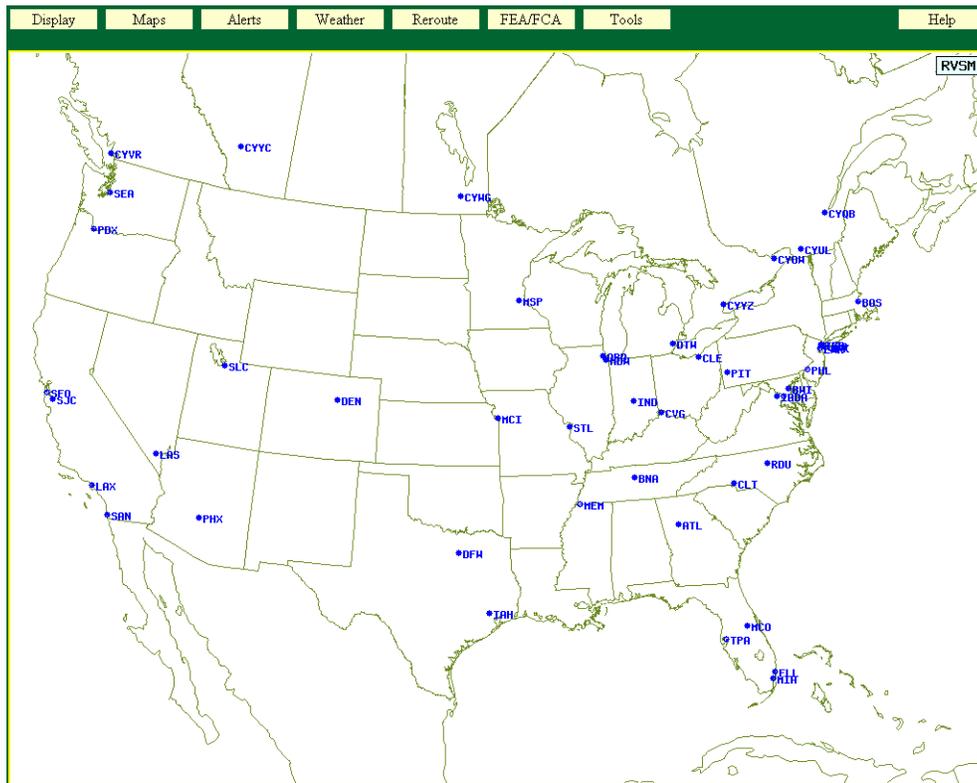
CCSD Overview

This chapter introduces you to the Common Constraint Situation Display (CCSD). CCSD menus and dialog boxes are briefly explained here and developed more fully in the ensuing chapters. Like any other Windows-based program, the CCSD uses menu bars, drop-down menus, and dialog boxes.

Using the CCSD

Two factors can occasionally cause web-based applications to act erratically. The behavior of the user interface is highly dependent on the behavior of each user's browser and operating system. Users may have their systems configured differently. Both of these difficulties can be overcome to a great degree. The following tips will help you use the CCSD effectively.

Using the CCSD on Different Platforms

- **UNIX-only: Set your window manager to not force the active window on top.**
  Using HP/UX, you can customize your window behavior using the Style Manager to modify the Window properties. The best settings for WSD/CCSD are to select Point in Window to Make Active, and to de-select Raise Window When Made

Active. Similar settings should be available on other Unix systems, particularly if you are running the Common Desktop Environment (CDE).

- **Windows-only: Make use of your task bar.** Using Microsoft Windows, you have no control over the window management. Windows forces the active window to be on top. For example, if you have Show Times open on top of your main window, and you click a menu option on the main window, the Show Times box goes underneath. The best way to manage this is to have your Task Bar visible at all times. An icon on the task bar represents every open window. When you lose a window, clicking the icon pulls it back to the top. So, if you have **Show Times** open and you want to **Move/Zoom**, do the Move/Zoom, and when you are done (i.e., you have closed the Move/Zoom window), click the **Times** icon to get the Times box back on top.

- **If you have any doubts whether any display is current, use Reload or Refresh.** It is possible that you will get your display into a state where, for example, you haven't seen the flights move for a while or you haven't seen an FCA Timeline update for a while. If this happens, put the cursor into the suspect window, click the right mouse button, and select Refresh (Internet Explorer) or Reload (Netscape & Mozilla). Not only will this ensure that you see the current data, it is also likely to fix whatever was causing the window not to update.

Starting the CCSD

1. Start your browser. If your browser is already running, switch to it.

2. Type into the **Location** field of your browser the address of the CCSD. (For security reasons, the address is not given here. The Command Center will provide you with the address.)

A dialog box will pop up asking for a user name and password. Enter the user name you have been given. Consult the SecureID Token (also called a key fob) for a number that you enter into the Password field. The SecureID token is a small device that the Command Center will provide when you become a CCSD user. Click **OK**.

Issuing CCSD Commands

You issue commands through the CCSD main menu, located at the top of the CCSD window. Each main menu option is explained in detail in the following chapters within this document.

Chapter 3: Display

This menu lets you specify the way the CCSD will look on your screen.

Chapter 4: Maps

This menu specifies what items will be displayed on the CCSD map, the location of the center point, and the scale of the display. You will also be able to show a series of concentric rings around specified locations.

Chapter 5: Alerts

This menu lets you control the display of alerted elements, which are airports, sectors, and fixes for which excess demand is predicted. It also lets you obtain more details about traffic demands on a particular airport, sector, or fix.

Chapter 6: Weather

This menu lets you specify which weather products are displayed on the CCSD.

Chapter 7: Reroute

This menu lets you select a reroute and specify which information to display.

Chapter 8: FEA/FCA (Flow Evaluation Area/Flow Constrained Area)

This menu lets you create, edit, and delete your own FEAs, and to display FEAs and FCAs created by you and other users. FEAs/FCAs are areas where routing and delays can be expected, possibly because of severe weather. You can display details about traffic demands for an FEA/FCA.

Chapter 9: Tools

This menu lets you open a command line dialog box through which you request reports. Also, this menu lets you display the Version number of the CCSD you are using.

CCSD Menus

The CCSD main menu is located at the top of the CCSD display. To select an item on the main menu, left-click on it. You will see a drop-down menu showing the commands that are now available. To remove this drop-down menu, left-click again on the item.

For example, if you left-click on **Maps** on the main menu, a drop-down menu showing the Maps commands is displayed, as shown below. Notice that the first four commands are available and that the other three are not yet available. The commands that are grayed out will be available in future versions of the CCSD. To remove this menu, left-click again on **Maps**.
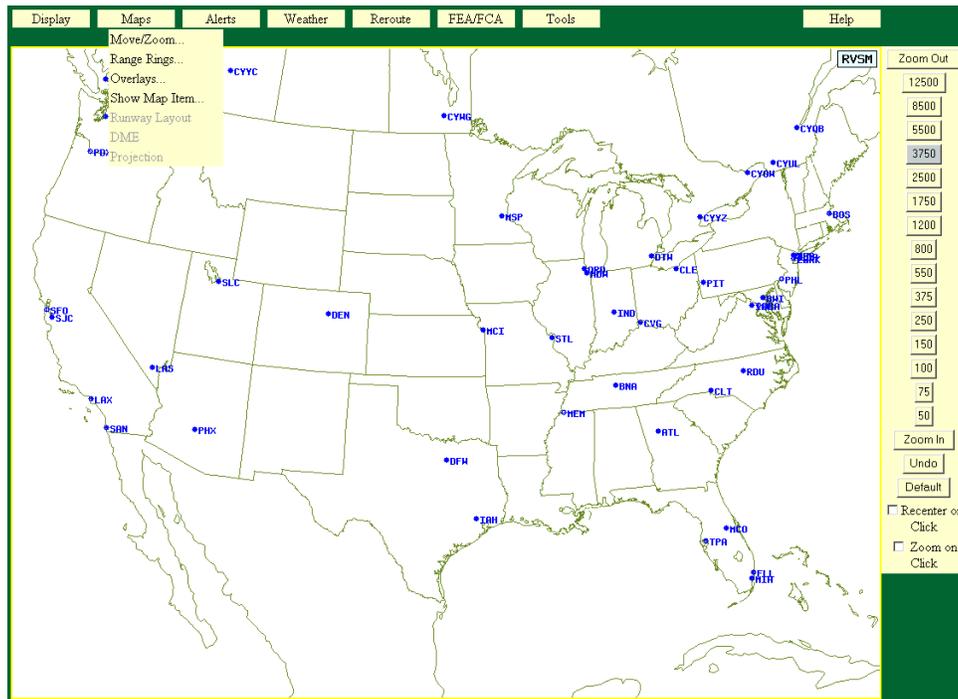
CCSD Dialog Boxes

Dialog boxes are windows that let you enter information instructing the CCSD on what to do. Dialog boxes enable you to specify choices before issuing a command. The following graphic shows a sample dialog box that opens after you issue the Select Flights command on the Flights pull-down menu. This dialog box is used here as a representative of the dialog boxes throughout the CCSD. Although there are differences, all dialog boxes require some form of user response.
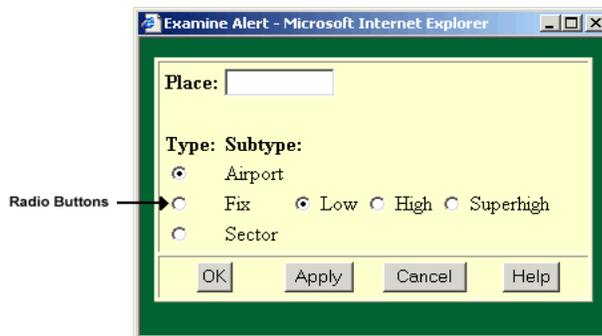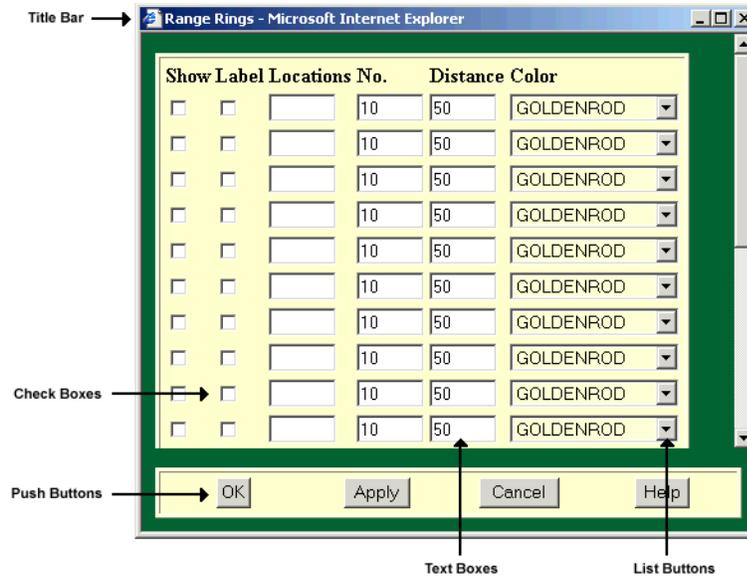
Title Bar

The title bar displays the name of the dialog box and can be used to drag the dialog box to a different location. To do this, with your pointer in the title bar, depress the left mouse button and drag the dialog box to a new location.

Text Entry Field

The text entry fields allow you to use the keyboard to type in information. Entries may consist of file names, locations, or other types of information appropriate to a specific command. The text cursor, a small vertical line, shows where you enter the appropriate values. If you make an error, backspace to remove characters.

Double-clicking on a word in a text field highlights it; triple-clicking selects the entire entry. If you type while any or all of the text field is highlighted, you overwrite the highlighted portion. You can also highlight text by dragging the pointer over the text while holding down the left button. When finished entering text, you can press **<Tab>** to move to the next field.

Value Change Buttons

Some entry fields have up and down arrow buttons that allow you to increase or decrease the value in the field. Click on the up arrow button to increase the value or the down arrow button to decrease.

List Buttons

List buttons are represented by an arrow button to the right of list field. The Color buttons above are an example of this type of button. Clicking on the arrow opens a list of color choices. You click on the appropriate color to select it.

Check Boxes

Check boxes allow you to choose from predefined selections. To make a selection, move the pointer to the button at the left of the selection and click the left mouse button. To deselect, click the button again.

Radio Buttons

Radio buttons are used to select one option exclusively from a group of options. When one of these buttons is selected, it automatically deselects the other options.

Push Buttons

Push buttons perform a specific action when selected, indicated by the label on the button. To select a push button, move the pointer onto the button and click the left mouse button. The push buttons shown in the illustration on page 10 are common to many dialog boxes.

- **OK**   Applies any changes you have made in the dialog box, and closes the dialog box.
- **Apply**   Applies your changes but leaves the dialog box open so you can make additional changes.
- **Cancel**   Closes the dialog box. Any changes you have made in the dialog box are discarded and not applied.
- **Help**   Displays information on using the dialog box. If no help is available, this button is grayed.

Some push buttons have specialized functions. A button that look like the Filter button opens an additional dialog box. When you click on the button, another dialog box opens. For example, clicking on the Filter button opens the Filter Flights dialog box. After you enter information in that dialog box and click **OK** or **Apply**, you are returned to the original dialog box.

Scroll Bar

Some lists of options are too long to be displayed in a dialog box, so only a portion of the entire list is displayed at any time. On the right side of the list is a scroll bar, as shown in the following illustration.
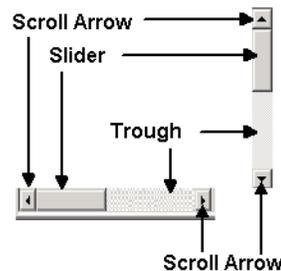
- To scroll using the arrows, press the up-arrow to move up one line in the list and down-arrow to move down one line.

- To scroll using the slider, move the pointer onto the slider, depress the left button, and drag the slider up or down to move through the list. Release the button. The position of the slider indicates the relative position of the items displayed within the list.

- To scroll using the trough region, click in the trough above the slider to move up one window or below the slider to move down one window.
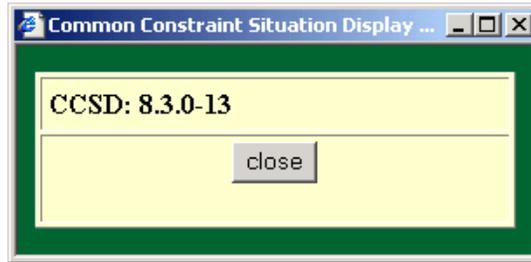
Focus

The term focus is used in two senses. First, a window has focus, meaning that this window accepts input from the keyboard. To move the focus from one window to another, move the pointer. Depending on how your system administrator has configured your node, you might need to click in the window to get focus. You can tell which window has focus by watching the color of the title bar. If a window has focus, its title bar is shown in its true color rather than a dull color.

The second meaning of the term refers to a text field or button in a dialog box having focus. The item that has focus is the one that receives input from the keyboard. If a text field has focus, you can enter data into it directly from the keyboard. If a button has focus and you press **<spacebar>** or **<enter>**, the result is the same as if you had clicked on the button.

- To move the focus forward through a dialog box, press **<Tab>**.

- To move backward through a dialog box, press **<Shift ><Tab>**.

Information and Query Boxes

Other types of dialog boxes are information and query boxes. An information box gives you a brief message and asks for an acknowledgement, as shown in the example. The dialog box that results from selecting Version on the Tools menu is typical of an information box.

3. Display Menu

This section contains information on the commands available on the Display menu. The following commands are currently available:

- **Show Times**   **page 15**
  Displays the current time and most recent update time
  for flights, alerts, and weather overlays.

- **Adapt**   **page 16**
  Opens a submenu that lets you recall previously saved
  settings, save settings to an adaptation file, delete previously
  saved settings and initialize the display.

- **Redraw**   **page 22**
  Refreshes the display.

- **RVSM**   **page 23**
  Lets you select Reduced Vertical Separation Minimums
  (RVSM) display options for the CCSD.
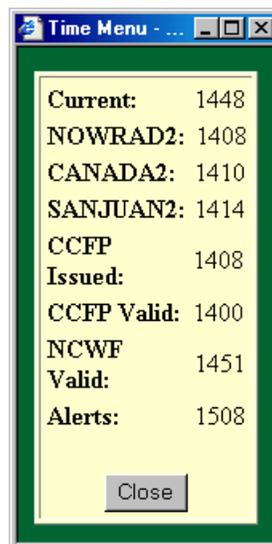
Show Times
The **Show Times** command lets you display the Time Menu dialog box, which shows update times for the current data display.

1. Click **Display** on the main menu.
2. Click **Show Times**.

Time Menu Dialog Box

After you click **Show Times**, if Alerts and Weather overlays have been selected, the Time Menu dialog box looks like the following sample.

The first line of the box shows the current time. The rest of the lines show the time that each type of data was last updated. You can watch this box to make sure that you are receiving updates. If no overlays have been selected, the Time Menu dialog contains only the current time.

Adapt Commands

The next few sections in this chapter show you how to issue commands to alter the display. For example, you can display map overlays, flight sets and their properties, weather overlays, and alert settings. Once you specify these overlays and settings, you can use the Adapt submenu commands to save these settings to a file, recall a previously saved file, delete a file, and return the display to its default state. These submenu commands are explained in this section.
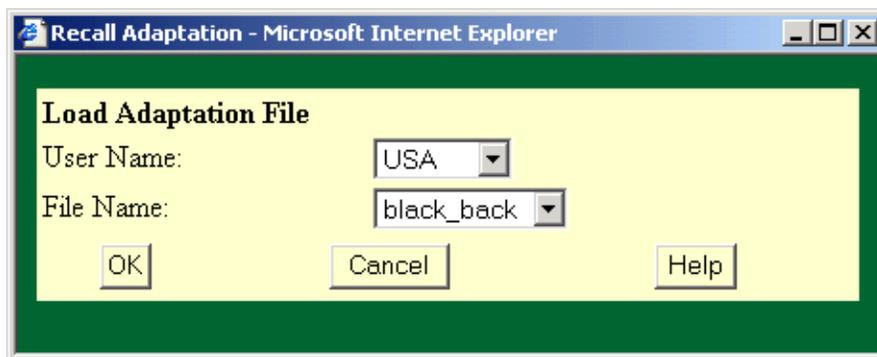
Recall Settings
The **Recall Settings** command lets you change your display to settings that have been previously saved to a file.   1. Click **Display** on the main menu. 2. Click **Adapt**. 3. Click **Recall Settings**.

After you click **Recall Settings**, the following dialog box opens.

To recall an adaptation file,

1. Select your user name, or another user's name, from the **User Name** pick list. After you select your name, the **File Name** field will contain a pick list of all adaptation files associated with the selected user name.

2. Click **OK**. The display changes to the settings in the adaptation file you specified.

   Note: If you have previously saved adaptation files, your name will appear as the default name in the **User Name** field. If you have no adaptation files saved for your name, the default selection will be blank with a pick list of all those users' names with adaptation files saved. Also, passwords are no longer required.
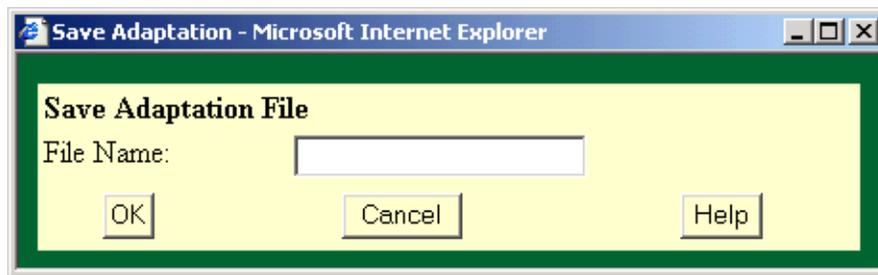
Save Settings

The **Save Settings** command lets you save your settings to a file.

Display	Maps	Alerts	Weather	Reroute	FEA/FCA	Tools		Help

Minimize
Show Times...
Adapt   Recall Settings...
Redraw   Save Settings...
Legend   Delete Settings...
RVSM...   Initialize

RVSM

1. Click **Display** on the main menu.
2. Click **Adapt**.
3. Click **Save Settings**.

After you click **Save Settings**, the following dialog box opens.

Save Adaptation - Microsoft Internet Explorer

Save Adaptation File
File Name: [   ]

OK   Cancel   Help

You can save the following display settings to an adaptation file:

- Map Overlays

- Weather Overlays

- Items currently specified by the Show Map Item command

- Range Rings

- Current center point of the map display

- Zoom scale

- Data block contents

- Alert settings

- RVSM settings

- Default settings for range rings, and reroutes

- Default settings for the Reroute Monitor, including column selections, filter settings, and sort settings

- Colors and fonts for overlays

- FEA/FCA Dynamic List columns selections.

To save your settings, enter a file name for the settings you want to save in the File Name text field. Click **OK.**

> **Note:**   You can save files only to your own user name. You can recall other users' adapation file and save the settings in your own adaptation file. See Recall Settings (page 16)

- If you click **OK** in the Save Adaptation dialog box with the File Name text field left blank, the following error message box will open:

  Click **OK**. The Save Adaptation dialog box remains open for you to enter a file name.

- If the file name you enter contains illegal characters, the following error message will open:

  Click **OK**. The Save Adaptation dialog box remains open for you to enter a file name with legal characters.

- If the file name you enter already exists, the following warning message will open:

  Click **Yes** to replace the existing file and close the Save Adaptation dialog box.

  Click **No** to return to the Save Adaptation dialog box to enter a different file name.
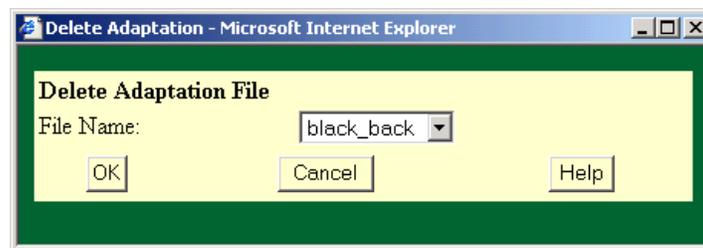
Delete Settings

The **Delete Settings** command lets you delete settings you had previously saved to a file.

1. Click **Display** on the main menu.
2. Click **Adapt**.
3. Click **Delete Settings.**

After you click **Delete Settings**, the following dialog box opens

To delete your adaptation, select the File Name from the pick list and click **OK**. You may delete only files associated with your own user name.

Initialize

The **Initialize** command restores the display to its default state.

1. Click **Display** on the main menu.
2. Click **Adapt**.
3. Click **Initialize.**

Redraw
The **Redraw** command refreshes the display window. You can use this command to force the display screen to update. This command is equivalent to your browser's Reload or Refresh command.

1. Click **Display** on the main menu.
2. Click **Redraw**.

RVSM
The **RVSM** command lets you select Reduced Vertical Separation Minimums (RVSM) display options.

Display	Maps	Alerts	Weather	Reroute	FEA/FCA	Tools	Help

Minimize
Show Times...
Adapt   >
Redraw
Legend
RVSM...

`RVSM`

1. Click **Display** on the main menu.
2. Click **RVSM**.

RVSM Functions

RVSM allows controllers to separate properly equipped aircraft in the FL290 and FL410 airspace by as little as 1000 feet vertically, rather than the 2000 foot minimum that is currently required. The term *conformant* is used to characterize properly equipped aircraft.

With FAA approval, unequipped aircraft will be able to enter the RVSM airspace, but these aircraft must be vertically separated from all other aircraft by at least 2000 feet vertically. The term *non-conformant* is used to characterize any unequipped aircraft in the RVSM airspace.

Alerts and FEA/FCA functions are enhanced by RVSM. These RVSM enhancements are discussed in their appropriate menu sections.

Select RVSM Display Options Dialog Box

Selecting RVSM on the Display menu opens the Select RVSM Display Options dialog box.
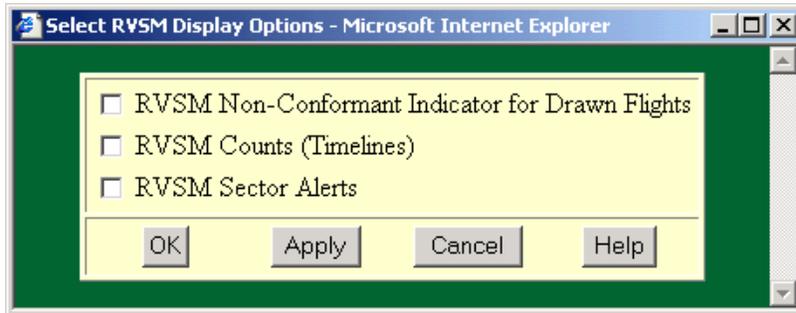
RVSM

Item	Action
RVSM Non-Conformant Indicator for Drawn Flights	This option has no effect on the CCSD.
RVSM Counts (Timelines)	When this option is selected, RVSM flight counts are displayed on the Timeline.
RVSM Sector Alerts	When this option is selected, the CCSD displays RVSM sector alerts. To see the RVSM Sector Alerts, you must issue the Show Alerts command. **Note:** This option is also available on the Select Alerts dialog box.

RVSM Status Icon

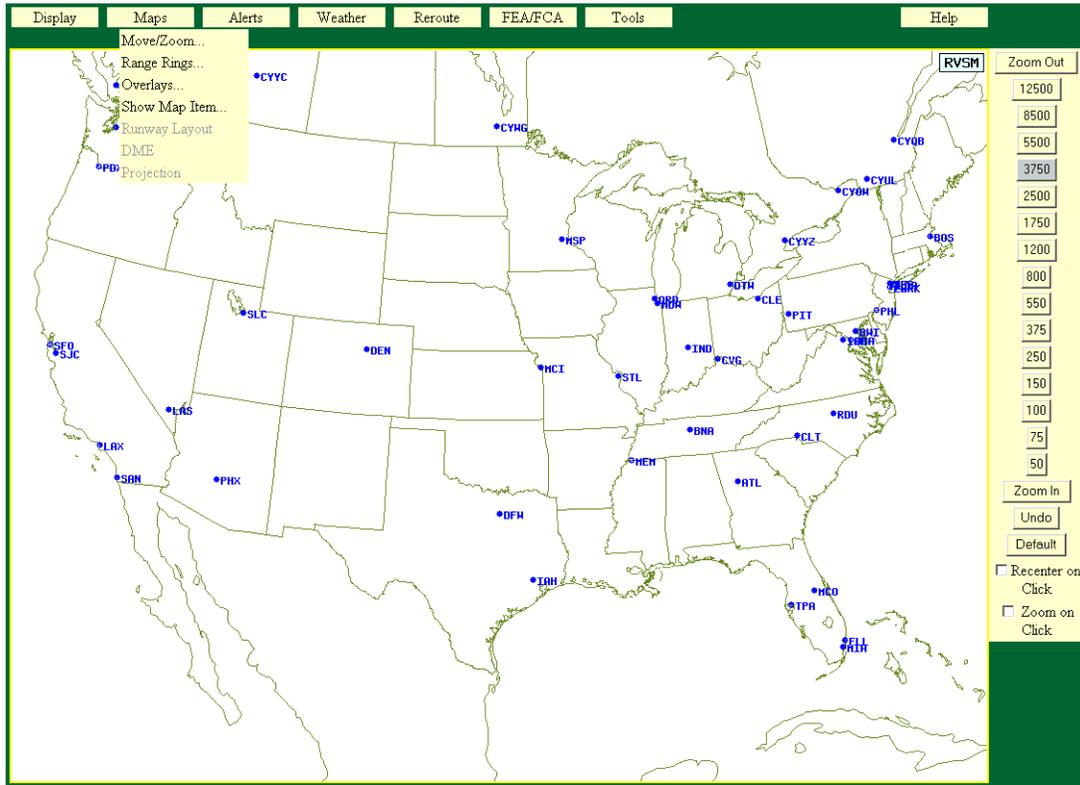The RVSM Status icon changes colors to reflect which of the options shown above are on or off.

- Blue: All three display options are **ON**
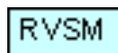
- Orange with a diagonal stripe: Any option on the Select RVSM Display Options dialog box is **OFF,** and the RVSM option in the Select Alerts dialog box is also off. This dialog box is discussed in the Alerts Menu section.

4. Maps Menu

This section contains information on the commands available on the Maps menu. The following commands are currently available:

- **Move/Zoom**   **page 26**
  Changes the center point and scale of the display.

- **Range Rings**   **page 30**
  Displays a series of concentric rings around specified locations.

- **Overlays**   **page 32**
  Shows graphic displays of map items with fixed locations.

- **Show Map Item**   **page 34**
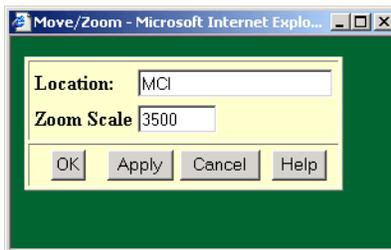 Displays selected NAS elements.

Move/Zoom

The **Move/Zoom** command lets you change the center point and scale of the display. You can change the center point to any ARTCC, TRACON, sector, airport, NAVAID, fix, SUA, Lat/Lon point or fixed radial distance you want. You can change the scale of your display from 20 to 12,800 nautical miles.

Display	Maps	Alerts	Weather	Reroute	FEA/FCA	Tools		Help

Move/Zoom...
Range Rings...
Overlays...
Show Map Item...
Runway Layout
DME
Projection

RVSM

1. Click **Maps** on the main menu.
2. Click **Move/Zoom**.

After you click **Move/Zoom**, the Move/Zoom dialog box is displayed, looking like the following.

Move/Zoom - Microsoft Internet Explo...

Location: MCI
Zoom Scale 3500

OK   Apply   Cancel   Help

The Move/Zoom dialog box has two text boxes that require entries:

1. Click in the **Location** text box and enter any airport, sector, NAVAID, ARTCC, TRACON, fix, SUA, Lat/Lon point or fixed radial distance.

    Lat/Lon Point

    Enter the point in NAS format: latitude/longitude. Latitude may be followed by N or S; Longitude may be followed by E or W. If these letters are missing, the program assumes N and W. If latitude is followed by N or S, longitude must be followed by E or W. For example, 3911/0943W is not valid.

   Valid entries include: **3911N/09343W or 3911/09343**

Fix-radial distance

Use the format: fix-radial distance with no spaces or markers.

Example: **MDCA360010**

2. Click in the **Zoom Scale** text box and enter the number of miles you want in the Zoom Scale field, from 20 to 12,800 miles.

3. Click **OK** or **Apply** to move to and zoom in on the specified location.

The following graphic shows what the display would look like if you zoomed in on MCI with a zoom scale of 500.
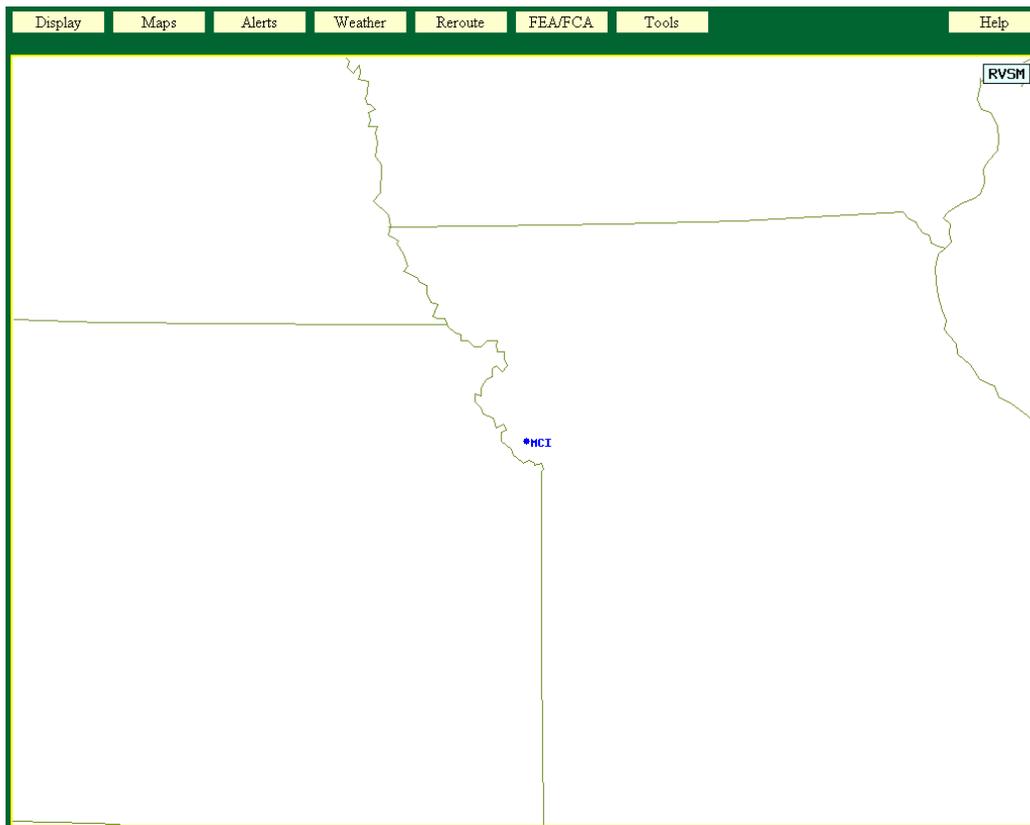
Zoom Out/Zoom In Scale

In addition to the Move/Zoom dialog box, there is a vertical Zoom Out/Zoom In scale, shown below, located to the right of the display map.
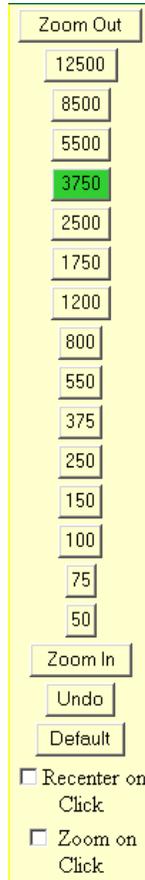
Using the Scale

The Zoom In and Zoom Out buttons let you change the Zoom scales away from or toward the center.

There are four buttons and two check boxes that help you change the center point and scale of the display.

- **Zoom Out**
  Lets you zoom out from the center point of the display. The Zoom Scale reflects the change. For example, if the Zoom Scale shows that you are 1200 nautical miles from the center ORD, clicking Zoom Out changes the scale to the next level, 1750. The map display also zooms out from your center.

- **Zoom In**
  Lets you zoom in to the center point of the display. The Zoom Scale reflects the change. For example, if the Zoom Scale shows that you are 1200 nautical miles from the center ORD, clicking Zoom In changes the scale to the next level, 800. The map display also zooms in closer to your center, in this case ORD.

- **Undo**
  Lets you return to your last zoom scale setting and location. For example, if the Zoom Scale shows that you are 1200 nautical miles from the center ORD and you zoom in to 800, clicking Undo returns you to your last setting of 1200 miles.

- **Default**
  Lets you return to the system's default setting for location and zoom scale. The default location setting is MCI. The default zoom scale setting is 3500 (nautical miles from MCI).

- **Recenter on Click**
  Lets you change the center point of the display map to the location on which you click the display.

- **Zoom on Click**
  Clicking in the Zoom on Click check box and clicking within the display map lets you zoom in on your current display. For example, clicking on ORD zooms your display in one level to ORD. The Zoom Scale on the right changes to show the distance in nautical miles. If the Zoom Scale was showing 1750, when you click on the map and there is a check in the Zoom on Click button, the scale changes to the next lowest number: 1200.

When you select one of the numbers on the Zoom Out/Zoom In scale, your display changes accordingly. For example, if you click on 1750, the map adjusts itself to this exact center point of 1750. The number is highlighted in green to indicate this exact location.

If you enter a number in the Move/Zoom dialog box that differs from the numbers in the vertical Zoom Out/Zoom In scale, the number closest to the number you entered in the dialog box is highlighted in gray on the Zoom Out/Zoom In scale. For example, if you enter 500 in the dialog box and click OK or Apply, 550 becomes highlighted in gray on the Zoom Out/Zoom In scale.
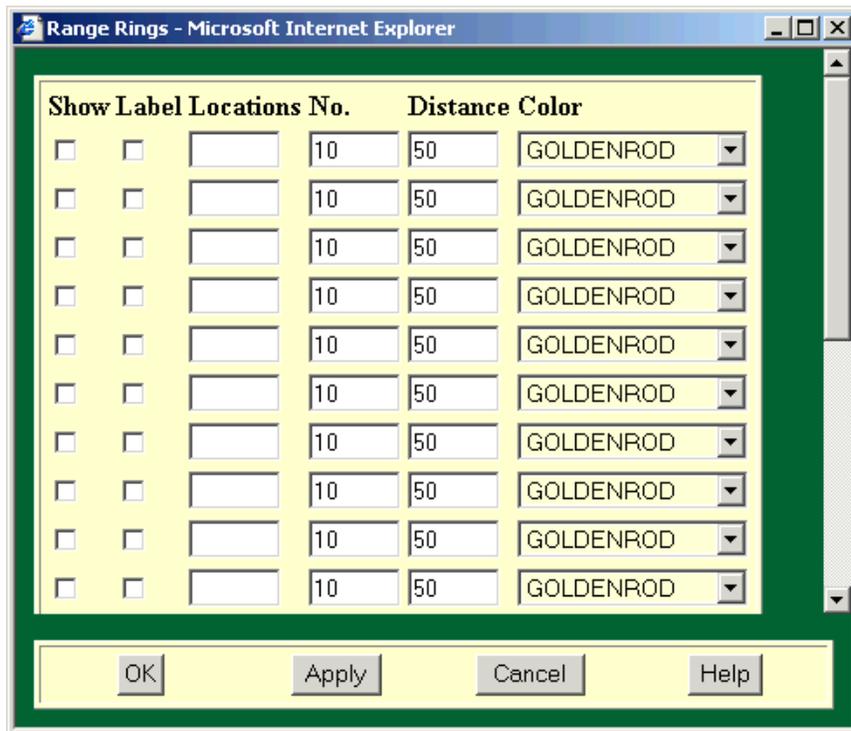
Range Rings

The **Range Rings** command displays concentric rings around specified NAS elements. The locations may include airports, fixes, navaids, lat/lon points and fix-radial distances. You can specify the number of rings you want displayed, up to 200, and the distance between the rings, up to 3,000 nautical miles.

Display	Maps	Alerts	Weather	Reroute	FEA/FCA	Tools		Help

Move/Zoom...
Range Rings...
Overlays...
Show Map Item...
Runway Layout
DME
Projection

RVSM

1. Click **Maps** on the main menu.
2. Click **Range Rings**.

After you select Range Rings, the following Range Rings dialog box is displayed.

Each row in the Range Rings dialog box has the following entry fields.

Range Rings

Item	Action
Show	Click **Show** to toggle on and off the set of range rings. If this button is checked, the range rings set specified on that line is displayed.
Label	Click **Label** to toggle on and off the range rings labels. If this button is checked, labels for the center point and distance of each set of range rings is displayed.
Locations	Click in the **Locations** text box and enter any of the NAS elements, except Victor or Jet Routes.
No.	Click in the **No**. (number) text box and enter the number of range rings you want to display around the specified element. You can enter from one to 200 rings.
Distance	Click in the **Distance** text box and enter the number of nautical miles that you want to separate the rings in the range rings set. You can enter a range of one to 3000 miles.
Color	Click **Color** and select from the pick list of colors.

If you checked **Show** and **Labels** on the Range Rings dialog box for a set of five range rings with 50 miles between them around St. Louis (STL) and clicked **OK** or **Apply**, the display would look like the following.
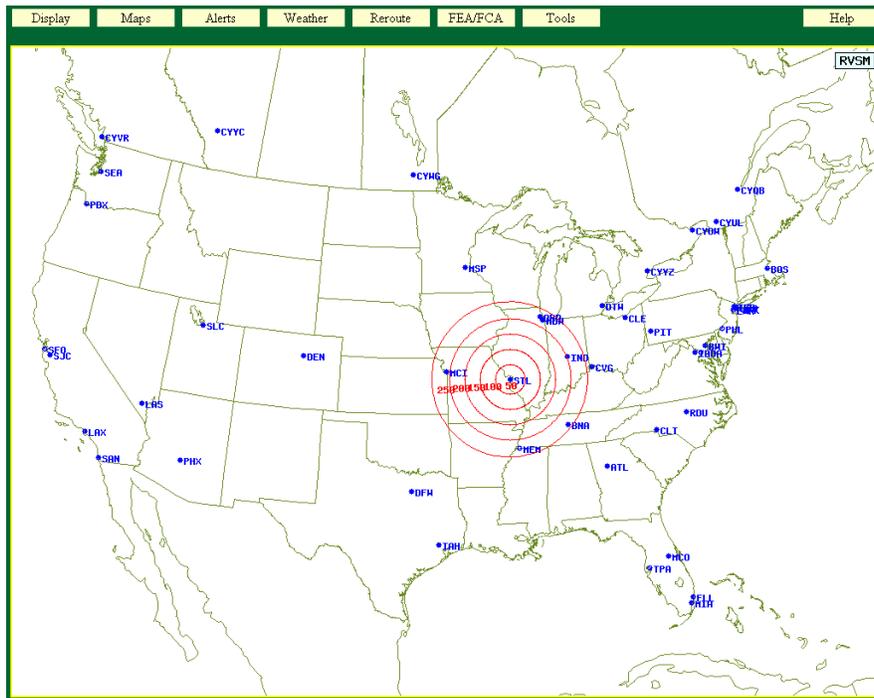
Overlays

The **Overlays** command lets you control which overlays you want displayed. You can also display labels for any of the selected overlays.

1. Click **Maps** on the main menu.
2. Click **Overlays**.

After you select Overlays, the Map Overlays dialog box is displayed.

Click the appropriate check box to select the items you want to display or deselect any items you want to remove. If desired, select **Label** to display identifiers for overlay elements. Select the display color for any item from the color dropdown list to the right of each item. Click **OK** or **Apply** to display your selections.
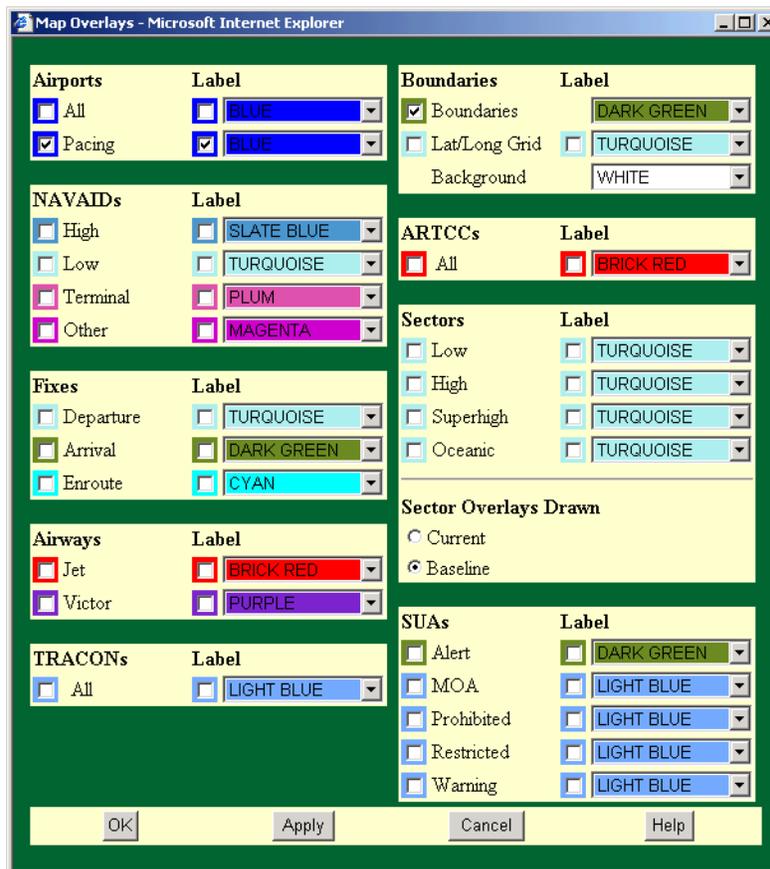
Dynamic Sectorization

The Map Overlays dialog box lets you show sector overlays using Current or Baseline sector boundaries. To display current sector overlays, you must select a **Sector** (Low, High Superhigh or Oceanic). In the **Sector Overlays Drawn** section, click **Current**. Selecting Current without selecting a sector to be displayed would have no effect on the Overlays display.

> **Note:** TRACONs are no longer included in Dynamic Sectorization. TRACON overlays can be drawn only in Baseline mode.

A Current sector number followed by a plus sign (+) indicates that portions of another sector have been added to this sector. A minus sign (-) indicates that a portion of the sector has been assigned to another sector so that the sector as currently displayed has less area than its baseline dimensions.

The display would look like the following if you selected Pacing Airports and ARTCCs and their labels.
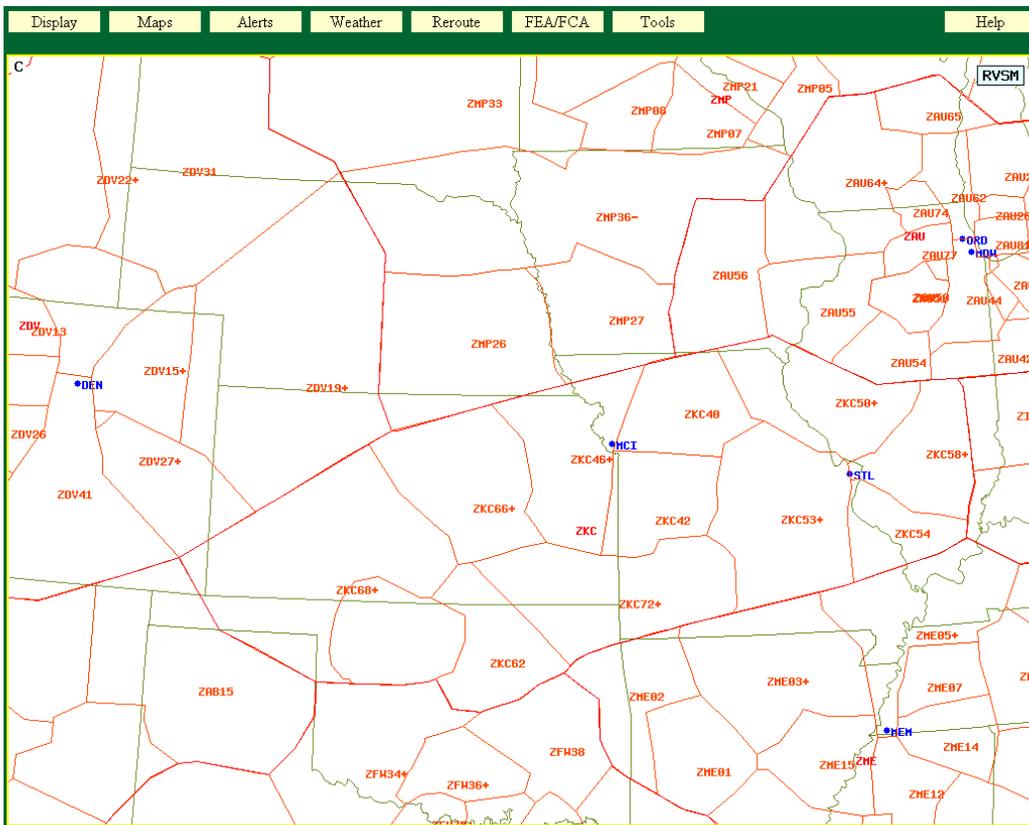
> **Note:** You cannot display the label without the element. If the element label is checked but the element is not, the label is not displayed.
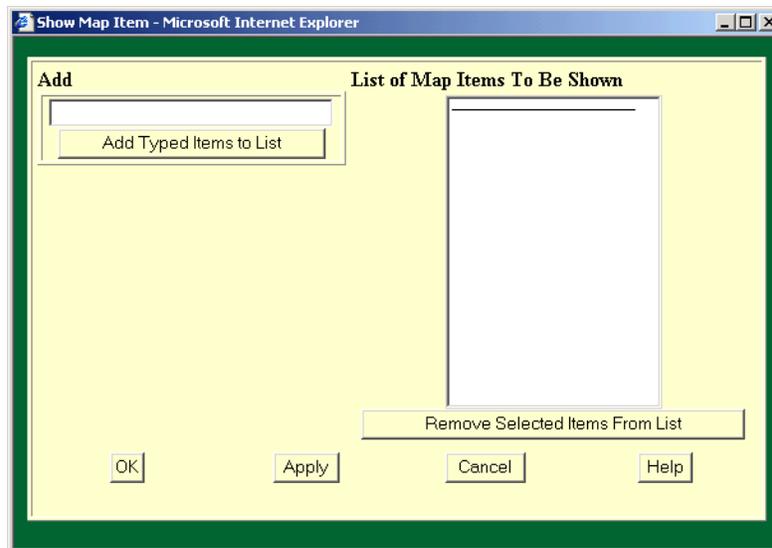
Show Map Item
The **Show Map Item** command lets you display individual sectors, TRACONs, fixes, pacing airports, terminals, NAVAIDs, and ARTCCs. Use this command if you want to locate a specific NAS element on the display.

1. Click **Maps** on the main menu.
2. Click **Show Map Item**.

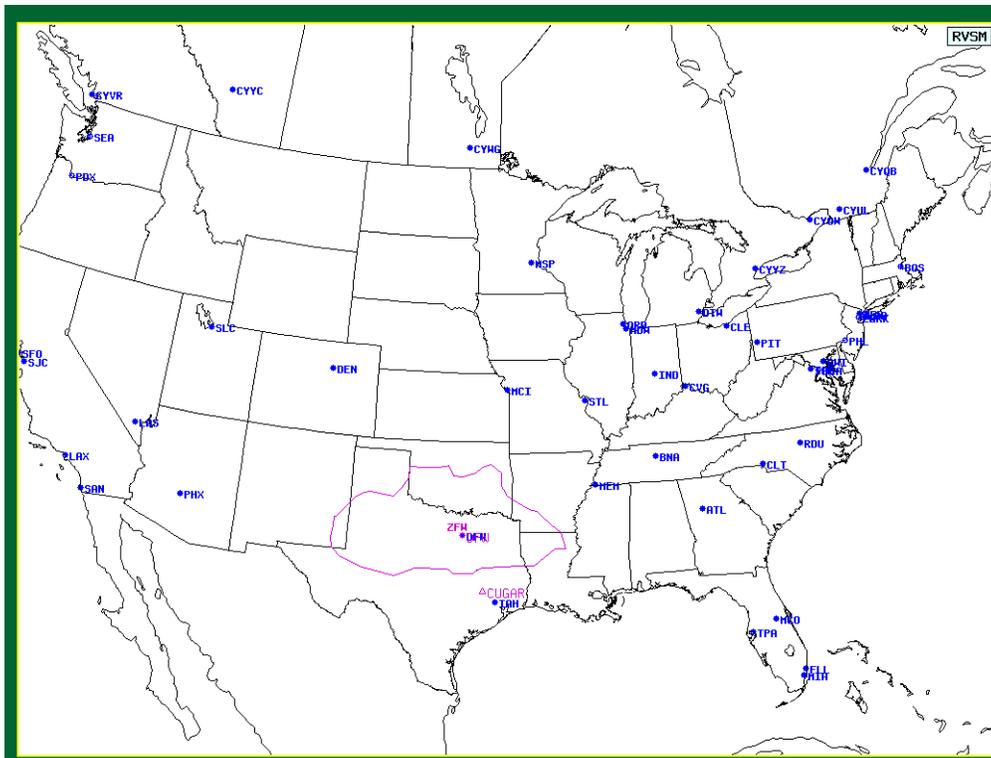After you select **Show Map Items**, the Show Map Item dialog box opens.

Whenever you open the Show Map Items dialog box, the List of Map Items to be shown field displays the map items, if any, that are currently shown on the WSD/CCSD. You can manipulate the List of Map Items to be Shown by using the Add and Remove features so that a list contains exactly the items you want shown. Click **OK** or **Apply** to display the items. When you click **OK**, the map items display and the Show Map Item dialog box closes. When you click Apply, the map items display and the Show Map Item dialog box remains open. Clicking **Cancel** removes all current entries that you have not applied from the list and closes the dialog box.

To show a map item on the display,

1. Enter the name of the map item in the **Add** field. You can enter more than one item in the field. Separate each item with a space.

2. Click **Add Typed Items to List**. This action moves the map item to the **List of Map Items to be Shown** field.

   In the following example, the ZFW, DFW, and CUGAR were added to the List of Map Items to be Shown column in the Show Map Item dialog box.

After you click **OK** or **Apply**, the display would look like the one below.

To remove shown map items from the display,

1. In the Show Maps dialog box, select a map item in the **List of Map Items to be Shown** field.

2. Click **Remove Selected Items from List**.

3. Click **OK** or **Apply** to remove the map items from the display and from the dialog box.

5. Alerts Menu
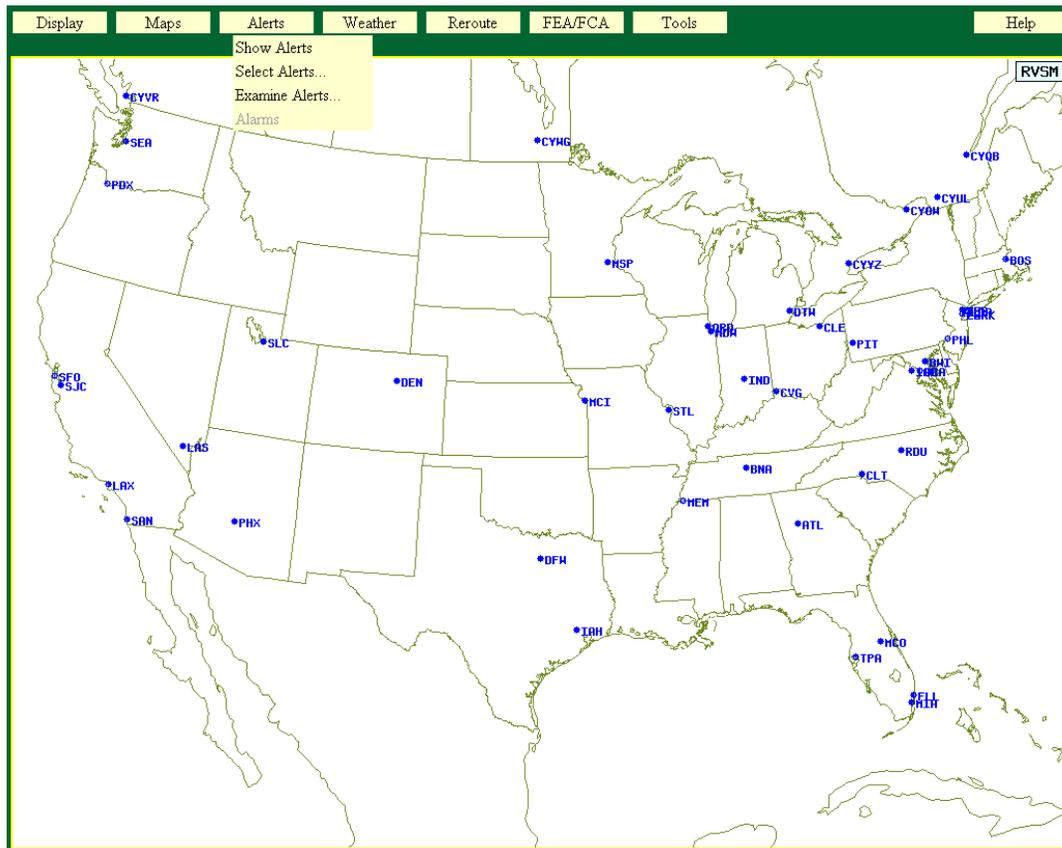
This section contains information on the commands available on the Alerts menu. Alerts are areas in which the traffic demand is projected to exceed a pre-defined capacity threshold. The following commands are currently available:

- **Show/Hide Alerts**   **page 38**
  Toggles display of alerts elements and icons.

- **Select Alerts**   **page 41**
  Lets you select alerted airports, low, high or super high
  sectors, or fixes for display.

- **Examine Alerts**   **page 44**
  Displays traffic demands for a specified airport, fix, or sector.

Show/Hide Alerts

The **Show/Hide Alerts** command lets you toggle a display of alert icons for airports, sectors, and fixes. If no Alerted elements are selected in the Select Alerts dialog box, selecting Show Alerts will have no effect. Either Show or Hide Alerts appears on the Alerts menu, depending on the status of the display. That is, if alerted elements currently appear on the display, the Alerts menu will show Hide Alerts.

Display	Maps	Alerts	Weather	Reroute	FEA/FCA	Tools		Help

Show Alerts
Select Alerts…
Examine Alerts…
Alarms

RVSM

1. Click **Alerts** on the main menu.
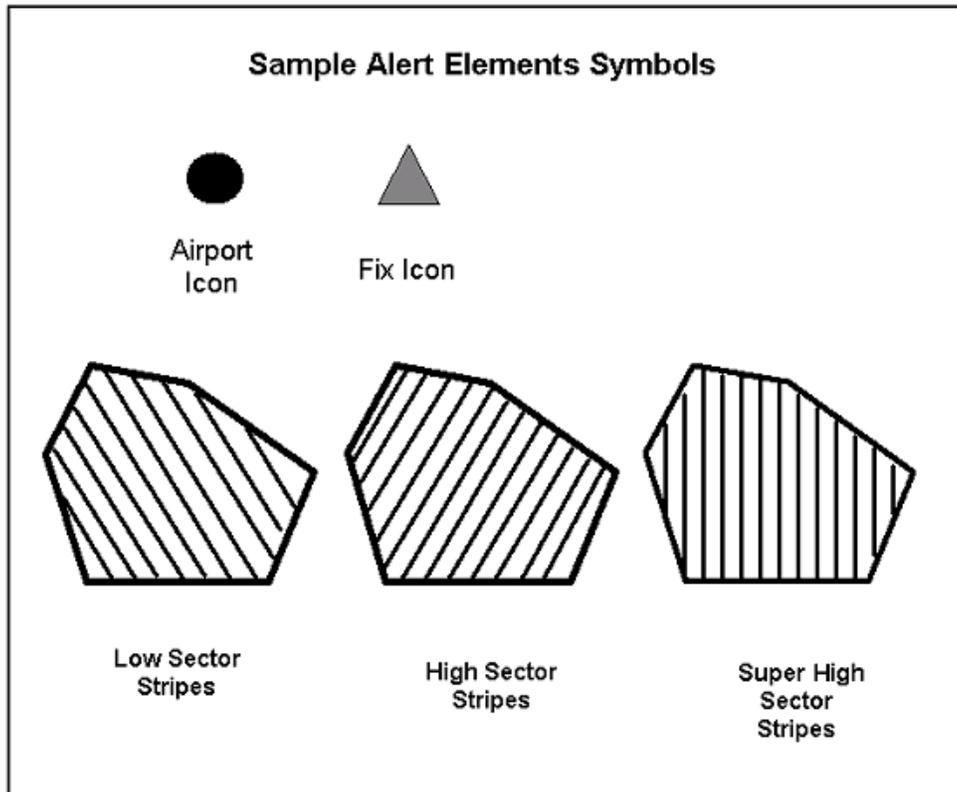2. Click **Show Alerts** or **Hide Alerts**.

About the Display

The following three types of display elements can be placed on alerted status:

- **Airports**
  An alert is declared for an airport for a 15-minute interval if the number of predicted arrivals in that interval exceeds the arrival threshold for that interval or if the predicted number of departures in that interval exceeds the departure threshold for that interval.

- **Sectors**
  Traffic demands are based on the greatest number of flights projected to be within the sector at any instant during a particular time interval (peak load). A plus (+) or minus (-) sign is appended to a sector label if that sector is not in its baseline form.

- **Fixes**
  An alert is declared for a fix for a 15-minute interval if the predicted number of flights going over that fix during that interval and within the altitude limits exceeds the threshold.

An alert icon is placed on the display for an element if it is alerted for any 15-minute interval over the next six hours.

Alert Icon Colors

- **Red**
  Indicates that all the flights predicted to cause the threshold to be exceeded are in the air.

- **Yellow**
  Indicates that flights that are proposed (not yet in the air) are included in the prediction that the threshold will be exceeded.

Sample Alert Elements Symbols

Airport
Icon

Fix Icon

Low Sector
Stripes

High Sector
Stripes

Super High
Sector
Stripes

The following sample of alerted elements shows all elements (airports, sectors, and fixes) selected.
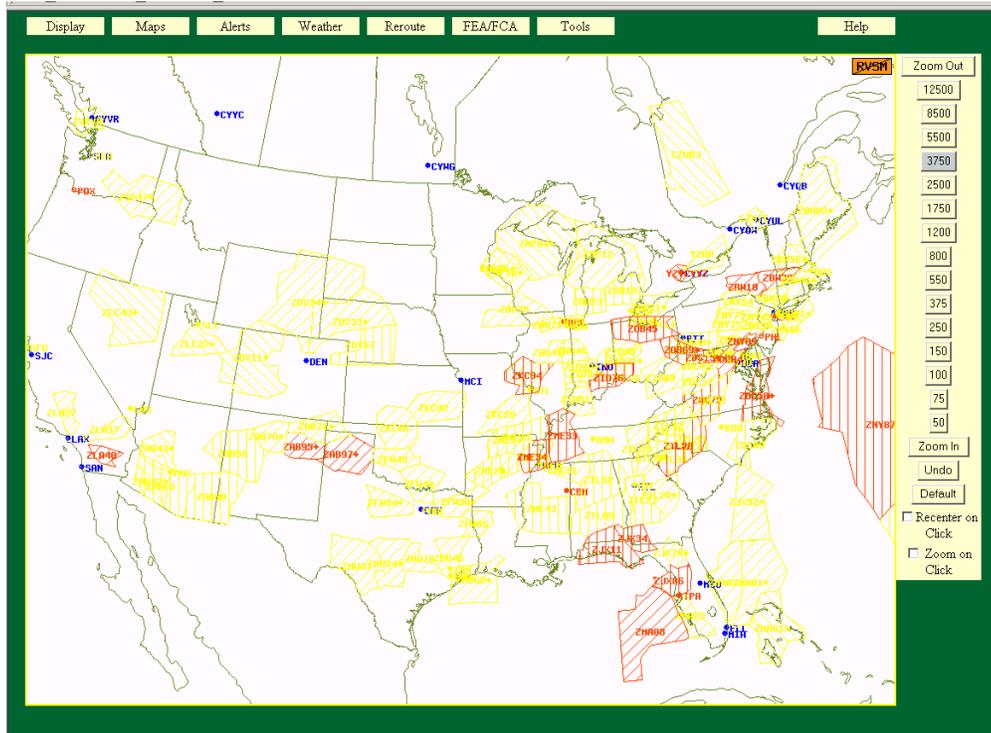
Select Alerts

The **Select Alerts** command lets you limit the display of alerted airports, sectors, and fixes. You can also choose to display multiple or all alerted elements.

Display	Maps	Alerts	Weather	Reroute	FEA/FCA	Tools		Help

Show Alerts
Select Alerts...
Examine Alerts...
Alarms

RVSM

1. Click **Alerts** on the main menu.
2. Click **Select Alerts**.

After you click **Select Alerts**, the Select Alerts for Display dialog box opens. Click in the check boxes to select the alerted elements you want to display.
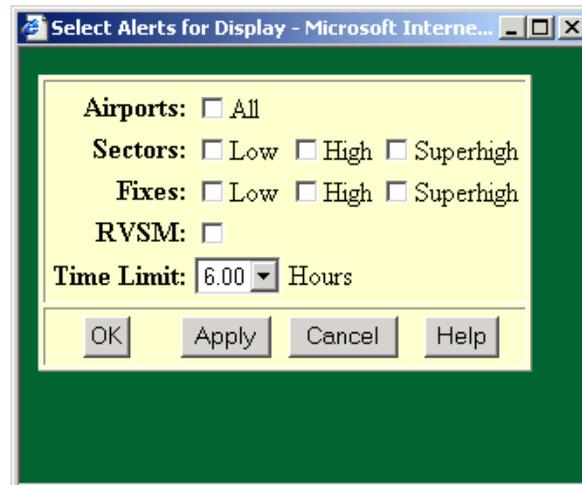
The following table explains each item in the Select Alerts dialog box. Make your selections and click **OK** or **Apply.**

Select Alerts for Display

Item	Actions
Airports	Click **All** to display all alerted airports.
Sectors: Low, High, and Superhigh	Click **Low**, **High**, or **Superhigh** to specify the type of alerted sectors you want displayed.
Fixes: Low, High, and Superhigh	Click **Low**, **High**, or **Superhigh** to specify the type of alerted fixes you want displayed.
RVSM	Click in the check box to display RVSM alerts. **Note:** This option is also available on the Select RVSM Display Options dialog box. Selecting the RVSM Sector Alerts option on the Select RVSM Display Options dialog box causes the RVSM option on the Select Alerts for Display dialog box to become selected. The reverse is also true.
Time Limit	Click the down arrow in the Time Limit field to open a pick list of available times. Available times range from .25 hours to six hours in increments of .25 hours.

The following sample of alerted elements shows all elements (airports, sectors, and fixes) selected.

RVSM

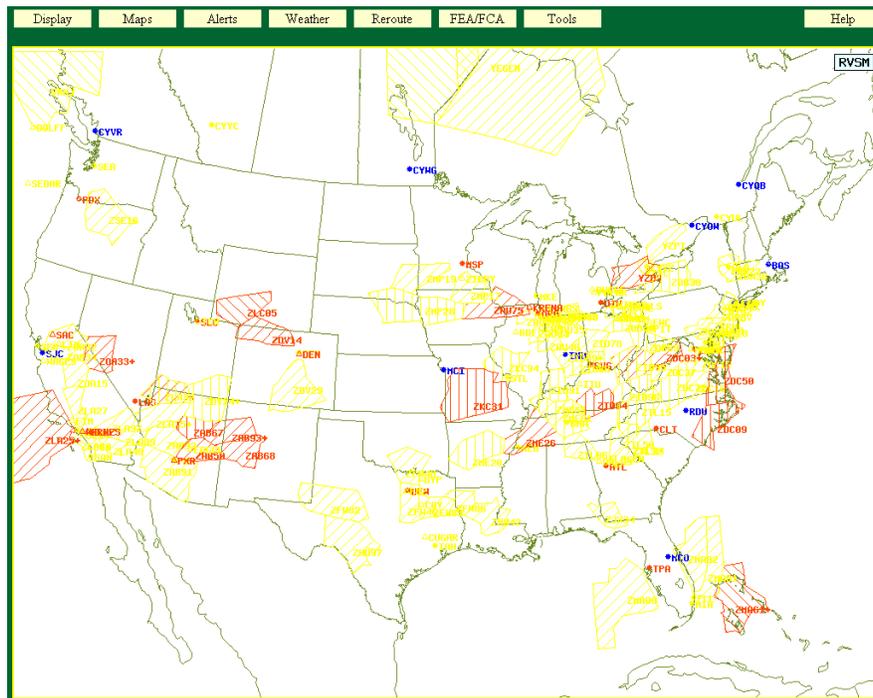If the RVSM option is selected in the Select Alerts for Display dialog box or if the RVSM Sector Alerts option is selected in the Select RVSM Display Options dialog box (Display menu, RVSM option), RVSM alerts are displayed on the CCSD.

If the sector does not meet the conditions for drawing a standard alert, the display shows the sector with a blue horizontal line fill as shown below.
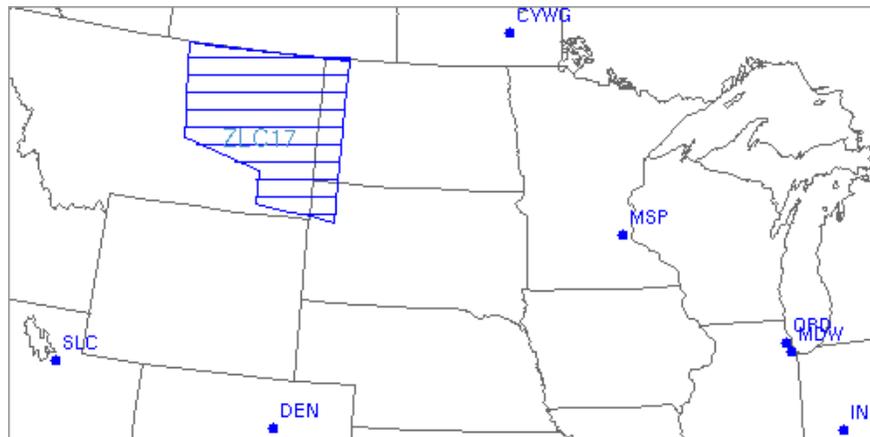
If the sector does meet the conditions for drawing a standard alert, the display shows the sector as before, but with the addition of a horizontal line in the same color as the sector alert.
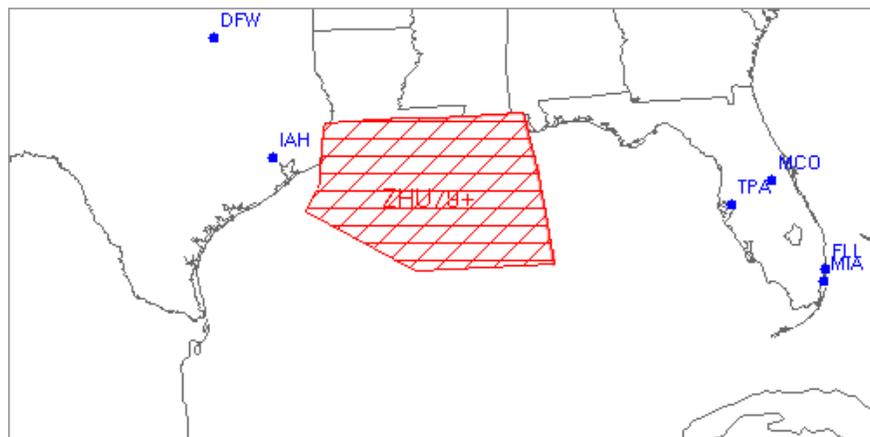
Examine Alerts

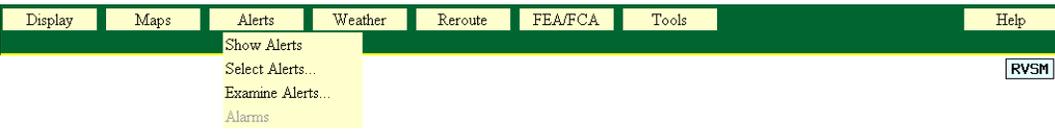The **Examine Alerts** command lets you display traffic demands for any alerted airport, sector, or fix. You can access an alerts report from the Alerts Timeline dialog box. Also, you can click any 15-minute interval on the Timeline to see a report for that specified interval.

1. Click **Alerts** on the main menu.
2. Click **Examine Alerts**.

After you click **Examine Alerts**, the Examine Alerts dialog box is displayed.
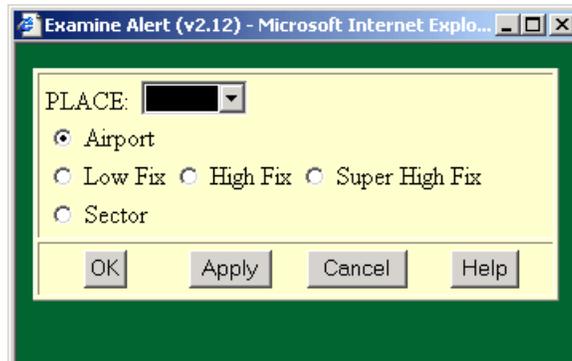
To examine an element,

1. Click one of the radio buttons to define the place as an airport, fix, or sector. If the place is a fix, designate it as Low, High, or Super High by clicking the appropriate radio button. The Place field will auto-fill with a list of alerted elements for the specified alert type.

    Note: It is not necessary to specify whether a sector is Low, High, or Super High because the sector name identifies it uniquely. When requesting a report for a fix, however, it is necessary to specify which altitude (low, high, or super high) you want.

2. Click the down arrow in the **Place** field to open a pick-list of alerted elements.

    Note: The time limit set in the Select Alerts dialog box determines the list of alerted elements that are displayed.

The alerted elements are shown in their appropriate alert color.
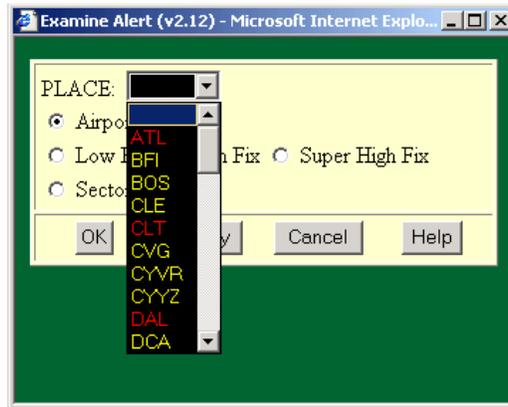
3. Click on an element in the list to select it and close the pick list.

4. Click **OK** or **Apply.**

The Alert Timeline dialog box for the specified alerted element is displayed. If you had entered **MSP** in the Place field and selected **Airport**, the resulting dialog box would look like the following:
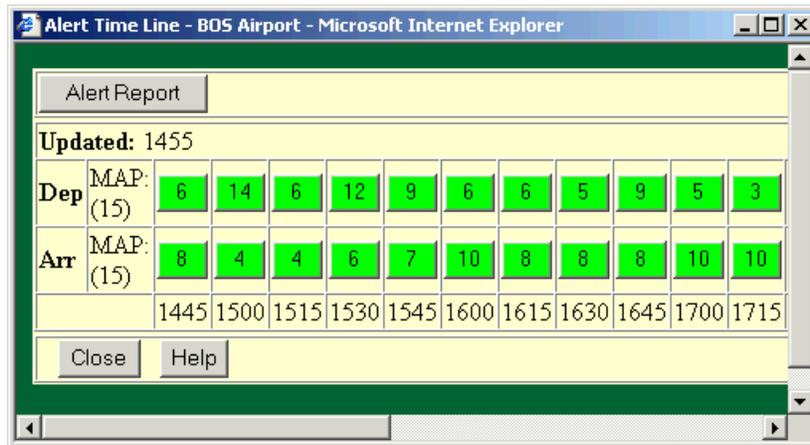
The Monitor Alert Parameters (MAP) for the NAS element is shown in parentheses on the left. The total number of flights projected to arrive at, depart from, or traverse the specified alerted elements appears in the dialog box at 15-minute intervals.

The time line is color coded. These colors cannot be changed.

There can be only one Alerts Timeline dialog box on the screen at one time. When you examine a second alert, the first time line is replaced by the second.

Alerts Timeline Color Codes

| Color of Time Bar Segment	What It Represents
Green	No alerts.
Yellow	Indicates that flights that are proposed (not yet in the air) are included in the prediction that the threshold will be exceeded.
Red	Indicates that all the flights predicted to cause the threshold to be exceeded are in the air.

Alert Timeline for Current and Baseline Sectors

Current sectors and TRACONs display a plus (+) or minus (-) sign on the title bar of the timeline for that sector. These signs indicate that the current sector contains a portion of another sector (+) or has had a portion of its original configuration removed.

RVSM

If the RVSM Counts option is selected in the Select RVSM Display Options dialog box, the RVSM counts are displayed on the Alert Timeline. The CCSD displays the peak one-minute counts of flights that are predicted to be RVSM non-conformant at any time when they are in the examined sector, based on the current configuration of the sector. The CCSD displays this count as a white number over a square black background in the Timeline cell as shown below.
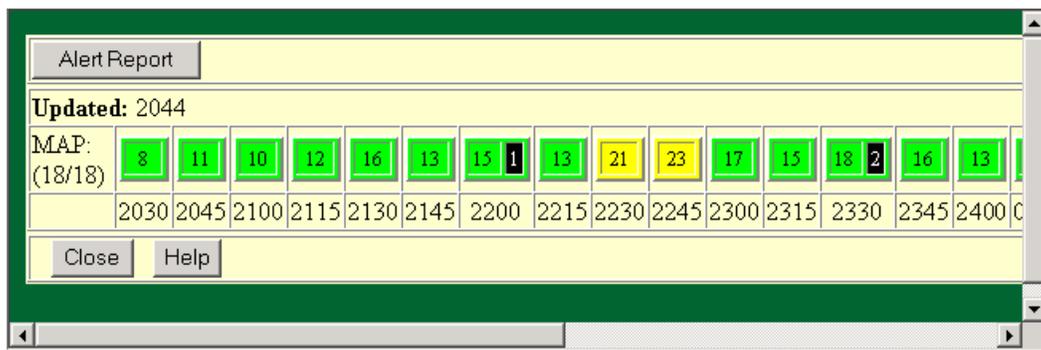
Alert Report

You can generate a report from the Alert Timeline dialog box for the element you specified.

To do that, click the **Alert Report** button at the top left corner of the dialog box (shown on the previous page). The Alert Report is a flight list report for any sector, fix, or airport you have specified with the Examine Alert command. The report includes all flights projected to arrive at, depart from, or traverse an alerted element for each 15-minute interval during the currently specified time range. A sample report is shown below.

```
Report - Microsoft Internet Explorer                                    _□×

  ZAB43 1630 2229 LIST RVSM ACID STAT ENTRY EXIT ORIG DEST RTE SORT STAT ENTRY EXIT
 01/1630   01/2229


                  TRAFFIC
 RVSM   ACID       ENTRY  EXIT  ORIG  DEST   ROUTE

01/1630   7
  -     ASH17    A   1625   1634  CYEG   PHX
CYEG./.FFU341011..DRK.COYOT1.KPHX/1729
  -     SWA2365  A   1627   1630  PHX    SMF    PHX.CHILY1.BTY.J92.OAL..SWR.FLUNK3.
  -     SMF/1803
  -     SWA2206  A   1631   1644  LAS    PHX    LAS./.PGS303023..DRK.COYOT1.PHX/1650
  -     ASA100   A   1633   1647  PDX    PHX    PDX./.CORKR.J11.DRK.COYOT1.PHX/1655
 NC     ASA198   A   1638   1653  SEA    PHX    SEA./.CORKR.J11.DRK.COYOT1.PHX/1700
  -     SWA1688  A   1644   1658  ABQ    LAX    ABQ./.INW121017..DRK..EED..TNP.PDZ4.
        LAX/1731
  -     N9173Z   P   1635   1705  PRC    PGA    PRC..PGA/0045


01/1645   10
  -     ASA100   A   1633   1647  PDX    PHX    PDX./.CORKR.J11.DRK.COYOT1.PHX/1655
 NC     ASA198   A   1638   1653  SEA    PHX    SEA./.CORKR.J11.DRK.COYOT1.PHX/1700
  -     SWA1688  A   1644   1658  ABQ    LAX    ABQ./.INW121017..DRK..EED..TNP.PDZ4.
        LAX/1731
  -     N23A     A   1650   1653  LAS    SDL    LAS.HOOVR2.PGS..FLG.JCOBS2.SDL/0040
  -     ASH460   A   1653   1707  SMF    PHX    SMF./.FROGO..BTY..BLD.COYOT1.PHX/1712
  -     AWE240   E   1650   1702  CYYC   PHX    CYYC./.TCH.J11.DRK.COYOT1.KPHX/1710
  -     N9173Z   P   1635   1705  PRC    PGA    PRC..PGA/0045
  -     N835CW   P   1649   1654  SDL    SO7    SDL.BANYO4.BTY.J92.FMG.J5.LKV..DSD..
        SO7/0225
 NC     SWA516   P   1653   1705  LAS    PHX    LAS.COWBY1.DRK.COYOT1.PHX/0038
  -     TMP308   P   1656   1724  PHX    HII    PHX.CHILY1.CHILY.V12.EED..HII/0045


01/1700   9
  -     ASH460   A   1653   1707  SMF    PHX    SMF./.FROGO..BTY..BLD.COYOT1.PHX/1712
  -     ASH341   A   1700   1715  SEA    PHX    SEA./.YERIN..BTY.KARLO9.PHX/1722
 NC     SWA2575  A   1705   1717  SMF    PHX    SMF./.LIDAT.J92.BLD.COYOT1.PHX/1721
  -     AWE240   E   1650   1702  CYYC   PHX    CYYC./.TCH.J11.DRK.COYOT1.KPHX/1710
  -     N9173Z   P   1635   1705  PRC    PGA    PRC..PGA/0045

                    Print   Save   Close   Help
```

The column headers in this report are defined as follows:

Alert Report

Label	Column Description
RVSM	Indicates the within-sector RVSM conformance status of each flight in the list
ACID	Aircraft identifier
Status	A prefix is used to indicate the source of the data that is used to set the ETD. You can judge the reliability of the data partly on the basis of the prefix, explained below. **S**-Scheduled. ETMS has received no flight plan. Data is based on the OAG and user-provided schedule updates. **N**-Early intent. ETMS has received a user-provided early intent route. **P**-Proposed. ETMS has received a NAS flight plan. **T**-Taxi. ETMS has received a message indicating the flight has pushed off from the gate. **A**-Active. ETMS has received a NAS or user-provided departure message. **E**-Estimated. ETMS has received a message indicating the flight was active, but no departure message was received.
Entry	Time the flight will enter the sector **hhmm** (hours & minutes) **Note**: This field applies to an alerted sector only
Exit	Time the flight will exit the sector **hhmm** (hours & minutes) **Note**: This field applies to an alerted sector only
ETD	Estimated time of departure in the following format: **A** (Active) **P** (Proposed) **S** (Scheduled) **hhmm** (hours & minutes) **Note**: This field applies to an alerted airport only
ETA	Estimated time of arrival in the following format: **A** (Actual) **E** (Estimated) **hhmm** (hours & minutes) **Note**: This field applies to an alerted airport only

Alert Report (Continued)

Label	Column Description
EAFT	Estimated Arrival Fix Time **Note**: This field applies to an alerted fix only
ORIG	Originating airport designator
DEST	Destination airport designator
ROUTE	Flight route text

6. Weather Menu

This section contains information on the commands available on the Weather menu. The following commands are currently available:

- **Show/Hide Weather**   **page 51**
  Toggles display of weather on and off.

- **Select Weather**   **page 52**
  The Select Weather command lets you display three types
  of weather data:

  - NOWRAD

  - CCFP (Collaborative Convective Forecast Product)

  - NCWF (National Convective Weather Forecast)
    NCWF provides one-hour extrapolation forecasts
    of thunderstorm locations.

All of these weather types are shown for the CONUS (Continental United States), Canada and San Juan, Puerto Rico.

Show/Hide Weather

The **Show/Hide Weather** command lets you toggle the display of weather overlays. If no weather overlays are selected in the Select Weather dialog box, selecting Show Weather will have no effect. Either Show or Hide Weather appears on the Weather menu, depending on the status of the display. That is, if weather overlays currently appear on the display, the Weather menu will show Hide Weather.

1. Click **Weather** on the main menu.
2. Click **Show Weather** or **Hide Weather**.

Select Weather

The Select Weather command lets you display weather overlays on the display. These overlays include precipitation areas and levels of intensity and convective weather.

1. Click **Weather** on the main menu.
2. Click **Select Weather**.

After you click **Select Weather**, the Weather dialog box is displayed.

Click in the radio buttons to display the overlays you want. Each overlay is explained in this section.
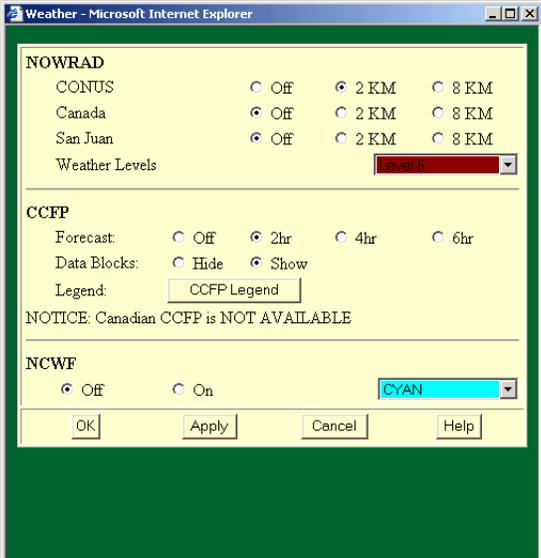
The following sample shows the weather overlays as specified in the dialog box above.
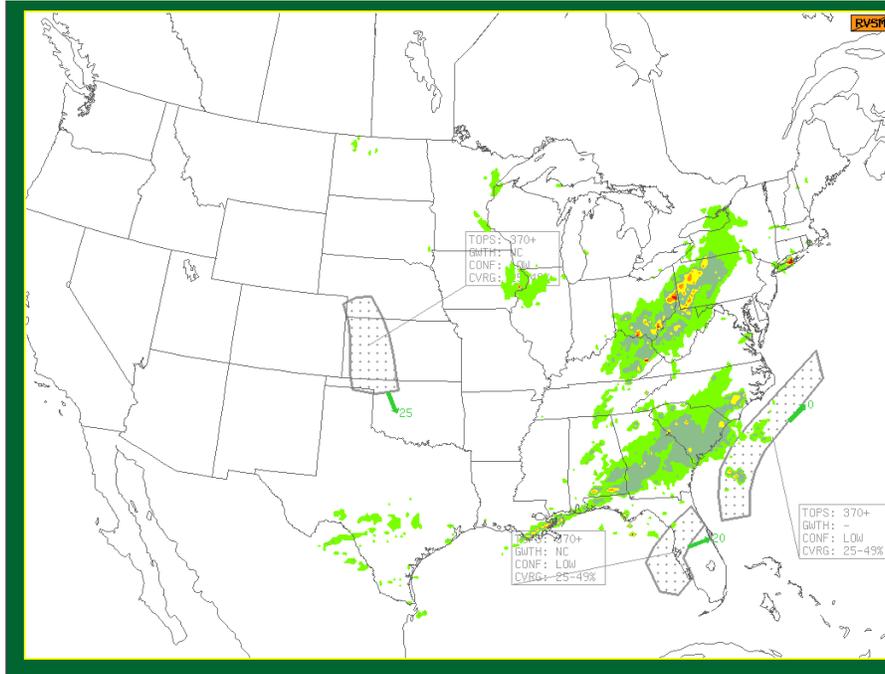

NOWRAD

The NOWRAD overlay displays a graphic depiction of precipitation areas that updates every five minutes. NOWRAD2 and NOWRAD8 options are available, although only one option may be selected at a time. NOWRAD (2km) high-density weather data provides better resolution of weather information but may take longer to display. NOWRAD (8km) has less resolution but may offer greater speed in its performance.

1. To display NOWRAD overlays for CONUS, Canada, and/or San Juan, click either the **2 KM** or the **8 KM** radio button in the **NOWRAD** section of the Weather dialog box to select the area where precipitation is to be displayed. Note that simultaneous display of precipitation for one, two or three regions is supported.

2. To suppress display of NOWRAD overlays for any region, click the **Off** radio button in the **NOWRAD** section of the Weather dialog box.

Different colors represent the levels of precipitation intensity, with 1 being the lowest precipitation level and 6 being the highest level. Click the box to the right of the NOWRAD button to display a pull-down menu of intensity levels.
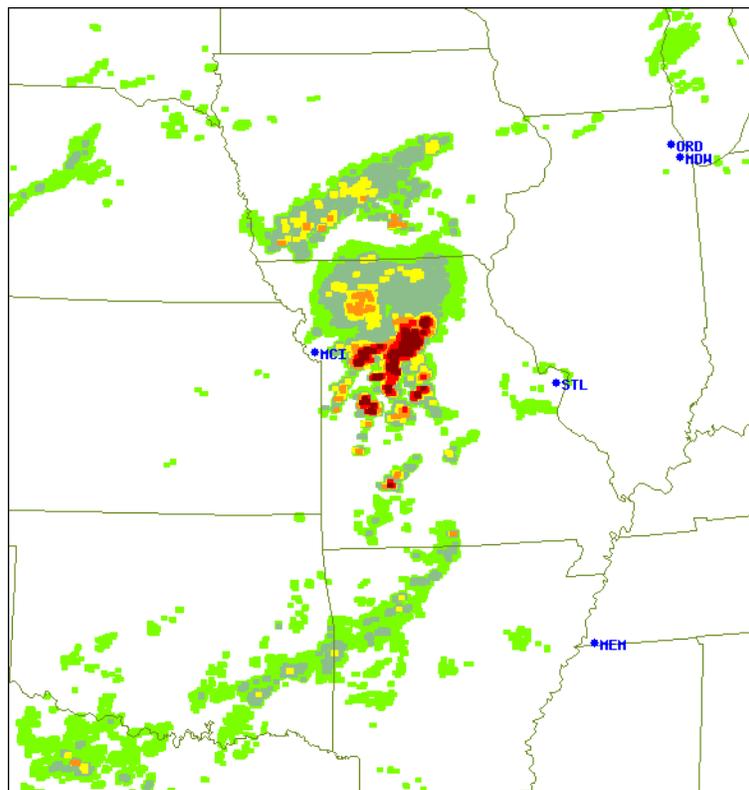
CCFP

The Collaborative Convective Forecast Product (CCFP) overlay shows areas where convective weather might occur. The CCFP forecast season typically runs from March 1 to late October. During the forecast season, meteorologists at the Aviation Weather Center (AWC) produce a set of three CCFP forecasts every two hours, based on information provided by FAA and airline weather specialists. You can display a CCFP overlay and associated information for an interval of 2, 4, or 6 hours by clicking the forecast button for that interval.

The Canadian CCFP forecast season runs from April 1 through September. During March and October, when Canadian CCFP forecasting is not operational, the CCFP section of the Weather Dialog box displays the message "NOTICE: Canadian CCFP is NOT AVAILABLE".

To display CCFP overlays,

1. Click one of the **2 hr**, **4 hr**, or **6 hr** radio buttons in the CCFP section of the Weather dialog box.

2. Click **Show Data Blocks** to display a data block for the CCFP overlay.

   To suppress the display of CCFP overlays, click the **Off** radio button in the CCFP section of the Weather dialog box.

The following is a sample of a CCFP overlay with its data block displayed.
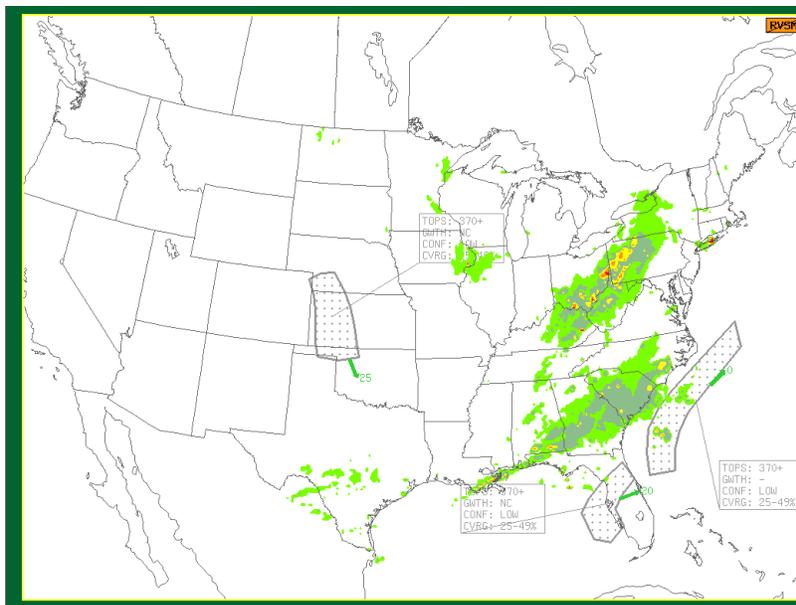
For each CCFP polygon, the CCSD depicts forecast confidence in the following colors:

• Slate Blue = High Confidence

• Gray = Low Confidence

The CCFP forecast overlay may consist of the following types of elements.

1. A set of one or more purple, solid, connected lines of convective weather activity.

2. Color-filled polygons represent forecast areas. These areas are color-coded to indicate the forecasted thunderstorm coverage in that area.

Brick Red	High 70%-100%
Brown	Medium 40%-69%
Yellow	Low 1%-39%

The CCFP forecast overlay may consist of the following types of elements.

1. A set of one or more purple, solid, connected lines of convective weather activity.

2. Color-filled polygons represent forecast areas. These colors are color-coded to indicate the forecasted thunderstorm coverage in that area.

    A green arrow points from the polygon in the direction that the forecast.

3. Data blocks describing a forecast area connect to that area by a leader line. A data block contains values described in the next table. A leader line extends from the data block to the related forecast.

Forecast Area Data Block

Data Element	Description	Example of value
TOPS	Height of clouds in hundreds of feet.	370+
GWTH	Convective growth rate.	NC
CONF	Confidence in forecast of convective activity.	LOW
CVRG	Convective coverage.	25-49%

When the data file is updated, the CCFP forecast is redrawn in the new location. The measurement of cloud tops is indicated in hundreds of feet. The data block shows the growth rate of a selected forecast area and the probability of thunderstorm occurrence according to the codes described in the table above.

CCFP Legend

The CCFP Legend displays a legend with information about the convective forecast. The information includes the forecast confidence levels, coverage levels, growth rate, tops (the altitude of cloud tops within precipitation areas), and the direction and speed in knots that the forecast is moving. Cloud tops are represented in 100's of feet; for example, 300 represents 30,000 feet. Direction and speed are indicated by a green arrow.
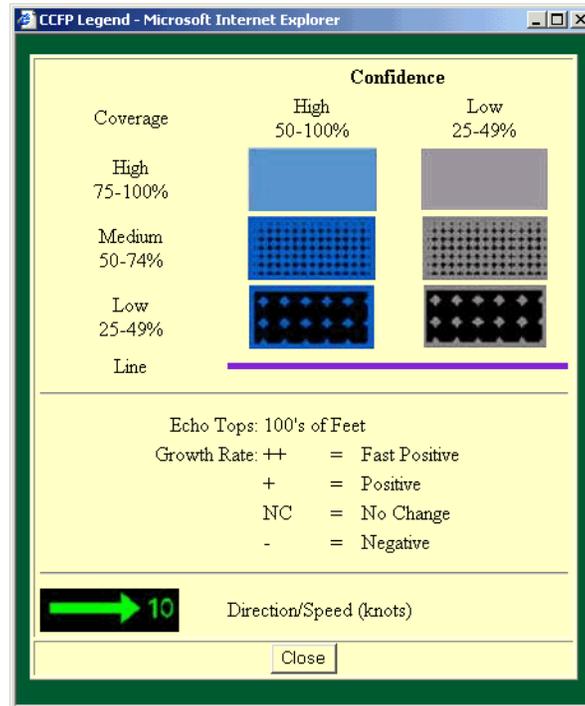
The table below explains the convective coverage areas and the confidence levels of the weather specialists in their forecasts of convective activity.

Polygon Fill/Polygon Color	Coverage	Confidence
Solid Fill/Slate Blue	High 75% - 100%	High 50 - 100%
Solid Fill/Gray	High 75% - 100%	Low 25 - 49%
Medium Fill/Slate Blue	Medium 50 -74%	High 50 - 100%
Medium Fill/Gray	Medium 50 -74%	Low 25 - 49%
Sparse Fill/Slate Blue	Low 25 - 49%	High 50 - 100%
Sparse Fill/Gray	Low 25 - 49%	Low 25 - 49%

The CCFP Legend uses codes to show the growth rate of a selected forecast area and expresses Tops in hundreds of feet. The bottom section of the CCFP displays a green arrow indicating the direction and movement of the CCFP.

NCWF

The NCWF (National Convective Weather Forecast) uses polygons to depict a one-hour forecast of the location of currently existing thunderstorms. An arrow and a number that indicate the storm's current direction of motion and speed, in knots, accompany each polygon. The NCWF updates every five minutes.

NCWF does not forecast the initiation of new storms or the growth or decay of existing storms. Each forecast polygon is simply an extrapolation of the storm's current shape, direction, and speed. As the storm's shape, direction, or speed changes, its polygon, arrow, and number will change, too, every five minutes.
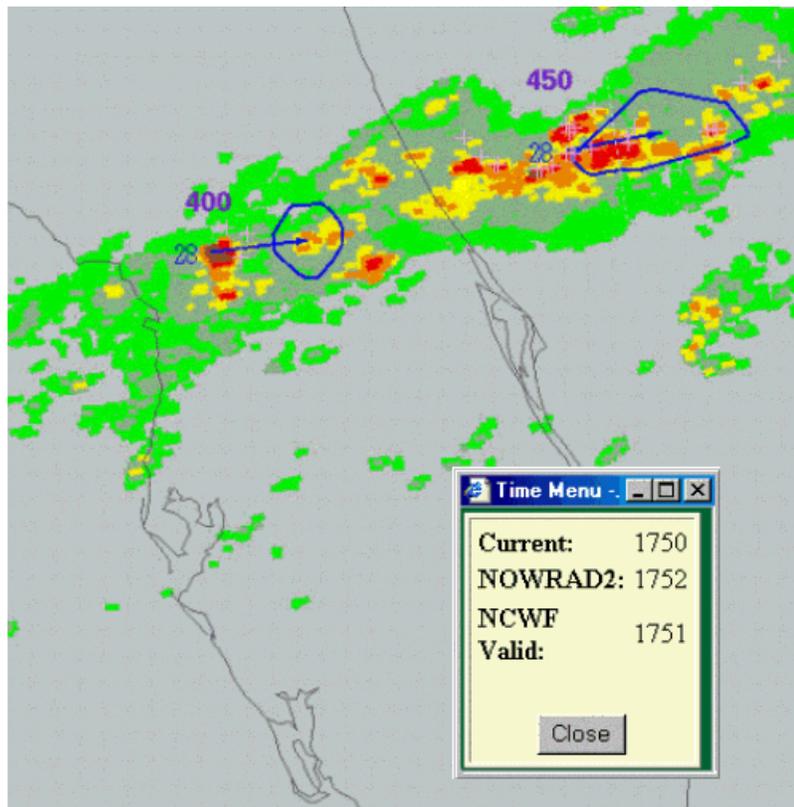
NCWF Polygons, Arrows, and Numbers

Each polygon represents the size and shape of the core of the storm, roughly speaking, the level 3 and higher precipitation. It is not intended to encompass the lower-intensity, outer boundaries of the storm.

The length of each storm's arrow corresponds to the speed of that storm. A storm moving 50 nautical miles per hour has an arrow that is 50 nautical miles long. The base of the arrow is located at the center of the currently existing storm. The tip of the arrow is located at the center of its forecasted location. The number near the base of the arrow is the storm's current speed. Arrows appear only for storms with forecast polygons.

Which Storms Have Forecast Polygons

NCWF will not issue forecast polygons for every storm. In order to have a forecast polygon, a storm must meet the following criteria:

- Be convective with significant vertical development rather than stratiform, and

- Have a stable track vector in the NCWF algorithm

  Or

- Have a significant cloud-to-ground lightning flashrate

- Have a stable track vector in the NCWF algorithm

Most storms will not have forecast polygons early in their lifetimes because it can take 20 minutes or more for the algorithm to develop a stable track vector once the storm fulfills the other criteria. When the storm no longer meets the criteria listed above, the NCWF stops issuing forecast polygons for that storm.

The presence of an NCWF polygon does not guarantee that the storm will persist for one hour. The absence of an NCWF polygon does not mean that the storm will not persist for one hour. The presence and absence of polygons is based simply upon whether or not the storms meet the criteria listed above.

NCWF Performance

Analysis of all of the NCWF polygons from 2002 shows that the forecasts were 'correct' about 30% of the time (i.e., storms did occur inside the forecast polygons at the forecast valid time) and the forecasts were 'false alarms' about 70% of the time (i.e., storms did not occur in the forecast polygon at the valid time or the storms that did occur were not strong enough to meet the forecast validation criteria). Indeed, most individual thunderstorms do not last for more than an hour so a one-hour forecast of their location should be evaluated carefully.

Thunderstorms of the air-mass or 'popcorn' variety usually do not persist long enough to reach their one-hour forecast locations. Nevertheless, the NCWF storm motion information for those storms may be valuable to ETMS users for tactical purposes. Storms that do persist for more than one hour may be described as 'organized' convection associated with a cold front or a dry line or some other long-lived causal factor. NCWF polygons are more accurate for organized storms than for air-mass storms.

The Times Box

The Times Box indicates the time for which the NCWF and CCFP forecasts are valid.
(e.g., NCWF Valid: 1751). The valid time is one hour in the future with respect to the time
that the weather radar data were collected. It takes several minutes to collect the data and
several more minutes to process it, so the valid time will usually be 45-55 minutes in the
future with respect to the current time.
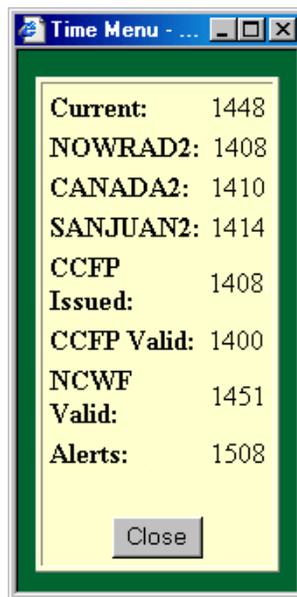
7. Reroute Menu
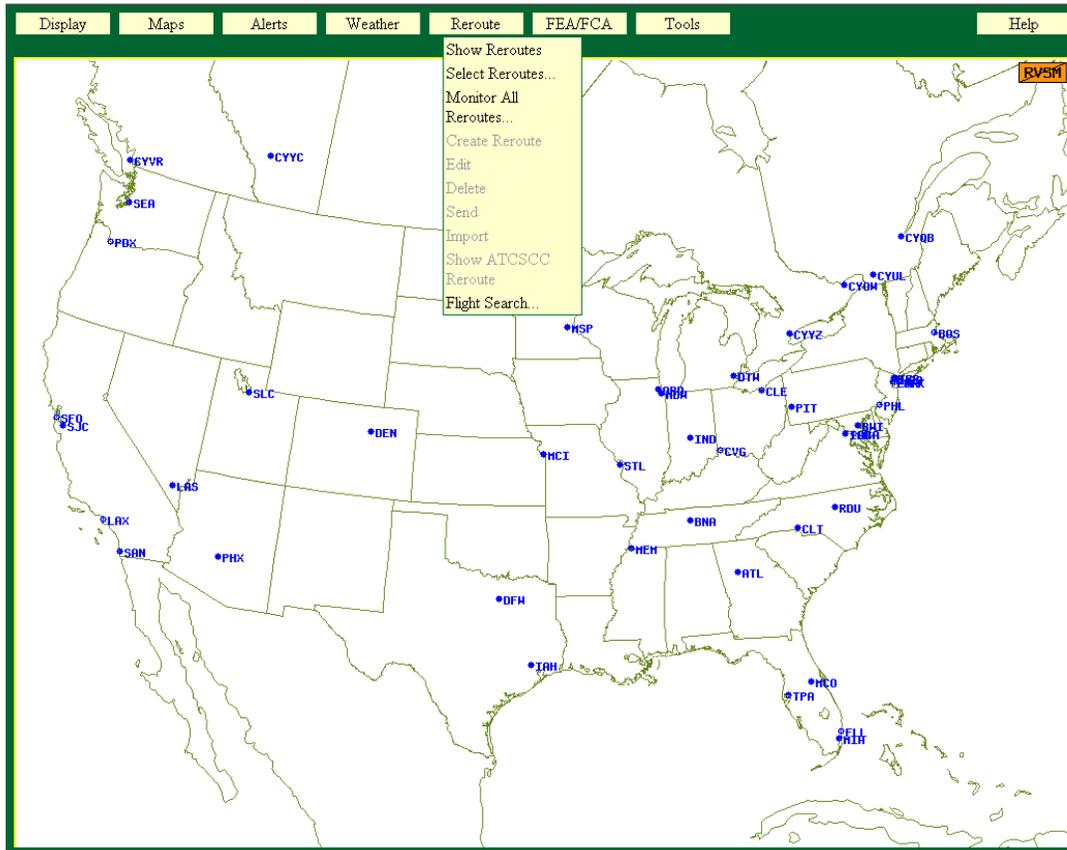
Overview

This section contains information on the commands available on the Reroute menu. Reroutes are graphic overlays showing areas where flight reroutes have been suggested due to severe weather conditions.

- **Show/Hide Reroutes**   **page 62**
  Toggles display of reroutes on and off.

- **Select Reroutes**   **page 63**
  Defines reroutes that are to be shown on the display.

- **Monitor All Reroutes**   **page 75**
  Monitors the flights involved in public reroutes and
  also lets you obtain periodic updates.

- **Flight Search**   **page 99**
  Searches for flights in a reroute set by exact flight identifications.

Show/Hide Reroutes

The **Show/Hide Reroutes** command lets you toggle a display of reroute sets that are checked in the Show check boxes in the Select Reroutes dialog box. You must have selected a reroute before it appears on your display. Either **Show** or **Hide Reroutes** appears on the Reroute menu, depending on the status of the display. That is, if reroute information currently appears on the display, the Reroute menu will read Hide Reroutes. Conversely, if Reroutes are currently hidden, the menu will read Show Reroutes.

1. Click **Reroute** on the main menu.
2. Click **Show Reroutes** or **Hide Reroutes** to toggle display of public reroute information.

About the Display

When you click **Show Reroutes**, all reroute sets with Show buttons checked in the Select Reroutes dialog box appear on the display. The following graphic shows an example of several sets of reroutes.
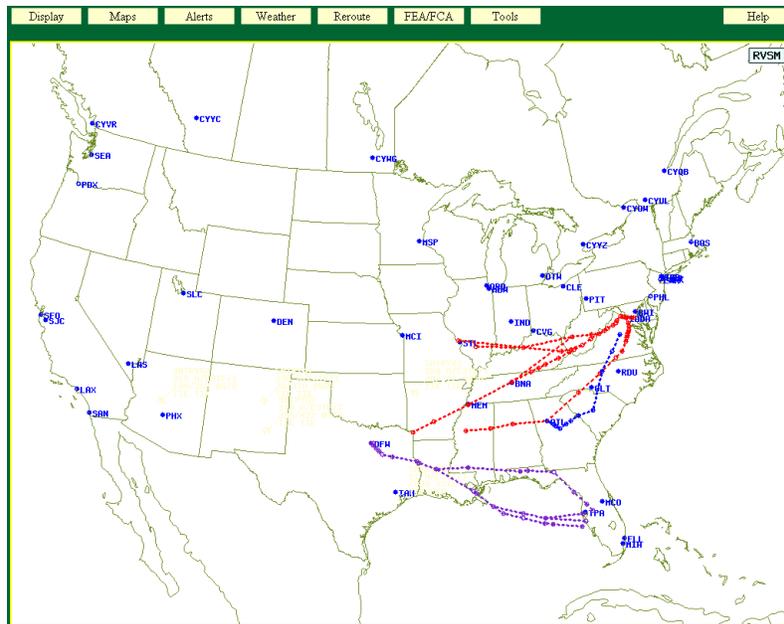
Select Reroutes
The **Select Reroutes** command lets you see what reroutes are currently active and displays data about those reroutes. This function also lets you choose colors for the display of reroutes and sort the list in the Select Reroutes dialog box by reroute names or void times. Reroutes are issued by the severe weather specialists at the Command Center when flight reroutes have been necessitated due to severe weather conditions. Reroute data includes the reroute advisory text, graphic overlays showing where the reroutes lie, and information about the flights affected by the reroutes.

1. Click **Reroute** on the main menu.
2. Click **Select Reroutes.**

After you click **Select Reroutes**, the Select Reroutes dialog box showing all reroutes in the database, opens. Reroutes are sorted first by Domain and then by Name. The default is for Reroutes to be sorted by Reroute Name. You can sort by Void Time by clicking **Sort by Reroute Void Time**.

The following table explains the headers in the Select Reroute dialog box.

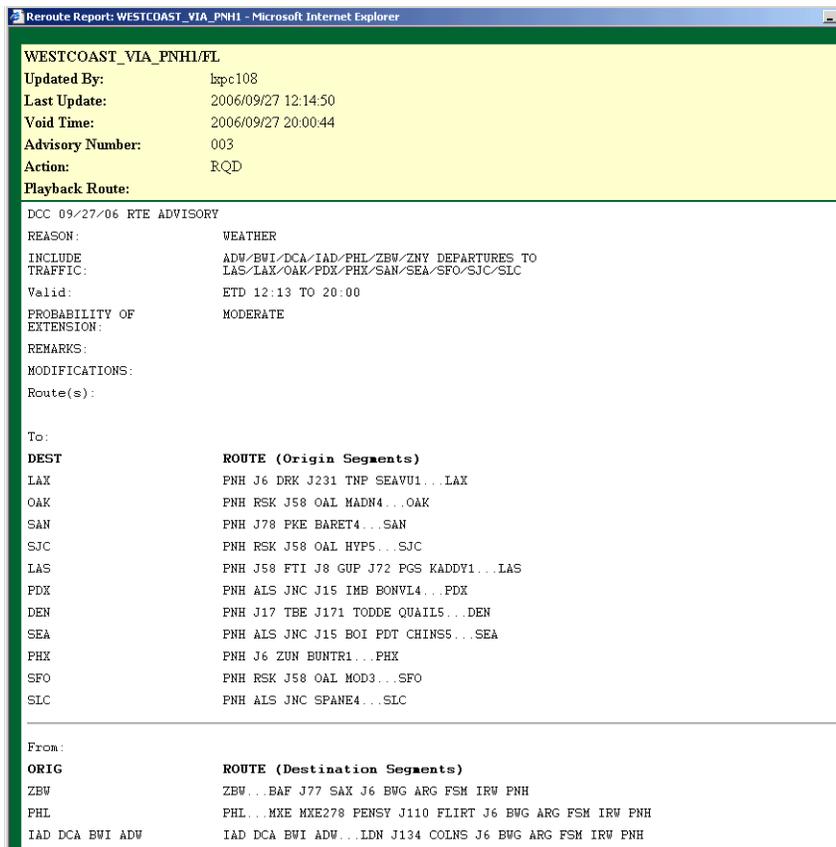**Select Reroutes dialog box**

Item	Description
Show Reroute	Select this check box to display the route graphically. **Note**: The next three check boxes specify the subsidiary information that is shown if the route is displayed. You cannot show the Label, Navaids, or Fixes if the Show Reroute check box is not selected.
Show Label	If the **Show Reroute** check box is selected, select this check box to show the name of the reroute.
Show Navaids	If the **Show Reroute** check box is selected, select this check box to show the names of the Navaids along the reroute.
Show Fixes	If the **Show Reroute** check box is selected, select this check box to show the names of the adapted fixes along the reroute.
Domain	Domain indicates whether the reroute set was created as Public, Shared, or Private. You cannot edit this field.
Status	Status can be Active, Planned, or Expired. You cannot edit this field
Color	Color indicates the color in which the reroute is shown if graphically displayed. Click **Color** to display a color palette and select your choice of color.
Name	Name shows the name that was given to the reroute by its creator and cannot be edited. If the reroute was issued with a flight list, the reroute name ends with /FL. (example: BOS_ORW/FL)
ADV #	Reference number for the advisory issued by the FAA. Select the ADZ (Advisory) # button to display additional information about the reroute in the advisory. **Note:** **Note**: The ADZ # and Info buttons display the same information.
Actions	Actions include: **RQD** = Required **RMD** = Recommended **PLN** = Planned **FYI** = For Your Information
Void	Void designates the time the reroute will expire. You cannot edit this field.
Info	Select **Info** to open a dialog box with any additional information about the reroute that is contained in the advisory. This function is discussed more fully on the following page.
View	Select **View** to open the Reroute Viewer, which lets you see the reroutes graphically and manipulate them in a number of ways.

Select Reroutes dialog box (Continued)

Item	Description
Monitor	Select **Monitor** to display the Reroute Monitor dialog box for the selected reroute. The Monitor button lets you select only one reroute at a time to monitor.
	To monitor more than one reroute, click the **Select Reroutes** button on the Reroute Monitor dialog box and check the reroutes you want to monitor. To monitor all reroutes in a single window, issue the **Monitor All Reroutes** command on the main Reroute menu. See the Monitor All Reroutes section for details.
	Note: If the Reroute Monitor is already open, the current content of the display is replaced with the content for the selected reroute.

Info Button/ADZ# Button

All of the information about a specific reroute is not shown on the Select Reroutes dialog box. If you want additional information, click the **Info** button or the **ADZ#** button for that reroute. After you click the **Info** button or the **ADZ#** button, a dialog box is displayed with the information for that reroute. Click **Close** to close the dialog box and return to the Select Reroutes dialog box.

```
Reroute Report: WESTCOAST_VIA_PNH1 - Microsoft Internet Explorer          _ |□

WESTCOAST_VIA_PNH1/FL
Updated By:              lxpc108
Last Update:            2006/09/27 12:14:50
Void Time:              2006/09/27 20:00:44
Advisory Number:        003
Action:                 RQD
Playback Route:

DCC 09/27/06 RTE ADVISORY

REASON:                 WEATHER
INCLUDE                 ADW/BWI/DCA/IAD/PHL/ZBW/ZNY DEPARTURES TO
TRAFFIC:                LAS/LAX/OAK/PDX/PHX/SAN/SEA/SFO/SJC/SLC
Valid:                  ETD 12:13 TO 20:00
PROBABILITY OF          MODERATE
EXTENSION:
REMARKS:
MODIFICATIONS:
Route(s):


To:
DEST                    ROUTE (Origin Segments)
LAX                     PNH J6 DRK J231 TNP SEAVU1...LAX
OAK                     PNH RSK J58 OAL MADN4...OAK
SAN                     PNH J78 PKE BARET4...SAN
SJC                     PNH RSK J58 OAL HYP5...SJC
LAS                     PNH J58 FTI J8 GUP J72 PGS KADDY1...LAS
PDX                     PNH ALS JNC J15 IMB BONVL4...PDX
DEN                     PNH J17 TBE J171 TODDE QUAIL5...DEN
SEA                     PNH ALS JNC J15 BOI PDT CHINS5...SEA
PHX                     PNH J6 ZUN BUNTR1...PHX
SFO                     PNH RSK J58 OAL MOD3...SFO
SLC                     PNH ALS JNC SPANE4...SLC


From:
ORIG                    ROUTE (Destination Segments)
ZBW                     ZBW...BAF J77 SAX J6 BWG ARG FSM IRW PNH
PHL                     PHL...MXE MXE278 PENSY J110 FLIRT J6 BWG ARG FSM IRW PNH
IAD DCA BWI ADW         IAD DCA BWI ADW...LDN J134 COLNS J6 BWG ARG FSM IRW PNH
```

Some reroutes issued by the FAA are released with a flight list, located at the bottom of the Reroute Information dialog box.

The following table explains the column headers in the flight list.

Flight List

Column Header	Definition
RVSM	RVSM conformance status of the flight within the sector
ACID	Unique alphanumeric aircraft identifier (AAL101)
TYPE	Aircraft type and equipment. Tables available in the Appendix
DCENTR	Departure ARTCC
ACENTR	Arrival ARTCC
ORIG	Departure airport
DEST	Arrival airport
ETD	Estimated time of departure based on the best available time data. The ETD is marked with one of the following prefixes to indicate the kind of data on which the estimate is based. **S**-Scheduled. ETMS has received no flight plan. Data is based on the OAG and user-provided schedule updates. **N**-Early intent. ETMS has received a user-provided early intent route. **P**-Proposed. ETMS has received a NAS flight plan. **T**-Taxi. ETMS has received a message indicating the flight has pushed off from the gate. **A**-Active. ETMS has received a NAS or user-provided departure message. **E**-Estimated. ETMS has received a message indicating the flight was active, but no departure message was received. **R**-The historical route has been replaced by the assigned route.
ETA	Estimated time of arrival based on the best available time data. The ETA is marked with one of the following prefixes to indicate whether the flight has actually arrived: Actual arrival time (proposed or active flight) Estimated arrival time (proposed or active flight)
PGTD	Proposed gate time of arrival
IGTD	Initial gate time of departure
CTG	Aircraft category: Jet, Prop, Turbo jet
ALT	Requested altitude in hundreds of feet
SPD	Ground speed filed in flight plan

Route Prefixes

The assigned routes in the Flight List display the advisory action prefix as listed in the following table:

Route Prefix Depending on Advisory Action

Route Segment Type	RQD	RMD	PLN	FYI
No Type	RQD:	RMD:	PLN	FYI
UPT RTE	RQD UPT RTE	RMD UPT RTE	PLN UPT RTE	FYI UPT RTE
CDR RTE	RQD CDR RTE	RMD CDR RTE	PLN CDR RTE	FYI CDR RTE
RERTE	RQD RERTE	RMD RERTE	PLN RERTE	FYI RERTE
UNKN RTE	RQD UNKN RTE	RMD UNKN RTE	PLN UNKN RTE	FYI UNKN RTE

Reroute Viewer

Clicking **View** on the Select Reroutes dialog box opens the Reroute Viewer, shown on the following page. The Reroute Viewer displays a graphical picture of the selected reroute and also gives textual information about the assigned routes. The Viewer provides a flight list if the reroute was issued with one.

Unlike the Reroute Monitor, the Reroute Viewer does not update the flight list automatically. To view the latest flight data, click the **Refresh Viewer** button.

> **Note:**   The Reroute Viewer can be used to view any reroute, regardless of whether or not the reroute was issued with an attached flight list. CCSD users can view route information for their airline only.

The City Pair Display is shown by default.

The City Pair display includes the origin and destination for every flight included in the reroute flight list. Moreover, it shows the route(s) assigned for each city pair. A color is assigned to each route so that the route can be clearly seen on the graphic. In the example above, several of the city pairs were assigned more than one route. Each city pair route is assigned a different color by the Reroute Viewer function and can be displayed independently.

A city pair route is displayed by a combination of dashed and solid lines. The part of the route defined by the advisory is shown as a solid line. Dashed lines connect the ends of the assigned route to the origin and destination airport, if necessary.

The entire reroute is drawn in gray. The colored city pair routes are overlaid on top, allowing the individual routes to be viewed in the context of the entire reroute. This means that when all city pair routes are displayed, any routes that appear in gray are part of the advisory, but are not assigned to any of the flights in the flight list.

The Reroute Viewer displays the same position, zoom scale, and all the same data that were displayed in the main map window with the exception that all reroutes are turned off except for the one being viewed. If you wish to view a reroute in the context of the weather or an FEAFCA, you need to exit the Reroute Viewer, turn on the display of those elements using the normal functions, and re-select the Reroute Viewer.

The City Pair Display includes the following information.

- **ORIG**:   Origin airport
- **DEST**:   Destination airport
- **DCENTR**:   Departure Center
- **ACENTR**:   Arrival Center
- **COUNT**:   Number of flights that match the city pair

Under each city pair are the assigned routes for that city pair. The text of the assigned route is displayed exactly as it appears in the advisory. You can control the graphical display of the city pair routes as follows:

1. Click the colored check box next to the city pair route to turn the display of that route on or off.

2. Click the **Show All Reroutes** check box near the top of the window to turn the display of all the city pair routes on or off.

City Pair Display Details

Click the **Details** button next to a city pair to collapse the City Pair Display so that the textual route is shown for the chosen city pair only. In addition, the graphical display shows in color the assigned route(s) for the chosen city pair. Detailed data for flights flying between that city pair are shown below the graphical display.

To return to the full City Pair display, click the **City Pair Display** button again.

The example below provides details for the DEN to PHL city pair.

> **Note:** When Detail is selected, the Show All Reroutes button acts on the routes for that city pair only.

> **Note:** The route is graphically displayed on the map in the same color as it appears on the City Pair List.

The flight data fields shown at the bottom of the graphical display contain the following information:

- **ACID**   Aircraft identifier
- **TYPE**   Aircraft type
- **ORIG**   Origin of flight
- **DEST**:   Destination of flight
- **DCen**:   Departure Center
- **ACen**:   Arrival Center
- **ETD**:   Estimated time of departure A prefix is used to indicate the source of the data that is used to set the ETD. You can judge the reliability of the data partly on the basis of the prefix, defined on the following page.
- **ETA**:   Estimated time of arrival
- **PGTD**:   Proposed gate time of arrival, as filed on the flight plan
- **IGTD**:   Initial gate time of departure

- **CTG**:   Aircraft category: Jet, Prop, Turbo jet
- **Alt**:   Altitude in hundreds of feet
- **Speed**:   Speed of aircraft

Prefixes

The following prefixes indicate the source of the data used to set the ETD.

- **S**-Scheduled. ETMS has received no flight plan. Data is based on the OAG and user-provided schedule updates.

- **N**-Early intent. ETMS has received a user-provided early intent route.

- **P**-Proposed. ETMS has received a NAS flight plan.

- **T**-Taxi. ETMS has received a message indicating the flight has pushed off from the gate.

- **A**-Active. ETMS has received a NAS or user-provided departure message.

- **E**-Estimated. ETMS has received a message indicating the flight was active, but no departure message was received.

- **R**-The historical route has been replaced by the assigned route.

Flight Display

Clicking **Flight Display** on the Reroute Viewer causes the display to switch from the City Pair Display to the Flight Display, as seen in the following graphic.

The Flights display includes flight information for each flight for the specified airline in the reroute. The display includes the following information:

- **ACID:**   Aircraft identifier
- **Type:**   Aircraft type
- **Orig:**   Origin of flight
- **Dest:**   Destination of flight
- **DCen:**   Departure Center
- **ACen:**   Arrival Center
- **ETD:**   Estimated time of departure. A prefix is used to indicate the source of the data that is used to set the ETD.

  - **S-**   Scheduled. ETMS has received no flight plan. Data is based on the OAG and user-provided schedule updates.
  - **N-**   Early intent. ETMS has received a user-provided early intent route.
  - **P-**   Proposed. ETMS has received a NAS flight plan.

T-   Taxi. ETMS has received a message indicating the flight has pushed off from the gate.

A-   Active. ETMS has received a NAS or user-provided departure message.

E-   Estimated. ETMS has received a message indicating the flight was active, but no departure message was received.

R-   The historical route has been replaced by the assigned route.

Flight Display Details

Clicking **Details** for a specific flight opens additional details for that flight. In the following example, details for flight AAL1238 are shown beneath the graphical display, along with the assigned route(s) for this one flight. In the following example, there are three assigned routes for this flight. The display of the assigned routes can be controlled as they are in the other modes.

ACID	Type	Orig	Dest	DCen	ACen	ETD	ETA	PGTD	IGTD	CTG	Alt	Speed
AAL1238	MD80	AUS	ORD	ZHU	ZAU	P1819	E2030	1747	281747	J	330	431
☑	MCB J35 MEM J42 BNA J39 IIU J89 KURTZ VHP OKK OKK1											

Additional flight data details include the following information.

- **ETA:**   Estimated time of arrival
- **PGTD :**   Proposed gate time of arrival
- **IGTD:**   Initial gate time of departure
- **CTG:**   Aircraft category: Jet, Prop, Turbo jet
- **Alt:**   Altitude in hundreds of feet
- **Speed:**   Speed of aircraft

Combined View

To see multiple routes on the Reroute Viewer, on the Select Reroutes dialog box put a check mark in the **Show** column for any reroutes you want to see. Click the **Combined View** button at the top right side of the Select Reroutes dialog box. All reroutes with a check mark on the Select Reroutes dialog box are displayed in a combined view on the Reroute Viewer, as in the following sample.

Monitor All Reroutes

The **Monitor All Reroutes** command lets you monitor the flights involved in public reroutes and obtain periodic updates. You will be able to see which flights are affected by a reroute, which flights have filed flight plans that conform to the reroute, and which flights have not filed flight plans that comply with the reroute.

1. Click **Reroute** on the main menu.
2. Click **Monitor All Reroutes**.

Reroute Monitor Functions

You can perform several functions using the Reroute Monitor.

- You can hide or show the Timeline and Flight List. You can also shrink the dialog box to show only the Counts Panel and Time Panel.

- You can monitor one or more specific public reroutes or all public reroutes.

- You can view the assigned route for an individual flight.

- You can control which flights show up in the flight list and on the display by using the Filter option and/or the Timeline.

- You can select a range of time intervals on the timeline using the Select Time Range dialog box.

- You can choose which time is to be represented by the Timeline: Departure Time, Arrival Time, Entry Time, for a specified Center, or for an FEA/FCA.

- You can view the selected time range on the timeline in Absolute or Relative time range modes.

- You can filter the flights by various criteria by clicking the Select Filters button on the Reroute Monitor dialog box and selecting **Filters ON**.

   Note: Filters will be turned **ON** if you select Filters and click **OK** in the Reroute Flight Filters dialog box.

Reroute Monitor Dialog Box

After you click **Monitor All Reroutes** or press **M**, the Reroute Monitor dialog box opens.

> **Note:** Clicking the **Monitor** button on the Select Reroutes dialog box
> also opens the Reroute Monitor for the selected reroute.To monitor more
> than one reroute, click the **Select Reroutes** button on the Reroute Monitor dialog
> box and check the reroutes you want to monitor. The Select Reroutes button is
> discussed later in this section.

The Reroute Monitor dialog box contains three major sections.

1. **Control Panel**
   Located near the top of the dialog box, the Control Panel has three subsections.

   - Counts Panel
     Located on the left side of the Control Panel, this panel displays data about flights affected by a reroute.

   - Selection Panel
     Located in the center of the Control Panel, this section consists of buttons and radio buttons that help you set specific parameters for monitoring reroutes.

   - Time Panel
     Located on the right of the Control Panel, this section displays the current time and indicates the time of updates to the Reroute Monitor.

2. **Timeline**
   This section of the Reroute Monitor is located under the Control Panel. You can use the Timeline to select a time range of flights shown in the Flight List and drawn on the map. The default timeline selection is six hours and can be expanded up to 15 hours.

3. **Flight Lis**t
   The Flight List, located on the lower part of the dialog box, lists the flights involved with the reroute.

Using the Reroute Monitor Dialog Box

After you select **Monitor All Reroutes**, or the Monitor button on Select Reroutes, the Reroute Monitor dialog box opens. The title bar displays information about the state of the Reroute Monitor based on whether all reroutes or a single reroute are being monitored in Relative or Absolute time mode.

Counts Panel

The Counts Panel displays the following data:

- **Non-Conformant**
  Number of flights that meet either of the following conditions:

  1. A Reroute Advisory requires the flight to follow an explicit route, and the flight's current route from a flight plan or early intent message does not match any of the assigned routes shown for the flight in the Reroute Advisory.

  2. A Reroute Advisory requires the flight to avoid an FCA and provides no explicit route assignment, and the flight's current route from a flight plan or early intent message intersects the FCA.

- **Unknown**
  Number of flights with no flight plan filed or early intent message submitted.

- **Conformant**
  Number of flights that meet either of the following conditions:

1. A Reroute Advisory requires the flight to follow an explicit route, and the flight's current route from a flight plan or early intent message matches one of the assigned routes shown for the flight in the Reroute Advisory.

2. A Reroute Advisory requires the flight to avoid an FCA and provides no explicit route assignment, and the flight's current route from a flight plan or early intent message bypasses the FCA.

- **OK**
  Number of flights that were manually approved for an exception to remain on their current route after the reroute was issued.

- **Excluded**
  Number of flights that were excluded from the reroute when it was issued.

  Note: A flight is counted only once, even if it is in more than one reroute and appears more than once on the flight list. Also, the Reroute Monitor will count only flights that have been allocated to the Timeline by the selection made in the Assign to Time Segments panel.

Selection Panel

The buttons located in the Selection Panel segment of the Control Panel let you select reroutes to monitor, select filters, select columns, select Advanced Sort criteria, select a time range, show or hide the Timeline, show or hide the Flight List and submit early intent.

If all reroutes are being monitored, the All button in the Monitor field of the Selection Panel is selected. When individual reroutes are selected in the Select Monitored Reroutes dialog box, the Monitor field is toggled to Selected.

When the Filters button on the Selection Panel is toggled **On**, the Flight List is filtered to show only the flights that meet any filter condition defined in the Select Filters dialog box. When the button is toggled **Off** any filter specifications are ignored.
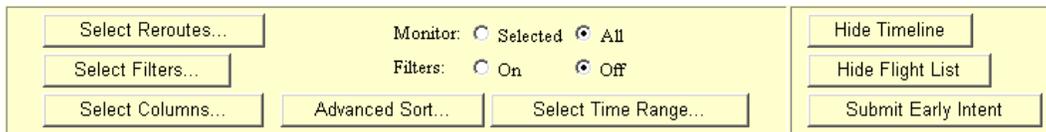
Select Reroutes

The Select Reroutes button on the Reroute Monitor opens the Select Monitored Reroutes dialog box. The dialog box displays a list of reroutes that can be monitored, as shown below. To display a list of selected reroutes, in the Select Monitored Reroutes dialog box, click in the check box to the left of the Advisory number. The Reroute Monitor lists only flights that are included in the reroutes you selected.
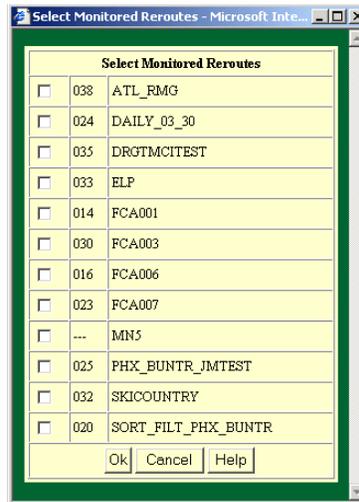
For example, if you select Advisory number 038 on the Select Monitored Reroutes dialog box by clicking in the check box to the left of the advisory number and clicking **OK**, the Reroute Monitor would display flights for only that Advisory number in the flight list. You can select one or more reroutes.

Select Filters

The **Select Filters** button on the Selections Panel opens the Reroute Flight Filters dialog box.

The Reroute Flight Filters dialog box contains an Advanced Filters button, which provides additional filter options. The abbreviated version of the Reroute Flight Filters dialog box has the options that are most often used. However, if you want to specify one of the Advanced Filters options, click the **Advanced Filters** button to expand the Reroute Flight Filters dialog box.

> **Note:** If any of the advanced filters are selected, the Reroute Flight Filters dialog box opens with the advanced filters fields showing.

> The range for the timeline is no longer set on the Filters dialog box. Instead, use the Select Time Range dialog box.

Advanced Filters

Clicking the **Advanced Filters** button on the Reroute Flight Filters dialog box displays additional filter fields, as shown below.
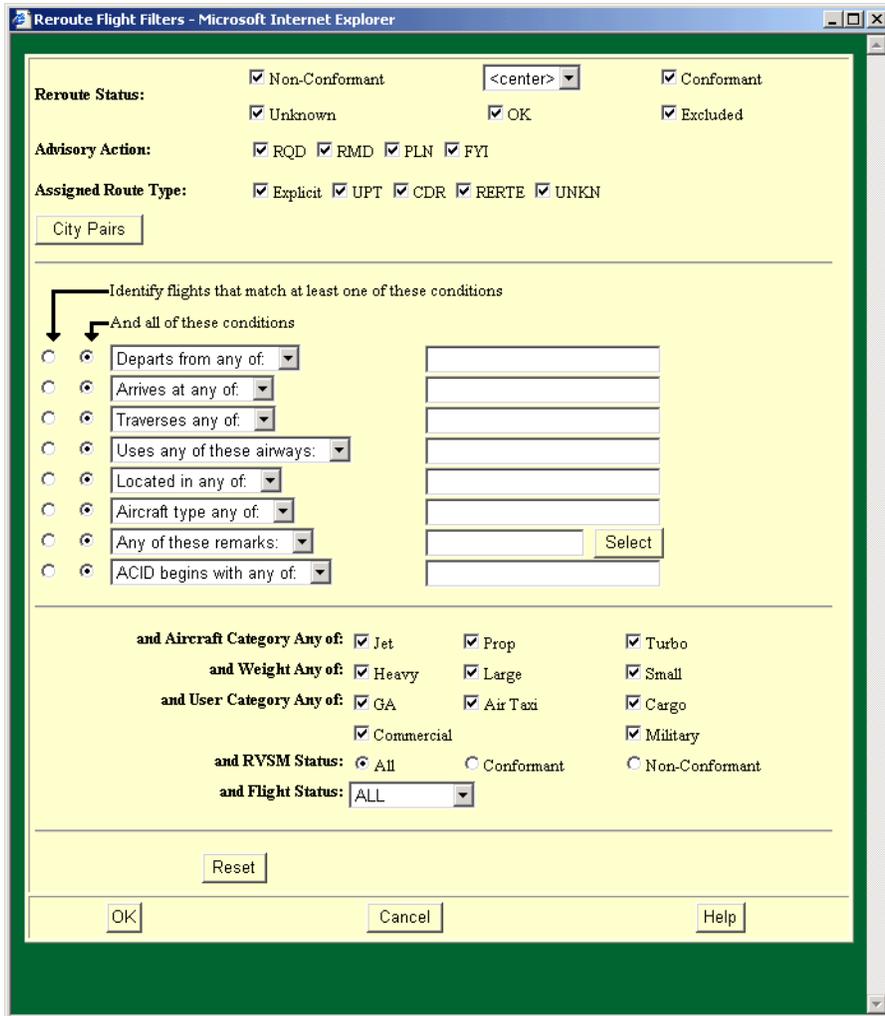
The following table describes the fields in the expanded Reroute Flight Filters dialog box.

Reroute Flight Filters

Item	Description
Reroute Status	Limits the selection by reroute conformance status - Conformant, Non-Conformant, OK, Unknown, or Excluded. If the non-conformant box is checked and a center is selected in the center pick list, this limits the selection to flights that are non-conformant when in the selected center.
Advisory Action	Limits the selection by advisory action - RQD, RMD, PLN, or FYI.
Assigned Route Type	Limits the selection to assigned route type - Explicit, UPT (User-Preferred Trajectory), CDR (Code Departure Route), RERTE, UNKN. **Note**: The term Explicit means that a specific reroute has been assigned.
City Pairs	Opens the Reroute monitor City Pairs Filter dialog box, which enables you to limit the selection to flights that depart from and arrive at city pair airports. More details on this feature are available on the following pages.
Departs from any of/ Departs from none of	Limits the selection to flights that depart from any or none of the listed airports or ARTCC(s).
Arrives at any of/ Arrives at none of	Limits the selection to flights that arrive at any of or none of the listed airports or an airport within the listed ARTCC(s).
Traverses any of/ Traverses none of/ Traverses all of	Limits the selection to flights that traverse any, all, or none of the listed sectors, fixes, or ARTCCs.
Uses any of these airways/ Uses none of these airways/ Uses all of these airways	Limits the selection to flights that use any, all, or none of the listed airways.
Located in any of/ Located in none of	Limits the selection to flights that are, or are not, currently located in the specified ARTCCs.
Aircraft type any of/ Aircraft type none of	Limits the selection to flights that are, or are not, of specific aircraft types.
Any of these remarks/ None of these remarks/ All of these remarks/	Limits the selection to flights with any, all, or none of the specified remarks keywords.
ACID begins with any of/ ACID begins with none of ACID is any of ACID is none of	If one of the "begins with" options is selected, limits the selection to flights with Aircraft IDs that begin, or do not begin, with the characters specified by each entry. If one of the "is" options is selected, limits the selection to flights with Aircraft IDs that exactly match, or do not match, the characters specified by each entry.
Aircraft Category Any of	Limits the selection to flights that have an aircraft category that matches one of the selected categories. The default is all categories selected, indicating that no filtering is required.

Reroute Flight Filters (Continued)

Item	Description
Weight Any of	Limits the selection to flights that have a weight class that matches one of the listed categories. The default is all categories selected, indicating that no filtering is required.
User Category Any of	Limits the selection to flights that have a user category that matches one of the listed categories. The default is all categories selected, indicating that no filtering is required.
RVSM Status	Limits the selection to all flights, flights that are RVSM conformant, or flights that are RVSM non - conformant.
Flight Status	Clicking on the arrow displays three choices: All, Active, or Proposed. If Proposed is selected, limits the selections to flights that are not yet airborne, which includes those that have a status of Scheduled, Filed, Airline Created, or Controlled. If Active is selected, limits the selection to airborne flights. All indicates that no filtering is required. All is the default.
Reset	Resets the filter fields to their defaults.

Note: If you define filters in the Reroute Flight Filters dialog box, the Filters field on the Reroute Monitor is toggled **On**.

City Pairs Filter

You can filter the Reroute Monitor Flight List by city pairs by clicking the **City Pairs** button on the Reroute Flight Filters dialog box and specifying departing and arriving airports on the Reroute Monitor City Pairs dialog box.

The dialog box displays two columns: Departs and Arrives. To enter a city pair, enter a departing airport in the Departs field and an arriving airport in the Arrives field. You can enter only one departure or arrival airport per field. You can enter up to 50 city pairs.

Click **OK** to save your entries and return to the main Reroute filters dialog box. Click **Reset** to clear all fields on the dialog box. Click **Cancel** to close the Reroute Monitor dialog box without saving any changes.

The Reroute Flight Filters dialog box displays a city pairs filter summary to the right of the City Pairs button. In the example below, the city pairs filter summary indicates that only flights that depart from BOS and arrive at ORD will display on the Reroute Monitor Flight List. The City Pairs summary field displays in a non-editable field.

The City Pairs summary field displays in a non-editable field. To edit a City Pairs filter, you must open the Reroute Monitor City Pairs dialog box by clicking the **City Pairs** button.

> **Note:** You must click **OK** on the main Reroute Monitor flight filters dialog box before any changes you have made to the city pair filters will take effect.

Select Columns

The Select Columns button on the Reroute Monitor lets you add and remove columns from the Reroute Monitor Flight List. After you click on **Select Columns**, the Reroute Monitor Column Selection dialog box opens.
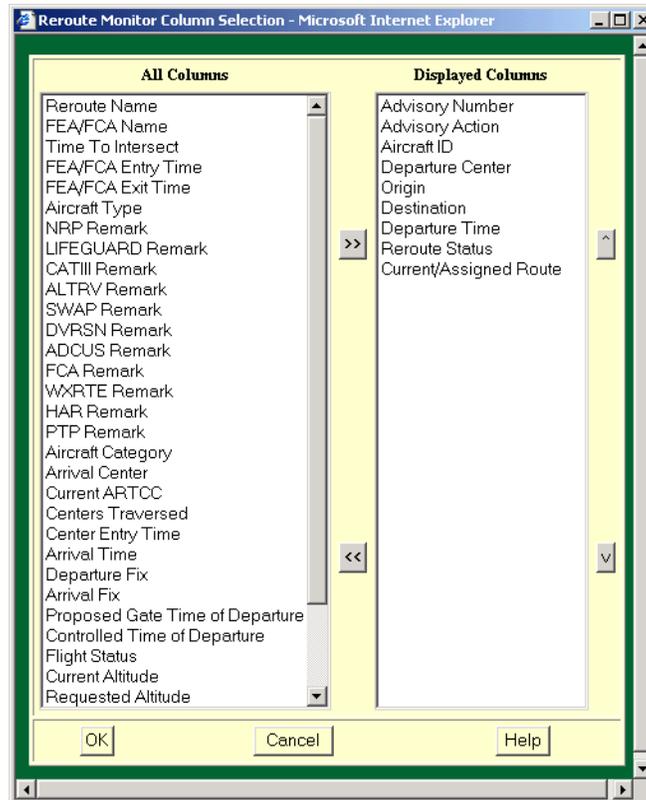
The All Columns field shows the columns that can be added to the Reroute Monitor Flight List. The Displayed Columns field shows the columns that are currently displayed on the Reroute Monitor Flight List.

To select columns for the Flight List:

1. Click on the column name and the left arrow button to move a column name out of the **Displayed Columns** list. The column name appears in the **All Columns** list.

2. Click **OK**. You are returned to the Reroute Monitor. Notice that the column is no longer displayed in the Reroute Monitor Flight List.

3. To return the column to the Reroute Monitor Flight List, click **Select Columns** again and select the name in the All Columns list. Click the right arrow button. The column name appears in the Displayed Columns list. Click **OK**. You are returned to the Reroute Monitor and the column is redisplayed.

4. The order in which the column names appear in the Displayed Columns List is the order, from left to right, in which they appear on the Reroute Monitor Flight List. To move the column names up and down within the list of Displayed Columns, select the column name and click the up or down arrow.

5.   Click **OK** to move the column header on the Reroute Monitor Flight List to the left if you selected the up arrow, or to the right if you selected the down arrow.

The columns Show, ADZ, and ACID are fixed columns and cannot be added, moved. or removed from the Reroute Monitor Flight List.

- **Show**
  Each flight listed has a checkbox in the Show column. When the Flight List first opens all of the checkboxes are selected by default. Click the **Show** column header to deselect all of the checkboxes and choose the flights you wish to display by clicking individual **Show** checkboxes. For more information see "Show Flights and Routes" on page 97

- **ACID**
  This column displays the Aircraft Identifier for each flight listed.

- **ADZ (Advisory Number)**
  This column displays a button labeled with the reference number of the advisory that applies to the flight or "-" if none. The Advisory (ADZ) Number column displays an ADZ# button for each flight on the Flight List. You can click any ADZ# button on the Flight List to display the full text of the advisory report for that flight.

The following table includes the column names available in the Select Columns option, the column headers that display on the Flight List, and descriptions of each column.

Reroute Monitor Column Selection

Column Name	Flight List Header	Description
Advisory Action	ACTION	Action associated with the advisory that applies to the fight. This can be any of the action values assigned when the advisory is issued, such as RQD, RMD, or FYI.
Aircraft Category	CAT	Aircraft Category code. Possible values are J, P, and T.
Aircraft Type	TYPE	Aircraft Type and Equipment.
Arrival Center	ACENTR	Arrival Center.
Arrival Fix	AFIX	Arrival Fix.
Arrival Time	ETA	ETMS estimate of wheels-down time.
Center Entry Time	C ENTRY	If Center Entry Time option is selected on timeline, this is the time when the flight enters the specified center.

Reroute Monitor Column Selection (Continued)

Column Name	Flight List Header	Description
Centers Traversed	CENTRS	For a required reroute, the center name displays in red if the flight is off the reroute when it is in the center, or if the center could move the flight onto the reroute. For a non-required reroute, the center name displays in blue if the flight is off the reroute when it is in the center. Otherwise, the name displays in black.
Control Element	CTL_ELEM	Name of Airport or FCA that is controlling the flight and a "-" if the flight is not controlled.
Controlled Time of Departure	CTD	Controlled Departure Time, or "-" if none.
Current Altitude	CALT	Current altitude in hundreds of feet.
Current ARTCC	ARTCC	ARTCC where flight is currently located or departure ARTCC for inactive flights.
Current or Assigned Route	CURRENT/ ASSIGNED ROUTE	Current and assigned routes. If several reroute options have been assigned, they will all be listed.
Departure Center	DCENTR	Departure Center.
Departure Fix	DFIX	Departure Fix.
Departure Time	ETD	ETMS estimate of wheels-up time. The ETD prefix indicates both the status of a flight and the source of data for a flight as follows: **A** - Actual departure time, usually based on a NAS departure message. **E** - Estimated departure time. No departure message was received, but the flight is known to be airborne because NAS messages indicating this have been received. **T** - Flight is taxiing. A gate departure time has been received. **P** - P-time from the NAS flight plan message. **N** - Early intent. ETMS has received a user-provided early intent route. **S** - Departure time estimated from the Official Airline Guide scheduled time. **R** - The historical route has been replaced by the assigned route.
Destination	DEST	Arrival Airport

Reroute Monitor Column Selection (Continued)

Column Name	Flight List Header	Description
FEA/FCA Entry Time	FCA ENTRY	Time when the flight is predicted to first intersect the FEA/FCA, if the reroute that applies to the flight is an FEA/FCA-based reroute. Otherwise "-".
FEA/FCA Exit Time	FCA EXIT	Time when the flight is predicted to exit the FEA/FCA for the last time if the reroute that applies to the flight is an FEA/FCA-based reroute. Otherwise "-".
FEA/FCA Name	FEA/FCA Name	FEA/FCA name, if the reroute that applies to the flight is an FEA/FCA-based reroute. Otherwise "-".
Filed Speed	SPD	Filed speed.
Flight Status	FSTAT	Both the status of a flight and the source of data for a flight as follows: **S** - Scheduled. ETMS has received no flight plan. Data is based on the OAG and/or user-provided schedule updates. The route is based on historical data. **P** - Proposed. ETMS has received a NAS flight plan. **N**-Early intent. ETMS has received a user-provided early intent route. **T** - Taxi. ETMS has received a message indicating the flight has pushed off the gate. **A** - Active. ETMS has received a NAS or user-provided departure message. **E** - Estimated. ETMS has received a message indicating the flight was active, but no departure message was received. **R** - The historical route has been replaced by the assigned route.
Origin	ORIG	Departure Airport.
Proposed Gate Time of Departure	PGTD	Flight plan Ptime.
Remarks Keyword,	*Keyword* Remark (e.g, NPR Remark)	Displays a **Y** if the selected remark exists for a flight or "-" if none.
Requested Altitude	ALT	ETMS requested altitude in hundreds of feet.
Reroute Name	REROUTE	Name of the reroute that applies to the flight.

Reroute Monitor Column Selection (Continued)

Column Name	Flight List Header	Description
Reroute Status	RRSTAT	Reroute conformance status. (**C** - conformant, **NC** - non-conformant, **NC/OK** - Non-conformant but previously OK**, UNKN** - Unknown, **OK** = exception granted, **EXC** - Excluded)
RVSM Status	RVSM	RVSM conformance status.
Time to Intersect	TIME TO	Time to intersect the FCA, if the reroute that applies to the flight is an FCA-based reroute. Otherwise "-". The value shall be '00:00' if the flight has already intersected the FCA.

Advanced Sort

The **Advanced Sort** button on the Reroute Monitor dialog box lets you sort the Reroute Monitor Flight List by specifying Primary, Secondary, and Tertiary sort criteria.
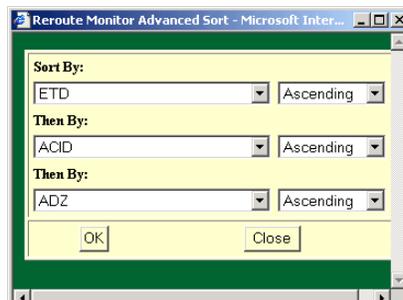
1. Click the arrow next to the criteria field to select from a pick list of sort options.

2. Click the Ascending/Descending arrow to select either ascending or descending order.

3. Click **OK**.

   Note: Clicking on the column header also lets you sort the list in ascending or descending order.

Select Time Range

The Select Time Range option on the Reroute Monitor dialog box allows you to select a single time interval or a range of time intervals to be displayed on the timeline. You can also choose whether to display the intervals as an Absolute or a Relative time range. To open the Select Time Range dialog box, click the **Select Time Range** button:
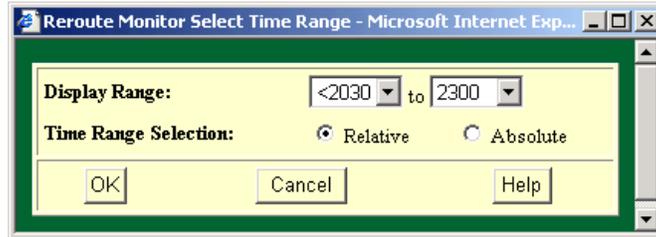
The Display Range pick lists have a range of time intervals corresponding to the currently displayed Timeline. Select a beginning time interval and an ending time interval from the pick lists. If you select an invalid display range, an error message is displayed. Click **OK** on the error message and enter a valid display range. On the Select Time Range dialog box, click **OK** to display the selected range on the timeline.

In the Time Range Selection, you can select **Relative** or **Absolute** time range by clicking the appropriate radio button.

Relative Time Range

If you select Relative Time Range, the WSD keeps the same block of cells highlighted and increases the start and end times of the selected time range by 15 minute intervals, as the current time advances. The same number of time intervals remain selected, and the selected time range shifts forward, advancing relative to current time. The following example shows the Reroute Monitor timeline with the Relative Time Range of 2030 to 2300 selected. At 2000, the timeline in the example will shift left, and the range selection will change to 2045-2315.
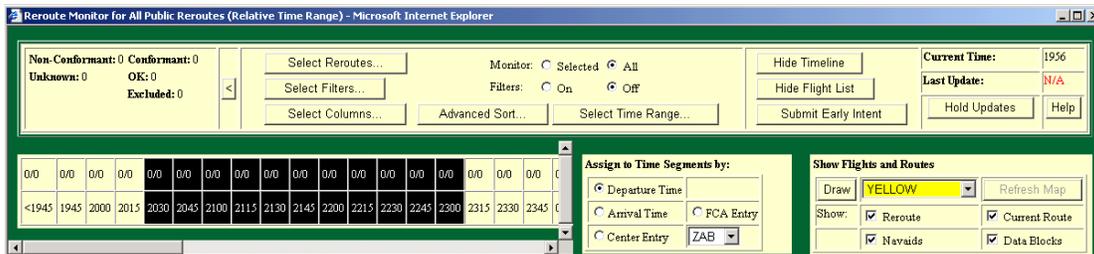
If you select **Departure Time** in the Assign to Time Segments panel, the left most time interval on the time line represents all time intervals prior to the current time interval, displayed with a left carat. For example: <1945, shown above.

If you select **Arrival Time** in the Assign to Time Segments panel, the prior to current time interval (<1945 in the example shown above) is not available since it would represent flights that had already landed.

Absolute Time Range

If you select Absolute Time range, the WSD retains the selected start and end times on the timeline. As current time advances, the timeline shifts all cell highlighting one cell to the left. If the selected start time is passed with the advance of current time, it is dropped from the timeline and the selected time range begins with the current time period, thus shortening the selected time range. With Absolute Time selected, the prior to current time segment is not available for any of the "Assign to Time Segments by" options.

The following example shows the Reroute Monitor timeline with the Absolute Time Range of 2030 to 2300 selected:
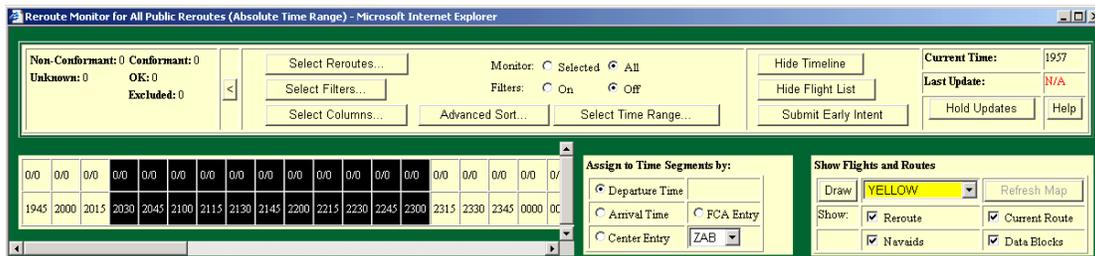
Show/Hide Timeline

Clicking on the **Show/Hide Timeline** button in the Selection Panel lets you show or hide the Timeline section of the Reroute Monitor dialog box. When the Timeline is visible, the Show/Hide Timeline button displays Hide Timeline. When the Timeline is hidden, the Show/Hide Timeline button displays Show Timeline.

Show/Hide Flight List

Clicking on the **Show/Hide Flight List** button in the Selection Panel lets you show or hide the Flight List section of the Reroute Monitor dialog box. When the Flight List is visible, the Show/Hide Flight List button displays Hide Flight List. When the Flight List is hidden, the Show/Hide Flight List button displays Show Flight List.

Both the Timeline and the Flight List are discussed in detail later on in this section.

Submit Early Intent

The Submit Early Intent option lets you submit an early intent message for one or more selected flights.

1. On the Reroute Monitor Flight List, click a check box corresponding to a flight to submit early intent for that flight. Note that not all flights have check boxes. You cannot submit early intent for active or filed flights.

> **Note:**   The Early Intent checkboxes are the left most column, to the left of the Show checkboxes. Note that not all flights have Early Intent check boxes. You cannot submit early intent for active or filed flights. More than one flight can be selected if the same early intent message is to be submitted for all of them, but all of the selected flights must have the same origin and destination

2. Click the **Submit Early Intent** button to open the Early Intent dialog box.

The Submit Early Intent button is discussed in detail in the FEA/FCA Dynamic List section of the FEA/FCA Menu.

Time Panel

The Time Panel section of the Control Panel displays the current time. It also indicates whether updates to the Reroute Monitor are being held or whether the window is being updated.

If the Reroute Monitor is being updated, the panel displays the latest flight list update time from among all of the reroutes being monitored. The Last Update Time field on the Time Panel indicates whether flight list data is available, missing, or out of date. If the data is available and up to date for all monitored reroutes, the Last Update time displays in black.

Flight List data is updated independently for each reroute, so the data may be up to date for some reroutes, but missing or out of date for others. If one or more monitored reroutes is out of date or unavailable, the Last Update Time displays in red.
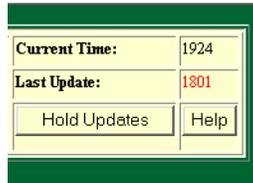
> **Note:**   Flight list data is out of date for a reroute if the last update time for the flight list precedes the current time by more than four minutes.

The Last Update time field in the time panel displays N/A in red if flight data is unavailable for all of the reroutes being monitored.

Hold/Resume Updates

To stop the Reroute Monitor from updating, click the **Hold Updates** button on the Time Panel. When you hold the updates, a **Held At:** label is displayed in red in the Time Panel section of the Control Panel. The Hold Updates button becomes Resume Updates. To resume updating, click **Resume Updates** on the Time Panel.
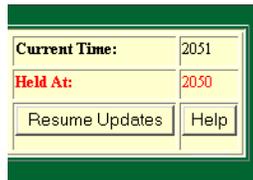
Timeline

The Timeline section of the Reroute Monitor displays up to fifteen hours of flight counts in quarter-hour time periods. The time periods selected in the Timeline determine the time range of flights in the Flight List. The default mode is Relative Time. The default time range selection is six hours.

To select a time range in the Timeline, click **Select Time Range** on the Reroute Monitor and enter the times in the Display Range fields. You can also select which time is to be represented by the Timeline: Departure Time, Arrival Time, or Center Entry Time. Selecting the arrow next to the Center Entry time lets you specify the Center.
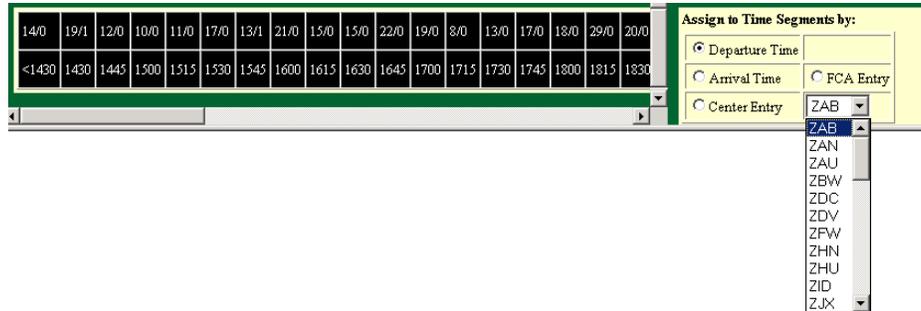
In Relative Time mode, the left most time interval of the Timeline contains a count of active flights in one of the monitored reroutes but would not otherwise be counted in one of the other time intervals. For example, when flights are assigned to time intervals by departure time, this time interval will show the count of the flights that are active, but that departed some time prior to the current quarter-hour time segment. A left carat (<) is displayed at the beginning of the time interval followed by the current time rounded down to the nearest quarter hour. The rest of the timeline is in quarter-hour intervals.

In each subsequent time interval the Timeline displays a count of the number of flights in the interval whose reroute status is either non-conformant or unknown. This count is followed by a slash (/) and a count of the number of flights whose reroute status is conformant, OK, or Excluded. In other words, the counts on the left of the / represent Non-Conformant or Unknown status; the counts on the right of the / represent Conformant, OK, or Excluded status.

Assign to Time Segments by

The **Assign to Time Segments by** panel allows you to select the time by which to allocate flights in the Timeline: Departure Time (by ETD), Arrival Time (by ETA), Center Entry, or FCA Entry. The default setting is Departure Time.

Click the radio button for the time by which you want the Timeline to display flight counts. To select Center Entry, click the **Center Entry** button and click the down arrow to select a Center from the pick list.

> **Note:** The FCA Entry option is not available in Monitor All mode or if any of the monitored reroutes are not based on a public FEA/FCA. All of the reroutes selected for monitoring must be FCA-based. If you select FCA Entry while monitoring a reroute that is not based on an FCA, an error message will be displayed.

Flight List

The Flight List section of the Reroute Monitor displays data about the flights that are included in any of the monitored reroutes. Flights that are involved in multiple reroutes are included in the list multiple times, once for each monitored reroute. Flight IDs shown in blue indicate that the flight is in more than one reroute, whether monitored or not. The sample below shows a flight in more than one reroute.

	ADZ	ACID	Dep Center	ORIG	DEST	ETD	RRSTAT	CURRENT/ASSIGNED_ROUTE
	015	USA1630	ZNY	PHL	ATL	A1457	C	PHL./.EMI.J48.ODF.MACEY2.ATL ASSIGNED: OOD OOD198 SBY018 SBY J9 KATZN J193 WEAVR J121 J4 IRQ SINCA3
	013	USA107	ZNY	PHL	SEA	A1459	C	PHL./.SEG154016..DJB.J34.RWF.J90.ABR.70.MLP.GLASR6.SEA ASSIGNED: MXE MXE278 PENSY J110 AIR J80 MCI HCT BFF BOY DNW LKT PDT C
	023	USA9	ZTL	CLT	SFO	A1512	NC	CLT.HOR2.OAKUM.VXV127.VXV..BWG.FAM.J112.BUM..SLN..HLC.J80.OAL.MOD2. ASSIGNED: VUZ J52 SQS EIC J4 ABI J66 EWM J184 J86 BLD J92 OAL MOD2
☐	023	USA47	ZTL	CLT	LAX	S1514	UNKN	CLT.HOR2.NALEY..FLM.J24.VHP.J80.GLD.J146.HBU.J28.HVE.J60.HEC.MITTS2.LAX ASSIGNED: VUZ J52 SQS EIC J4 ABI J66 EWM J4 TNP PDZ4
	023	USA167	ZNY	PHL	PHX	A1519	C	PHL..MXE..PENSY.J110.AIR.J80.MCI.J24SLN.J96.GUP.J102.ZUN.BUNTR1.PHX ASSIGNED: MXE MXE278 PENSY J48 MOL J22 VUZ J52 SQS EIC J4 ABI J66 EWM J4
	013	USA167	ZNY	PHL	PHX	A1519	C	PHL..MXE..PENSY.J110.AIR.J80.MCI.J24SLN.J96.GUP.J102.ZUN.BUNTR1.PHX ASSIGNED: MXE MXE278 PENSY J110 AIR J80 MCI J24 SLN J96 GUP BUNTR1
☐	022	USA1825	ZDC	DCA	ORD	S1520	UNKN	DCA..AML..149.FWA.OXI3.ORD ASSIGNED: BUFFR J518 DJB FNT PMM PMM4

After you specify in the **Assign to Time Segments by** panel how you want flight counts to be displayed in the timeline, the display updates the columns displayed in the Flight List to reflect your selection. With Departure Time as the default selection, the Flight List automatically displays the ETD column. If, for example, you change the selection and specify that flight counts be displayed by Arrival Time, the ETA column is automatically added to the Flight List. If you select FCA Entry, a column headed FCA Entry is added. These columns are added only if they are not already displayed. To remove the columns, click the Select Columns in the Selection panel (see page 86).

To sort the Flight List, you can click on a column header and sort the selected column in ascending or descending order alphabetically or select the Advanced Sort button to enter sort criteria.

Route Prefixes

The route prefix that displays on the Flight List for an assigned route is based on the reroute's advisory action and segment type. For more information on route prefixes, see the Flight List section in Select Reroutes on "Route Prefixes" on page 67.

Show Flights and Routes

The Show Flights and Routes panel enables you to display selected flights and their assigned routes.
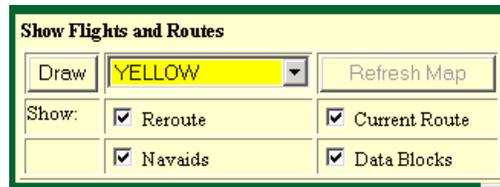
When the Flight List first displays, all the checkboxes in the Show column are selected (checked) by default. You can click the column header (Show) to deselect all checkboxes and choose the flights you wish to show by clicking individual Show checkboxes.

To view the assigned route for an individual flight on the Reroute Monitor, do the following:

1. On the Reroute Monitor, click the **Show** column head to toggle all Show checkboxes off and click the Show checkboxes for any flights you want to show.

2. In the Show Flights and Routes panel, click the checkboxes to show the Reroute, Navaids, Current Route and Data Blocks for the selected flights.

3. Click the color button to select the display color of the flight icons and routes. When you click **Draw**, the button toggles to read Hide and the Refresh Map button is enabled.

   Note: If you change the selected flights or elements to be shown, you must manually refresh the map display using the Refresh map button before the display will reflect your changes.

   - If you click **Draw** and the reroutes being monitored involve more than 200 flights, an error message will appear telling you to select fewer flights to be drawn on the display.

   - If you select **Hold Updates** while flights are drawn on the display, the Draw button is grayed out and a warning will appear telling you that while updates are held, flights will be hidden.

Shrink/Expand

The Shrink function lets you reduce the size of the Reroute Monitor dialog box so that it displays only the Counts and Times panels. To shrink the Reroute monitor, click the left arrow button on the Reroute Monitor Control Panel.
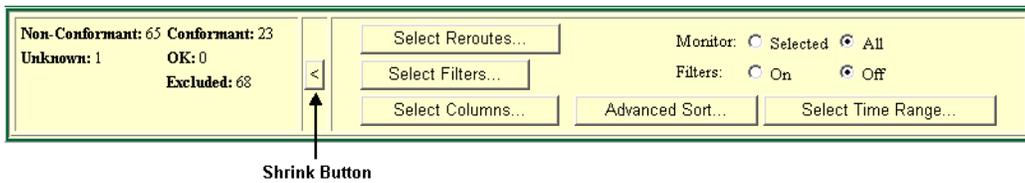
When you click the **Shrink** arrow, the Reroute Monitor displays a right arrow button, as shown below.
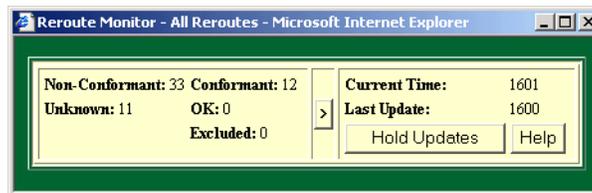
To expand the Reroute Monitor, click the right arrow. The window expands to the state it was in before it was reduced. For example, if you had previously hidden the Timeline, when you expand the window, the Reroute Monitor opens with the Timeline hidden.

Flight Search

The **Flight Search** command lets you search for flights in a reroute.

1. Click **Reroute** on the main menu.
2. Click **Flight Search**.

After you click **Flight Search**, the Search for Reroutes by Flight ID dialog box opens.
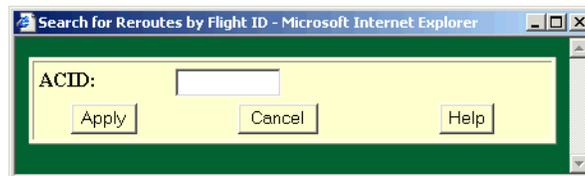
Selecting an ACID of **AWI3883** and clicking **Apply** results in a dialog box similar to the following.
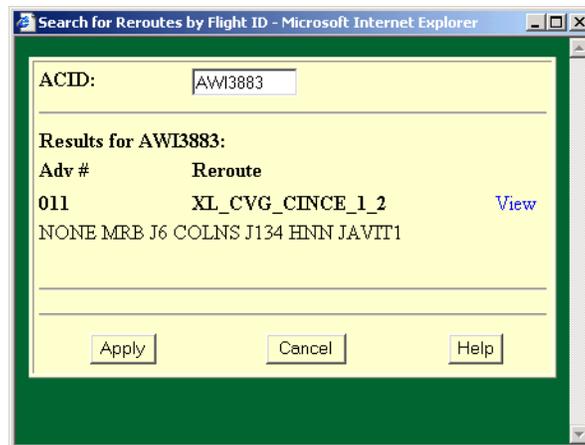
Search for Reroutes By Flight ID

Item	Description
ADV#	Displays the reference number for the advisory issued by the FAA.
Reroute	Displays the name given to the reroute by its creator.
ASSIGNED	Shows the flights assigned to the reroute.
The following Reroutes could not be searched	Indicates the reroutes which were not searched because flight list data was not available.

You can click on **View** to the right of the reroute name for a list of flights within the reroute. This Reroute Viewer works the same way it does when you select **View** on the Select Reroutes dialog box.

8. FEA/FCA Menu
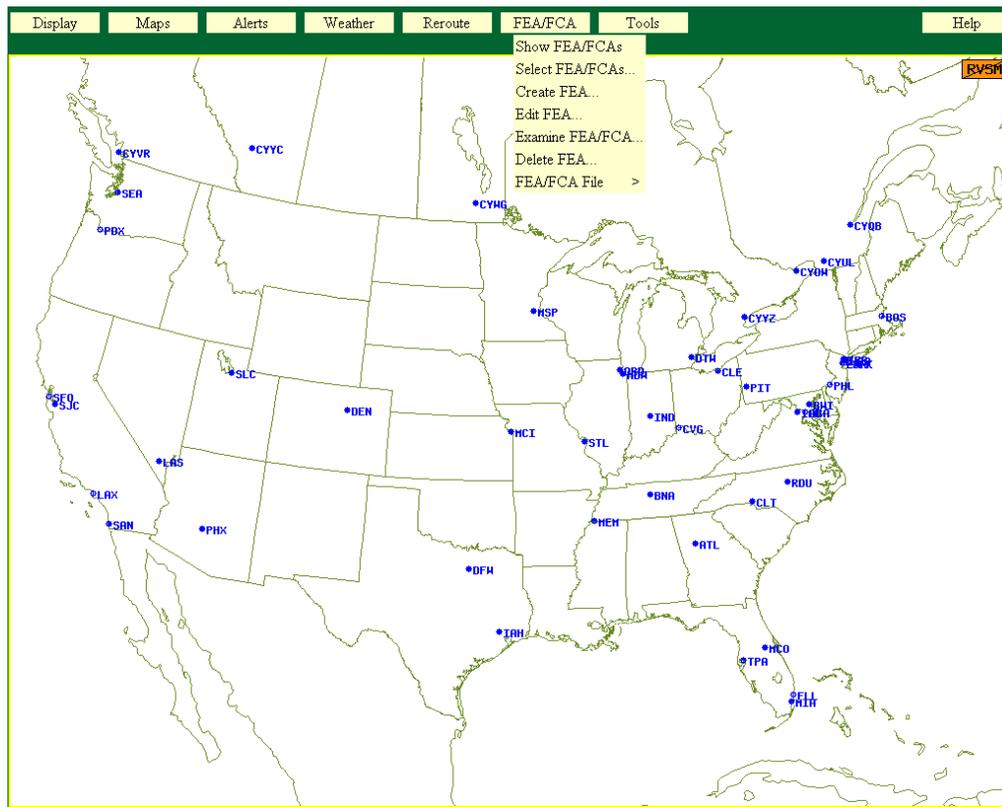
This section contains information on the commands available on the FEA/FCA menu. FEA/FCA stands for Flow Evaluation Area/Flow Constrained Area. This function allows you to produce graphic overlays showing areas where flight rerouting may be necessary. The following commands are currently available:

- **Show/Hide FEA/FCAs** **page 103**
  Lets you display or hide all FEA/FCAs selected in the
  Current FEA/FCAs dialog box.

- **Select FEA/FCAs** **page 105**
  Lets you select which FEA/FCAs you want to display.

- **Create FEA** **page 110**
  Lets you create a new FEA and designate it Private or Shared.

- **Edit FEA** **page 127**
  Lets you edit an FEA definition. Only Command Center users
  can edit FCAs.

- **Examine FEA/FCA** **page 130**
  Displays a timeline that shows traffic demand for an FEA/FCA.

- **Delete FEA** **page 144**
  Lets you remove a current FEA from the database.
  Only Command Center users can delete public FCAs and FEAs.

- **FEA/FCA File**   **page 145**
  Opens a submenu that lets you recall previously saved
  FEA/FCA definition files, save FEA/FCA definitions to a file, or
  delete previously saved FEA/FCA definition files.

Show/Hide FEA/FCAs

The **Show/Hide FEA/FCAs** command lets you toggle the display of FEA/FCAs. If you issue the Show FEA/FCAs command, all of the FEA/FCAs that are selected in the Select FEA/FCA dialog box will be drawn on the display. If you issue the Hide FEA/FCA, no FEA/FCAs will be drawn on the display. Either Show or Hide FEA/FCAs appears on the FEA/FCA menu, depending on the status of the display. That is, if FEA/FCA polygons currently appear on the display, the FEA/FCA menu option will read **Hide FEA/FCAs**.
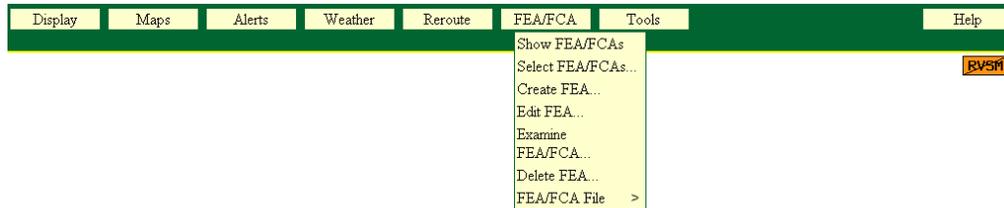
1. Click **FEA/FCA** on the main menu.
2. Click **Show FEA/FCAs** or **Hide FEA/FCAs**.

If Show FEA/FCAs is selected, the display could look like the following.
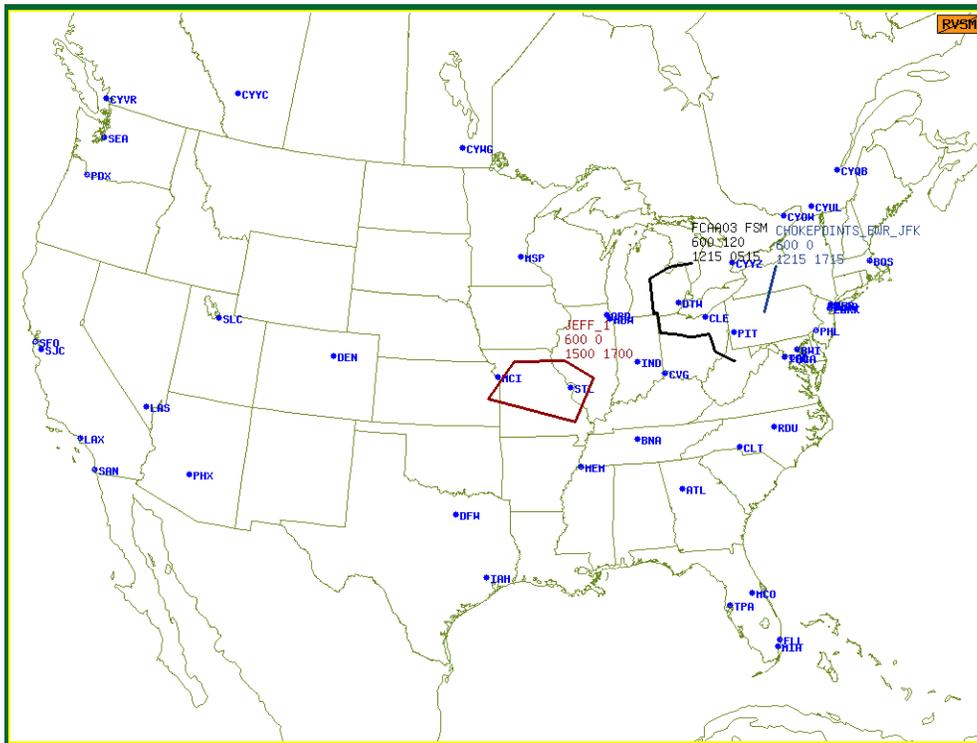
FEA/FCA Data Blocks

An FEA/FCA and its data block is drawn on the display in the color selected for the FEA/FCA in the Select FEA/FCA dialog box. FEA/FCA data blocks display the FEA/FCA Name, Altitude Range (ceiling and floor), and Start and End times. FEA/FCA data blocks also display "FSM" or "AFP" appended to the FEA/FCA name if the FEA/FCA is FSM-Eligible or has an active Airspace Flow Program (AFP).

Select FEA/FCAs

The **Select FEA/FCAs** command lets you specify which FEA/FCAs you want to display. It also allows you to access selected information about the FEA/FCA and filter the FEA/FCA flights.
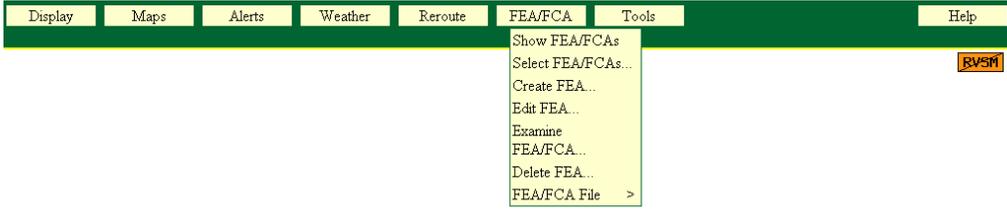
1. Click **FEA/FCA** on the main menu.
2. Click **Select FEA/FCAs.**

Select FEA/FCA Dialog Box

The Select FEA/FCA dialog box allows you to select from

- All public FCAs or FEAs created by the FAA Command Center

- Any shared FEAs created by another user

- Any shared FEAs created by the FAA and designated for viewing on the display

- Any shared or private FEAs created by your facility\

    Note: FEAs and FCAs will be retained in the system for a period of time after they have expired. An expired FEA/FCA can be drawn and edited, but no flight data can be displayed.

After you click **Select FEA/FCAs,** the Select FEA/FCA dialog box opens, similar to the following. The FEA/FCAs are sorted by default in the following order: Type, AFP Status, Domain, and Name. To sort entries by a specific column, click on the column header.

The column headers are described in the following table.

Select FEA/FCA

Column Name	Description	What To Do
Show	Displays and removes FEA/FCAs from the display	Click in the check box to toggle a check mark on or off. Click in the **Select All** check box to toggle all Show check boxes.
Type	Displays FEA, FCA, and Expired. Entries sorted in the following order: FCA, FEA, Expired, AFP Status, Name. Users at the Command Center create the FCAs.	You cannot edit this field.
AFP Status	Indicates whether FEA/FCA is FSM-Eligible or has an active AFP (Airspace Flow Program). AFP Status entries are sorted as follows: AFP FCAs, FSM FCAs, FSM FEAs, other FCAs, other FEAs, Expired Types, Name.	You cannot edit this field.
Domain	Sorted in the following order: Public, Shared, Private, and Name.	You cannot edit this field.
Color	Determines the color for each FEA/FCA and its data block.	Click the color arrow to display a list of colors. Select desired color.
Name	User-specified name for the FEA/FCA. Maximum of 30 characters.	You cannot edit this field.
Info	Displays the information dialog box for the selected FEA/FCA.	Click **Info** for the specific FEA/FCA. See the following section for more details on this dialog box.
Timeline	Displays the timeline for the selected FEA/FCA.	Click **Timeline** for the specific FEA/FCA. See the following section for more details on this dialog box.
Report	Displays the Dynamic List for the selected FEA/FCA.	Click **Report** for the specific FEA/FCA. See the following section for more details on this dialog box.

Select FEA/FCA (Continued)

Column Name	Description	What To Do
Departure	Displays any departure filters for flights that are part of the FEA/FCA.	You cannot edit this field.
Arrival	Displays any departure filters for flights that are part of the FEA/FCA.	You cannot edit this field.
Count	Displays the total number of flights expected to intersect the FEA/FCA.	You cannot edit this field.

Select FEA/FCA Buttons

The Info, Timeline, Report and Combined Report buttons are described on the following pages.

> **Note:** If an FEA/FCA is FSM-Eligible or has an active Airspace Flow Program (AFP), the dialog boxes accessed by the Info, Timeline, and Report buttons will append "FSM" or "AFP" to the FEA/FCA name in the title bar.

Info (FEA/FCA Information) Button

Clicking the **Info** button on the Select FEA/FCA dialog box displays the data that was specified when the FEA/FCA was created. The FEA/FCA Info dialog box has FSM or AFP appended to the FEA/FCA name if it is FSM-Eligible or has an active Airspace Flow Program. In the example below AFP is appended to the FEA name.
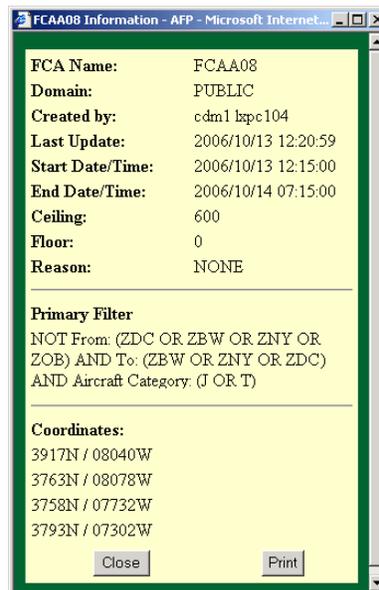
The Info dialog box displays latitude/longitude coordinates for the selected FEA/FCA. The coordinates are formatted to read as degrees, not as degrees and minutes. For example, 3152N means 31.52 degrees North, not 31 degrees, 52 minutes North. Also included on the Information dialog box are any filters you might have applied to the FEA/FCA.

Timeline Button

Clicking the **Timeline** button on the Select FEA/FCA dialog box opens the FEA/FCA Timeline. The Timeline functionality is described in detail in the Examine FEA/FCA section of this chapter.
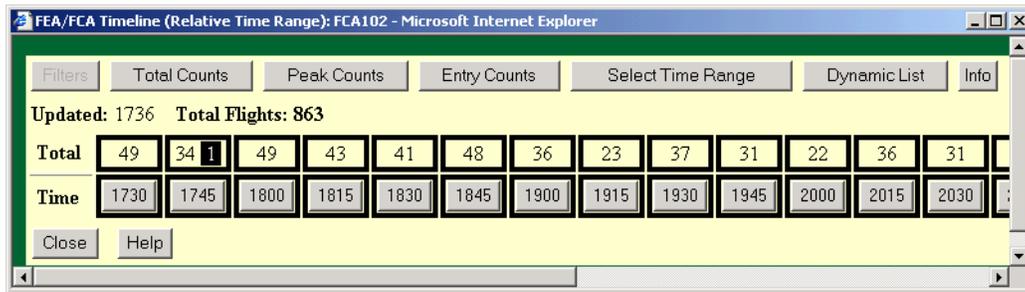
Report Button

Clicking the **Report** button on the Select FEA/FCA dialog box opens the FEA/FCA Dynamic List, which contains the flights predicted to intersect the selected FEA/FCA and displays detailed data on each flight. The following is a sample report.

You can sort the report by clicking any of the column headings. By default, the report is sorted by ACID.

The FEA/FCA Report is fully described in the Examine FEA/FCAs section of this chapter.

Combined Report Button

The **Combined Report** lists all of the flights predicted to intersect selected FEA/FCAs. To generate a combined report, click the **Show** checkboxes on the Select FEA/FCA dialog box for the FEA/FCAs you want to include and click the **Combined Report** button. The title bar displays the FEA/FCA names that are included in the combined report.

The buttons at the bottom of the Combined Report window are discussed in the Examine FEA/FCA section.

Create FEA

The **Create FEA** command lets you create an FEA and designate it as Shared or Private. Shared FEAs can be viewed by all WSD/CCSD users and with users at the Command Center. All users can create a Private FEA, which can only be viewed by users at the facility that created it.

1. Click **FEA/FCA** on the main menu.
2. Click **Create FEA.**

Note: Only the FAA Command Center can create a public FEA or FCA.

Flow Evaluation Areas (FEA)

The Create FEA command allows you to create an FEA. An FEA is a region of airspace that has been designated as one of interest by the user. For example, an FEA could reflect an area where storm activity is projected or an area around an arrival fix. An FEA is defined by a geographic area, created as a "point-and-click" polygon or line segment, as well as filtering criteria such as altitude limits, airline, or aircraft type. Once an FEA is defined, the user can see data for the flights that intersect the defined area and meet all the filtering criteria. For example, if Northwest Airlines is anticipating a thunderstorm near Detroit, they could create an FEA to view the NWA flights that depart from DTW and that intersect the projected area.

All users within the facility and within the Command Center can view shared FEAs.

The **Create FEA** command lets you specify which FEA/FCAs you want to display. It also allows you to access selected information about the FEA/FCA and filter the FEA/FCA flights.

After you select **Create FEA**, the following dialog box opens, with the Params button selected.

Three buttons are available on the Create FEA dialog box:

1. Params (parameters)

2. Filters

3. Lat/Lon

> **Note:** One button, Shared, is grayed-out and is not currently available.

Parameters Button

The following table explains how to use the Parameters fields in the Create FEA dialog box.

Params Button

Item	Description	What you do
Polygon	Lets you draw a custom FEA polygon.	Click **Polygon** to select this option, which is discussed in the following pages.
Line	Lets you draw a custom single or multi-segment line.	Click **Line** to select this option, which is discussed in the following pages.
NAS	Lets you designate a NAS element as an FEA. An airport or fix specifies one point. A sector, TRACON, or SUA specifies multiple points.	Click **NAS** to select this option, which is discussed in the following pages.
Name	User-specified name (alphanumeric, underscore and hyphen characters only) for the FEA. Maximum of 30 characters. Spaces and other special characters are not allowed.	Click in the **Name** text entry field and enter a name. Private or Shared FEAs cannot start with FCA.
Time Range		
Start Time	Initially filled in with the current date and time. The start date is formatted *mm/dd/yy*. The start time is formatted as *hhmm*.Start time can be any time within the next 24 hours.	Place the pointer over the year, month, date, hours, or minutes value. Type in the date or time values.
End Time	Initially filled in with the start time plus two hours. The end date is formatted mm/dd/yy. The end time is formatted as hhmm.The end time must be 15 minutes greater than the start time and no more than 24 hours greater than the beginning of the quarter hour interval that contains the current date/time. For example, if the start time is 1018 on 01/10/06, the end time must be less than or equal to 1015 on 01/11/06.	Place the pointer in the year, month, date, hours, or minutes value. Type in the date or time values.
Look Ahead Time Range	Determines the maximum future time range for which flight data will be available for display in the timeline or in the Dynamic List.	Enter a value between 1 and 24.

Params Button (Continued)

Item	Description	What you do
Altitude Range		
Ceiling	Initially filled in with the default value for Ceiling.	Click in the **Ceiling** field and enter a one to three-digit number.
Floor	Initially filled in with the default value for Floor.	Click in the **Floor** field and enter a one to three-digit number. **Note**: The Floor value must be between 0 and 600 and the Ceiling height must be greater than the Floor.
Moving Parameters		
Heading	Initially set to zero. You can enter one to three-digit values from 000 to 359 degrees. You need to enter data in this field if you want to create a moving FEA. Note that 000 = north.	Accept the default value of zero or highlight the zero and type a one to three-digit number. See Moving Parameters Field, following this table.
Speed	Initially set to zero. You can enter one to two-digit values from 00 to 99 knots. Enter a value of zero in this field if you want to create a stationary FEA. Enter some number greater than zero in this field if you want to create a moving FEA.	Accept the default value of zero or highlight the zero and type a one to two-digit number.
Characteristics		
Domain	Lets you decide if the FEA/FCA is to be Private or Shared. If the FEA/FCA is Private, it can be viewed only at the specific facility where it was created. If the FEA/FCA is Shared, it can be viewed by any WSD/CCSD user and by the Command Center.	Click in the **Domain** field or its arrow. In the resulting pull-down menu select the domain you want by clicking it.
Type	For a WSD/CCSD user, the only allowed type is FEA. A WSD/CCSD user is not allowed to create an FCA.	This field cannot be edited.
Reason	The reason that the FEA was created.	Click in the field or its arrow for a pull-down list of pre-defined reasons and select the appropriate reason.

Params Button (Continued)

Item	Description	What you do
Drawing Control		
Drawn at Start Time Position	Lets you specify whether you have drawn the FEA at the position associated with the current time or the position associated with the start time you entered in the Create FEA dialog box.	This check box applies only to moving FEA/FCAs. Leave unchecked if you have drawn the FEA at its current position. Check if you have drawn the FEA where you project it will be located at the FEA start time.
Color	Lets you determine the color of each FEA.	Click in the field or click the arrow button to display a color palette. Click a color that you want for the FEA.
Erase	Lets you delete the FEA polygon you just created.	Click **Erase** to delete the FEA polygon you just created.
Undo	Lets you delete the last point of the polygon you are drawing.	Click **Undo** to delete the last point of the polygon. Continue clicking **Undo** to delete previously defined points of the polygon.You can continue clicking **Undo** until all the previously defined points are deleted.

Moving Parameters Fields

When you create or edit a custom FEA polygon or line, you can make it move to show where the FEA started and how it is moving during the time limits you have specified. The Moving Parameters fields (Heading and Speed) must be filled in on the Create FEA dialog box if you want to create a moving FEA, which is discussed on the following page. The default value for each of these fields is zero, which indicates that a stationary FEA is being created.

In the example below, the FEA that is being created is a moving FEA that has a heading of 100 degrees and moves at a speed of 20 knots.

Moving FEAs

When you create or edit an FEA polygon or line segment, you may give it a speed and a direction of movement. For example, the graphic below shows stationary FEAs and a moving FEA; the dotted outline suggests the movement of the FEA, whose current position is drawn with a solid line. These dotted outlines represent past and future locations of the FEA. The dotted outlines are drawn at the starting location and at the one-quarter, one-half, three-quarter, and ending locations.
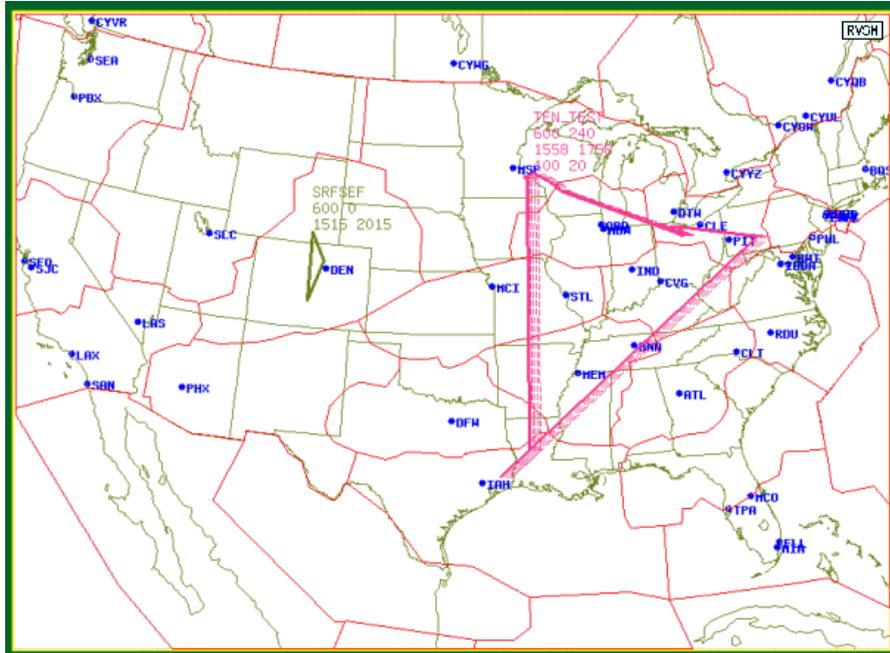
Drawing an FEA Polygon

To draw an FEA polygon on the display,

1. Make sure you have entered a name for the FEA in the Create FEA dialog box.

2. In the Create FEA dialog box, unchecked is the usual setting for the Drawn at Start Time Position field. Leave unchecked if you have drawn the FEA at its current position or if you are drawing a stationary FEA. Check if you have drawn the FEA where you project it will be located at the FEA start time.

3. Click on the map display to begin the polygon.

4. Click a different location on the map to establish the next point; a line will be drawn on the display to show the portion of the FEA that you have drawn so far. Continue this process until you have established all the points you want. You do not need to close the polygon; the two end points will be automatically connected to close the polygon.

5. Click **OK** to close the dialog box. The polygon will disappear from the display but will be automatically redrawn once it has been entered in the ETMS database; this might take a minute or two.

    Note: You can use the Polygon option to draw a single segment line by clicking once to begin the line and a second time to establish the second point. The two points will be automatically connected to form a single-segment line.

Drawing an FEA Line

To draw an FEA line on the display

1. Make sure you have entered an FEA name in the Create FEA dialog box.

2. The usual setting for the Drawn at Start Time Position field is unchecked. Leave unchecked if you have drawn the FEA at its current position or if you are drawing a stationary FEA. Check if you have drawn the FEA where you project it will be located at the FEA start time.

3. Click the left mouse button on the display to begin the line.

4. Click the left mouse button again to establish the next point. A single segment line connecting the two points will be drawn on the display. To draw a multi-segment line, continue this process until you have established all the points you need.

5. Click **OK** to close the Create FEA dialog box.

    Note: The end points of the multiple segment line are not automatically connected to form a polygon.

FEA/FEA NAS Option

Selecting **NAS** on the Create FEA/FCA dialog box changes the dialog box to display the NAS Element portion of the dialog box. The dialog box no longer shows the Altitude Range and Moving Parameters sections. Also, the Lat/Lon button on the Create FEA dialog box is grayed out.

Click the **Category** arrow in the NAS Element section to open a list of NAS element types: Airport, Center, Sector, Base Sector, Fix, TRACON, and SUA.

Enter the name for the NAS element in the Name field under Category. If you enter a name for the category type and do not enter an FEA Name in the Name field near the top of the dialog box, the Category name becomes the name of the FEA. The dialog box above shows Center as the Category and ZDC as the Category Name. The FEA name reflects the Category Name, ZDC.

> **Note:** If you create an FEA by specifying Sector using the NAS element option, the FEA's volume of airspace is always the same as that of the

current sector boundaries, even when those boundaries change. The FEA boundary, therefore, can change dynamically. However, if you create an FEA by specifying Base Sector or, the FEA's boundaries do not change when the sector boundaries change. You cannot create a NAS element FEA for a sector that is currently closed and combined into another sector. If you want to create an FEA for a closed sector, you must select the Base option.

Filters Button

Click the **Filters** button to open the following dialog box.

The Primary/Secondary Filters dialog box lets you define primary filters and secondary filters for FEA/FCA flights. A single primary filter can be set up as part of the FEA/FCA definition. It is used to narrow down the list of FEA/FCA flights to only those that match the primary filter conditions.

Any user can create and save secondary filters for an FEA/FCA and select which secondary filters will be applied to their view of FEA/FCA flights. A secondary filter can be private and viewable on the creator's workstation only, or it can be shared with the same set of users with whom its parent FEA/FCA is shared.

Create Primary Filter

Click the **Create** button to the right of the Primary Filter field to open the Create/Edit Filter dialog box, shown below. The Primary Filter is part of the FEA/FCA definition, and it determines the FEA/FCA flights. The Secondary filters, discussed later in this section, allow you to group the FEA/FCA flights into multiple subsets.

The Create/Edit Filter dialog box allows you to define the Primary filter parameters for the flights that intersect the FEA/FCA. The first nine conditional fields of the dialog box let you choose between flights matching all of the filter conditions or flights that match at least one of the conditions. By default, the "And all of these conditions" radio button is selected.

Each conditional field also provides a pick list of possible states. Click the **down arrow** in each field to view the pick list. The text entry fields accept multiple entries with a space separating each entry. The following table explains the buttons and fields in the Create/ Edit Filter dialog box.

Create Primary Filter

Include/Exclude	Description
Departs from any of Departs from none of	Limits the selection to flights that depart from any or none of the listed airports or an airport in the listed ARTCC.
Arrives at any of Arrives at none of	Limits the selection to flights that arrive from any or none of the listed airports or an airport in the listed ARTCC.
Traverses any of Traverses none of Traverses all of	Limits the selection to flights that traverse any of, none of or all of the listed sectors, fixes, or ARTCCs. Up to 64 characters.
Uses any of these Airways Uses none of these Airways Uses all of these Airways	Limits the selection to flights that use any of, none of or all of the listed airways within the FEA. Up to 64 characters.
Located in any of Located in none of	Limits the selection to flights that are, or are not currently located in the specified sectors or ARTCCs. Up to 64 characters.
Aircraft type any of Aircraft type none of	Limits the selection to flights that are, or are not, of specific aircraft types. See table in Appendix A for a list of aircraft types.
Any of these remarks None of these remarks	Limits the selection to flights with text in field 11 of the flight plan that match any of the selected remarks keywords. Clicking **Select** opens a list of keywords. Clicking in the check box to the left of the keyword you want automatically enters the keyword into the remarks field. You can also type in the keyword. See the table in Appendix A for a list of Remarks Keywords.
Heading in within Heading is not within	Limits the selection to flights whose heading upon entry into the FEA is equal to the specified heading $\pm$ the range. The Heading field accepts values from 000 to 359. The Range field accepts values from 000 to 180.
ACID begins with any of ACID begins with none of	Limits the selection to flights with Aircraft IDs that begin with, or do not begin with, the characters specified by each entry. Accepts up to 64 characters.
Lowest Flight Level Highest Flight Level	Limits the selection to flights whose altitude anywhere within the FEA is predicted to be between the lowest and highest flight levels. The maximum entry for both fields is 600, and the minimum entry for both fields is 000. These levels are expressed in hundreds of feet. One entry in each field only.
Aircraft category any of	Limits the selection to flights that have an aircraft category that matches one of the selected categories. The default is all categories selected, indicating that no filtering is required.

Create Primary Filter (Continued)

Include/Exclude	Description
Weight class any of	Limits the selection to flights that have a weight class that matches one of the selected categories. The default is all categories selected, indicating that no filtering is required.
User category any of	Limits the selection to flights that have a user category that matches one of the selected categories. The default is all categories selected, indicating that no filtering is required.
Flight Status	Limits the selection to flights that are Active or Proposed. Clicking the arrow displays three choices: Active, Proposed, or All. All indicates that no filtering is required. The default is All.
RVSM	Limits the selection to All flights, flights that are RVSM conformant, or flights that are not RVSM conformant.
Departure/Arrival Time Range	Limits the selection to flights that depart or arrive within the specified time period. The Option menu provides three choices: Departure, Arrival, and No Filter. You can enter start and end time. Time values 0000 to 2359 are accepted. The default is **No Filter.**

When you have specified Primary Filter criteria, click **OK** to create the Primary Filter. The name of the primary filter you created appears in the text box of the Primary/ Secondary Filters dialog box, and the Create button changes to Edit.

Edit Primary Filter

To edit the Primary Filter dialog box, click the **Edit** button in the Primary Filter section.
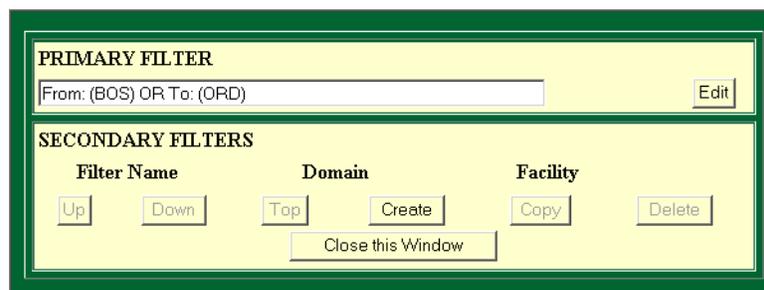
Clicking the **Edit** button opens the Create/Edit Filter dialog box. Make your changes and click **OK**.

Create Secondary Filters

All users can create secondary filters and apply them to their view of FEA/FCA flights. A secondary filter can be private and viewable on the user's workstation only, or it can be shared with the same set of users with whom its parent FEA/FCA is shared. Only authorized users, such as Command Center users, are allowed to add public secondary filters to a public FEA or FCA.

Clicking **Create** in the Secondary Filters section of the dialog box opens the following dialog box, which is almost identical to the dialog box for Primary Filter data. The main difference is that you do need to fill in the name field for the secondary filters.

Enter your filter choices and click **OK**.

Edit Secondary Filters

After you enter secondary filters, you are returned to the Primary/Secondary Filters dialog box. The sample dialog box below displays the names of the Primary Filter and the Secondary Filter.
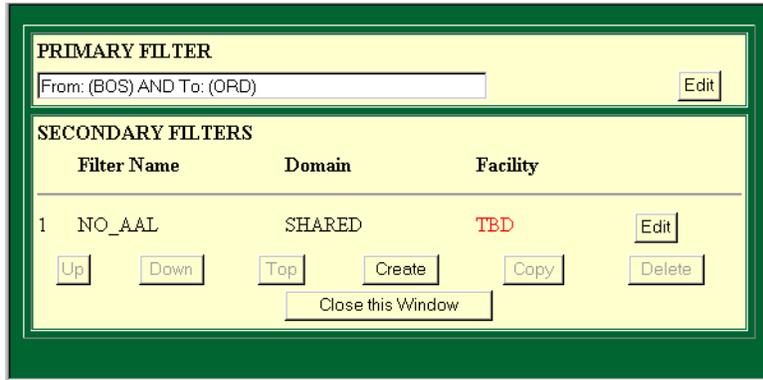
You can edit the Secondary filters by clicking on **Edit** in the Secondary Filters section. The resulting Create/Edit Filters dialog box for Secondary Filters has a Name field, as was mentioned in the Create Secondary Filters section.
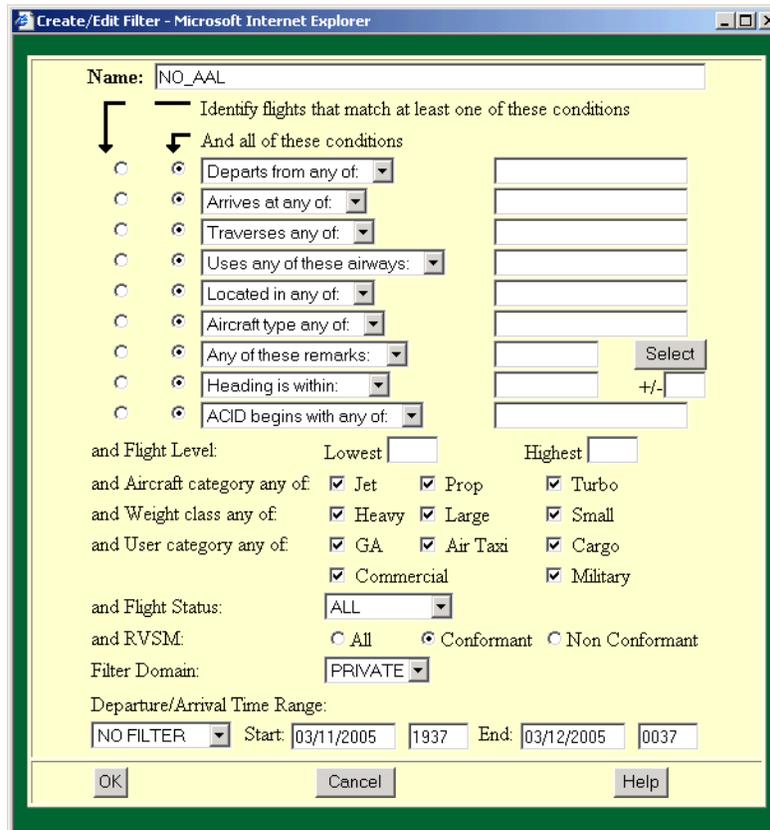
Make your changes and click **OK**. You are returned to the Primary/Secondary Filters dialog box. Close that dialog box. You are returned to the Create FEA dialog box. Click **OK** in that dialog box to save your changes.

Lat/Lon Tab

The Lat/Lon tab on the Create FEA dialog box lets you enter the latitude and longitude for a custom polygon or line segment. Click the **Lat/Lon** button to open the Latitude Longitude dialog box.

Enter the point in NAS format: Latitude/longitude. Latitude may be followed by N or S; Longitude may be followed by E or W. If these letters are missing, the program assumes N and W. If latitude is following by N or S, longitude must be followed by E or W. For example, 3911/09343W is not valid.

    Valid entries include: **3911N/09343W** or **3911/09343**

Latitude/Longitude coordinates are formatted to read as degrees, not as degrees and minutes. For example, 3911 means 39.11 degrees North, not 39 degrees, 11 minutes North.

    Note: A sample latitude/longitude is also included on the dialog box.

Click the **Draw** button and draw your FEA as the example shows in the following map. The latitude/longitude boxes are automatically filled in to reflect the polygon or line segment that you drew. You can also edit the FEA's latitude and longitude settings in the lat/lon dialog box.
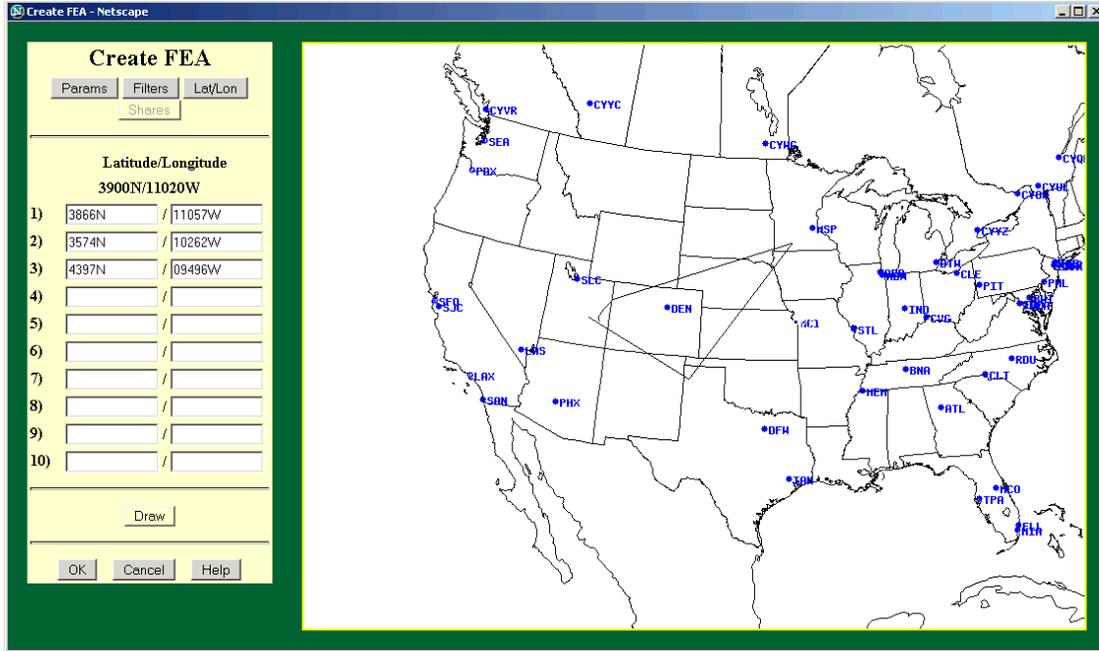
Edit FEA
The **Edit FEA** command lets you modify the selected FEA. Only users at Command Center can edit public FEA/FCAs.
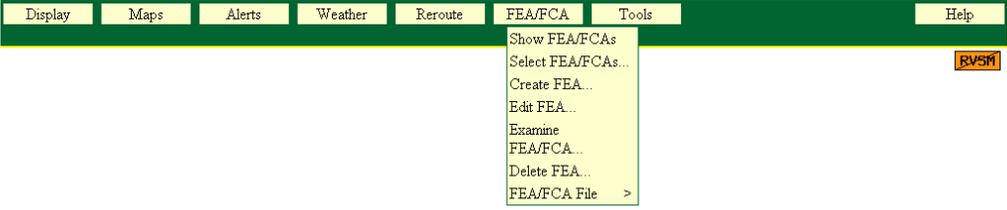
1. Click **FEA/FCA** on the main menu.
2. Click **Edit FEA.**

After you click **Edit FEA**, a dialog box opens with a pull-down list of current FEAs.
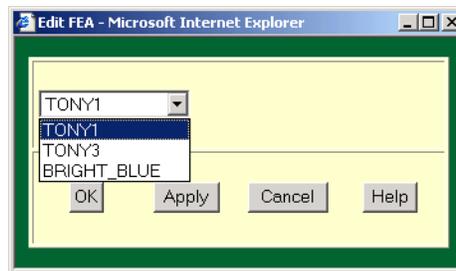
1. Click the arrow in the FEA name field and select the FEA name from the pick list.

2. Click **OK** or **Apply**.

   Note: You are allowed to edit only those FEAs that you created.

The Edit FEA dialog box opens.

> **Note:**   You no longer have to edit the Start Date/Time fields when editing an FEA/FCA. CCSD now ignores Start Date/Time values that are before the beginning of the current 15-minute interval.

Make any edits you want to this dialog box and click **OK**. If you want to edit the Primary filter, click the **Filters** button on the Edit FEA dialog box.

Edit Primary and Secondary Filters

Clicking the **Filters** button opens the Primary/Secondary Filters dialog box.

Edit Lat/Lon

Click the **Lat/Lon** button to open the Edit Lat/Lon dialog box. Make any changes to the latitudinal and longitudinal coordinates, and click **Draw** to leave the Lat/Lon dialog box open or click **OK** to change the coordinates and close the dialog box.

You can use this dialog box in the same way that you used the Lat/Lon dialog box in Create FEA/FCA.

Examine FEA/FCA

The **Examine FEA/FCA** command opens an FEA/FCA Timeline that details traffic demands for an FEA/FCA. This command also lets you produce an FEA/FCA Report that lists the flights predicted to intersect with the selected FEA/FCA during the specified time periods.
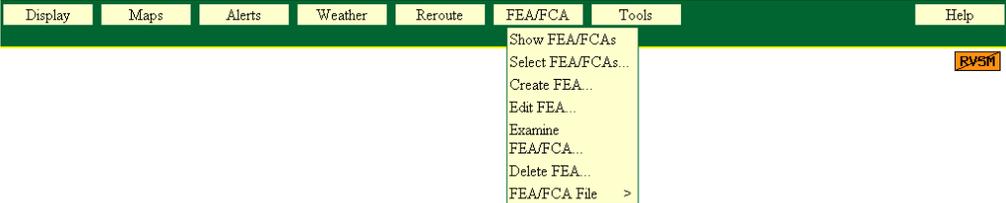
1. Click **FEA/FCA** on the main menu.
2. Click **Examine FEA/FCA.**

Note: You will not be able to examine an FEA/FCA that is based on a sector or a TRACON that is currently closed. If you are examining such an FEA/FCA, and the sector or TRACON upon which it is based is combined into another sector or TRACON, the CCSD will close the timeline and display an error message.

After you click **Examine FEA/FCA**, the Examine FEA/FCA dialog box opens.
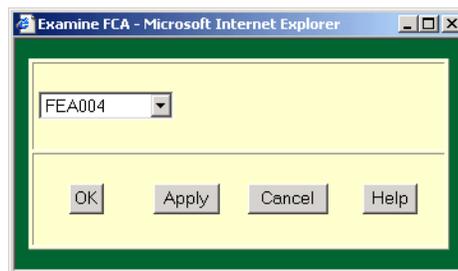
1. Click in the **FEA/FCA name** field and select a name from the pull-down list.
2. Click **OK** or **Apply**.

Timeline

The FEA/FCA Timeline opens, similar to the one below.

> **Note:** Both the FEA/FCA Timeline and the FEA/FCA Report refresh every two minutes.
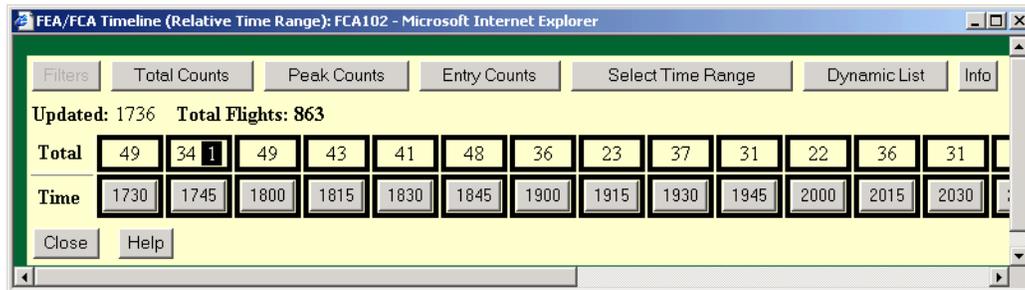
The FEA/FCA Timeline has several buttons located at the top of the timeline: Filters, Total Counts, Peak Counts, Entry Counts, Select Time Range, Dynamic List, and Info. To generate an FEA/FCA Dynamic List for the time selected in the timeline, click the Dynamic List button. Refer to the section on FEA/FCA Dynamic List for a discussion of the Filters and Info button. The Total Counts, Peak Counts, Entry Counts, and Select Time Range buttons are explained below.

Beneath the buttons, the Updated time indicates when the display was refreshed last. Total flights is a count of the number of flights that are in the FEA/FCA at any time during the time range selected in the timeline.

> **Note:** If an FEA/FCA is FSM-Eligible or has an active Airspace Flow Program (AFP), the Timeline dialog box, as well as the dialog boxes accessed by the Filters, Dynamic List, and Info buttons, will have "FSM" or "AFP" appended to the FEA/FCA name.

Total Counts

The Timeline displays Total Counts as the default selection. The numbers on the bottom row indicate the start times of the 15-minute intervals. The label of the top row is Total, and the numbers in this row indicate the number of flights that occupy this FEA/FCA for at least one minute during the 15-minute interval.

Also, all time intervals are selected by default, indicated by the bold border around each time slot. You can select a specific time range for display, as discussed later in the **Select Time Range** section.

> **Note:** You can scroll to the right or resize the window to view all intervals in the timeline.

Peak Counts

To change the Total Counts to Peak Counts, click the **Peak Counts** button. Your display would look like the following sample.
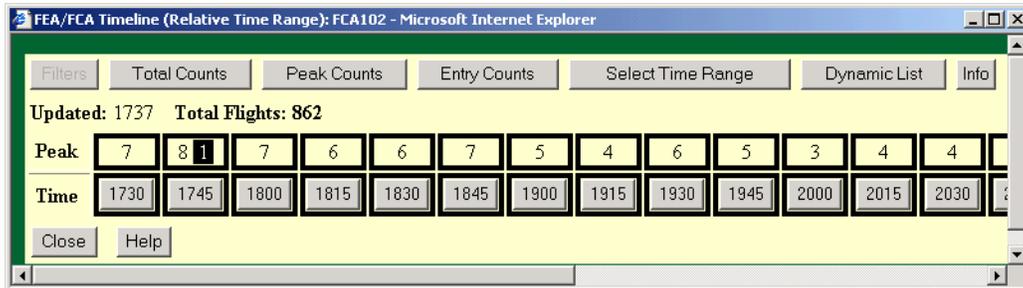
The label of the top row is changed to Peak, and the numbers in this row indicate the maximum number of flights expected to occupy the FEA/FCA during any one-minute interval within the 15-minute interval.

Entry Counts

To change the Total Counts to Entry Counts**,** click the **Entry Counts** button. Your display would look like the following sample.
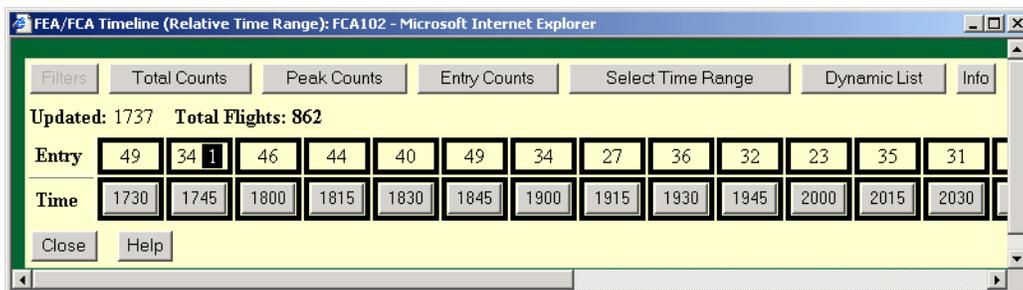
The label of the top row is changed to Entry, and the numbers in this row indicate the number of flights that enter the FEA/FCA during the report time interval.

RVSM

If the RVSM Counts option is selected in the Select RVSM Display Options dialog box (see Display Menu, RVSM on page 23), the RVSM counts are displayed on the FEA/FCA Timeline. The CCSD displays the peak one-minute counts (or total counts or entry counts) of flights that are predicted to be RVSM non-conformant at any time when they are in the examined FEA/FCA. The CCSD displays this count as a white number over a square black background in the Timeline cell.

The example below shows an FEA/FCA Timeline with total RVSM counts displayed.
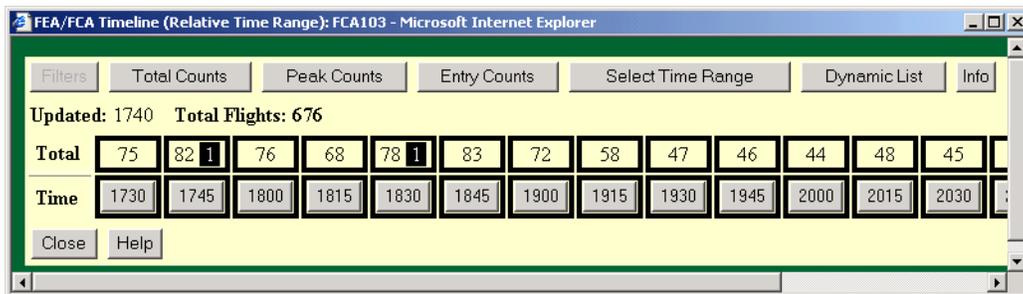
Select Time Range

The Select Time Range option on the FEA/FCA Timeline allows you to select a single time interval or a range of time intervals to be displayed on the Dynamic List. You can also choose whether to display the intervals as an Absolute or a Relative time range. To open the Select Time Range dialog box, click the **Select Time Range** button:
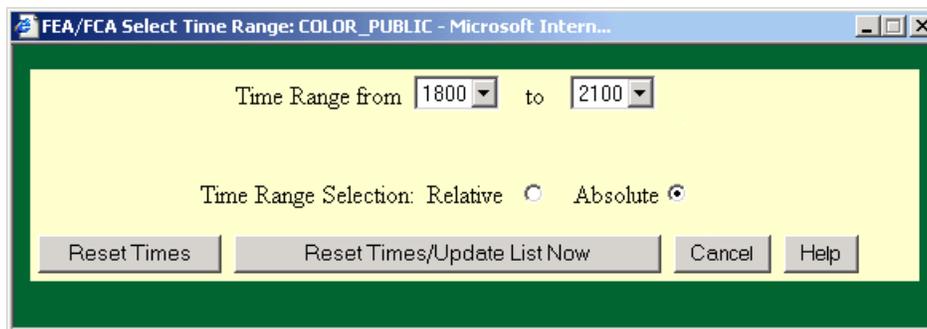
The **Time Range from/to** pick lists have a range of time intervals corresponding to the currently displayed Timeline. Select a beginning time interval and an ending time interval from the pick lists to define the new time range. If you select an invalid time range, an error message is displayed. Click **OK** on the error message and enter a valid time range.

On the Select Time Range dialog box, click **Reset Times** to display the selected range on the timeline (the Dynamic List will not update until a system-generated refresh), or click **Reset Times/Update List Now** to display the selected range on the timeline and update the Dynamic List Report with the new time settings. Click the **Dynamic List** button on the Timeline to display the Dynamic List Report with the selected Time range.

In the Time Range Selection, you can select Relative or Absolute time range by clicking the appropriate radio button.

Relative Time Range

If you select Relative Time Range, the CCSD keeps the same block of cells highlighted and increases the start and end times of the selected time range by 15 minute intervals as the current time advances. The same number of time intervals remain selected, and the selected time range shifts forward, advancing relative to current time. For example, on a Reroute Monitor timeline with the Relative Time Range of 2030 to 2300 selected, when the current time advances to the next 15 minute time interval, the timeline will shift left, and the time range selection will change to 2045-2315.

Absolute Time Range

If you select Absolute Time range, the CCSD retains the selected start and end times on the timeline. As current time advances, the timeline shifts all cell highlighting one cell to the left. If the selected start time is passed with the advance of current time, it is dropped from the timeline and the selected time range begins with the current time period, thus shortening the selected time range.

Dynamic List Report

To generate a Dynamic List report covering the time range selected in the Timeline, click the **Dynamic List** button on the Timeline. To display a Dynamic List report covering the selected 15-minute segment, click the time label button for the selected time range. The Dynamic List opens, looking like the following sample.

If **Total Counts** or **Peak Counts** is selected on the Timeline, the Dynamic List will show flights that occupy the FEA/FCA at any time during the selected time range.

If **Entry Counts** is selected, the Dynamic List only displays flights that enter the FEA/ FCA during the selected time range, and the report will display "Entering Flights Only" next to the update time, as in the following example:

When it is first displayed, the Dynamic List is sorted by ACID by default and the ACID column heading is underscored. It can be sorted by any column by clicking on the column header. When you select another column for sort order, that column header becomes underscored. The column headers for the Dynamic List dialog box are explained in the Select Columns section on page 140.

Report Buttons

The FEA/FCA Dynamic List has several other buttons located at the bottom of the report. **Print**, **Save**, **Close** and **Help** work the same way that they do on all other dialog boxes. **Hold/Refresh**, **Info, Early Intent**, **Airline**, and **Filters** are described below.

Hold/Refresh

An FEA/FCA Dynamic List refreshes every two minutes in its default mode. If you want to stop this refreshing so that you can study the report, click **Hold**. The button changes to **Refresh**.

In the Hold mode, the date and time of the last refresh appear at the top of the FEA/FCA Report. The report will remain in Hold mode until you click **Refresh**, at which time it returns to refreshing every two minutes.

Notification of Modified FEA/FCA

If you are examining an FEA/FCA using a timeline or Dynamic List, and the FEA/FCA definition is modified, a dialog box notifying you of the change will open, the next time the timeline or Dynamic List is refreshed.
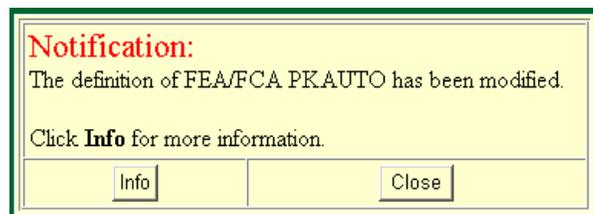
Click the **Info** button to display the data that was specified when the FEA/FCA was created.

Info (FEA/FCA Information)

Click the **Info** button to display the data that was specified when the FEA/FCA was created
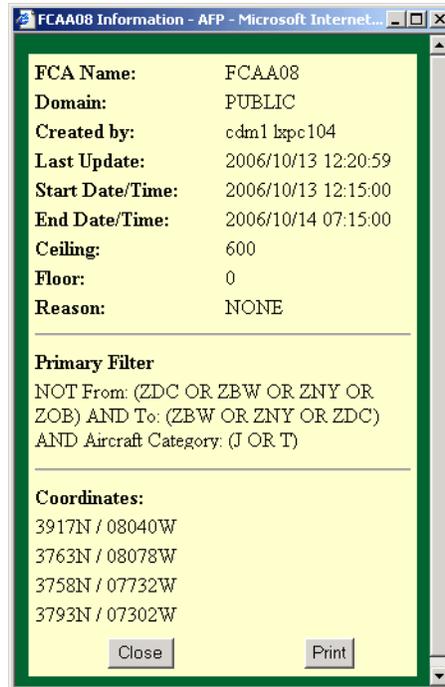
> **Note:** This dialog box is also accessed by clicking the Info button on the FEA/FCA Timeline and the Select FEA/FCA dialog box.

Early Intent

The Early Intent option, available on the FEA/FCA Dynamic List and Reroute Monitor Flight List, lets you submit an early intent message for one or more flights.

1. On the FEA/FCA Dynamic List, click the check box that corresponds to a flight to submit early intent for that flight. Note that not all flights have check boxes. You cannot submit early intent for active or filed flights.

> **Note:** More than one flight can be selected if the same early intent message is to be submitted for all of them, but all of the selected flights must have the same origin and destination.

2. Click the **Submit Early Intent** button. The Early Intent dialog box opens.

3. Enter a new route by typing it in the New Route text field or by clicking the **Copy** button to the right of either the current route or one of the assigned routes. This

action copies the route into the New Route field. You can edit the copied current or assigned route.

Note: Routes may be entered with route elements separated by spaces or in flight plan format; that is, all route elements separated by one or two dots. The new route must be a complete end to end route.

The following graphic is an example of an Early Intent dialog box in which the current route, located in the Flights section of the Early Intent dialog box, was copied into the New Route field.
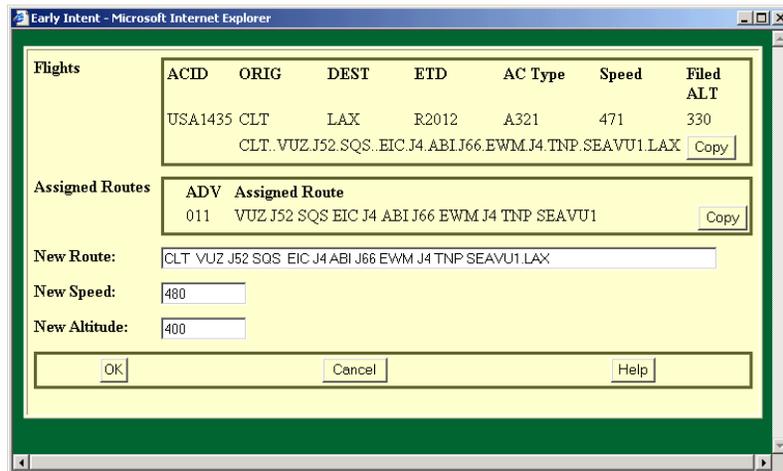
4. Enter or edit a speed and/or altitude in the text fields.

5. Click **OK** to enter the new early intent route in the database. A confirmation box opens to inform you that a new route has been sent.

Note: Monitor the FEA/FCA Dynamic List or Reroute Monitor Flight List to see if the route is accepted by ETMS. If the route is accepted, it should be reflected in the next update.

Airline

The FEA/FCA Dynamic List by default shows information for your airline only. The Airline button lets you select a specific airline for the report. Select the Airline arrow to display a pick list of airlines. Select the airline you want from the pick list.

Filters

Click the **Filters** button to view a list of Secondary filters, if any were created for the FEA. The following dialog box opens. Click the check boxes corresponding to the filters you want to apply to the FEA. Clicking **OK** returns you to the filtered Dynamic List report window.

> **Note:**   This dialog box is also accessed by clicking the Filters button on the Timeline for the selected FEA.
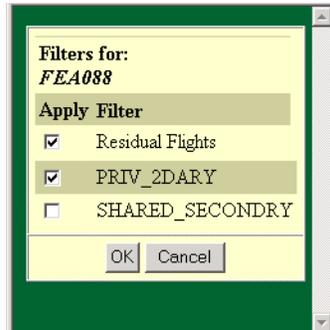
Select Columns

The Select Columns option lets you add and remove columns from the Dynamic List. Click the **Select Columns** button on the Dynamic List to open the FEA/FCA Column Selection dialog box.
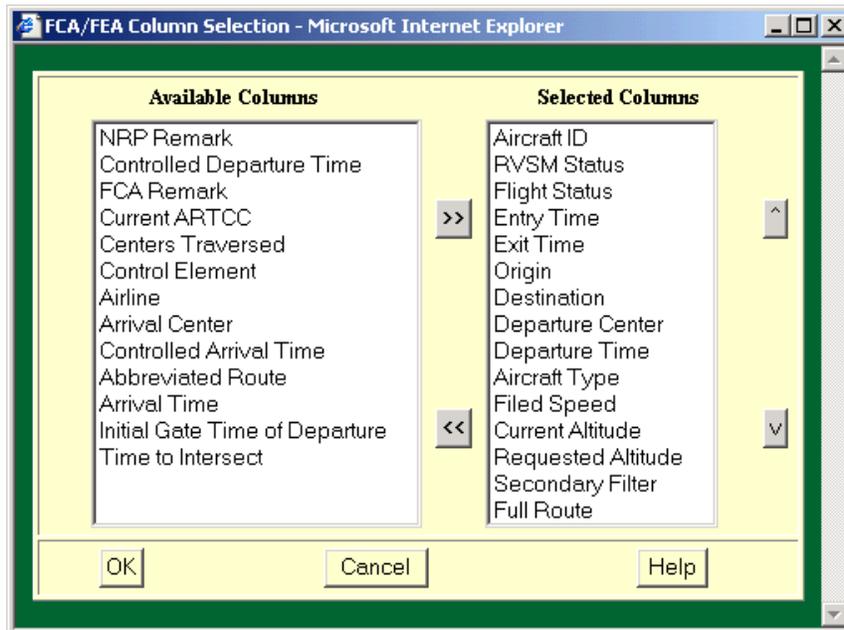
The two right-facing arrows in the middle of the dialog box let you move a column name to the Selected Columns section. The columns in the Selected Columns section are

displayed on the Dynamic List report. The two left-facing arrows let you move a column header from the Selected Columns section back to the Available Columns section. These column headers would not be displayed.

To Select Columns:

1. Click a name the Selected Column name and the left arrow button to move a column name out of the Selected Columns list,. The column name appears in the Available Columns list.

2. Click **OK**. You are returned to the Dynamic List. Notice that the column is no longer displayed.

3. To return the column to the Dynamic List, click Select Columns again and select the name in the Available List column. Click the right arrow button and **OK**. You are returned to the Dynamic List, and the column is redisplayed.

4. To move the selected column names up and down within the list of Selected Columns, select the name and click the up arrow or down arrow button. The order in which they appear in Selected Columns is the order, from left to right, in which they appear on the Dynamic List.

5. Click **OK** to move the column header to the left if you selected the up arrow button, or to the right if you selected the down arrow button.

The following table includes the column names available in the FEA/FCA Column Selection dialog box, the column headers that display on the Dynamic List, and descriptions of each column.

FEA/FCA Column Selection

Column Name	Dynamic List Header	Column Description
Aircraft ID	ACID	Aircraft Identifier. ACID is a default column in the Dynamic List.
Aircraft type	TYPE	Aircraft Type and Equipment.
Airline	AIRLINE	First three characters of the ACID if the first three are letters and the fourth is a digit.
Arrival Center	ACENTR	Arrival Center
Arrival Time	ETA	ETMS Estimate of wheels down time.
Centers Traversed	CENTRS	Space separated list of centers traversed.
Control Element	CTL_ELEM	Control Element - FCA or Airport for the AFP or GDP or "-" if none.
Controlled Arrival Time	CTA	Controlled Arrival Time

FEA/FCA Column Selection (Continued)

Column Name	Dynamic List Header	Column Description
Controlled Departure Time	CTD	Controlled Time of Departure
Current Altitude	CALT	ETMS reported altitude in hundreds of feet.
Current ARTCC	ARTCC	ARTCC where the flight is currently located or departure ARTCC for inactive flights.
Departure Center	DCENTR	Departure Center
Departure Time	ETD	ETMS estimate of wheels-up time. The ETD prefix indicates both the status of a flight and the source of data for a flight as follows: **A** - Actual departure time, usually based on a NAS departure message. **E** - Estimated departure time. No departure message was received, but the flight is known to be airborne because NAS messages indicating this have been received. **T** - Flight is taxiing. A gate departure time has been received. **P** - P-time from the NAS flight plan message. **N** - P-time from the airline-provided flight plan message. **S** - Departure time estimated from the Official Airline Guide scheduled time. **R** - The historical route has been replaced by the assigned route.
Destination	DEST	Arrival Airport.
Entry Time	ENTRY	Time when flight is first projected to enter FEA/FCA.
Exit Time	EXIT	Time when flight is projected to exit FEA/FCA for the last time.
FCA Remark	FCA	Displays a Y if FCA remark exists, or "-" if none.
Filed Speed	SPD	Filed Speed

FEA/FCA Column Selection (Continued)

Column Name	Dynamic List Header	Column Description
Flight Status	FSTAT	Both the status of a flight and the source of data for a flight as follows: **S** - Scheduled. ETMS has received no flight plan. Data is based on the OAG and/or user-provided schedule updates. The route is based on historical data. **P** - Proposed. ETMS has received a NAS flight plan. **N**-Early intent. ETMS has received a user-provided early intent route. **T** - Taxi. ETMS has received a message indicating the flight has pushed off the gate. **A** - Active. ETMS has received a NAS or user-provided departure message. **E** - Estimated. ETMS has received a message indicating the flight was active, but no departure message was received. **R** - The historical route has been replaced by the assigned route.
Full Route	FULL ROUTE	Complete Field 10 route, up to 30 characters.
Origin	ORIG	Departure Airport.
Initial Gate Departure Time	IGTD	Initial gate time of departure.
NRP Remark	NRP	Displays a Y if NRP remark exists, or "-" if none.
Requested Altitude	ALT	Requested altitude in hundreds of feet.
RVSM	RVSM	Indicates the within-sector RVSM compliance status of each flight in the list. "NC" is displayed if the flight is non-conformant or a dash "-" is displayed otherwise.
Secondary Filter	FILTER	Displays the name of the highest priority matching secondary filter. If no secondary filter is matched, "Residual" displays.
Time to Intersect	TIME TO	Time to intersect the FCA. The value is '00:00' if the flight has already intersected the FCA.

Delete FEA

The **Delete FEA** command lets you remove current FEAs from the database.

      Note: Only users at Command Center can delete public FCAs.

| Display | Maps | Alerts | Weather | Reroute | FEA/FCA | Tools | | Help |

Show FEA/FCAs
Select FEA/FCAs...
Create FEA...
Edit FEA...
Examine FEA/FCA...
Delete FEA...
FEA/FCA File   >
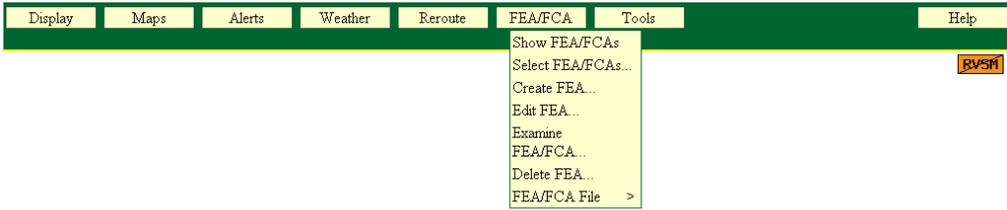
1. Click **FEA/FCA** on the main menu.
2. Click **Delete FEA.**

After you click **Delete FEA**, the Delete FEA dialog box opens. It lists only the FEAs that you are authorized to delete.

To delete an FEA,

1. On the Delete FEA dialog box, click the check box for the number of the FEA you want to delete.

#	Delete	Domain	Name	Info	Departure	Arrival
1	☐	SHARED	MH_TEST	Info	ALL	ALL
2	☐	PRIVATE	CHECKBOX_TEST	Info	BOS	ALL
3	☐	PRIVATE	FEA1	Info	ALL	ALL
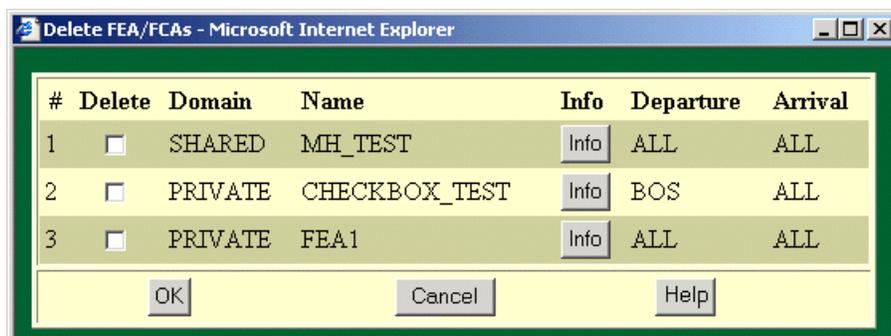
2. Click **OK**.

A confirmation message informs you that the selected FEA has been deleted.

FEA/FCA File

The next few sections in this chapter show you how to issue commands to save, recall, or delete FEA definition files.

Save FEA/FCA File
The **Save FEA/FCA File** commands allow you to save an FEA definition file so it can be recalled later.
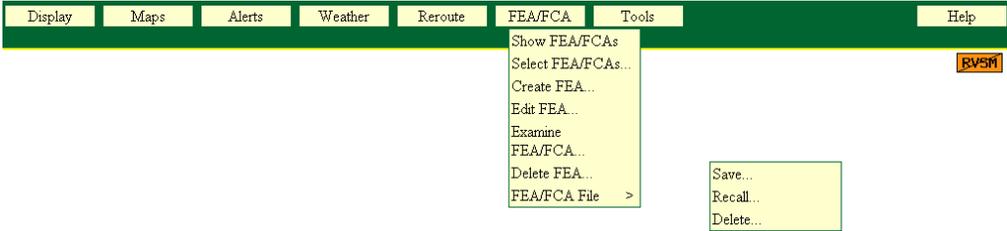
1. Click **FEA/FCA** on the main menu.
2. Click **FEA/FCA File...**.
3. Click **Save**.

After you click **Save**, a dialog box opens with a list of the FEA/FCAs that are currently defined and available.
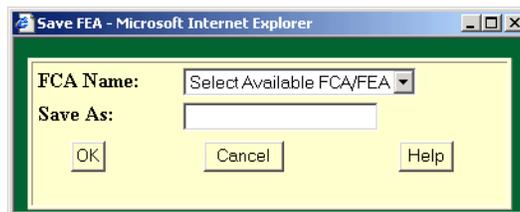
To save the FEA/FCA definitions, select the name of a currently defined and available FEA/FCA from the **FCA Name** picklist. The name will appear in the **Save As** text box.

To save your definitions with the filename as it appears, click **OK**. To save the definitions to a different filename, make changes in the Save As field and click **OK**.

If the filename does not exist, a message confirming that the file was saved will appear.

If the file name you enter already exists, a warning message box will open asking if you are sure you want to overwrite the existing file. Click **Yes** to replace the existing file and close the Save FEA/FCA File dialog box. Click **No** to return to the Save FEA/FCA File dialog box to enter a different file name.

FEA/FCA Definition files are saved to a directory with the same name as your user name (your user name is determined by the system, based on your IP address). You can only

save files to your own directory, but you can recall FEA/FCA Definition files from another user's directory. No password is required.

Recall FEA/FCA File
The **Recall FEA/FCA File** commands allow you to recall a previously saved FEA definition file.
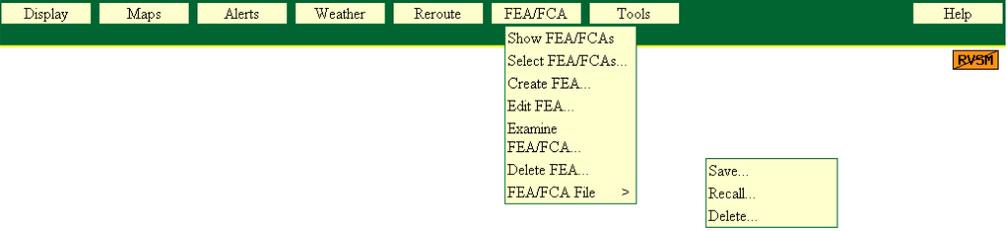
1. Click **FEA/FCA** on the main menu.
2. Click **FEA/FCA File...**.
3. Click **Recall**.

After you click **Recall**, a dialog box appears with a list of the FEA/FCA files that have been saved in a directory with your user name, as in this example
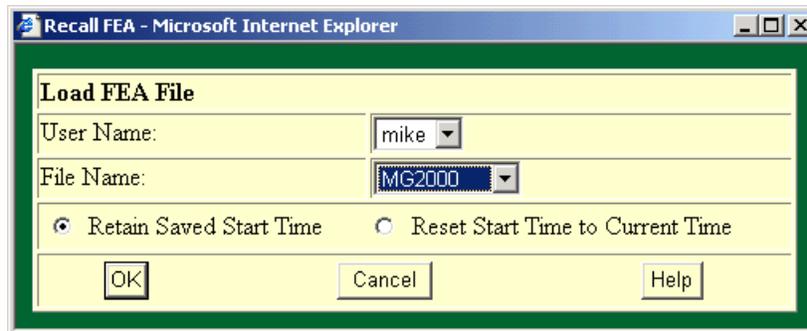
By default, the Recall FEA dialog box lists all of the FEA/FCA files that have been previously saved for your user name. If you want to recall an FEA file name that was saved for a different user name, select the desired user name from the **User Name** pick list, and a list of FEA file names saved by that user will be displayed in the **File Name** pick list.

1. Select a file name from the pick list. Select either **Retain Saved Start Time** or **Reset Start Time to Current Time**

   - If you click **Retain Saved Start Time** (the default selection) to recall a file, the start time and end time of the original FEA/FCA is retained when the file is recalled.

- If you click **Reset Start Time to Current Time**, the start date and time will be set to the current date and the current 15-minute interval. The end date and time will be set to preserve the original duration of the FEA/FCA

2. Click **OK**. The FEA/FCA file definition, including associated filters, will be displayed in the Edit FEA dialog box with the following adjustments, if necessary:

- Type will be set to **FEA**, even if the recalled file was defined as an FCA.

- Domain will be set to **Private**.

In the Edit FEA dialog box you can make changes as desired, and click **OK**, to create the FEA.

Delete FEA/FCA File

The **Delete FEA/FCA File** commands allow you to delete a previously saved FEA definition file.
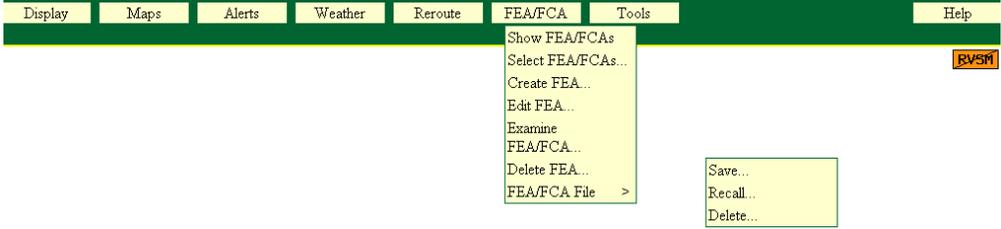
1. Click **FEA/FCA** on the main menu.
2. Click **FEA/FCA File...**.
3. Click **Delete**.

After you click **Delete**, a dialog box appears with a list of the FEA/FCA files that have been saved in a directory with your user name, as in this example.
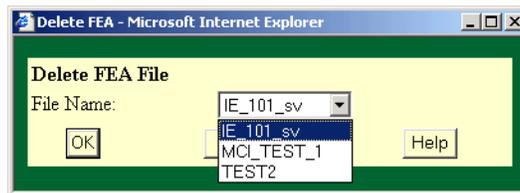
Select the file name that you want to delete from the File Name list and click **OK**.

9. Tools Menu

This chapter contains all of the reports that can be accessed through the Command Line menu option. Also in this chapter are sample reports and procedures for using the Version command.

Command Line

Allows you to make detailed queries to the ETMS database. Each of these request types is discussed in detail in this chapter. The following reports are available using the Command Line dialog box.

Version

Command Line

The **Command Line** lets you request the following report types: Area, ARRD, Count, FCATA, FIXL, LIFP, List, and Listo. Each of these reports is described in this section.
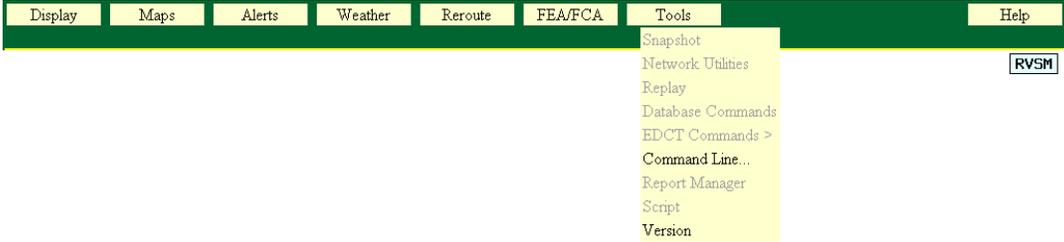
1. Click **Tools** on the main menu.
2. Click **Command Line**.

After you click **Command Line**, the Command Line dialog box is displayed. You enter your requests within this dialog box.
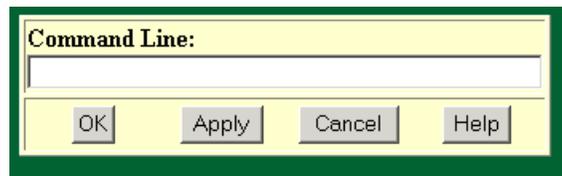
To request a report, click in the Command Line field and enter one of the requests using formats described in this section.

Printing and Saving Reports

After you display a report, you can print it or save it to a file.

- **Print**   Click **Print** to bring up your browser's print dialog box.
- **Save**   Click **Save** to bring up another report window. Click **File** on the second window and click **Save As**.
- **Close**   Click **Close** to exit the report window.

Request Area

The Request Area command lets you request a report that displays the number of flights traversing a specified sector or multiple sectors. Multiple sectors must be enclosed in brackets [ ]. You can also specify a time period, time intervals, and count options for the report. Optional entries are shown with an *.

Enter your command in the following format:

> **REQ AREA** sector time_ period* every* count*

or

> **REQ AREA** [sector1 sector2] time_period* every* count*

Note: * indicates optional entries.

Sample Area Requests

Description	Example
Flights traversing a specified sector, with time period and every options.	**REQ AREA ZDC16 4/12 2030 0130 EVERY 30**
Flights traversing a specified sector, with time period, every, and count options. **Note**: In the Request Area command, the word count is not used with the count option.	**REQ AREA ZDC16 4/12 2030 0130 EVERY 30 AIRL**
Flights traversing multiple sectors with Time, Period, and Every options.	**REQ AREA [ZBW52 ZBW02] 2030 0130 EVERY 30**

Time Period

The time period option allows you to change the date and the time span for the report data. By default, the report covers a time period of five hours beginning at the current time on the current day. If you use this option with other command options, you must place it first in the command line. For more information about using dates and times, see Appendix A.

Every

The default Area report displays flight data in 15-minute intervals. However, you can use the every option to specify a different time interval format. For more information, see Appendix A.

Hubsite

In addition to the time period and every options, there is one miscellaneous option that is available for all Request commands. The hubsite option allows you to specify the hubsite in Cambridge as the data source. For more information, see Appendix A.

Sample Area Report

The following report is a result of this command: **REQ AREA ZDC16 EVERY 30**

```
Report - Microsoft Internet Explorer                              _ □ ×

  AREA ZDC16 EVERY 30 26/1130  26/1629


      TIME    ZDC16   TOTAL
      1130      28      28
      1200      21      21
      1230      19      19
      1300      25      25
      1330      25      25
      1400      15      15
      1430      20      20
      1500      21      21
      1530      21      21
      1600      23      23
     TOTALS    218     218
```

[Print] [Save] [Close] [Help]

Reading the Report

Each report has a header that echoes the request you typed in, followed by the day of the month, and the beginning and ending times of the report. In the body of the report, each row represents one time interval, identified in the left-hand column. By default, the report spans a five-hour time period, divided into 15-minute intervals. For each time interval, the report shows the number of flights that are within each sector at any time during that time interval, followed by a total for that time period. The last line of the report shows a total for each sector, followed by a grand total for the report. All totals in the Area report are simple totals of the individual sector counts. (They may not represent the total number of unique flights.)

Request ARRD

The Request ARRD report lets you assess potential traffic congestion by predicting arrival delays. After specifying an airport, you can use the command options to set the number of stacked flights, capacity levels, and General Aviation estimates in order to analyze various traffic scenarios.

Enter your command in the following format:

REQ ARRD airport time period* stak* caps* ga* every*

Note: * indicates optional entries.

The ARRD options are summarized in the following table. Additional information about each option follows the table.

<div align="center">

ARRD Options

</div>

Option	Description	What you do	Example
Time Period	Changes the time span for the report.	Enter the time span in UTC format.	**REQ ARRD BOS 2000 0000**
Stak	Sets a specified number of arrivals held over the airport.	Enter **STAK**, and the number of stacked flights and the time, in UTC format.	**REQ ARRD DFW STAK 5 2000**
CAPS	Changes the specified rate of arrivals (capacity) allowed per report time interval.	Enter **CAPS**, and the time interval for the new capacity, and the capacity number.	**REQ ARRD JFK CAPS 2100 2200 3**
GA	Changes the number of General Aviation flights allowed per report time interval.	Enter **GA**, the time interval for the new estimate, and the estimate number.	**REQ ARRD ORD GA 0300 0800 10**
Every	Sets the time interval for the report format.	Enter **EVERY**, and the time value in minutes.	**REQ ARRD LAX EVERY 30**

Time Period

The time period option allows you to change the time span for the report data. By default, the report covers a time period of five hours beginning at the current time. If you use this option with other command options, you must place it first (immediately after the airport) in the command line. You may specify any hourly period between current time and 24 hours in the future. You can also use relative time periods. For more information about using dates and times, see Appendix A.

Stak

The stak option sets up an initial condition involving a specified number of arrivals held over the airport. To use this option, you must also specify the number of stacked flights and the time.

CAPS

The caps option allows you to see what the arrival delay prediction would be if the capacity level changed for a given time. You can specify the capacity number and the time interval for the capacity. If no time and capacity are set, the system uses the current capacity value set within the ETMS for the airport.

GA

The GA option, which stands for General Aviation estimates, allows you to see what the arrival delay prediction would be if more or fewer flights arrive than are expected at a certain time. Use this option to specify a time interval and the number of flights per time interval. If no time and value are set, the system uses the current setting in the ETMS.

Every

The every option sets the time interval (in minutes) of the report. If no interval is specified, the default time of 60 minutes is used. Available interval times are 5, 10, 15, 20, 30, 45, or 60 minutes. For more information, see Appendix A.

Sample ARRD Report

The following report results from issuing this command: **REQ ARRD DFW**
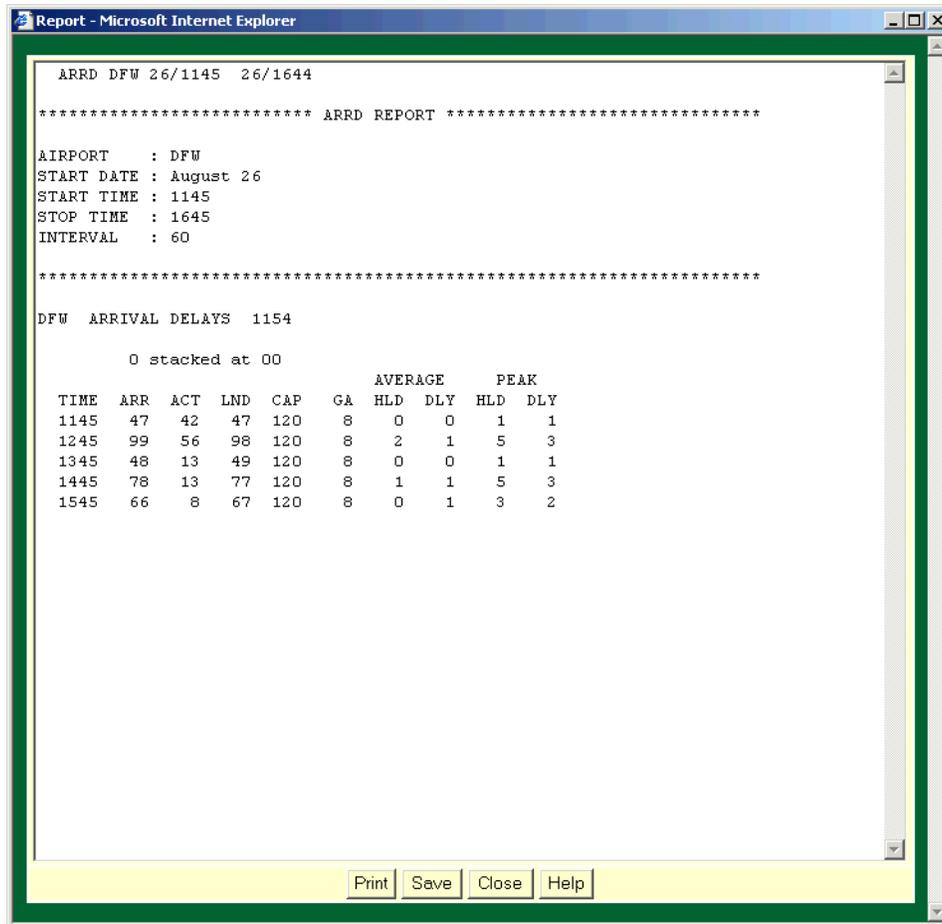
```
 Report - Microsoft Internet Explorer                                    _ □ ×

   ARRD DFW 26/1145  26/1644

*************************** ARRD REPORT ******************************

AIRPORT    : DFW
START DATE : August 26
START TIME : 1145
STOP TIME  : 1645
INTERVAL   : 60

*************************************************************************

DFW   ARRIVAL DELAYS  1154

          0 stacked at 00
                                   AVERAGE      PEAK
    TIME  ARR  ACT  LND  CAP   GA  HLD  DLY   HLD  DLY
    1145   47   42   47  120    8    0    0     1    1
    1245   99   56   98  120    8    2    1     5    3
    1345   48   13   49  120    8    0    0     1    1
    1445   78   13   77  120    8    1    1     5    3
    1545   66    8   67  120    8    0    1     3    2




                          Print  Save  Close  Help
```

Reading the Report

The ARRD report header identifies the airport, start date, end date (if different from the start date), start time, stop time, and the time interval into which the report is divided. A line containing the airport name and the time at which you issued the command follows the report header, and a line indicating the stack size follows that. (Unless you use the stak option, the stack size reads "0 STACKED AT 00".) The list following the stack line is a breakdown of the total number of arrival delays. The first column is always the time in UTC. Each of the remaining nine columns on the ARRD report is described as follows:

- **ARR**   Displays the total number of aircraft expected to arrive at the destination airport during the specified time interval. This number includes the stack size, if specified.
- **ACT**   Displays the total number of arrivals for which a departure message has been received. This number includes the stack size, if specified.
- **LND**   Displays the predicted number of aircraft landing during the specified time interval.

- **CAP**   Displays the current arrival capacity setting for the reported airport.
- **GA**   Displays the current GA estimate setting for the reported airport.
- **AVERAGE HLD**

  Displays the average number of aircraft projected to be holding in the terminal area for the specified time interval, calculated with the following formula:

$$\text{AVERAGE HLD} = \frac{\text{Sum of all aircraft holding for time interval}}{\text{Number of holding aircraft in the time interval}}$$

- **AVERAGE DLY**

  Displays the average of projected delays attributed to aircraft holdings for the specified time interval, calculated with the following formula:

$$\text{AVERAGE DLY} = \frac{\text{Sum of delays of holding aircraft for time interval}}{\text{Number of holding aircraft in the time interval}}$$

- **PEAK HLD**   Displays the maximum number of aircraft projected to be holding in the terminal area for the specified time interval. A count of holding aircraft is made for every minute of the time interval. The largest of these in each time interval is the PEAK HLD for that period.
- **PEAK DLY**   Displays the maximum projected delay attributed to aircraft holdings during the specified time interval, that is, the largest projected delay a holding aircraft may have to endure during this interval.

Request Count

The Request Count report displays the number of flights departing from, arriving at, or traversing an airport, fix, sector, or Air Route Traffic Control Center (ARTCC). In addition, you may define the report with filter and format options that specify the places, times, dates, airlines, flight times, and other criteria.

Enter your command in the following format:

> **REQ** location

> Or

> **REQ** location arr dest time_ period* filters* every* count* gstop*

> **Note:**   * indicates an optional entry

For example:

> **REQ A DFW 2000 0000 EVERY 30 COUNT AIRP**

Specifying Arrivals or Departures

Enter **A** or **D** to limit the report to arrivals or departures, respectively.

If you do not enter A or D, the report will include both.

Specifying the Location

To specify the location for a Request Count command, you must at least include a Primary Place of Interest (PPI). This may be the FAA designator for an airport, ARTCC, sector, high fix, low fix, or super high fix. If the report is for a fix or a sector, only one location designator is allowed; however, for airports and/or ARTCCs, you may enter multiple PPIs (enclosed in brackets), or you may add one or more Secondary Places of Interest (SPI) enclosed in a second pair of brackets. If you include an SPI, the report will be limited to flights traveling between any PPI and any SPI. You may also exclude locations from either category by using a minus sign.

There are various methods you may use to designate locations. For more information, see the Location Designator table in Appendix A.

Time Period

The time period option allows you to change the date and the time span for the report data. By default, the report covers a time period of five hours beginning at the current time on the current day. If you use this option with other command options, you must place it first (immediately after the airport) in the command line. For more information about using dates and times, see Appendix A.

Filter

The default flight counts report covers all flights going to and from the location you indicate. However you can filter the information to reflect only specific flights you want included in the report. There are many options available, and you may use as many as you want for your purposes. For a complete description of these options, see Appendix A.

Every

The default flight counts report displays flight data in 15-minute intervals. However, you can use the every option (also known as the time interval option) to specify a different time interval format. For more information about this option, see Appendix A.

Gstop

The gstop option lets you generate reports of flight counts by origin airport or center to show counts of all flights that have not yet departed and those flights held past their original departure times. The gstop option should be used for arrivals only, and only with the count option COUNT ORIG or COUNT DCENTR. To use this option, type **GSTOP** after **ORIG** or **DCENTR**.

For example: **REQ A ORD COUNT ORIG GSTOP**

The gstop report contains the following information

- **Total Count**
  Represents the total number of flights that have not yet departed from this airport or center.

- **Controlled Flights**
  Represents the number of flights for which controlled departure times have been issued and which have already been held past their original departure time.

- **Flights on GroundPast ETD**
  Represents the number of flights that have remained on the ground beyond their most recently issued Estimated Time of Departure (whether controlled or not).

Count

To designate a category of columns that differs from the default format, you may use the Count option. To use this option, enter the word **COUNT** and one of the options described in the table below. If you do not want to see all of the columns for the selected category type, you can limit the display by choosing only the columns you want to see. You may also exclude columns by entering a minus sign. See Appendix A for a table describing Count Options in detail.

Miscellaneous

Two miscellaneous options are described in Appendix A. The OAG option allows you to specify that the report use only schedule data. The hubsite option allows you to specify the hubsite in Cambridge as the data source.

Sample Count Report

The following report results from issuing this command: **REQ DFW:**

```
DFW 26/1200  26/1659

                   ARRIVALS                        DEPARTURES
     TIME   ACTIVE  PROPOSED  SUB_TOTAL   ACTIVE   PROPOSED  SUB_TOTAL
     1200    6        0          6          1        12         13
     1215    9        0          9          0        12         12
     1230   11        2         13          0        15         15
     1245   12        2         14          0        20         20
     1300   16        8         24          0        18         18
     1315   13       11         24          0        18         18
     1330   15       14         29          0         5          5
     1345    2        6          8          0        11         11
     1400    4        5          9          0        18         18
     1415    2        4          6          0        14         14
     1430    0       16         16          0        16         16
     1445    6       15         21          0        24         24
     1500    0       13         13          0        34         34
     1515    1       15         16          0        16         16
     1530    0       20         20          0         7          7
     1545    0       20         20          0        10         10
     1600    0       17         17          0        19         19
     1615    0       10         10          0        17         17
     1630    0       11         11          0        11         11
     1645    0       22         22          0        26         26
    TOTALS  97      211        308          1       323        324
```

Reading the Report

The report has a header that echoes the request you typed in, followed by the day of the month, and the beginning and ending times of the report. The default format lists arrival data and departure data separately. The following describes the columns of information:

- **TIME**   Identifies the specific block of time this report provides information on. Report times are the same for both arrivals and departures. By default, the five-hour time period is divided into 15-minute intervals.
- **ACTIVE**   Identifies the number of active flights during this time period.
- **PROPOSED** Identifies the number of flights that have not yet departed but are expected for this time period. (This count includes scheduled flights.)

After you have read the report, you can send it to your printer by clicking **Print**. A dialog box opens asking you to confirm the Print command or enter the filename and number of copies desired.

Request FCATA

The Request FCATA command enables you to request the following types of FCA reports: Count, List, and Listo using the following format:

REQ FCATA FCA005 --Count command

REQ FCATA FCA005 LIST--List command

You can enter options for the FCATA requests in the same way you would in the regular request commands.

Sample FCATA Report


```
FCATA ZNY_IMPACT 26/1200  26/1659


              ARRIVALS
  TIME    ACTIVE   PROPOSED   SUB_TOTAL
  1200      42        6          48
  1215      39        40         79
  1230      27        54         81
  1245      23        80         103
  1300      9         78         87
  1315      8         57         65
  1330      7         64         71
  1345      7         68         75
  1400      3         69         72
  1415      0         22         22
  1430      0         0          0
  1445      0         0          0
  1500      0         0          0
  1515      0         0          0
  1530      0         0          0
  1545      0         0          0
  1600      0         0          0
  1615      0         0          0
  1630      0         0          0
  1645      0         0          0
  TOTALS    165       538        703
```

Request FIXL

The Request FIXL report counts the flights traversing a specified arrival or departure fix or all arrival and departure fixes.

Enter the command in the following format:

> **REQ FIXL** airport or fix time period*

> **Note:**   * indicates optional entry. Either airport or fix is required.

For example:

> **REQ FIXL ORD 12/04 0600 1200 EVERY 30** (with options)

> **REQ FIXL ORD** (both arrival and departure fixes)

> **REQ FIXL A ORD** (arrival fix report)

> **REQ FIXL D ORD** (departure fix report)

The FIXL Options

The following three options are available to you when you request a fix loading report:

- Time Period
- Every
- Hubsite

These options are described briefly below and in further detail in Appendix A.

Time Period

The time period option allows you to change the date and the time span for the report data. By default, the report covers a time period of five hours beginning at the current time on the current day. If you use this option with other command options, you must place it first (immediately after the airport) in the command line. For more information about using dates and times, see Appendix A.

Every

The default fix loading report displays flight data in 15-minute intervals. However, you can specify a different time interval format. For more information, see Appendix A.

Hubsite

In addition to the options described above, there is one miscellaneous option that is available for all Request commands. The hubsite option allows you to specify the hubsite in Cambridge as the data source. For more information, see Appendix A.

Sample FIXL Report

The following report results from issuing this command: **REQ FIXL MIA**

```
 Report - Microsoft Internet Explorer                              _ |□| X|

    FIXL MIA 26/1200  26/1659                                            ▲


 MIA   ARRIVAL FIX LOADING 1218
 TIME    FIX     ARR    ACT
 1200    HEATT    0      0
         JUNUR    2      2
         FAMIN    1      1
         WORPP    0      0

 1215    HEATT    2      1
         JUNUR    1      1
         FAMIN    0      0
         WORPP    2      2

 1230    HEATT    4      3
         JUNUR    0      0
         FAMIN    1      0
         WORPP    2      2

 1245    HEATT    6      4
         JUNUR    4      4
         FAMIN    0      0
         WORPP    1      1

 1300    HEATT    3      3
         JUNUR    3      2
         FAMIN    1      0
         WORPP    2      1

 1315    HEATT   11      7
         JUNUR    1      1
         FAMIN    1      0
         WORPP    4      4

 1330    HEATT    2      2
         JUNUR    2      0
         FAMIN    0      0
         WORPP    3      0                                               ▼

                  Print  Save  Close  Help
```

Reading the Reports

The report header identifies the airport or fix, the type of report (fix loading), and the time the report was created (UTC). The following list describes the columns of information found in the FIXL report:

- **TIME**   Identifies each time interval. By default, the report is for a five-hour time period divided into 15-minute intervals, beginning with the current hour.
- **FIX**   Identifies the specific arrival fixes for which counts are given. If you specified a fix, every entry in this column will be that fix. If you specified an airport, all of the arrival fixes associated with that airport will appear.
- **DEP**   Identifies the number of flights expected to arrive at the departure fix during the time period.
- **ARR**   Identifies the number of flights expected to arrive at the fix during the time period.
- **ACT**   Identifies the number of active flights within the ARR count.

Request LIFP

The Request LIFP report lists the flight plans of selected aircraft. It includes the flight identifier, airport origin, estimated time of departure, destination, estimated time of arrival, and the flight plan. You can specify up to ten flights in one request.

Enter the request in the following format:

REQ LIFP flight identifier(s)

For example:

REQ LIFP DAL200 AAL1200 UAL110

Sample Flight Plan Report

The following command results from issuing this command: **REQ LIFP DAL514**
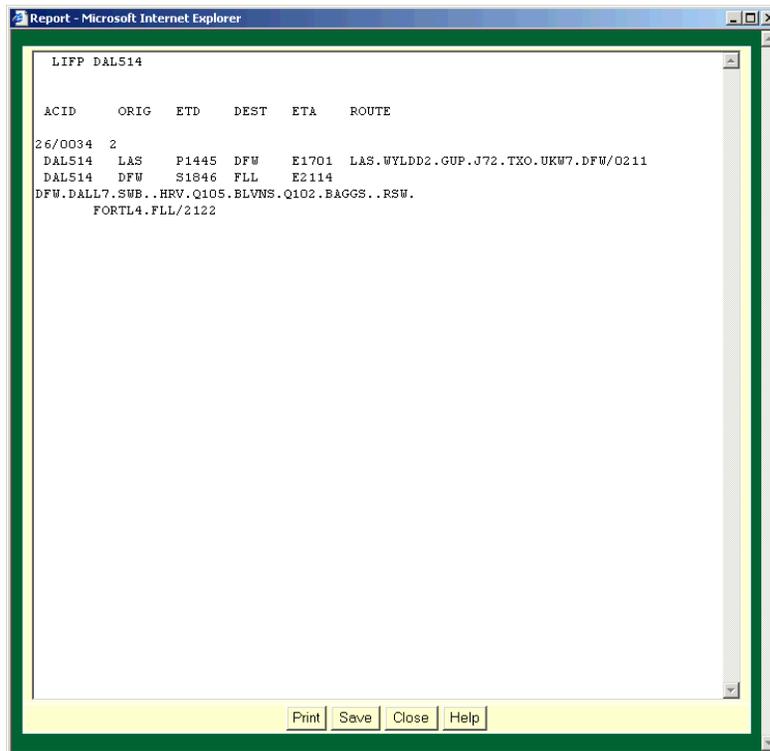
Reading the Reports

The LIFP report header shows an echo of the command you entered, followed by the beginning and end date/time of the report. The following list describes the six columns of information:

- **ACID**   The unique alphanumeric aircraft identifier.
- **ORIG**   The FAA designator showing the departure airport.
- **ETD**   The estimated time of departure (ETD) is based on the best data available to ETMS. A prefix is used to indicate the source of the data that is used to set the ETD; the user can judge the reliability of the data partly on the basis of the prefix, explained below.

    A - Actual departure time, usually based on a NAS departure message.

    E - Estimated departure time. No departure message was received, but the flight is known to be airborne because NAS messages indicating this have been received.

    T - Indicates that the flight has pushed back from the gate and that it is in taxi status. This status is known from an OOOI message sent by a NAS user.

    P - P-time from the flight plan.

    N - Early intent.ETMS has received a user-provided early intent route.

    S -Scheduled time from the Official Airline Guide.

    R-The historical route has been replaced by the assigned route

- **DEST**   The FAA designator showing the destination airport.
- **ETA**   The estimated time of arrival based on the best available estimate from either the Actual time of arrival (A) or the Estimated time of arrival (E). The ETA is marked with either of these prefixes to indicate which data the estimate is based on.
- **ROUTE**   The designators showing the flight plan of each aircraft.

The LIFP report shows flight plans for flights scheduled to fly within the current 24-hour period, beginning exactly 12 hours before you entered this request and ending 12 hours in the future. The line immediately below the column labels identifies the date and time of the beginning of the period, followed by the number of flights listed.

Request List

The Request List report lists various types of flight information in columns. You define the standard report by specifying a location. You may use filter options to specify optional information and formatting criteria.

Enter the request in the following format:

REQ A or D* location time period* filters* every* **LIST** columns* sort*

Note: * indicates optional entries.

For example:

REQ DFW 4/12 2000 0000 AIRL EVERY 30 LIST SORT DEST

Specifying Arrivals or Departures

Enter **A** or **D** to limit the report to arrivals or departures, respectively. If you do not enter A or D, the report will include both.

Specifying the Location

To specify the location for a Request List command, you must at least include a Primary Place of Interest (PPI). This may be the FAA designator for an airport, ARTCC, sector, high fix, low fix, or super high fix. If the report is for a fix or a sector, only one location designator is allowed; however, for airports and/or ARTCCs, you may enter multiple PPIs enclosed in brackets, or you may add one or more Secondary Places of Interest (SPI) enclosed in a second pair of brackets. If you include an SPI, the report will be limited to flights traveling between any PPI and any SPI. You may also exclude locations from either category by using a minus sign.

There are various methods you may use to designate locations. For more information, see the Location Designator table in Appendix A.

Time Period

The time period option allows you to change the date and/or the time span for the report data. By default, the report covers a time period of five hours beginning at the current time on the current day. If you use this option with other command options, you must place it first (immediately after the airport) in the command line. For more information about using dates and times, see Appendix A.

Filter

The default flight counts report covers all flights going to and from the location you indicate. However, you can filter the information to reflect only specific flights you want included in the report. There are many options available, and you may use as many as you want for your purposes.

The following request format would retain the flight list data, but filter the information for only United Airlines flights going to and from Los Angeles Airport. (See Appendix A for more information on filter options.)

REQ LAX AIRL UAL LIST

Every

The default flight counts report displays flight data in 15-minute intervals. However, you can use the every option (also known as the time interval option) to specify a different time interval format. For more information, see Appendix A.

Column and Sort Options

The flight list report displays columns of information by default in the following order: **RVSM**, **ACID**, **TYPE**, **ORIG**, **ETD**, **DEST**, **ETA**, **ETE**, and **CENTER**. If you want to override the default format, you can request other columns of information and change the order in which you want them to be displayed. To do this, specify the other columns after the keyword list.

The order in which you list the columns determines the order in which the columns appear on the report. For instance, if you wanted to display a flight list report for Baltimore/Washington International Airport and you wanted columns of information (reading left to right) on the aircraft identifier, aircraft type, combined aircraft/equipment type, equipment type, origin airport, destination airport, and remarks data, your command would look like this:

REQ BWI LIST ACID TYPE E_TYPE ORIG DEST AC_RMK

See Appendix A for the Columns and Sort Options table which lists the options available with the Request List command, including tables of Remarks Keywords and Equipment Types.

By default, the list of flights appears in chronological order under ETA (for arrivals) and ETD (for departures) for each 15-minute interval. You can specify that the list be ordered under a different category by using the sort option. The items under each category are sorted in alphabetical, numerical, or chronological order, according to what is appropriate for that category.

The first item you enter after the word SORT determines the primary sort criterion. If you enter a second item, that item becomes the secondary sort within the first criterion, and so on. For example, to show lists of flights for BWI organized first alphabetically according to origin airports, and then alphabetically by airline within the origin category, you would enter this command:

REQ BWI LIST SORT ORIG AIRL

The third and subsequent sort criteria would have similar results. The system allows you to sort up to ten levels deep.

You can sort on most of the column options. The Columns and Sort Options table in Appendix A lists all of the column options and specifies which ones are not available as sort options.

Miscellaneous

Two miscellaneous options are described in Appendix A. The OAG option allows you to specify that the report use only schedule data. The hubsite option allows you to specify the hubsite in Cambridge as the data source.

Sample List Report

The following report results from issuing this command: **REQ A JFK LIST**

```
 Report - Microsoft Internet Explorer                                    _ □ ×

   A JFK LIST 24/1945  25/0044


              ARRIVALS
   RVSM  ACID     TYPE  ORIG  ETD    CTD    DEST  ETA    ETE   DCENTR  BEACON

   24/1945  8
   -     JBU74    A320  PBI   A1706  -      JFK   A1945  0160  ZMA     -
   -     EGF753   E135  CYUL  A1847  -      JFK   E1948  0062  CZU     6245
   -     IBE6251  B742  LEMD  E1220  -      JFK   E1949  0450  ZEU     0731
   -     UAL800   B772  RJAA  E0805  -      JFK   E1950  0706  ZPA     2742
   -     DAL90    B763  JFK   E2345  -      JFK   E1954  1210  ZNY     -
   -     AAL492   B752  DFW   A1708  -      JFK   E1954  0167  ZFW     2272
   -     JBU118   A320  MSY   A1742  -      JFK   E1954  0133  ZHU     7342
   -     COM1522  CRJ2  GSO   A1848  -      JFK   E1958  0071  ZTL     7232

   24/2000  4
   -     UAL4     B762  LAX   A1522  -      JFK   E2007  0286  ZLA     6767
   -     JBU12    A320  FLL   A1740  -      JFK   E2007  0148  ZMA     3314
   -     COM388   CRJ1  CHS   A1841  -      JFK   E2008  0088  ZJX     5654
   -     IDE1086  CRJ2  IAD   A1927  -      JFK   E2014  0048  ZDC     0534

   24/2015  9
   NC    AAL118   B762  LAX   A1513  -      JFK   E2016  0304  ZLA     6720
   -     DAL524   B763  MDSD  E1701  -      JFK   E2017  0197  ZSA     1406
   -     COM791   CRJ2  CVG   A1852  -      JFK   E2020  0089  ZID     4156
   -     DAL333   B752  TJSJ  A1658  -      JFK   E2021  0204  ZSU     1427
   -     DAL107   B763  EDDF  A1209  -      JFK   E2022  0494  ZEU     0751
   -     ELY007   B744  LLBG  A1214  -      JFK   E2022  0489  ZEU     6075
   -     JBU624   A320  PBI   A1809  -      JFK   E2023  0135  ZMA     6523
   -     AFR006   B772  LFPG  A1302  -      JFK   E2024  0443  ZEU     0702
   NC    COA5574  B735  IAH   A1736  -      JFK   E2028  0173  ZHU     1003

   24/2030  14
   -     DAL31    B763  UUEE  A1019  -      JFK   E2032  0614  ZEU     6026
   -     DAL149   B763  LIRF  A1142  -      JFK   E2032  0531  ZEU     0747
   -     JBU94    A320  OAK   A1521  -      JFK   E2033  0313  ZOA     3647
   -     EGF622   E135  BOS   P1947  -      JFK   E2033  0047  ZBW     3506
   -     JBU402   A320  TJSJ  E1652  -      JFK   E2037  0226  ZSU     2117

              Print   Save   Close   Help
```

Reading the Reports

The flight list report separates report information into arrivals and departures. Arrivals are listed at the top, and departures are listed below. Scroll down if necessary, to view all of the data. The header echoes the request you typed in, followed by the day of the month, and the user-defined time stamp. The report groups flight data in 15-minute intervals (UTC) beginning at the current time. The number next to each time indicates the flight count for that interval. The columns of data for each flight are as follows:

- **RVSM**   The within-sector RVSM conformance status of the flight.
- **ACID**   The unique alphanumeric aircraft identifier (AAL101, for example).
- **TYPE**   The flight's aircraft type (DC10 or B727, for example).
- **ORIG**   The FAA designator showing the origin airport. If you are reviewing the departure portion of the report, this column should be the original airport name (DFW, for example).
- **ETD**   The estimated time of departure (ETD) is based on the best data available to ETMS. A prefix is used to indicate the source of the data that is used to set the ETD; the user can judge the reliability of the data partly on the basis of the prefix, explained below.

    A - Actual departure time, usually based on a NAS departure message.

    E - Estimated departure time. No departure message was received, but the flight is known to be airborne because NAS messages indicating this have been received.

    T - Indicates that the flight has pushed back from the gate and that it is in taxi status. This status is known from an OOOI message sent by a NAS user.

    P - P-time from the flight plan.

    N -Early intent.ETMS has received a user-provided early intent route.

    S -Scheduled time from the Official Airline Guide.

    R-The historical route has been replaced by the assigned route

- **CTD**   Controlled Time of Departure. Corresponds to a runway departure time.
- **DEST**   The FAA designator showing the destination airport. If you are reviewing the arrival portion of the report, this column should be the original airport name (DFW, for example).
- **ETA**   The estimated time of arrival based on the best available time data. The ETA is marked with one of the following prefixes to indicate whether the flight has actually arrived:

    A   Actual arrival time (completed flight)

> **E**   Estimated arrival time (proposed or active flight)

- **ETE**   The estimated time en route, expressed in minutes.
- **DCENTR** or **ACENTR**

> In the arrival section, the FAA designator showing the departure ARTCC. In the departure section, the FAA designator showing the arrival ARTCC.

Request Listo

The Request Listo command produces a flight list report exactly like the one produced with the Request List command, except that the Estimated Time of Arrival (ETA) and the Estimated Time of Departure (ETD) are modified under certain conditions. If a flight is not active and is controlled by a ground delay program, the flight list report reverts to the original arrival and departure times. (Under the same conditions, the Request List command would show the controlled times). You may use the report data for creating a ground delay program, in which case you want to be certain that updated arrival and departure time calculations are not based on any previously existing controlled times. You can also use the Request List and Request Listo commands together to compare or verify data.

The syntax and options for this command work exactly the same as the syntax and options for the Request List command, except that you type **LISTO** instead of **LIST**.

For example: **REQ A DFW LISTO**

Sample Listo Report

The following report results from issuing this command: **REQ A DFW LISTO**

Reading the Reports

The Flight Listo report separates report information into arrivals and departures. Arrivals are listed first, and departures are listed second. Scroll down if necessary to view all of the data. The header echoes the request you typed, followed by the day of the month, and the five-hour time stamp. The format is exactly like the report produced by Request List except for variations on two of the columns. For information about the other columns, see the Request List command.

Request VT (Verify Time)

The Request VT command produces a time verification report for a specified airport or airports. The report shows discrepancies between the actual arrival and departure times and those times predicted by a specified time type. It shows how late or early flights are, relative to the specified time type, and also provides analysis of that information for the group of flights requested. You can customize the report by using filter and format options.

Enter your request in the following format:

REQ VT [ST, PT, OT, or **CT] location time* A/D* filters* every* list** vtstats***

For example:

REQ VT PT DFW 0600 1400 VTSTATS

Specifying the Time Type

To issue the Request VT command you must use one of four time types. The time type you select will always be compared to actual departure and arrival times in the report. Always enter VT before the time type designator, as shown in the table below.

VT Times Types		
Option	**Description**	**Example**
ST	Scheduled departure and arrival times, from the airline schedule.	**REQ VT ST DFW**
PT	Proposed departure and arrival times, from individual flight plans.	**REQ VT PT DCA**
OT	Original departure and arrival times, as defined by ETMS traffic model processing, without regard to ground delay controls or actual times.	**REQ VT OT DFW**
CT	Controlled departure and arrival times, assigned to each flight by a ground delay program.	**REQ VT CT ORD**

Specifying Arrivals or Departures

Enter **A** or **D** to limit the report to arrivals or departures, respectively. If you do not enter A or D, the report will include both.

To specify the location for a Request VT command you must at least include a Primary Place of Interest (PPI). This may be the FAA designator for an airport or ARTCC. (You may not specify a fix or sector for this command.) You may enter multiple PPIs enclosed in brackets or you may add one or more Secondary Places of Interest (SPI) enclosed in a second pair of brackets. If you include an SPI, the report will be limited to flights traveling between any PPI and any SPI. You may also exclude locations from either category by using a minus sign.

The following table describes the various methods you may use to designate airports or ARTCCs. This table does not show all PPI/SPI combinations; for more information, see Appendix A.

Location Designators

Element	Description	What You Do	Example
Airport and ARTCC	Flights going to and from one element (one PPI).	Enter the FAA designator.	**REQ VT PT DFW**
	Flights going to and from more than one element (more than one PPI).	Enter each FAA designator, all within brackets or parentheses.	**REQ VT PT [BWI DCA]**
	Flights between a primary element and selected others (flights between a PPI and SPIs).	Enter the primary FAA designator, followed by the secondary FAA designator (within brackets if more than one).	**REQ VT PT ZBW [DFW ATL]**
	Flights between a primary element and anywhere *except* selected others (exclusions from the SPI).	Enter the primary FAA designator, and the secondary elements, each preceded by a minus sign (within brackets if more than one).	**REQ VT PT JFK - DFW**

Time period

The time period option allows you to change the date and/or the time span for the report data. By default, the report covers a time period of five hours beginning at the current time on the current day. For more information about using dates and times, see Appendix A.

Filter

The default flight counts report covers all flights going to and from the location you indicate. However you can filter the information to reflect only specific flights you want included in the report. There are many options available, and you may use as many as you want for your purposes. For a complete description, see Appendix A.

Every

The every (or time interval) option allows you to change the default 15-minute display interval. For more information see Appendix A.

List and VTstats

These options allow you to specify whether the report will include the list portion or the summary statistics portion. (If you do not specify List or VTstats, the report will include both.) For example, if you wanted to see only the list section of a time verification report on Logan International Airport comparing actual to proposed time, your command line would look like this:

REQ VT PT BOS LIST

If you wanted only the vtstats section of a time verification report on Logan International Airport comparing actual to proposed time, your command line would look like this:

REQ VT PT BOS VTSTATS

Columns

You can use the columns option to specify column headings that are different from those that appear in the default list section, using the same column headings that you can use with the Request List command. This option can be used only if you specify List. The order in which you list the columns after entering List determines the order in which the columns will appear on the report. If you use this option, only the columns you specify will appear. See Section 2.7, Request List command, for a more detailed definition of the columns option. See Appendix A for a complete list of the Columns and Sort options available.

> **Note:**   The only time that you should use the columns option with the Request VT report is if you want to customize the column headings in the list section and you want a statistics section. To do so, add the word vtstats to the end of your request. If you just want the list section with customized column headings, you can generate such a report more easily with the Request List command.

Sort

You can use the sort option to display flight data in numerical or alphabetical order within any column you designate. This option is available only if you specify the list option. See Section 2.7, Request List command, for a more detailed definition of the sort option and a complete list of available sort options. See Appendix A for a complete list of the Columns and Sort options available.

Miscellaneous

Two miscellaneous options are described in Appendix A. The setlen option allows you to change the display width of the report. The hubsite option allows you to specify the hubsite in Cambridge as the data source.

Sample VT Report

The following report results from issuing this command: **REQ VT PT LAX**

```
 Report - Microsoft Internet Explorer                              _ □ ×

    VT PT LAX 28/1315  28/1814


                   ARRIVALS
   DCENTR   ORIG   DEST   ACID     PGTD  AGTD      PD_DIF    PGTA  AGTA     PA_DIF

  28/1315  4
    ZME    MEM    LAX    FDX1415  0824  0957    0133 LATE    1137  1316  0139 LATE
    ZAN    ANC    LAX    ASA106   0805  0816    0011 ON_TIME 1313  -     -    -
    ZPA    YSSY   LAX    QFA107   -     -       -    -       -     -     -    -
    ZLA    BUR    LAX    AMF4196  1308  1321    0013 ON_TIME -     -     -    -

  28/1330  4
    ZOB    TOL    LAX    ATN802   0845  0934    0049 LATE    1331  -     -    -
    ZAN    ANC    LAX    GCO2888  0830  0857    0027 LATE    1356  -     -    -
    ZID    CVG    LAX    DHL401   0852  0948    0056 LATE    1338  -     -    -
    ZOA    FAT    LAX    EGF12    1250  1247   -0003 ON_TIME 1341  -     -    -

  28/1345  6
    ZOA    FAT    LAX    SKW6906  1300  1306    0006 ON_TIME 1347  -     -    -
    ZLA    SBA    LAX    EGF34    1253  1313    0020 LATE    1317  -     -    -
    ZLA    LAS    LAX    SWA2185  1300  1311    0011 ON_TIME 1336  -     -    -
    ZLA    SAN    LAX    SKW6156  1320  -       -    -       1346  -     -    -
    ZOA    MRY    LAX    EGF24    1240  1243    0003 ON_TIME 1350  -     -    -
    ZLA    SAN    LAX    EGF58    1315  -       -    -       1344  -     -    -

  28/1400  10
    ZID    DAY    LAX    WOA30    0956  1019    0023 LATE    1359  -     -    -
    ZPA    YMML   LAX    QFA93    -     -       -    -       -     -     -    -
    ZOA    SMF    LAX    SWA1616  1250  1259    0009 ON_TIME 1355  -     -    -
    ZLA    SGU    LAX    SKW6631  1237  1244    0007 ON_TIME 1407  -     -    -
    ZAB    TUS    LAX    SWA1783  1245  1251    0006 ON_TIME 1353  -     -    -
    ZOA    OAK    LAX    SWA1002  1300  1308    0008 ON_TIME 1357  -     -    -
    ZAB    PHX    LAX    SKW6912  1300  1308    0008 ON_TIME 1356  -     -    -
    ZOA    MRY    LAX    SKW6064  1315  1314   -0001 ON_TIME 1415  -     -    -
    ZOA    SFO    LAX    UAL1401  1305  1311    0006 ON_TIME 1358  -     -    -
    ZLA    LAS    LAX    SWA2882  1330  -       -    -       1405  -     -    -

  28/1415  9

                        Print   Save   Close   Help
```

Reading the Reports

The report separates information into arrival and departure information (list section) and arrival and departure statistics tables (vtstats section). The example above shows the list portion. Departure data may not be immediately visible; simply scroll down past the end of the arrival data to review the departure data. Data is divided into 15-minute time intervals. The report header reflects the request you typed on the command line, followed by the day of the month, and the time the report begins.

The columns on the report depend on which time type you selected and whether you are looking at arrivals or departures. The following list describes each of the columns that may appear.

- **DCENTR** or **ACENTR**
  The departure ARTCC (for arrivals) or the arrival ARTCC (for arrivals).
- **ORIG**   The FAA designator showing the origin airport.
- **DEST**   The FAA designator showing the destination airport.
- **ACID**   The unique alphanumeric aircraft identifier (AAL101, for example).

- **SGTD**, **PGTD**, **OGTD**, or **CGTD**

  The scheduled, proposed, original, or controlled gate time of departure, depending on the time type you selected.
- **AGTD**   The Actual Gate Time of Departure.

- **SD_DIFPD_DIF**, **OD_DIF**, or **CD_DIF**

  The discrepancy between the actual gate time of departure and the departure time predicted by your time type selection, along with a designator showing the status of the comparison. For example, if you indicated CT on the command line, this column would show the results of AGTD minus CGTD.
- **SGTA**, **PGTA**, **OGTA**, or **CGTA**

  The scheduled, proposed, original, or controlled gate time of arrival, depending on the time type you selected.
- **AGTA**   The Actual Gate Time of Arrival.
- **SA_DIF**, **PA_DIF**, **OA_DIF**, or **CA_DIF**

  The discrepancy between the actual gate time of arrival and the arrival time predicted by your time type selection, along with a designator showing the status of the comparison. For example, if you indicated CT on the command line, this column would show the results of AGTA minus CGTA.

The following designators appear after the _DIF columns to show the status of each time comparison:

- **EARLY**   Arrived or departed more than five minutes prior to predicted time.
- **ON TIME**   Arrived or departed between five minutes prior to and 15 minutes after predicted time.
- **LATE**   Arrived or departed more than 15 minutes later than predicted time.

Version
The **Version** command displays the current version number of the CCSD.
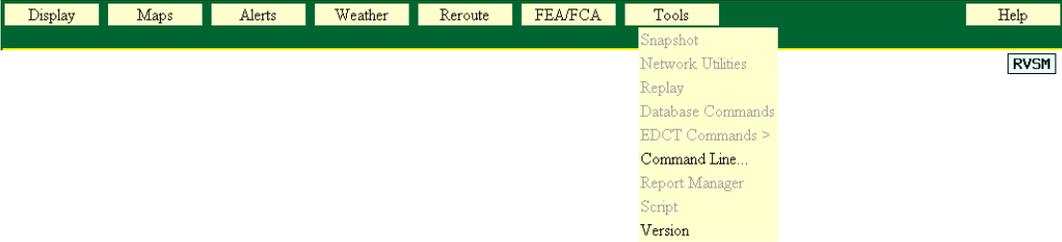
1. Click **Tools** on the main menu.
2. Click **Version**.

After you click Version, a dialog box opens with the current version number, similar to the following sample.
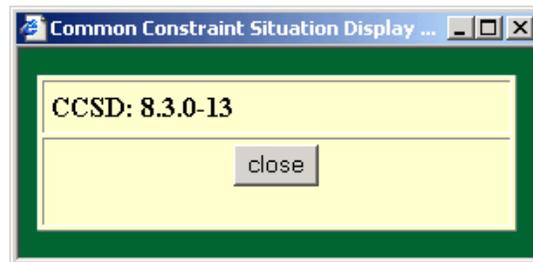
Appendix A:

This appendix describes the following options and features. Section I describes which are common to several or all of the **Request** commands. Section II describes how to configure the display for various internet browsers

Section I: Request Commands

Section II: Configuration

Section I: Request Command Reference

Arrivals/Departures Option

This section applies to **Request Count**, **Request List**, and **Request Listo**.

If you are requesting a report on an airport or Air Route Traffic Control Center (ARTCC), you can limit the report to arrivals only or departures only by entering **A** or **D** on the command line. If you do not enter A or D, the report includes both. If you include this option, it should appear immediately before the location identifier, as shown here:

REQ D ORD

If you specify both a primary and a secondary place of interest in your location designator (see the next section), the A or D refers to arrivals or departures at the primary place of interest. For example, the following command is requesting a report for arrivals to ORD which are departing from LAX:

REQ A ORD LAX

Multiple Locations

For flight counts, flight list, and time verification reports, you can specify multiple locations if the locations are airports and/or ARTCCs. You cannot enter more than one fix or sector as the location designator. This section applies to **Request Count**, **Request List**, and **Request Listo**.

The location in a **Request** command has a two-part structure; a primary place of interest, and a secondary place of interest. These terms are described below.

Primary Place of Interest (PPI)—required

This is the location for which the report is being requested. It may consist of a single location or multiple locations. If the PPI consists of more than one location name, enclose the entire PPI expression in a single set of brackets. For example:

REQ A [JFK LGA EWR]

If the first element in the PPI expression is an ARTCC, you may exclude one or more airports within that ARTCC by preceding the airport name with a minus sign (**-**). For example:

REQ A [ZDC – BWI –IAD]

Secondary Place of Interest (SPI)—optional

The SPI expression follows the PPI expression and limits the flights included in the report. If an SPI is included, the report will include only those flights that travel between any PPI and any SPI location. The SPI may be a single location name. For example:

REQ A LAX SFO

In the example above, the report will show all flights arriving at LAX (the PPI) from SFO (the SPI). If the SPI consists of more than one location name, enclose the entire SPI expression in brackets. For example:

REQ BOS [MIA JAX]

In the above example, the report will show all flights between BOS and MIA and between BOS and JAX. If each location name in the SPI expression is preceded by a minus sign (-), the report will be for flights between the PPI and any location except those listed in the SPI, as in the following example:

REQ MEM –ZME

In the above example, the report will include flights between MEM and any airport except those in the ZME center.

In the next example, the report will include all flights departing from ORD and all flights departing from ZOB, except those that will be arriving at CLE or PIT:

REQ D [ORD ZOB] [-CLE –PIT]

Using Brackets

As the preceding examples show, you must use brackets to group locations together into PPI and SPI expressions whenever you have multiple locations in either expression. Locations with and without minus signs (-) may appear in the same set of brackets. Never use more than two sets of brackets in the same request.

The following two examples illustrate the importance of using brackets to distinguish between PPI and SPI expressions. In the first example, both airports are part of the PPI expression, and all flights to and from ORD or IND are included in the report. In the second example, IND is considered an SPI and all flights between ORD and IND are included.

REQ [ORD IND]

REQ ORD IND

Time Period Option

This section applies to all **Request** commands except Request **LIFP**.

Days and dates

> **Note:** Specifying days and dates does not apply to **Request ARRD** or **Request Fixl.**

By default, each of these reports covers a time period of five hours beginning at the current time on the current day. The time period option allows you to change these default values for report data.

You may specify a different day. Days can be entered in any one of the following ways:

- Numerical (mm/dd)   04/12
- Abbreviated month   NOV. 23
- Abbreviated Day of week   WED.
- Yesterday   YESTERDAY
- Tomorrow   TOMORROW

Hourly Periods

You may also specify an hourly period within the current day, which must be expressed in terms of a four-digit Universal Coordinated Time (UTC). Time periods can be entered with any one of the following:

- space   1800 2300
- **to** in the middle   1800 to 2300
- **from** and **to**   From 1800 to 2300
- **From** in the front   From 1800 (five hours after time)
- **To** in the front   To 1800 (five hours before time)

For example, if you want a FIXL report on Miami International Airport for April 12 from 0600 to 1200, your request would look like this: **REQ FIXL MIA 4/12 0600 1200**

Only one day and one date may be specified for each request. If the report period is to span two days, use the day when the report period starts.

If a day of week is given but no date is specified, the system assumes that the request is made for the current or an upcoming date. For example, if a request is made for **THU**., and the current day is Thursday, information is provided for that day. If on Thursday, however, a request is made for **WED**., information is provided for the Wednesday following the current day.

If you specify **YESTERDAY** or yesterday's date, be sure that the specified time is within 15 hours in the past, as explained in the next section.

Time Periods and Data Availability

There are practical time limits within which you should restrict your requests when using the Time period option. You may not request flight information further than 15 hours in the past. Also, any requests beyond 15 hours in the future will not return information about fixes or sectors. Requests beyond the scope of the Schedule Database (approximately 30 days in the future) will generate an empty report.

Relative time periods

You can specify times relative to the current time (rounded down to the previous hour). To do so, type a plus sign (+) followed by the number of hours after the current hour or a minus sign (-) followed by the number of hours before the current hour. This is sometimes

referred to as an offset from the current time. For example, if the current time is 1449, the following command generates a report for the four-hour time period from 1300 (one hour before 1400) to 1700 (three hours after 1400):

REQ DCA –1 +3 LIST

To specify times relative to the current quarter hour (rounded down), include the tilde character (~). For example, if you add a tilde to the previous example (using the same current time of 1449), the command generates a report for the period from 1345 to 1645. For example:

REQ DCA –1~ +3~ LIST

Relative times can be mixed with absolute times, as shown in the following examples:

REQ MEM -1 1400 LIST

REQ SEA 1600 –2 LIST

In any request, the two times specified must be in chronological order (the second time must fall later than the first). If using relative times would otherwise cause the second time to be *earlier* than the first, the system interprets the second time as falling on the following day. (For example, if the current time is 1800, the system interprets **1700-2** to be the period from 1700 *today* to 1600 *tomorrow*.)

Filter Options

This section applies to **Request Count**, **Request List**, and **Request Listo.** The default reports for the commands listed above display flight data for all flights traveling to or from the place or places you indicate. However, you can filter the information to reflect only specific flights you want included in the report.

Many different filter options are available. These options should appear after the location designator(s) and, if included, the time period option. Filter options are described in the two tables that follow. (The examples in the table show **Request Count** commands.)

Filter Options

Option	Description	What you do	Example
Airway	Includes only flights that use specified airway(s) [or excludes flights that use specified airway(s) from report].	Enter **AIRWAY**, and the name of one or more airways, each separated by a space. (To exclude, precede each airway with -.)	**REQ SFO AIRWAY J80** **REQ SFO AIRWAY - J80**
Center	Includes only flights that traverse specified center(s) (ARTCCs) [or excludes flights that traverse specified center(s) from report].	Enter **CENTER**, and one or more ARTCC designators, each separated by a space. (To exclude, precede each ARTCC with -.)	**REQ MEM CENTER ZAUREQ MEM CEN-TER -ZAU**
Destination Unknown	Includes only flights whose destination airports are unknown (or excludes flights whose destinations are unknown).	Enter **DEST UNKW**. (To exclude, precede UNKW with -)	**REQ LAX DEST UNKW** **REQ LAX DEST - UNKW**
DVALL	Includes all flights that have been diverted.	Enter **DVALL** and an airport identifier in a Request Count or List/ Listo report.	**REQ A MIA DVALL LIST**

Filter Options (Continued)

Option	Description	What you do	Example
DVREC	Includes airborne and grounded flights that are recoveries of flights that have been diverted.	Enter **DVREC** and an airport identifier in a Request Count or List/ Listo report.	**REQ A JFK DVREC A LIST** **REQ A JFK DVREC G LIST** **REQ A JFK DVREC A G LIST**
Fix	Includes only flights traversing specified fix(es) [or excludes flights that traverse specified fix(es) from report].	Enter **FIX**, and the name of one or more fixes, each separated by a space. (To exclude, precede each fix with -.)	**REQ BOS FIX MHT** **REQ BOS FIX -MHT**
Origin Unknown	Includes only flights whose origin airports are unknown (or excludes flights whose origin airports are unknown).	Enter **ORIG UNKW**. (To exclude, precede UNKW with -)	**REQ ORD ORIG UNKW** **REQ ORD ORIG - UNKW**
Sector	Includes only flights traversing specified sector(s) [or excludes flights that traverse specified sector(s) from report].	Enter **SECTOR**, and the name of one or more sectors, each separated by a space. (To exclude, precede each sector with - .)	**REQ IAD SECTOR ZDC17** **REQ IAD SECTOR - ZDC17**
Arrival Fix	Includes flights arriving at a specified arrival fix.	Enter **AFIX**, and the name of the fix.	**REQ A BOS AFIX PVD**
Aircraft Categories	Includes specified categories only (or excludes specified categories from report).	Enter **AC_CAT**, and the category designator(s): J for jet, P for propeller, and T for turbo prop. (To exclude, precede designator with -.)	**REQ BOS AC_CAT** **REQ JFK AC_CAT -J**
Aircraft Classes	Includes specified classes only (or excludes specified classes from report).	Enter **CLASS**, and the class designator(s): H for heavy, L for large, and S for small. (To exclude, precede designator with -.)	**REQ DCA CLASS H** **REQ DCA CLASS -L**
Flight times and conditions	Includes flights for only specified arrival/departure time types and actual time periods.	Enter Specific time type, and a time qualifier (see next table).	**See Table on following page.**
Aircraft Types	Includes specified aircraft types only (or excludes specified types from report.)	Enter **TYPE**, and the aircraft type designator(s), each separated by a space. (To exclude, precede designator with -.)	**REQ IAH TYPE B747**

Filter Options (Continued)

Option	Description	What you do	Example
Airlines	Includes flights for specified airlines only (or excludes specified airlines from report).	Enter **AIRL**, and the airline identifier(s), separated by a space. (To exclude, precede each identifier with -.)	**REQ JFK AIRL USA** **REQ ATL AIRL -DAL**
RVSM	Includes RVSM flights that are either conformant or non-conformant.	Enter **RVSM**, and a space, followed by C to include conformant flights and -C to include non-conformant flights.	**REQ A BOS RVSM -C**
User Categories	Includes flights for specified user categories only (or excludes specified user categories from report.)	Enter **USER**, and the user designator(s): **T** for air taxi, **F** for cargo, **C** for commercial, **G** for General Aviation, and **M** for Military, (To exclude, precede each designator with -.)	**REQ IAH USER M F** **REQ BWI USER-M-F**

Flight Times and Conditions

You can filter reports according to the flight times and conditions by using one of the options listed below, in combination with the LT (less than) or GT (greater than) flight time condition. The resulting report will include only those flights with times less than or greater than a time you specify (in UTC). To use the ETE option, enter the estimated time enroute in minutes instead of specifying a UTC. You may use this option with any of the other filter options

Flight Times and Conditions

What you enter	Description	Example
ARTA time condition	Actual runway time of arrival	**REQ A IAD AGTA LT 1400**
ARTD time condition	Actual runway time of departure	**REQ D IAD AGTD GT 1400**
CTA time condition	Controlled time of arrival	**REQ A FO CGTA GT 1200**
CTD time condition	Controlled time of departure	**REQ D SFO CGTD GT 1200**
ETA time condition	Estimate based on best available time from among the other arrival time types	**REQ A IAH ETA LT 1400**
ETD time condition	Estimate based on best available time from among the other departure time types	**REQ D IAH ETD GT 1400**
ETE time condition	Estimated time en route, in minutes	**REQ DCA ETE LT 120**
ORTA time condition	Original runway time of arrival	**REQ A BOS OGTA LT 1100**

Flight Times and Conditions (Continued)

What you enter	Description	Example
ORTD time condition	Original runway time of departure	**REQ D BOS OGTD GT 1100**
PGTA time condition	Proposed gate time of arrival	**REQ A JFK PGTA LT 1100**
PGTD time condition	Proposed gate time of departure	**REQ D JFK PGTD GT 1100**
SGTA time condition	Scheduled gate time of arrival	**REQ A ZLA SGTA LT 0900**
SGTD time condition	Scheduled gate time of departure	**REQ D LA SGTD LT 0900**
TGTA time condition	Gate time of arrival based on ETMS Total Traffic Model (TTM)	**REQ A DFW TGTA GT 0900**
TGTD time condition	Gate time of departure based on ETMS Total Traffic Model (TTM)	**REQ D DFW TGTD LT 0900**

Count Options

You may use the count option to designate a category of columns for an Area report that differs from the default format. To use this option, enter the word COUNT, one of the options described in the following table.

Count Option

Count By	What You Do	Example
Aircraft Category	Enter **COUNT AC_CAT** You may limit the display to selected categories by adding **J** for jet, **P** for propeller, and/or **T** for turbo prop. Precede with - to exclude.	**REQ IAH COUNT AC_CAT** **REQ IAH COUNT AC_CAT T** **REQ IAH COUNT AC_CAT -P -T**
Standard keywords representing flight remarks data	Enter **COUNT AC_RMK**	**REQ ORD COUNT AC_RMK** **REQ ORD COUNT AC_RMK |NRP** **REQ ORD COUNT AC_RMK -|LIFEGUARD**
Airline	Enter **COUNT AIRL** You may limit the display to selected airlines by adding a list of airlines. Precede with - to exclude.	**REQ BWI COUNT AIRL** **REQ BWI COUNT AIRL AAL** **REQ BWI COUNT AIRL-UAL-AAL**
Airport (by origin for arrivals, by destination for departures)	Enter **COUNT AIRP** You may limit the display to selected airports by adding a list of airports. Precede with - to exclude.	**REQ ZMA COUNT AIRP** **REQ ZMA COUNT AIRP [DCA ATL]** **REQ ZMA COUNT AIRP [-LAX -SFO]**

Count Option (Continued)

Count By	What You Do	Example
Aircraft Class	Enter **COUNT CLASS** You may limit the display to selected classes by adding **H** for heavy, **L** for large, and/or **S** for small. Precede with - to exclude.	**REQ DCA COUNT CLASS** **REQ DCA COUNT CLASS H S** **REQ DCA COUNT CLASS -S -L**
Destination Airport	Enter **COUNT DEST**	**REQ ZSE COUNT DEST**
Origin Airport	Enter **COUNT ORIG**	**REQ ZNY COUNT ORIG**
Departure Center	Enter **COUNT DCENTR**	**REQ ZNY COUNT DCENTR**
Aircraft Type	Enter **COUNT TYPE** You may limit the display to selected types by adding a list of types. Precede with - to exclude.	**REQ JFK COUNT TYPE** **REQ JFK COUNT TYPE DC10** **REQ JFK COUNT TYPE -DC10 -B747**
User Category	Enter **COUNT USER** You may limit the display to selected user categories by adding **T** for air taxi, **F** for freight/cargo, **C** for commercial, **G** for general aviation, and **M** for military. (Category labeled **O** for Other appears if no user category listed above applies). Precede with **-** to exclude.	**REQ JFK COUNT USER** **REQ JFK COUNT USER T G** **REQ ZSE COUNT USER -F -C**
Aircraft Category	Enter **COUNT AC_CAT** You may limit the display to selected categories by adding **J** for jet, **P** for propeller, and/or **T** for turbo prop. Precede with - to exclude.	**REQ IAH COUNT AC_CAT** **REQ IAH COUNT AC_CAT T** **REQ IAH COUNT AC_CAT -P -T**
Standard keywords representing flight remarks data	Enter **COUNT AC_RMK**	**REQ ORD COUNT AC_RMK** **REQ ORD COUNT AC_RMK |NRP** **REQ ORD COUNT AC_RMK -|LIFEGUARD**
Estimated Time Enroute	Enter **COUNT ETE SPAN ##*** (Specify time in hours and minutes.The example on the right is for one hour and 20 minutes.)	**REQ JFK COUNT ETE SPAN 120**

*If you use the **ete span** option, the report will not be displayed by time intervals.

If you are generating a report of counts by origin airport or center, the gstop option causes the report to show counts of all flights that have not yet departed and those held past their departure times. If you include this option, each count in the report includes a series of three numbers, separated by a slash (/): Total Count / Controlled Flights on Ground Past ETD.

Location Designators

The following table describes the various methods you may use to designate locations. This table does not show all PPI/SPI combinations; for more information, see the Multiple Locations section earlier in this appendix.

Location Designators

Element	Description	What you do	Example
Airport and ARTCC	Flights going to and from one element (one PPI).	Enter the FAA designator.	**REQ DFW**
	Flights going to and from more than one element (more than one PPI).	Enter each FAA designator, all within brackets or parentheses.	**REQ [BWI DCA]**
	Flights between a primary element and selected others (flights between a PPI and SPIs).	Enter the primary FAA designator, followed by the secondary FAA designator (within brackets if more than one).	**REQ ZBW [DFW LAX]**
	Flights between a primary element and anywhere except selected others (exclusions from the SPI).	Enter the primary FAA designator, and the secondary elements, each preceded by a minus sign (within brackets if more than one).	**REQ JFK [-DFW - ATL**
Sector	Flights passing through a sector.	Enter the FAA designator.	**REQ ZDV32**
High fix	Flights passing a high fix.	Enter **HIFIX**, and the FAA designator.	**REQ HIFIX GUP**
Low fix	Flights passing a low fix.	Enter **LOFIX**, and the FAA designator.	**REQ LOFIX GUP**
Super High fix	Flights passing a super high fix.	Enter **SUFIX**, and the FAA designator.	**REQ SUFIX GUP**

Column and Sort Options

The following table lists the columns and sort options available with the Request List command.

Columns and Sort Options

Label	Column Description
AC_CAT	Aircraft categories (jet, propeller, turbo prop)
ACENTR**	Arrival Center
ACID	Unique alphanumeric aircraft identifier (Same as IDENT option)
AC_RMK	Standard keywords representing flights remarks data. See Remarks Keywords
AFIX	Arrival fixes
AIRL	Airline(s)
AIRP	Two columns: Origin and Destination airports
AIRWAY*	A listing of airways traversed
ALT	Requested altitude (hundreds of feet)
ARTA	Actual runway time of arrival.
ARTD	Actual runway time of departure
ASECTR	Arrival sector
BEACON*	A four-digit transponder code assigned to an aircraft by a NAS center. It is forwarded to the ETMS in a Beacon code (BZ) message subsequent to a flight plan and usually prior to a departure message (DZ). It is also transmitted to the ETMS prior to a center hand-off message (UZ).
CA_DIF*	The difference between ARTA and CTA, with a designator showing the status of the comparison
CALT*	Current Altitude (hundreds of feet)
CD_DIF*	The difference between ARTD and CTD, with a designator showing the status of the comparison
CENTER**	Departure center for arrivals. Arrival center for departures
CENTRL*	A listing of centers traversed
CENTRL*	A listing of centers traversed
CLASS	Aircraft classes (heavy, large, and small)
CTA	Controlled time of arrival. Corresponds to a runway arrival time
CTD	Controlled time of departure. Corresponds to a runway departure time
CTL_ELEM	Controlled element. Shows controlled airport, sector, or fix
DCENTR**	Departure Center
DEST	Destination airport
DFIX	Departure Fix

Columns and Sort Options (Continued)

Label	Column Description
DP*	Departure Procedures
DSECTR	Departure sector
DTRSN*	DP Transition fixes
DV_REC*	Diversion recovery
EAFT	Estimated Arrival Fix Time
EDFT*	Estimated Departure Fix Time
EFTA	Estimated fix time of arrival
ENTRY	Sector entry times (use with sectors only)
EQUIP #	Equipment type, represented by prefix or suffix. See Equipment Types
ETA	Estimated time of arrival, based on best available time from among the other departure time types
ETD	Estimated time of departure, based on best available time from among the other departure time types. Indicates whether the flight is Active or Proposed. A prefix is used to indicate the source of the data that is used to set the ETD. You can judge the reliability of the data partly on the basis of the prefix, explained below. **S**- Scheduled. ETMS has received no flight plan. Data is based on the OAG and user-provided schedule updates. **N**- Early intent. ETMS has received a user-provided early intent route. **P**- Proposed. ETMS has received a NAS flight plan. **T**- Taxi. ETMS has received a message indicating the flight has pushed off from the gate. **A**- Active. ETMS has received a NAS or user-provided departure message. **E**- Estimated. ETMS has received a message indicating the flight was active, but no departure message was received **R**- The historical route has been replaced by the assigned route.
ETE	Estimated time enroute
E_TYPE	Complete aircraft equipment type. Includes both aircraft type (TYPE) and equipment type data (F/B757/A)
EXIT	Sector exit times (use with sectors only)
FIX*	A listing of fixes traversed
GS*	Last reported ground speed
IDENT	Flight identifier (same as ACID option)
IGTA*	Initial Gate Time of Arrival
IGTD*	Initial Gate Time of Departure
IN*	Actual time reported by the airlines for gate arrival
LGTA	Airline gate time of arrival
LGTD	Airline gate time of departure

Columns and Sort Options (Continued)

Label	Column Description
LRTA	Airline runway time of arrival
LRTD	Airline runway time of departure
OA_DIF*	The difference between ARTA and ORTA, with a designator showing the status of the comparison
OD_DIF*	The difference between ARTD and ORTD, with a designator showing the status of the comparison
OETA	Indicates a previously saved ETA
OETD	Indicates a previously saved ETD
OFF*	Actual time reported by the airlines for wheels up
ON*	Actual time reported by the airlines for wheels down
ORIG	Origin airport
OUT*	Actual time reported by the airlines for gate pushback
PA_DIF*	The difference between ARTA and PGTA, with a designator showing the status of the comparison
PD_DIF*	The difference between ARTD and PGTD, with a designator showing the status of the comparison
PGTA	Proposed gate time of arrival
PGTD	Proposed gate time of departure
RAL	Last reported altitude, as displayed in a data block
RTE*	Flight route
RVSM	Reduced Vertical Separation Minimums. RVSM flights are conformant or non-conformant.
SA_DIF*	The difference between ARTA and SGTA, with a designator showing the status of the comparison
SD_DIF*	The difference between ARTD and SGTD, with a designator showing the status of the comparison
SECTOR*	A listing of sectors traversed
SGTA	Scheduled gate time of arrival
SGTD	Scheduled gate time of departure
SPD	Air speed filed in a flight plan
STAR*	Standard Terminal Arrival Route
STAT	Two columns: active and proposed flights
STRSN*	STAR Transition fixes
TIME	Two columns: ETD and ETA.
TRTA	Gate time of arrival based on ETMS Total Traffic Model (TTM). Formerly called TGTA.

Columns and Sort Options (Continued)

Label	Column Description
TRTD	Gate time of departure based on ETMS Total Traffic Model (TTM). Formerly called TGTD.
TT_FCA*	Displays for custom FEA/FCAs the Time to Reach FCA data, which is estimated in minutes
TYPE	Aircraft type (B747, etc.)
USER	User Category (air taxi, cargo, commercial, general aviation, military, and other)

  * Indicates the option is not available as a Sort option.
**ZXX in column means no FS or FZ message mas been resolved.

Remarks Keywords

The following table contains the standard keywords for flight remarks data.

Remarks Keywords

Boxes you check	Description
NRP	National Route Program flight
LIFEGUARD	Lifeguard or MEDEVAC flight
CATIII	Flight has CATIII landing equipment
ALTRV	Altitude Reservation. Usually a military request.
SWAP	Swapping flight from a standard to a nonstandard route. Usually done due to inclement weather.
DVRSN	Diversion recovery leg
ADCUS	Advise Customs about this flight
FCA	Flight is reroutes around a Flow Constrained Area
WXRTE	Flight has been rerouted due to severe weather
HAR	High-altitude Airspace Redesign
PTP	Point to Point

You can display columns of information for all Remarks keywords or columns for only one or more keywords. You can also exclude keywords. For Example:

Display all remarks columns: **REQ BFI LIST ACID AC_RMK**

Display remarks column(s):   **REQ BFI LIST ACID AC_RMK |NRP**

                                             REQ BFI LIST ACID AC_RMK |NRP |SWAP

Exclude remarks column(s):   **REQ BOS LIST ACID AC_RMK -|NRP**

                                             REQ BOS LIST ACID AC_RMK -|NRP |SWAP

Aircraft and Equipment Types

Aircraft and Equipment Types

What You Enter	Description
Aircraft Types	
H	Heavy
L	Large
S	Small
M	Military
C	Civilian
J	Jet
P	Prop
T	Turbo_prop
Equipment Type Prefix	
T/	TCAS
H/	Heavy
B/	Both Heavy and TCAS
L/	B757 with TCAS
F/	B757 without TCAS

Equipment Type Suffix

What You Enter	Description
NO DME	
/X	No transponder
/T	Transponder with no Mode C
/U	Transponder with Mode C
DME	
/D	No transponder
/B	Transponder with no Mode C
/A	Transponder with Mode C
TACAN ONLY	
/M	No transponder
/N	Transponder with no Mode C
/P	Transponder with Mode C
AREA NAVIGATION (RNAV)	
/Y	LORAN, VOR/DME, or INS with no transponder
/C	LORAN, VOR/DME, or INS, transponder with no Mode C

Equipment Type Suffix (Continued)

What You Enter	Description
/I	LORAN, VOR/DME, or INS, transponder with Mode C
	ADVANCED RNAV WITH TRANSPONDER AND MODE C (If an aircraft is unable to operate with a transponder and/or Mode C, it will revert to the appropriate code listed above under Area Navigation.)
/E	Flight Management System (FMS) with en route, terminal, and approach capability. Equipment requirements are: **(a)** Dual FMS which meets the specifications of AC 25-15, Approval of Flight Management Systems in Transport Category Airplanes; AC 20-129, Airworthiness Approval of Vertical Navigation (VNAV) Systems for use in the U.S. NAS and Alaska; AC 20-130A, Airworthiness Approval of Navigation or Flight Management Systems Integrating Multiple Navigation Sensors; or equivalent criteria as approved by Flight Standards.; **(b)** A flight director and autopilot control system capable of following the lateral and vertical FMS flight path. **(c)** At least dual inertial reference units (IRUs). **(d)** A database containing the waypoints and speed/altitude constraints for the route and/or procedure to be flown that is automatically loaded into the FMS flight plan. **(e)** An electronic map. (U.S. and U.S. territories only unless otherwise authorized.)
/F	FMS with en route, terminal, and approach capability. Unless otherwise authorized by the Administrator, equipment requirements are: **(a)** Single FMS which meets the specifications of AC 25-15, Approval of Flight Management Systems in Transport Category Airplanes; AC 20-129, Airworthiness Approval of Vertical Navigation (VNAV) Systems for use in the U.S. NAS and Alaska; AC 20-130A, Airworthiness Approval of Navigation or Flight Management Systems Integrating Multiple Navigation Sensors; or equivalent criteria as approved by Flight Standards **(b)** A demonstrated capability of depicting and following the lateral and vertical path. **(c)** An FMS with DME/DME updating and one or more of the following: Single Global Positioning System (GPS) - Single inertial reference unit (IRU). **(d)** A database containing the waypoints and speed/altitude constraints for the route and/or procedure to be flown that is automatically loaded into the FMS flight plan. (U.S. and U.S. territories only unless otherwise authorized.)
/G	Global Positioning System (GPS)/Global Navigation Satellite System (GNSS) equipped aircraft with en route and terminal capability
/R	Required Navigational Performance (Denotes capability to operate in RNP designated airspace and routes)
/W	Reduced Vertical Separation Minimums (RVSM)

Equipment Type Suffix (Continued)

What You Enter	Description
/Q	Required Navigation Performance (RNP) and Reduced Vertical Separation Minimums (RVSM) (Indicate approval for application of RNP and RVSM separation standards.) It should be noted that /Q is for automation purposes only and will not be filed by system users. FAA processors will convert the combination of /R+/W to =/Q.

Every Option

This section applies to all **Request** commands except **Request LIFP**.

The **every** (or time interval) option allows you to change the time interval into which flights are grouped and counted in the various reports. You can specify a time interval different from the default for each report type by entering EVERY followed by the number of minutes you would like to set as the time interval. For example, to specify 30-minute time intervals in a flight counts report on Los Angeles International Airport, enter this command: **REQ LAX EVERY 30**

For the following commands: **Request Count, Request List, Request Listo,** and **Request Area**, the default interval is 15 minutes. You can set the time interval to any value in increments of one minute. For **Request ARRD** the default time interval is 60 minutes. However you are restricted to the following interval options: 5, 10, 15, 20, 30, 45, or 60.

Setlen Option

The setlen option affects reports generated by **Request LIFP, Request List,** and **Request Listo**. Flight counts, arrival delay prediction reports, and the counts portion of the time verification reports override the setlen option and are not affected by what you enter.

This option allows you to set the length (in characters) of each line in the report being generated and for all subsequent reports. This determines the point at which each line wraps to the next line (default is 80 characters). Use this option by entering **SETLEN** anywhere after **REQ** on the command line, followed by a space and the desired line length in characters. For example, if you wanted a LIFP report on United Airlines flight 100 set in a line length of 120 characters, you would enter the following command: **REQ LIFP UAL100 SETLEN 120**

> **Note:** Once you use this option, it will stay in effect for subsequent reports until you reissue it or quit.

OAG Option

The oag option applies only to **Request ARRD, Request Count, Request List, and Request Listo**.

This option allows you to specify OAG data (from the Schedule Database) as the source of data regardless of the time of the request. (Normally, data comes from the Schedule Database only if the time period for your request is beyond the scope of the Flight Database that is, if it is more than 15 hours in the future.) To specify the OAG as the source, type **OAG** immediately after the word **REQ**. For example:

REQ OAG ARRD DFW

Hubsite Option

The **hubsite** option applies to all **Request** commands.

This option allows you to specify the hubsite in Cambridge, Massachusetts, as the source of all data for your report. (Because the Schedule Database is at the hubsite, there is no need to use both the oag and hubsite options in the same request.) If you use the hubsite option, data for up to 15 hours in the future comes from the Flight Database at the hubsite. (Normally, this data comes from the Flight Database that resides on the file-server node at your site.) Data for more than 15 hours in the future comes from the Schedule Database at the hubsite regardless of whether you use this option. To specify the hubsite as the source, type **HUBSITE** or **HUB** immediately after the word **REQ**. For example:

REQ HUBSITE ARRD DFW

Section II: Configuring the WSD/CCSD

The configuration settings affect both the appearance and behavior of your CCSD.
Following are our recommendations:

- Display Resolution. Your display resolution should be 1280 x 1024.

- Browser Versions. The browsers that are officially supported are:

  - Netscape 7.0 and higher

  - Internet Explorer 5.0 and higher

  - Mozilla 1.0.1 or higher

  Note: Due to a bug in version 1.4 of the Mozilla browser, this version of
  the browser can sometimes crash when filters are modified or toggled off/
  on, on the Reroute Monitor. If you experience this problem, you should
  upgrade your Mozilla browser to a more recent version (at least 1.4.4)

Netscape Settings

The following screen shots show the important settings when using Netscape. In some
cases, the settings shown don't matter to WSD/CCSD. The comments indicate the
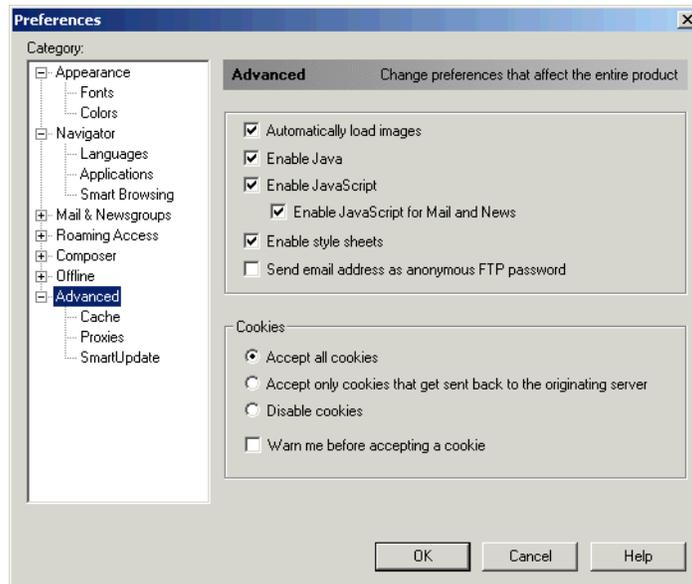important settings.

To change settings in Netscape,

1. Click **Edit** > **Preferences**.

2. In the left column, click **Fonts**. Verify that all your settings match the figure below.
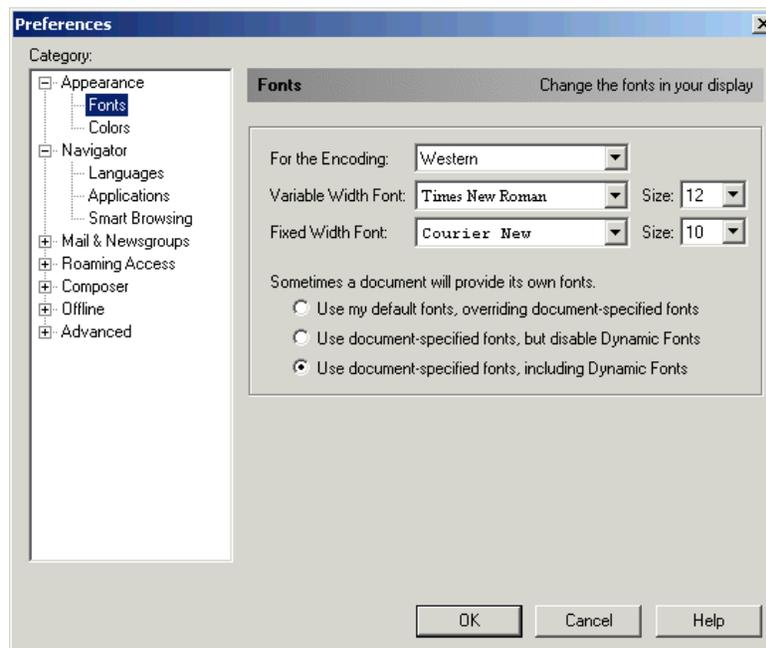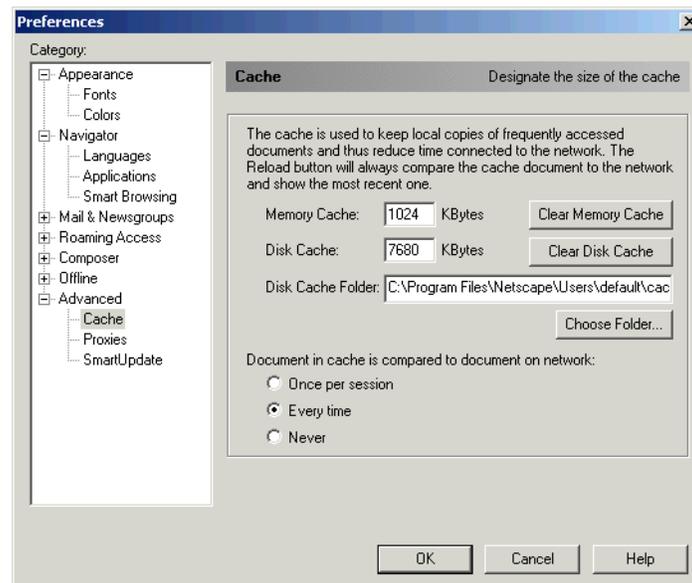
3. Click **Advanced**. Check that you have **Enable JavaScript** checked. If not, click to display a check, as in the example below.

   Note: You do not have to have Java or cookies enabled for CCSD.

4. Click **Cache**. Check that you have selected the option **Every Time**, as shown in the figure below.
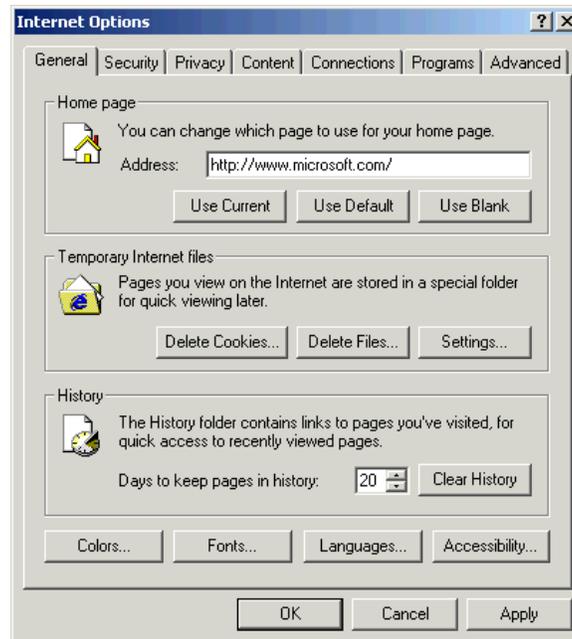

5. Click **OK**.

Internet Explorer Settings

The following sample windows show the important settings when using Internet Explorer. In some cases, the settings shown don't matter to the appearance of the CCSD. The comments indicate the important settings.

To change settings on Internet Explorer,

1. Click **Tools** > **Internet Options**.

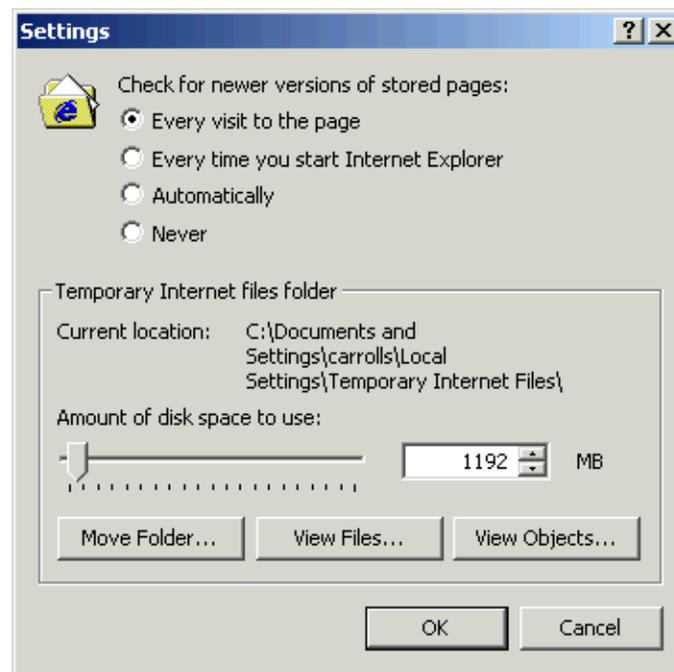2. Click **Fonts** on the **General** tab panel, as shown below

   .

3. Verify that all your settings match those of the figure below.

4. Click **OK**.

5. On the **General** tab panel (shown on preceding page) click **Settings**. Check that you have selected the option **Every Visit to the Page**, as shown below.

6. Click **OK** to save your settings.

   If you are using the default settings for Security, you will have no problems using CCSD. However, if you customize the Security settings by using the **Security** tab panel of the **Internet Options** function, you must have **Active Scripting** enabled.

7. Click **OK** to close the Internet Options dialog box

   Note: You do not have to have Java applets or cookies enabled for WSD/CCSD.
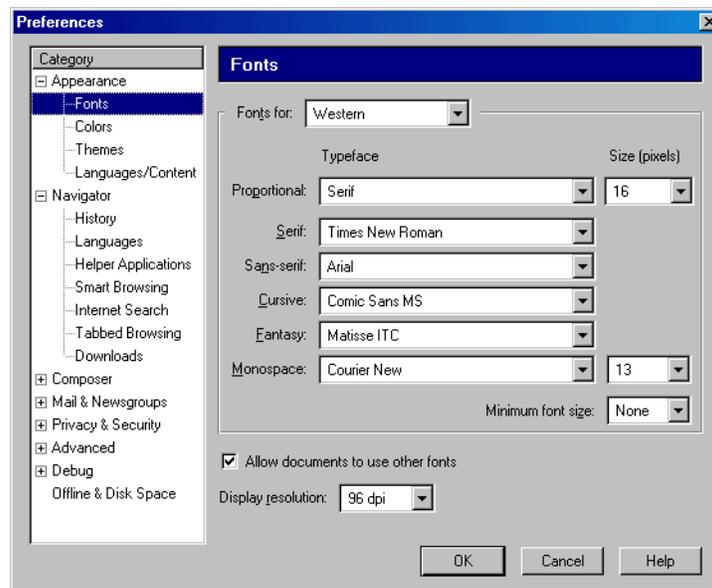
Mozilla Settings

To change settings in Mozilla,

1. Click **Edit > Preferences**.

2. In the left column click the plus sign (+) in front of **Appearance** to open the Appearance options.
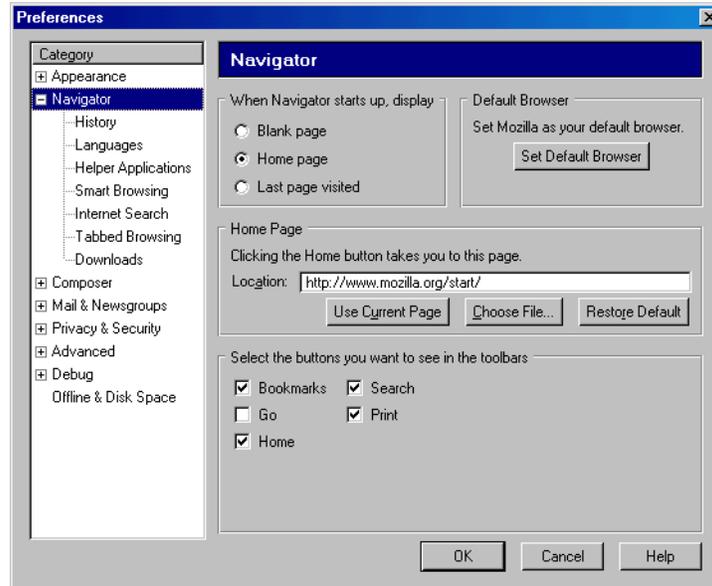
3. Click **Fonts** under the Appearance options. Verify that all of your settings match the following figure.

4. In the left column click the plus sign (+) in front of **Advanced** to open the Advance options.

5. Click **Cache** under the Advanced options. Check that you have selected the option to Restart Mozilla for changes to take effect **Every Time I View the Page**, as shown in the sample below.
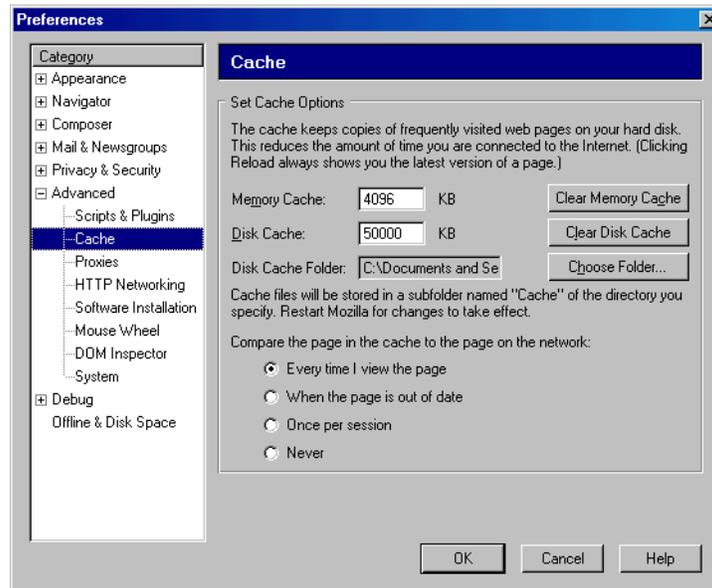
6. Click **OK** to save your settings.

    Note: Due to a bug in version 1.4 of the Mozilla browser, this version of the browser can sometimes crash when filters are modified or toggled off/ on, on the Reroute Monitor. If you experience this problem, you should upgrade your Mozilla browser to a more recent version (at least 1.4.4)

Glossary

Many of the terms included in this glossary have more than one meaning, and the definition given may not always be the most common one. These definitions refer to how the terms are used in relation to the TSD.

A

Stands for arrival.

AAR

Stands for Airport Arrival Rate, the number of arriving aircraft an airport can accommodate   during a certain period of time.

accelerator

A shortcut method that uses a key combination shown on the X window control menu to select options.

AC_CAT

Stands for aircraft categories (jet, propeller, turbo prop).

ACENTR

Stands for arrival center.

ACID

Unique alphanumeric aircraft identifier. Also known as call sign.

AC_RMK

Stands for standard keywords representing flights remarks data.

active

Refers to flights in the air.

ACTV

Activates a flight or airline in the ETMS airline database, thus removing a restriction that was previously set with the INHB command.

adaptation file

An external file you can create in order to tailor the initial TSD appearance to your own needs by including TSD command instructions in the file.

Ad Hoc

Reroutes class letting you create reroutes from scratch, from the Coded Departure Routes (CDR) database, or from a combination of both.

adjust colors palette

A row of six colored blocks, each of which may be moved up or down in order to alter the intensity of the color within the TSD display.

ADL

Stands for Aggregate Demand List. When Volpe National Transportation Systems Center receives updated flight schedules and other NAS information from participating DCDM AOCs, Volpe send the information back to the users in the form of an Aggregate Demand List.

ADR

Stands for Airport Departure Rate, the number of departing aircraft an airport can accommodate during a certain period of time.

AFIX

Stands for arrival fixes.

AFP

Stands for Airspace Flow Program. Controls departure times of flights arriving at a Flow Constrained Area (FCA)

AGT

Stands for actual ground time, the difference between the ARTD and the PGTD.

AGTA / AGTD

Stands for actual gate time of arrival / actual gate time of departure. Renamed to ARTA and ARTD.

aircraft type

An FAA abbreviation for a particular make of aircraft; appears as one of the fields in a flight data block and as one of the request command options.

AIRL

Stands for airline.

AIRP

Stands for airport.

airplane icon

The representation of an aircraft by the illustration of a small airplane on the TSD, either when you have zoomed in significantly far, or when you have distinguished a flight or group of flights from the others in some way. See also automatic icon, dot icon, flight icon heavy icon, and prop icon.

Air Route Traffic Control Center

See ARTCC.

Air Traffic Control System Command Center

See ATCSCC.

airway

Refers to a listing of airways traversed; also a pre-defined route over which flights may travel. See also jet airways and victor airways.

Alert

Indicates area of concern to traffic management. It occurs when the TSD software projects that the amount of air traffic will exceed a pre-defined threshold for a given element.

alert area

A type of Special Use Airspace in which pilot training or other non-hazardous flight activities occur.

alerted elements

Elements over which the amount of air traffic is projected to exceed a pre-defined threshold.

alerted flights

See examined flights.

Altitude (ALT)

Altitude listing on the TSD designate where the strongest winds are measured, in hundreds of feet. Thus, 338 represents an altitude of 33,800 feet.

ARINC

Stands for Aeronautical Radio Inc.

ARRD

Stands for Arrival Delay prediction.

arrival fix

The point at which responsibility for control of arriving flights passes from an Air Route Traffic Control Center to a Terminal Control Area.

arrivals/departures option

Allows the user to limit information in reports to arrivals only or departures only.

ARTA / ARTD

Stands for Actual Runway Time of Arrival (formerly AGTA) and Actual Runway Time of Departure (formerly AGTD).

ARTCC

Stands for Air Route Traffic Control Center, a facility devoted to air traffic control of en route aircraft operating on IFR flight plans. There are 20 ARTCCs within the CONUS.

ASD

Stands for Aircraft Situation Display, the former ETMS function that allowed you to communicate with the ETMS databases. Replaced by the TSD, the Traffic Situation Display.

ASECTR

Stands for arrival sector.

ASLOT

Arrival slot currently assigned to a flight. Includes the arrival airport and slot time in six-digit format.

AT

Refers to Atlantic Ocean, one of three geographic regions around which the display can be oriented.

ATCSCC

Stands for Air Traffic Control System Command Center, the national traffic management facility located at FAA headquarters in Washington, D.C. It is known informally as Central Flow. The top of the traffic management hierarchy, it manages air traffic problems on a national level and coordinates and approves actions taken by other traffic management facilities.

ATMS

Stands for Advanced Traffic Management System, a research and development program.

audible alarm file

Specifies elements that, when alerted, cause the TSD to sound an audible alarm or flash an alert signal. This file may also contain information defining how the alarm sounds or appears.

automatic icon

When the automatic icon (A) is specified for a flight set under the Select Flights dialog box, a flight is represented by one of three icons, whichever is appropriate: heavy icon for heavy aircraft, prop icon for prop aircraft, or airplane icon for all other aircraft.

bar chart

A graphical method of comparing an element's demands with its traffic thresholds. This comparison is displayed for each 15-minute time interval in the current time bar. In the case of airports, two bars appear for each time interval: one for arrivals and one for departures.

Beacon Code

A four-digit transponder code assigned to an aircraft by a NAS center. It is forwarded to the ETMS in a Beacon code (BZ) message subsequent to a flight plan and usually prior to a departure message (DZ). It is also transmitted to the ETMS prior to a center hand-off message (UZ).

BETA / BETD

Stands for Beginning Estimated Time of Arrival (wheel time) and Beginning Estimated Time of Departure (wheel time).

BLKT

Refers to Blanket, which is a type of control applied to all flights that are part of a specific ground delay program.

boundaries

Within the TSD, refers to geographical boundaries. These depict national boundaries as well as state borders within the United States.

BZ

See Beacon Code.

C

Refers to Runway Centerline Light Setting. Its values range from 0 (off) to 5 (maximum intensity), ASCII blank (no centerlines are configured for the runway), or F (sensor failure).

CA_DIF

Refers to the difference between ARTA and CTA, with a designator showing the status of the comparison.

call sign

See ACID.

CALT

Stands for Current Altitude.

capacity

The demand threshold at an airport, sector, or fix. When exceeded by a projected demand, causes an alert status. See also demand data, threshold.

CAPL

Stands for capacities list and refers to the TSD command that shows you the current capacity settings for any airport, fix, or sector.

CAPS

Stands for capacities set and refers to the TSD command that allows you to set the arrival or departure limit of any airport, fix, or sector for periods of time that you specify.

CCFP

Stands for Collaborative Convective Forecast Product.

CD_DIF

Refers to the difference between ARTD and CTD, with a designator showing the status of the comparison.

CDR

Stands for Coded Departure Routes.

CDM

Stands for Collaborative Decision Making, a joint government/industry initiative with the goal of improving air traffic management through increased information sharing, common situational awareness, and equitable resource allocation.

CDT

See controlled departure time.

center

Refers to departure center for arrivals; arrival center for departures.

centrl

Refers to a listing of centers traversed.

CGTA / CGTD

Stands for Controlled Gate Time of Arrival and Controlled Gate Time of Departure. Renamed to CTA and CTD.

class

Refers to aircraft classes (heavy, large, and small).

close

A menu control option that exits the TSD window. This function shuts down any program running in this window. It is not recommended that you close the TSD this way. When you want to exit the TSD, you should use the TSD's Quit command for a more orderly shutdown.

CNX

A report listing all flights cancelled in EDCT programs for a selected airport of FCA.

color palette

Refers to a checkerboard-like display of 30 colors from which you may choose to depict a variety of TSD icons including those for flights, lightning, and jet stream.

color set name

A name that you specify when saving a color set.

columns option

Allows user to request columns of information other than the default columns in the flight list report. With this option the user can also specify the order of display.

command history

Refers to a function that lets you display a list of previously entered commands. When the list of commands is selected, you can click on one of them to highlight it and place it in the Input Request field.

command line

A command that lets you issue TSD commands, display previously issued commands, and display a list of reports that have been received during the current TSD session.

command line interface

Refers to pressing the semicolon (;) key or selecting Command Line from the Tools menu to display the command line dialog box and entering a command in it to generate TSD functions.

COMP

Stands for compression, a process for filling open slots with available aircraft or for moving aircraft to later slots they can use, when aircraft are unable to use an earlier slot.

connection status indicator

The small red or green box located to the right of the Send button that indicates the status of the connection between Autosend and the communications software.

controlled airport

Airport currently controlled by ground delay programs.

controlled arrival time

The time of arrival for a flight currently controlled at an airport by ground delay programs.

controlled departure time

The time of departure for a flight currently controlled at an airport by ground delay programs.

controlled flight

Flight currently controlled by ground delay programs.

CONUS

Stands for both CONtinental United States and CONtiguous United States. Refers to the TSD graphic representation of the U.S. borders with the state outlines shown.

CT messages

Stands for control time messages issued by the TSD to implement the control time for each flight.

CTA / CTD

Stands for Controlled Time of Arrival. (formerly CGTA) and Controlled Time of Departure (formerly CGTD).

CTL-ELEM

Stands for Controlled Element.

customize

A dialog box that allows you to change the colors and font sizes of the TSD.

CX

Stands for cancel flag identifier.

CXSD

Stands for cancel flight from schedule database and refers to the TSD command that allows you to cancel the current day's flight plan for a flight number you specify. A flight canceled with the CXSD command will not appear in alert or request server reports.

D

Stands for Departure.

DAS

Stands for Delay Assignment, The default delay assignment mode, formerly known as FA Delay.

database commands

Let you display and revise airport, fix, and sector capacity settings; display and revise airport General Aviation estimates; and maintain the airline schedule database.

data block

A collection of flight information for each aircraft that can be displayed on the TSD. It includes the aircraft call sign, altitude, aircraft type, number of minutes to arrival, and the groundspeed.

data source option

A combination of actual and scheduled flight times used to calculate report data.

DCENTR

Stands for departure center.

default

A command that restores the display to the customized configuration that appeared when the TSD was started, or to another specified adaptation.

Delay Advisor

A tool that provides access to the Ground Time Predictor (GTP), a system that predicts flight departures based on historical data.

demand data

Figures representing the amounts of air traffic for airports, sectors, or fixes. They can be illustrated on the TSD in the form of either charts or reports. Demands are defined as the numbers of arrivals and departures at an airport, the number of flights in a sector at the same time, or the number of flights crossing a fix.

Dep

Departure airport.

departure fix

The point at which responsibility for control of departing flights passes from a Terminal Control Area to an Air Route Traffic Control Center.

DEST

Destination airport.

DFIX

See departure fix.

display–only fixes

Fixes whose FAA designators can be displayed on the TSD but will not be recognized by the TSD when specified in Move, Zoom, Range Rings, or other TSD commands. Any named fix that is not a navaid, airport, arrival fix, or departure fix is probably a display-only fix. Most display-only fix designators can be seen only when the airways along which they appear have been displayed.

distance

A button in the Create Manual Reroutes dialog box used to display the distance (in nautical miles) along a reroute.

DME

A command that displays the distance in nautical miles between specified points on the TSD and draws a line connecting the points.

DMGR

Stands for Delay Manager, a graphic software tool that allows the user to simulate and evaluate the effects of ground delay programs.

dot icon

The representation of an aircraft by a small dot on the TSD, appearing when you have unzoomed so far that aircraft icons would obliterate the screen. The dot icon also appears on the color palette.

DP

Stands for Departure Procedure.

DSECTR

Stands for departure sector.

DTRSN

Stands for DP (Departure Procedure) Transition Fixes.

DV_REC

Stands for Diversion Recovery.

DVT

Stands for Diversion Recovery.

Dynamic List

An FEA/FCA Report that includes only flights that are predicted to intersect the FEA/FCA during the selected time intervals. The Dynamic List is updated each time the FEA/FCA is updated.

Dynamic Projection

Dynamic Projection can be selected in the Projection command in the Maps menu to reduce distortion of the map overlay. This enables the projection center point to change automatically to be equal to the display center point and to change accordingly.

E

Refers to Runway Edge Light Setting. Its values range from 0 (off) to 5 (maximum intensity), or F (sensor failure).

EAFT

Stands for Estimated Arrival Fix Time.

ECR

Stands for EDCT Change Request, used to view and update an arriving flight's control time during a GDP.

EDCT commands

The Estimated Departure Clearance Time commands control the departure times of flights that will arrive at a specific airport and provide information about controlled flights and airports.

EDCT server

The Estimated Departure Clearance Time server keeps track of all ground delay programs and allows the user to review their status. This function can be accessed through the TSD.

EDFT

Stands for Estimated Departure Fix Time.

EDT

Stands for Estimated Departure Time, based on either actual departure time or proposed departure time.

EFTA

Stands for Estimated Fix Time of Arrival.

EGT

Stands for Estimated Ground Time, predicted by Ground Time Predictor (GTP).

element

A named NAS facility or airspace component that can be displayed on the TSD. Examples are sectors, airports, fixes, and airways.

element name

The FAA name used to identify a NAS element on the TSD. For instance, BWI is the element name of the Baltimore Washington National Airport.

element type

Identifies a class of NAS elements displayed on the TSD (for example, sector, fix, and airport).

EMA

Stands for Equity Metric for Airlines, a metric that indicates how equitable a proposed initiative is for the airlines.

EMail

Electronic Mail (EMail) allows you to send advisories or general messages to addresses on the National Airspace Data Interchange (NADIN) Network and Aeronautical Radio Inc. (ARINC) Network or to other workstations.

EMF

Stands for Equity Metric for Flights, a metric that indicates how equitable a proposed initiative is for all the flights.

ENTRY

Refers to sector entry times.

EQUIP

Refers to equipment type, represented by prefix or suffix (H/R).

ERTA / ERTD

Stands for the Earliest Runway Time of Arrival and Earliest Runway Time of Departure. This is the earliest CTA or CTD that the airline would accept for the flight.

ETA / ETD

Stands for Estimated Time of Arrival and Estimated Time of Departure, based on a flight's actual or estimated time of arrival or departure.

ETE

Stands for Estimated Time Enroute.

ETMS

Stands for Enhanced Traffic Management System and is an automated data processing system which supports the FAA traffic management functions. Based on prototype software developed for the Advanced Traffic Management System (ATMS).

E_TYPE

Refers to complete aircraft equipment type. Includes both aircraft type (TYPE) and equipment type data.

EX

Exempt flag. Indicates whether the flight was considered exempt when the last controls were computed by FSM. Values are Y or N.

examined flights

Flights predicted to arrive at, depart from, or traverse any element being examined during the time range currently selected on the alerts time bar.

EXIT

Refers to sector exit times.

external file

A file that you create from outside the TSD.

FAA

Stands for Federal Aviation Administration.

FAA designator

Abbreviation or other identifier assigned by the FAA to an individual location or item.

FA Delay

See DAS (Delay Assignment)

FADT

Stands for Fuel Advisory Delay Table, which specifies delays that apply to pop-up flights arriving at a controlled airport during a controlled interval.

fake data

A TSD flight data representation based on a stored file of static flight positions.

FCA

Stands for Flow Constrained Area, a graphic overlay showing an area where flight rerouting may be necessary.

FDB

Stands for Flight Database.

FEA

Stands for Flow Evaluation Area, a graphic overlay showing an area where flight rerouting may be necessary.

file server node

The node on which TSD programs and data files are stored.

filter options

Allow users to select for display and inclusion in reports flights that meet specified criteria.

fix

A referable position on the surface of the earth. May be identified by latitude and longitude, an adapted name, or a fix-radial-distance.

FIXL

Stands for Fix Loading.

fix loading report

Counts flights traversing a specified arrival fix or all arrival fixes for a specified airport.

fix–radial–distance

A fix defined by reference to a navaid. The fix location is determined by following the given heading (radial) from the given navaid (fix) for the given distance.

flagpole

The line that connects a data block with the flight icon it describes.

flight counts report

Displays the number of flights departing from, arriving at, or traversing an airport, fix, or sector.

flight data update

The time at which flight icons disappear from the TSD display and reappear in their newly reported positions.

flight icon

Either of four graphic representations of flights. Airplane icons look like swept-wing airplanes and represent flights either when you have zoomed in beyond a certain point or

when you have specified the icon for a particular flight set. Dot icons are smaller and appear only when you have unzoomed to a certain point. Heavy icons look like wedges and represent heavy aircraft when the automatic icon has been specified for a flight set. Prop icons look like straight-wing airplanes and represent prop aircraft.

flight level

Means of describing the altitude at which planes fly, expressed in hundreds of feet. Thus, a flight level of 250 is equal to 25,000 feet.

flight list report

Includes all flights projected to traverse an alerted area for each 15-minute interval during the alert time period denoted by the time bar.

flight path

A graphic depiction of a flight's route on the TSD.

FPSD

Stands for Flight Plan Schedule Database and refers to the TSD command that allows you to add a flight plan record to the Official Airline Guide (OAG) database. The flight plan will remain in the database marked as an "added flight" until the next OAG update.

FSM

Stands for Flight Schedule Monitor.

FTM

Stands for Flight Table Manager and is a program that maintains the database of flight information used for the TSD display.

full application modal

Means that users can interact with any window except those that are part of the same application as the modal window.

FZ messages

NAS flight plan messages, which are received by the ETMS and include the proposed departure time of each flight.

GA

Stands for General Aviation and refers to the category of flights that is unscheduled and non-commercial. For example, both civilian and military flights are General Aviation flights.

GAAP

Stands for General Aviation Airport Program, a delay assignment mode used during a GDP when current demand does not meet capacity but it believed that unknown traffic will meet or near capacity.

GAEL

Stands for General Aviation Estimates List and refers to the TSD command that allows you to view the estimated number of General Aviation (GA) flights that will arrive and depart within each 15-minute interval from an airport you specify.

GAES

Stands for General Aviation Estimates Set and refers to the TSD command that allows you to change the estimated number of General Aviation (GA) flights that will arrive and depart during each 15-minute interval from an airport you specify for periods of time that you specify.

GCD

Stands for Great Circle Distance, the distance between the origin airport and arrival airport.

GDP

Stands for Ground Delay Program, a specific operation that assigns delay (control times) to the departure times of flights that will be arriving at a specific airport.

GDT

Stands for Ground Delay Tools, components that aid users in looking at various operational or air traffic scenarios.

general aviation

See GA.

ghost

An outline of an aircraft icon, representing a flight about which no position information has been received for over seven minutes.

graphic image format

See Snapshot.

ground speed

Flight speed measured relative to the ground, expressed in knots.

GS

Stands for Ground Stop, a traffic management action that halts departures for a given airport. Also refers to ground speed.

gstop option

Allows user who is generating reports of counts by origin airport or center to show counts of all flights that have not yet departed and those flights held past their original departure times.

GTM

Stands for ground time method, a method for making predictions of flights.

GTP

Stands for ground time predictor.

GTP ACID

Stands for ground time predictor aircraft identifier. Lets you display information about as many as 14 of the most recent departures for a specified flight from a specified airport.

GTP AIRP

Stands for ground time predictor airport. Lets you display a summary overview of ground times experienced by flights at specified airports over a 24-hour period.

heavy icon

The representation of a heavy aircraft by the illustration of a small wedge on the TSD. These icons only appear when the automatic icon (A) has been specified for a flight set on the Select Flights dialog box.

high sectors

Volumes of airspace defined for controlling high altitude flights. High sector altitude limits generally cover from 24,000 to 33,000, or 24,000 to 60,000 feet.

history

Displays a dotted line that traces the flight path from the time the tracing begins until either the flight lands or you turn the function off.

HP

Stands for Hewlett Packard, the source of the computer hardware used by the TSD.

Hubsite

Also referred to as Hub, it is the source of request data in Cambridge, Massachusetts. Used as a data source with request commands.

Icon

See flight icon.

IDENT

Stands for flight identifier (same as ACID option).

IFR

Stands for Instrument Flight Rules, and indicates flights that are positively tracked and controlled by en route air traffic control.

IGTA / IGTD

Stand for Initial Gate Time of Arrival and Initial Gate Time of Departure, the arrival time (or departure time) when the flight was first created. It is used to positively identify a flight leg.

import

Lets you import reroute definitions from one TSD to another.

IN

Actual Time reported by the airlines for gate arrival.

information boxes

Similar to a query box but it gives you a brief message and asks for an acknowledgement.

INHB

Stands for inhibit flight in schedule database and refers to the TSD command that allows you to inhibit (or cancel temporarily) either a specific flight or all flights for a specific airline in the schedule database.

initialize

Returns TSD display to its default state.

input device

Hand-held input devices, the mouse and the trackball, provide an alternative to the keyboard as a means of communicating with the computer.

intersections

A button in the Create Manual Reroutes dialog box employed to label all points where jet routes used in the reroute intersect ARTCC boundaries and other jet routes.

item settings

Refers to a number of map overlays whose colors and font sizes can be changed.

jet airways

Pre-defined airways to be used by flights at altitudes of 18,000 feet and above. Also known as jet routes.

keyboard color palette

A checkerboard-like display of 30 different colors from which you may choose when issuing one of the colors commands.

lat/lon

Refers to latitude/longitude coordinates that may be entered in the Move or Zoom commands to center the point of the display.

leader line

The line that connects a data block with the flight icon it describes.

lead lines

Dotted lines leading away from the noses of the aircraft icons on the TSD. They indicate where the flights will be either in a certain period of time or at a certain distance from their current positions, assuming the flights continue traveling in the same direction and at the same speed.

legend

A command that allows you to display text at the bottom of a TSD window.

LGTA / LGTD

Stands for Airline Gate Time of Arrival and Airline Gate Time of Departure.

LIFP report

Lists flight plans of selected aircraft.

locid

Stands for location identifier and refers to a prompt often used to request a place name. It can refer to an airport, navaid, fix, sector, ARTCC, or other FAA place designator.

low sectors

Volumes of airspace defined for controlling low altitude flights. Low sector altitude limits generally cover from ground level to 23,000 feet, unless over a TRACON, where the low sector limits cover from 18,000 to 23,000 feet.

LRTA / LRTD

Stands for Airline Runway Time of Arrival and Airline Runway Time of Departure.

main menu

The main menu displayed at the top to the TSD display.

MAP

Monitor Alert Parameter refers to the threshold that determines the alert status of sectors, airports, and fixes.

METAR

Stands for Aviation Routine Weather Report, a type of weather report produced through the Report command in the Weather menu.

military areas

A term used within the TSD program to mean Special Use Airspace (SUA); SUA does not refer only to Military Operations Areas.

military operations area

See MOA.

minutes to arrival

One of the fields in a data block. It indicates how many minutes are expected to pass from the time currently displayed in the time box until the flight is projected to land.

mnemonics

Underlined letters on a menu indicating that pressing one or more keys can display a pull-down menu from the keyboard or can select a menu option from the pull-down menu.

MOA

Stands for military operations area and is a type of Special Use Airspace reserved for military activities.

Monitor Alert

This function displays and enables analysis of the airports, sectors, and fixes on alert status.

Moving FEA/FCA

Shows how the FEA/FCA started and how it moves during the course of the time limit you specified. Contains shadows of the original FEA/FCA representing past and future locations of the FEA/FCA.

MP

Refers to Runway Visual Range from the middle point of the runway. Its values range from 00 to 60+, representing hundreds of feet.

NADIN

Stands for National Airspace Data Interchange.

NAS

Stands for National Airspace System.

Navaids

Stands for NAVigational AIDS, usually fixes at which visual devices, radio beacons, or other electronic devices have been placed to help pilots identify their flight positions.

nodename

A name of a computer, beginning with two slashes usually followed by a combination of letters and numbers. Typical node names include //fs01, //ws06, and //etms10.

no radar symbol

Appears in the upper left corner and in the ARTCC designation if the overlay is on and indicates that no TZ messages have been received from one or more ARTCCs for three successive updates.

NOWRAD

The NOWRAD command displays a color-coded graphic overlay of areas of precipitation. The display, updated every five minutes, shows up to six levels of precipitation, ranging from very light to very heavy. Two NOWRAD options are available. NOWRAD (8km) uses the same weather data as used by the TSD and is recommended for display. The NOWRAD (2km) high-density weather data provides better resolution of weather information, but takes longer to display. Only one option may be selected at a time.

NRP

Stands for National Route Program, a flight that files for a more direct route, but is considered to be a preferred route (as designated by the FAA).

OA_DIF

Refers to the difference between ARTA and ORTA, with a designator showing the status of the comparison.

OAG

Stands for Official Airline Guide and refers to the publisher of the standard airline schedule information. Used as a data source with request commands.

oceanic sectors

Volumes of airspace defined for controlling air traffic, beginning three miles offshore and extending further out over the oceans.

OCTA / OCTD

Stands for Original Control Time of Arrival and Original Control Time of Departure.

OD_DIF

Refers to the difference between ARTD and ORTD, with a designator showing the status of the comparison.

OETA / OETD

Stands for Original Estimated Time of Arrival (wheel time) and Original Estimated Time of Departure (wheel time).

OFF

Actual time reported by airlines for wheels up.

OGTA / OGTD

Stands for Original Gate Time of Arrival and Original Gate Time of Departure. Renamed to ORTA and ORTD.

ON

Actual time reported by airlines for arrival on the runway.

ORIG

FAA designator showing the airport of origin.

ORTA / ORTD

Stands for Original Runway Time of Arrival (formerly OGTA) and Original Runway Time of Departure (formerly OGTD).

OUT

Actual time reported by airlines for gate pushback.

overlay

A map illustration that can be displayed on the TSD. Because many of these maps can appear on the display at one time without obliterating the others, they are called overlays: you can increase the amount of information on the display by laying another map over the ones you have already displayed.

pacing airport

One of approximately 30 larger airports whose arrival and departure traffic sets the pace for all air traffic throughout the CONUS.

PA_DIF

Refers to the difference between ARTA and PGTA, with a designator showing the status of the comparison.

palette

See color palette.

pathname

A pathname identifies not only a file name, but also the name of the directory and node in which the file is stored. For example, the following pathname indicates that the file adaptation is stored in the static_data subdirectory, which is located in the graphic.

directory on node //ws10://ws10/graphic/static_data/adaptation.

PD_DIF

Refers to the difference between ARTD and PGTD, with a designator showing the status of the comparison.

peak demand

The greatest number of flights projected to be within a sector at any instant during a given time period. Also called peak load.

PGTA / PGTD

Stands for Proposed Gate Time of Arrival and Proposed Gate Time of Departure.

Playbook

Categories of plays, displayed on Create Reroute, Edit Reroute, and Copy Reroute dialog boxes.

Pop-up menu

Once an item is preselected or selected, you can click the right mouse button to access pop-up menus, which vary according to the item.

PPI

Stands for Primary Place of Interest, used in some Command Line requests.

preselect

Refers to placing the pointer on a map item, such as an airport or navaid, causing that item to become highlighted. If the label is not currently displayed, preselecting also displays the label of the highlighted item. When an item is preselected, clicking the left button selects it, which means that a dotted line is drawn around the item and its label.

preview

Found in the Customize Dialog Box. Allows you to view the changes you make to TSD map items before permanently applying these changes to the TSD. If you want to make adjustments, you can use the Undo button and restore the previous color.

pri

Stands for print in an EDCT Sub Print command.

primary place of interest (PPI)

Refers to the location(s) specified for the Request Count command.

prohibited area

Special Use Airspace in which no flight is allowed.

projection

This command allows the user to choose a specific geographic region to appear in an accurate perspective on the TSD.

prompt

Character, word, or phrase the computer displays to let you know that it is ready to receive your response or command.

prop icon

The representation of a prop aircraft by the illustration of a straight-wing on the TSD. These icons only appear when the automatic icon (A) has been specified for a flight set on the Select Flights dialog box.

proposed flights

Flights that have a filed flight plan but have not yet left the ground.

quick key command

A command that can be issued through one or two keystrokes and is usually not interactive.

QWERTY keyboard

Name given to a standard typewriter keyboard, whose top line of letter keys reads Q, W, E, R, T, Y, etc.

radar labels overlay

A summary of information provided to the ETMS by the Forecast Systems Laboratory (FSL) to show detailed information about precipitation areas.

radar tops

Displays the altitude of cloud tops within precipitation areas in hundreds of nautical feet. This information is updated every ten minutes.

radio button

A push button that the user clicks to select the item corresponding to that button. Only one button in a group of radio buttons can be selected at any time.

RAL

Stands for last reported altitude, as displayed in a data block.

range rings

A set of concentric circles, drawn at specified distances from a given location that facilitate the determination of how far flights are from location.

reconnect

A command that disconnects from all ETMS and other servers and connects with the servers. You can use this function to reestablish communication with ETMS services in case a connection is lost and the automatic reconnection is not successful.

relative time

Time made relative to the current time by entering a plus sign (+) followed by the number of hours after the current hour. Relative time may be used in commands.

replay

A command that lets you display past flight, weather, and alert data. You can specify the amount of time by which the replay clock increases at each update.

report manager

A command from the Tools menu that lets you find, view, and manage reports in the reports directory.

report name icon

A boxed name given to your report, appearing as an icon in the upper right hand corner of the display. It identifies the directory, the element, time/date, and version number.

reports

A function that lets you display a list of reports that have been received during the current TSD session.

request commands

Enable you to request reports on specific groups of flights. You define these groups by specifying the elements, report types, times, dates, airlines, flight times, and other criteria you want to include in the report.

request script file

A special data file containing specifications to be accessed through the request commands.

request server

ETMS process that takes flight list, flight counts, and ARRD report requests and formats them as specified through the request command.

resize

A method of changing the size of a window by using the Window Control size option or moving the pointer to any corner of the window and resizing the window.

restore

A menu control option that returns the window to its previous size.

restricted area

Special Use Airspace through which flight must be authorized.

RMGR

Stands for Route Manager.

RO

Refers to Runway Visual Range from the Rollout point of the runway. Its values range from 00 to 60, representing hundreds of feet.

route

Can refer either to an airway or to an individual aircraft's path of flight. If it refers to an individual aircraft's route of flight, it can mean either the written notation of the route or a graphic depiction of the flight path. See also airway, jet airway, victor airway, flight path.

route text

The written description of a route, usually as taken from field 10 of a NAS message.

RTE

Stands for flight route.

RVR

Refers to Runway Visual Range.

RVSM

Refers to Reduced Vertical Separation Minimums. RVSM allows controllers to separate properly equipped aircraft in the FL290 and FL410 airspace by as little as 1000 feet vertically, rather than the 2000 foot minimum that is currently required.

RWY

Refers to Runway identifier. Its numeric values are from 01 through 36. A sub-runway value might be appended to the RWY. The sub-runways are defined as L (left), R (right), or C (center).

SA_DIF

Refers to the difference between ARTA and SGTA, with a designator showing the status of the comparison.

SD_DIF

Refers to the difference between ARTD and SGTD, with a designator showing the status of the comparison.

save

A function on some TSD dialog boxes that allows you to save selected values to a specified filename.

schedule database

Database of airline schedule information based on information received from the Official Airline Guide (OAG). The schedule database is updated with new OAG data every two weeks.

SCS

Stands for Slot Credit Substitution, a situation that commonly occurs during GDPs where an operator has a flight f0 with a slot at time t0, and flight f0 cannot use its slot because it is delayed or cancelled. In these situations, SCS provides a mechanism for an operator to substitute other operator's flights to bridge the slot from an unusable time to a time that the operator can use to his/her advantage.

secondary request

Allows user to use the report name icon to quickly request additional reports with different specifications for the same location specified in the original report.

sector

A volume of air space corresponding to one air traffic control area of responsibility. There are many sectors within an ARTCC. Generally, one team of air traffic controllers is responsible for each sector.

semicolon commands

A class of interactive commands that usually require you to respond to a series of prompts and give detailed instructions. They are called semicolon commands because you must press the semicolon key in order to tell the TSD you want to issue one of these more detailed commands.

send secondary

A menu option that allows you to use information requested in an original report to generate subsequent flight list, flight count, or flight plan reports for the same location.

SGTA / SGTD

Stands for Scheduled Gate Time of Arrival / Scheduled Gate Time of Departure.

SH

Refers to the Slot Hold Flag.

SI messages

Stands for Substitution processing messages received from airlines.

site

This command displays the network address sites to which your TSD is currently connected. The sites identified by this command are the groups of nodes that your node uses as the source for various types of data.

site identifier

The local site identifier corresponds to a fileserver node at your physical site. (If you have only one fileserver, your site identifier is always the same.) The hubsite site identifier refers to a specific group of nodes at the hubsite in Cambridge, Massachusetts.

size

A menu control option that changes the pointer to a cross icon. You can place it on a window border and resize by moving the pointer in another direction and clicking and releasing the left mouse button.

snapshot

A command that lets you save the TSD screen to a graphic image format (GIF).

sort option

Allows user to order a list of flights in a report in alphabetical, numeric, or chronological order under ETA (arrival) and ETD (departure) for each 15-minute interval.

SPD

Refers to the ground speed filed in a flight plan.

special use airspace

See SUA.

SPI

Stands for Secondary Place of Interest, used in some command line requests.

Stak

The stak option sets up an initial condition involving a specified number of arrivals held over the airport.

STAR

Stands for Standard Terminal Arrival Route.

STAT

Refers to flights status.

streamlines

A display of the Jet Stream command that indicate the direction of high winds.

SUA

Stands for special use airspace and refers to volumes of airspace for which aircraft flight has been limited for one reason or another. They include alert areas, MOAs, prohibited areas, restricted areas, and warning areas.

Subs

Data from the EDCT Sub Show command, showing you the status of Substitution processing (SI) for all airports.

superhigh sectors

Defined volumes of airspace, which in general, have altitudes greater than 35,000 feet.

system modal

Users are unable to interact with any window in any application except the modal window.

TAF

Stands for International Aerodrome Forecast, a type of weather report produced through the Report command in the Weather menu.

TCA

Stands for terminal control area and refers to a volume of airspace above an airport in which all flights are subject to operating rules and pilot and equipment requirements.

TD

Refers to Runway Visual Range at the touchdown point. Values range from 00 to 60+, representing hundreds of feet.

TDB

Refers to Traffic Database.

Tear-off menus

A feature that enables you to treat menus as separate windows and move them.

terminals

Another term for airports.

threshold

The level of demand at an airport, sector, or fix which, when exceeded by a projected demand, will cause an alert to be indicated. See demand data.

TIME

Refers to two columns, ETD and ETA.

time bar

An illustration that appears at the bottom of the TSD display when live alerts are displayed. When an alerted element is examined, the time bar indicates which intervals are alerted.

time interval

The segments of time for which the monitor/alert projects and displays traffic demands. The default size of the time intervals is currently defined as 15 minutes.

time interval option

Allows user to specify a time interval format different from that of the default flight counts report.

time in sector

Graphically depicts the flights that cross the sector during a six-hour interval.

Time Limit

Governs the interval of time, set between one-quarter of an hour and six hours, for the display of alert icons.

timeline

Refers to a graphic display of the total number of flights projected to arrive at, depart from, or traverse the specified alerted element at 15-minute time intervals. The color of the button denotes the status of the alert for that time interval.

time period option

Allows user to change the default time period of five hours for reports.

time range

Appears in the Alert Timeline dialog box and the corresponding bar chart. (maximum is 9 hours)

time types

The time verification report includes four time types for arrivals and departures: scheduled, proposed, original (defined by ETMS traffic model processing without regard to ground delay controls or actual times), and controlled (assigned by ground control program).

time verification report

Shows discrepancies between actual arrival and departure times and those predicted by a specified time type.

title bar

Displays the name of the dialog box and can be used to drag the dialog box to a different location.

TMI

Stands for Traffic Management Initiative.

TMU

Stands for Traffic Management Unit. Each ARTCC TMU manages air traffic problems within the range of its center. Each TRACON TMU manages air traffic problems specific to the one or more airports under its control.

Tool Manager

The ETMS Tool Manager is the program that displays an icon for each main ETMS function. It allows the user to start an ETMS function by clicking on the appropriate icon.

top

A function that establishes the priority order in which flights that meet criteria for more than one flight set are displayed.

Top-down search

The act of finding a certain word or other combination of characters by searching from the beginning of the file to the end of the file until it finds the first occurrence of the character combination.

trace

See history.

TRACON

Stands for Terminal Radar Approach Control facilities. These facilities control arriving and departing flights at a terminal or set of terminals.

Traffic Management Unit

See TMU.

Traffic Model functions

Sometimes called Total Traffic Management Model (TTM), these functions perform detailed flight modeling and determine traffic demands and alerts based on NAS messages. The functions consist of the Parser, the FDB, and the TDB.

TRTA / TRTD

Stands for Gate time of arrival and Gate Time of Departure based on ETMS Total Traffic Model (TTM). Formerly called TGTA and TGTR.

TSD

Stands for Traffic Situation Display, the function of the Enhanced Traffic Management System that allows you to communicate with the ETMS databases through a graphic display representing flight positions and NAS elements such as ARTCCs, sectors, and fixes.

TSTM

Thunderstorm.

TT-FCA

For custom FEA/FCAs, displays the Time To Reach FCA data, which is estimated in minutes.

TYPE

Refers to type of control last applied to this flight. Types include GDP, GS, SUB, UPD, FA, COMP, BLKT; or refers to aircraft type (B747, DC10, etc.).

TZ messages

Messages transmitted from the ARTCCs, which update the position and speed of each airborne flight every five minutes. Based on the NAS track tables.

Undo

Found in the Customize Dialog Box. Allows you to remove or reverse any changes that you make to a map item. This button is available only after you have used the Preview button.

Universal Coordinated Time

See UTC.

unnamed point

A non-labeled point along an experimental route that when added to the route as a fix will be identified by its longitude/latitude coordinates.

UPD

Stands for Update in an EDCT Update command.

update

Usually refers to a flight data update, the time at which flight icons disappear from the TSD display and reappear in their newly reported positions.

USER

Refers to the User Category (air taxi, cargo, commercial, general aviation, military, and other.)

UTC

Stands for Universal Coordinated Time, the time zone used as the basis of worldwide standard time. Formerly called Greenwich Mean Time.

version

A command that displays a dialog box showing what version of the TSD you are currently running.

victor airways

Pre-defined airways to be used by flights at altitudes below 18,000 feet. Also known as Victor routes.

void time

A field in the Create Manual Reroutes dialog box used to designate a time (in four-digit UTC) at which you want the route definition to expire.

VTstats

In the Verify Time command this entry produces the summary statistics portion of the Verify Time report.

warning area

Special Use Airspace that has been defined as potentially hazardous international airspace.

weather symbol menu

Display of weather symbols that depict current weather conditions. Included in this menu are weather, precipitation, and storm symbols that can be used for drawing a weather map.

wind speed

Contour lines and numbers identify wind speed in knots. The outermost lines define the areas within which winds aloft have been measured at 70 knots or more. Within these areas contour lines define areas of even higher winds, placed at intervals of 20 knots.

WX

Refers to a report command that lets you display and print weather information; abbreviation for weather.

X window

Refers to the environment in which the TSD runs. All applications that run in this environment share common features.

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