

Reference Manual

For



Computer **R**efined **E**n Route **A**nd **T**erminal
Enhancement Program
(**C**reate**2000** or **C2K**)

Version 4.0

A Component of

SIGNAL

*(Simulation and Integration of
Ground, Network, and Air Links)*

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1 Overview

This document covers the features and functions that make up Create2000. This document does not cover how to build a Master or Scenario database for simulation or how to build a database for airspace modeling. That information can be found in the *Building a Database* document.

Create2000 is a component of the SIGNAL software system of air traffic simulations written by AMI-800 in support of the FAA Academy in Oklahoma City, Oklahoma.

2 Web Site

Information about Create2000 and the other components of the SIGNAL software system can be found on our web site @ WWW.SIGNAL.JCCBI.GOV.

3 Database Concept

There are two types of files that Create2000 is capable of loading and creating. They are a Master and a Scenario.

- | | |
|----------|---|
| Master | A master database is capable of holding all the data types that are found in the Data Description Dictionary. It holds the information that describes the world that the simulation will be performed on. It is able to standing alone and to be loaded into the simulation engine (Charter). |
| Scenario | A scenario consist of only Flight Plans, System Events, Student Areas of Control information, and Wind settings. It must have a master database to support and complete all the information necessary for the simulation engine (Charter) to be loaded. <i>The relationship to the master is intended to be one master to many scenarios.</i> When a scenario is loaded, all of the master only functions are disabled automatically. These items will be grayed out when every a scenario is loaded. |

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4 File Names (.c2k)

The Create2000 files should all use the file extension of **".c2k"**. Version 3 of CREATE called OpenCREATE used the extension **".CRT"**. These files cannot be loaded into Create2000. These files can however be updated using the Construct2000 program which can convert an OpenCREATE database into a Create2000 format.

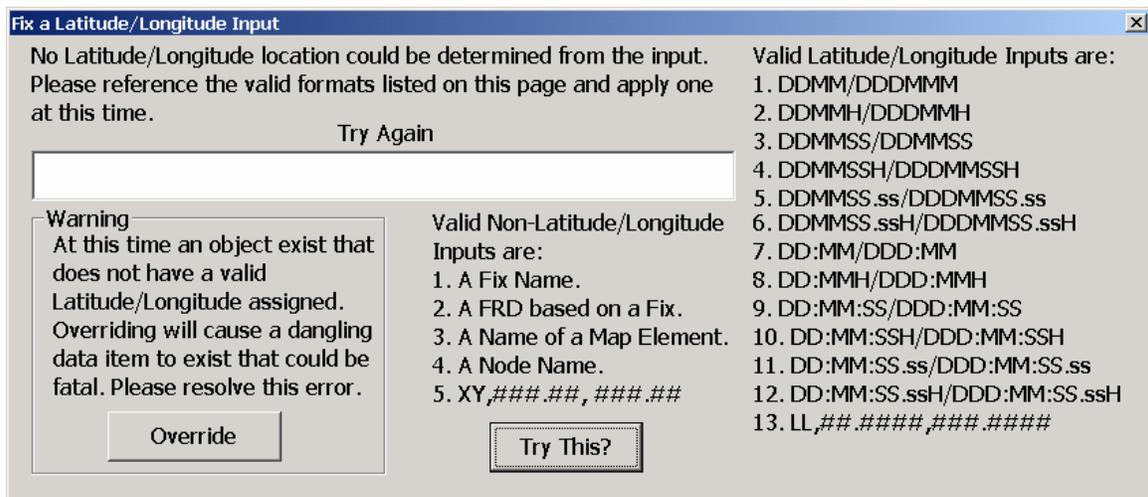
Masters All master filenames are the name of the master followed by **"-Master.c2k"**. **Example:** A master named "test" would have the file name of Test-Master.c2k.

Scenarios All scenario file names are the name of the master followed by a dash and then the name of the scenario database with **".c2k"** at the end. **Example:** A scenario named "exercise1" and references the "Test" master database would be named Test-Exercise1.c2k.

This naming convention must be followed. A scenario cannot be loaded that references a master file that does not exist.

5 Location

Any time a location field is available for input, the user can input any of the valid formats in that field as shown in the following picture.



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6 Menus

The menu buttons allow functions to be used. When a function is not permitted it is grayed out and does not work.

6.1 Main Menu & Toolbars

The main menu & toolbars are displayed across the top of the program window.



The Main menu has four sub-menu buttons; File, Edit, View & Help. There are two toolbars, Toolbar & Workbar. These are described in the following paragraphs.

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6.1.1 File

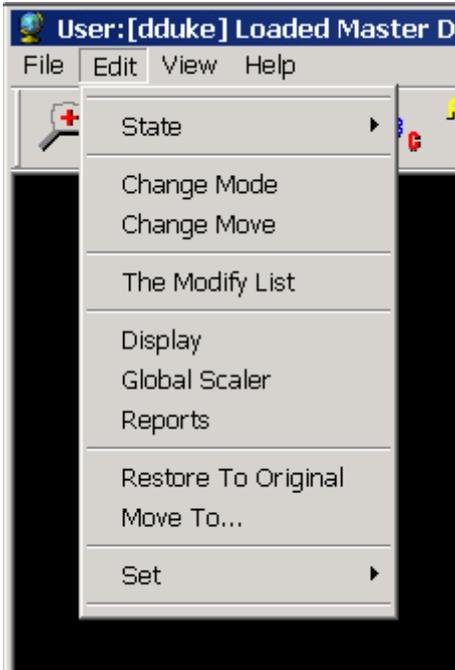


The File menu is used mainly in support of file operations. Described below is a brief description of each buttons functions.

New	This button creates an empty Scenario database only. User is required to select a Master file and input the name for the New Scenario.
Open...	This button allows an existing Master or Scenario Database to be loaded.
Close	This closes the database that is loaded. If changes have been made the user will be asked if they want to save the changes.
Save	This saves the loaded database using the original name of the database.
Save As...	This saves the loaded database using a new name.
Configure	This allows the user to configure Create2000. Important data directory locations are set here.
Print Screen	This function is used to print the map to the printer.
Print Setup...	This allows the user to determine which printer is to be used and the configuration of that printer.
Exit	This exits the program.

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6.1.2 Edit



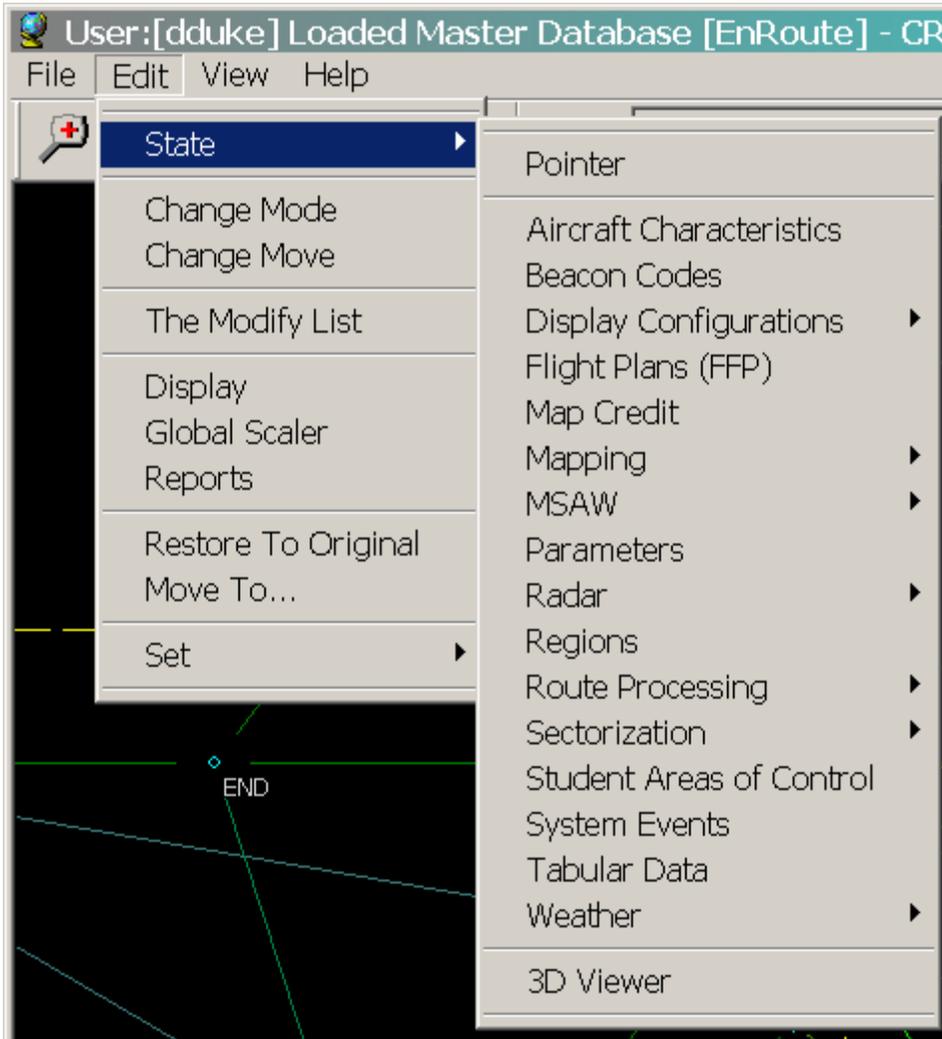
The main menu is displayed across the top of the program window. The Edit submenu item allows access to the different States described later, the Set submenu and many different functions used in configuring and changing the environment. Each item will be discussed in detail in later sections.

Note: All the available functions under the Edit submenu are duplicated on the Context menu or Popup menu. This menu is available by clicking the right mouse button on the mapping area.

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6.1.2.1 State

The State menu is used to display the next level of submenu.



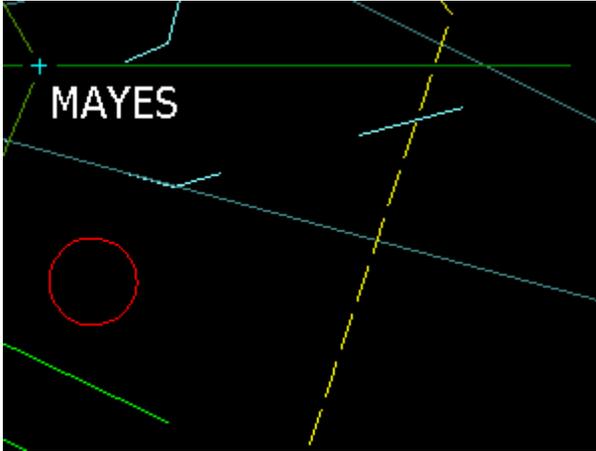
The State submenu is used to select which configuration the software is in and the rules that are in effect. This is the most sophisticated cascading menu used by the software. Each State will be discussed in future paragraphs.

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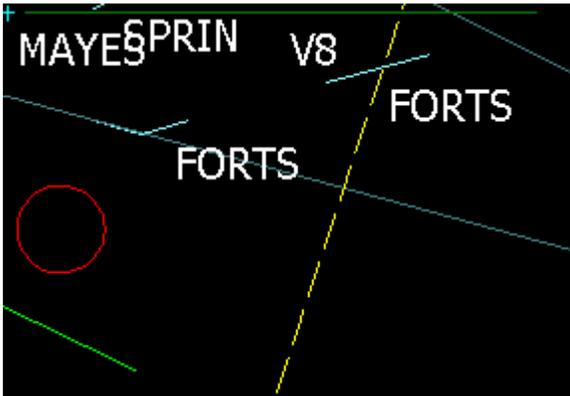
6.1.2.1.1 Pointer

The Pointer State is the default position. When in the Pointer State the user has the ability to click on a map item on the screen and see the label displayed for that item.

Before



After clicking on a map item with the left mouse button.

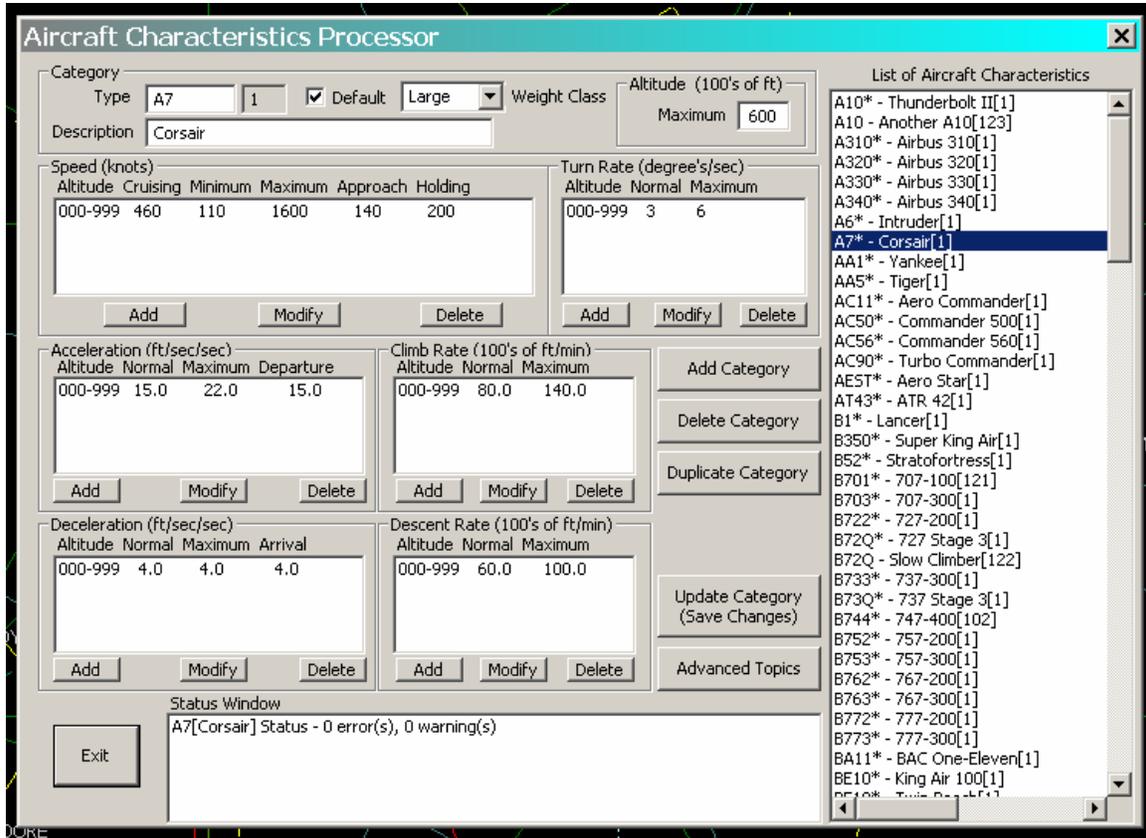


This function is very helpful when trying to determine the name of a map item and you do not want to turn "On" all the map labels. Turning on the labels sometimes leads to information overload for the user with too much data being displayed at one thing.

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6.1.2.1.2 Aircraft Characteristics

This State allows the user to work with the aircraft characteristics in the database. Each aircraft characteristics is referred to as a Category. This is a Master only function, so a Scenario is not able to modify/add information to this area.



There is no limit on the number of Categories that a database can have.

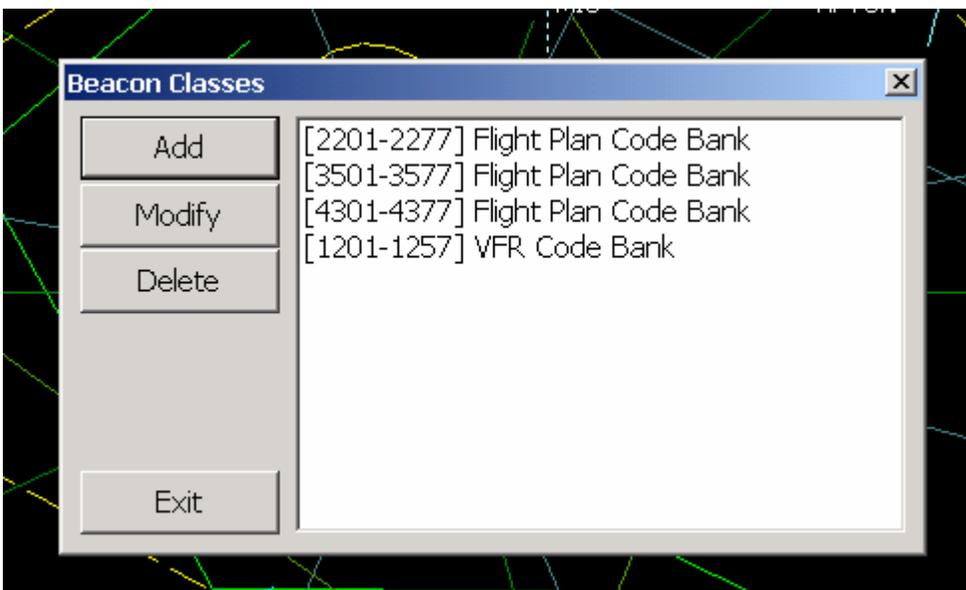
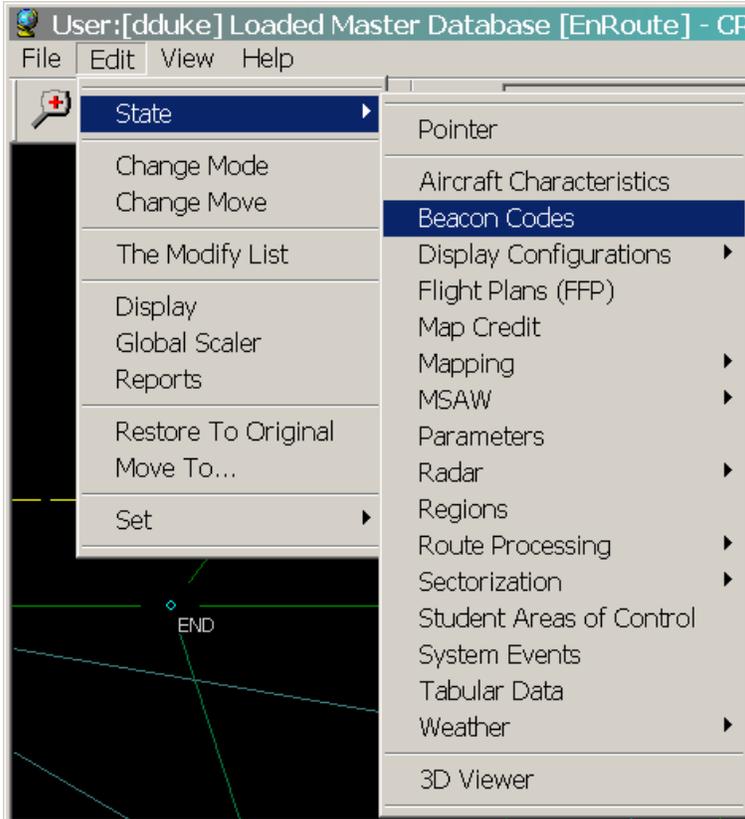
Active Error Checking is performed on the Categories and the results are displayed in the status window.

If a Category is found to have an error, simply double click on the error message and that flight plan will be loaded and the cursor moved to the field in question. Data areas that display the data in a list box do not perform this function.

When no Category is selected, the Errors are displayed for all Categories. When a Category is selected, only Errors for that Category are displayed.

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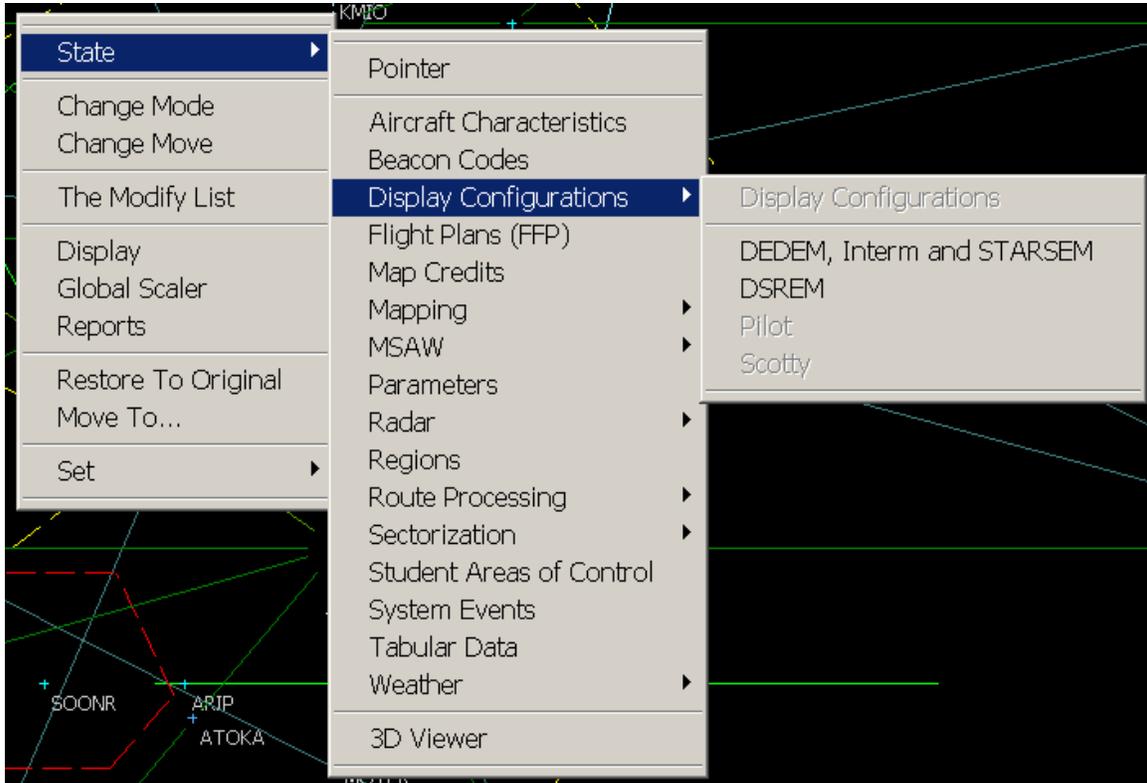
6.1.2.1.3 Beacon Classes



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6.1.2.1.4 Display Configuration

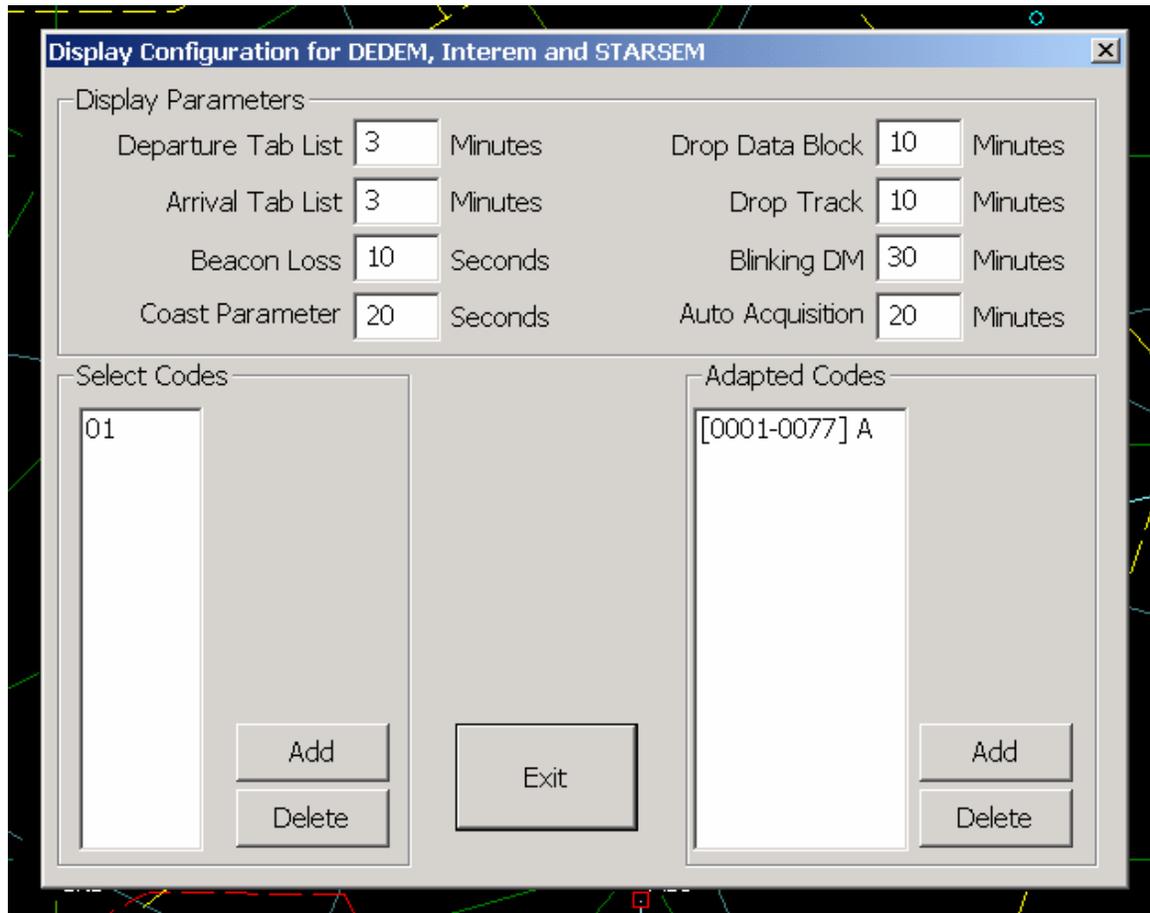
The Display Configuration area is used to configure the different medium fidelity display supported by SIGNAL. This allows a unique configuration to exist for each scenario has needed to support training.



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6.1.2.1.4.1 DEDEM

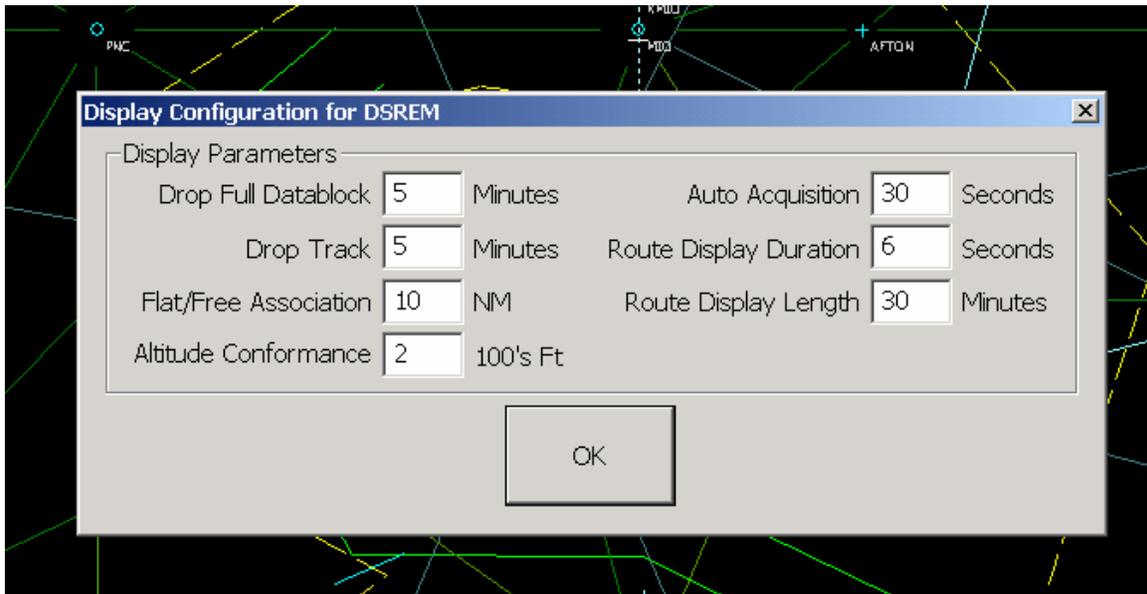
The DEDEM Display Configuration allows the setting of the following display settings as well as the selected codes and adapted codes for the scenario.



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6.1.2.1.4.2 DSREM

The DSREM Display Configuration allows the setting of the DSREM medium fidelity display setting. These setting can be scenario unique.



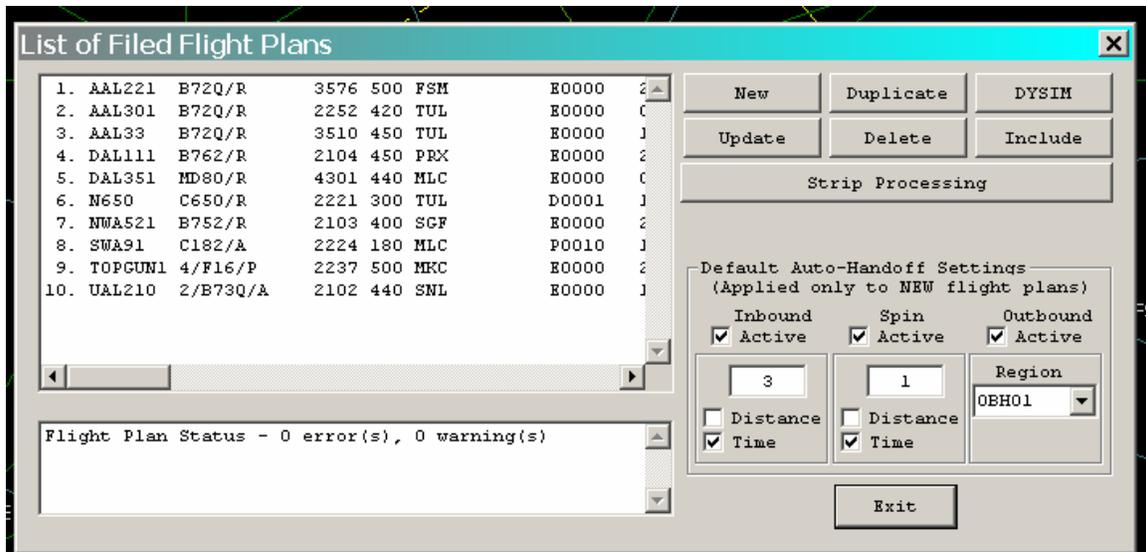
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6.1.2.1.5 Flight Plans

Flight plans can be input into Master or Scenario databases. Normally the flight plans will reside in a Scenario. Flight Plan contain the data concerning all the aircraft that will be in the Scenario and the events that are associated with these aircraft.

6.1.2.1.5.1 Flight Plan List

This window is used to display a list of all the existing flight plans.



Active Error Checking is performed on the Flight Plan and the results are displayed in the status window of the List of Filed Flight Plans. If a flight Plan is found to have an error, simply double click on the error message and that flight plan will be loaded and the cursor moved to the field in question.

The Auto-Handoff information is used to set a Handoff event packet on a flight. This calculation can be done based on Distance or Time. If Distance is selected then the edit box is implied to be in terms of miles. If Time is selected then the edit box is implied to be in terms of minutes. This is where the default values for this data is set. This data is part of the database and stored whenever a database is saved.

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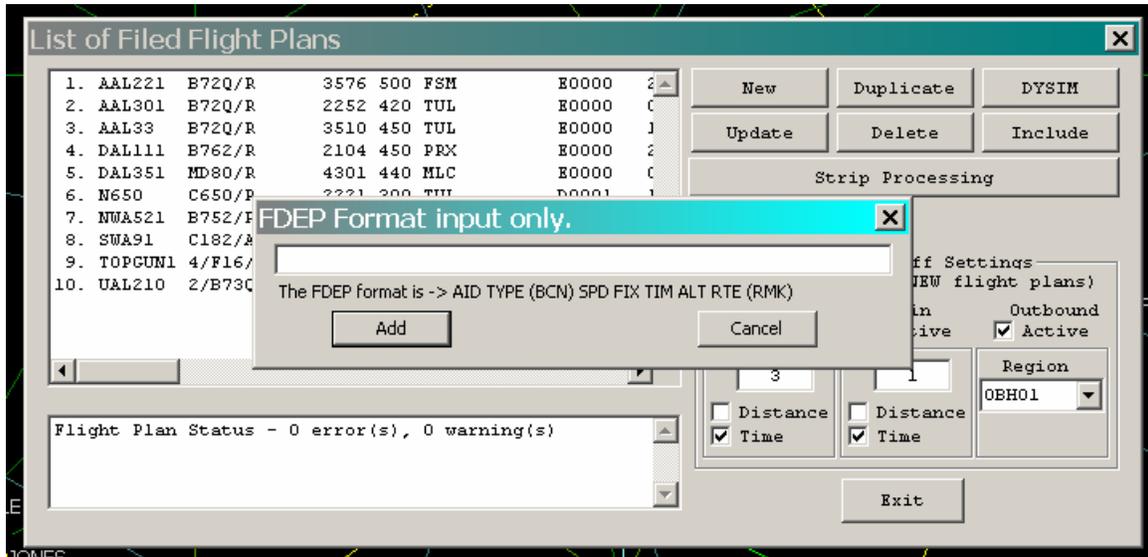
List of Filed Flight Plans functions

New	This function generates a new Flight Plan.
Update	The user must first select a Flight Plan from the list and then pressing this button allows access to the Flight Plans data.
Delete	The user must first select a Flight Plan from the list and then pressing this button allows the user to delete the Flight Plan. The Confirm Delete Box is displayed and "Yes" must be selected before the delete will happen.
Duplicate	The user must first select a Flight Plan from the list and then pressing this button duplicates that flight plan and creates a second one.
Include	This allows Flight Plans from other Create2000 files to be Included into the current file.
DYSIM	This allows DYSIM Flight Plans to be Auto-Loaded into the current file.
Strip Processing	This allows access to the Strip Processor.
Exit	This deletes the Flight Plan List window, exits the FFP State and return to the Pointer State.

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6.1.2.1.5.2 New Flight Plans

New Flight Plans can be input by pressing the "NEW" button and using this window. The format for the input is based on the FAA's FDEP format. This format is displayed under the input window.



Data items in the Route are separated as follows:

- (..) 2 Periods separate like items.
- (.) 1 Period separates unlike items.

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6.1.2.1.5.3 Flight Plan Update

Flight Plans can be modified by selecting a Flight Plan from the FFP List and pressing the "Update" button.

6.1.2.1.5.4 Flight Plan Delete

Flight Plans can be deleted by selecting a Flight Plan from the FFP List and pressing the "Delete" button.

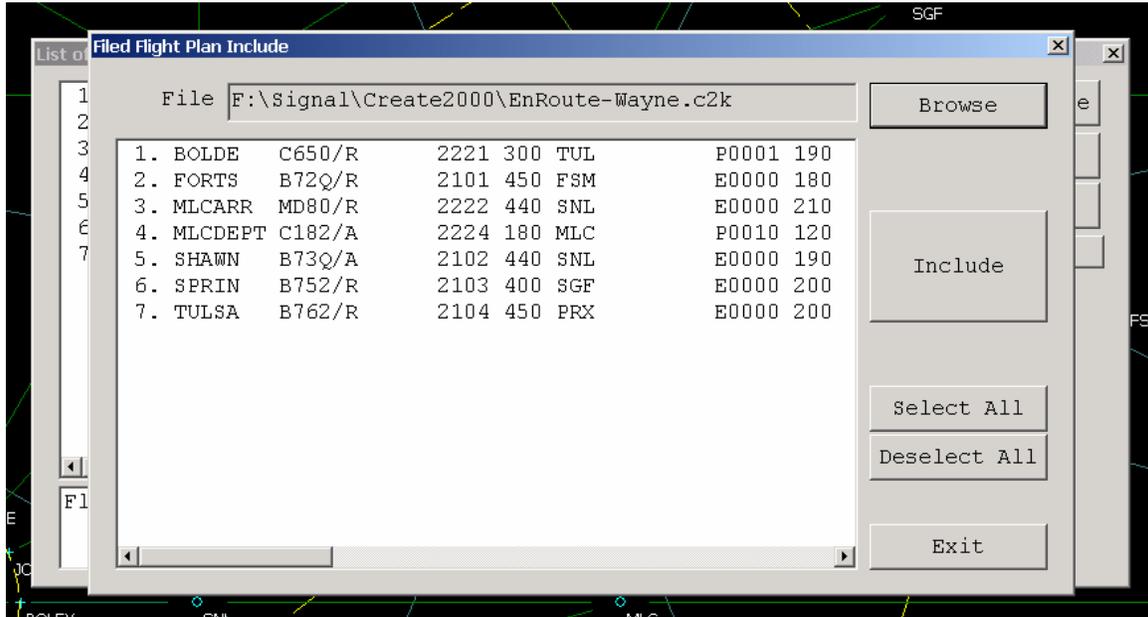
6.1.2.1.5.5 Flight Plan Duplicate

Flight Plans can be duplicated by selecting a Flight Plan from the FFP List and pressing the "Duplicate" button.

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6.1.2.1.5.6 Flight Plan Includes

This window lets the user browse to another Create2000 file and display the Flight Plan in that file.



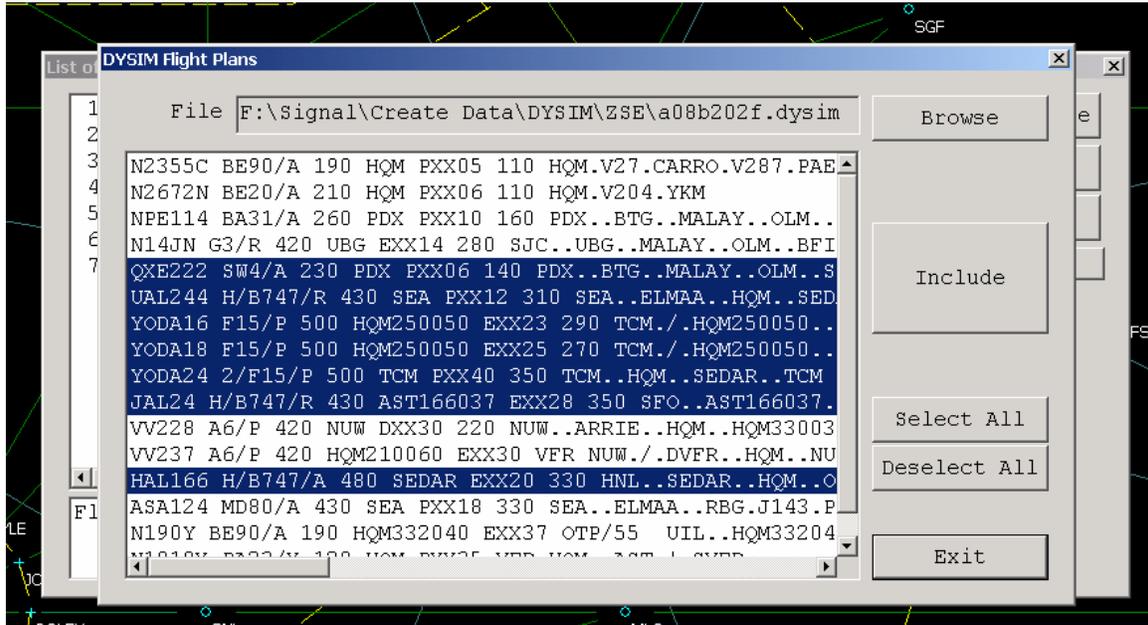
These Flight Plans can be included into the current file by selecting the desired Flight Plans and then pressing the "Include" button. The selected Flight Plans will be copied into the Filed Flight Plan area of the current file.

Browse	This button brings up the File Select Dialog and allows the user to select a Create2000 file.
Include	This button adds all the selected Flight Plans from the list into the current file.
Select All	This button selects all the Flight Plans.
Deselect All	This button deselects all the Flight Plans.
Exit	This button exits the window back to the FFP list.

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6.1.2.1.5.7 DYSIM Flight Plans

This window lets the user browse to a DYSIM file and display the Flight Plan in that file.



These Flight Plans can be included into the current file by selecting the desired Flight Plans and then pressing the "Include" button. The selected Flight Plans will be copied into the Filed Flight Plan area of the current file.

Browse	This button brings up the File Select Dialog and allows the user to select a DYSIM file.
Include	This button adds all the selected Flight Plans from the list into the current file.
Select All	This button selects all the Flight Plans.
Deselect All	This button deselects all the Flight Plans.
Exit	This button exits the window back to the FFP list.

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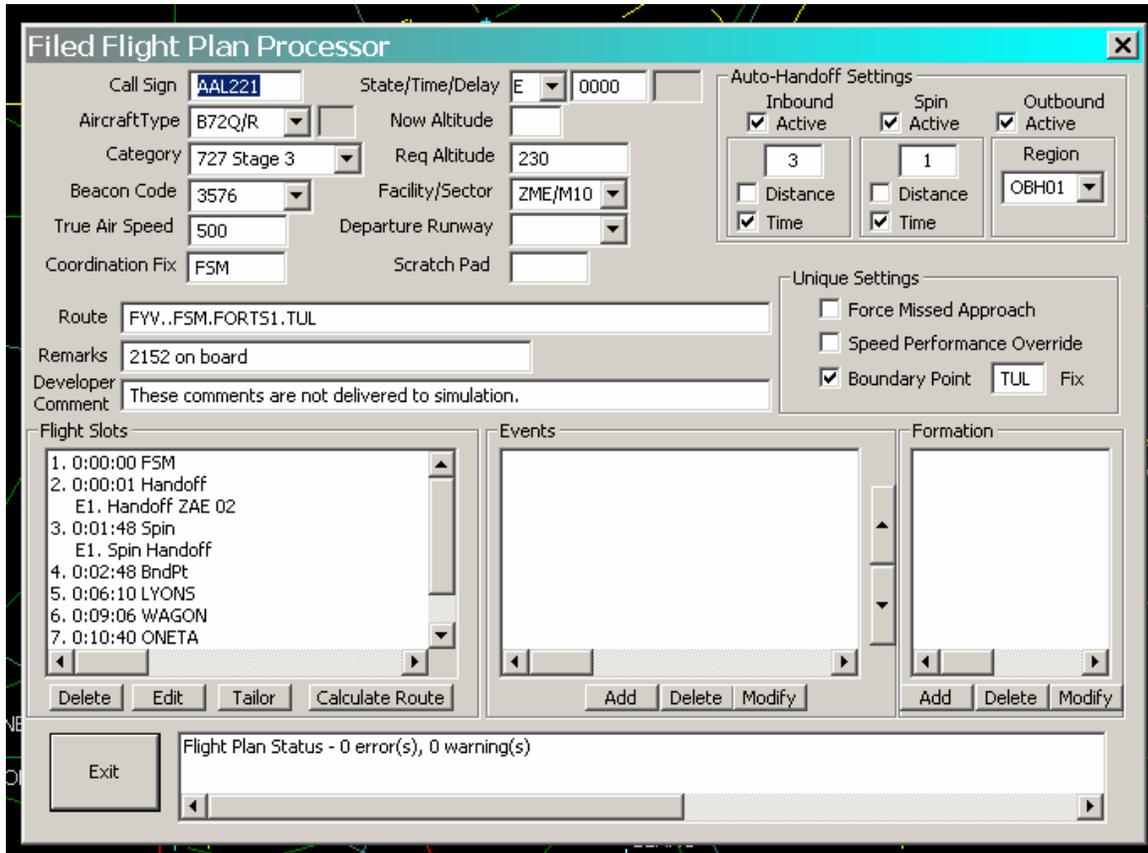
6.1.2.1.5.8 Flight Plan Strip Processing

Flight Plans Strips can be generated and printed by pressing the "Strip Processor" button.

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6.1.2.1.5.9 Flight Plan Window

This window is used to display the data for a Filed Flight Plan. The functions on this window are grouped into 4 groups; Flight Data, Flight Fix Slots, Conditional Events & Error Processing.



Flight Data the FDEP data items that make up the flight plan. The data fields are clearly explained as to what the data is.

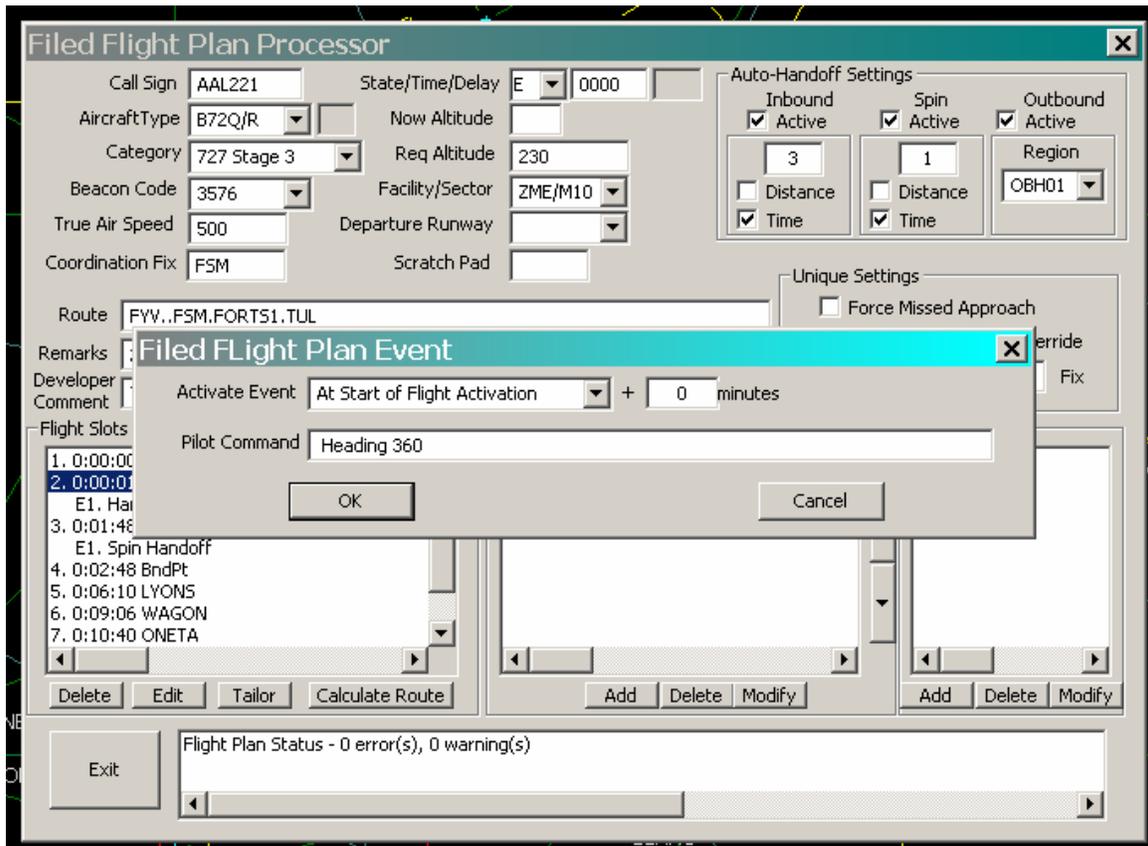
Flight Fix Slots are the points in space that this aircraft is to fly to. Delete allows a fix slot to be deleted, Edit allows information on an existing flight slot to be modified, Calculate Route causes the Rough Route Calculator to be brought up and Tailor allows access to the graphical presentation of the flight data.

Conditional Event are time based either from the start of a exercise or start of the flight. The events as found in the Pilot Users Manual can be input here and in that same format.

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Error processing is active on this window. The bottom list window displays the current status of the flight plan. If an error exist, then it will be displayed in this window. By double clicking the left mouse button on an error in this list, the focus is moved to the field that is in error for modification. Errors should be resolved, while warnings indicate unusually conditions like a duplicate beacon code or AID that may be intentional.

6.1.2.1.5.10 Flight Plan Events

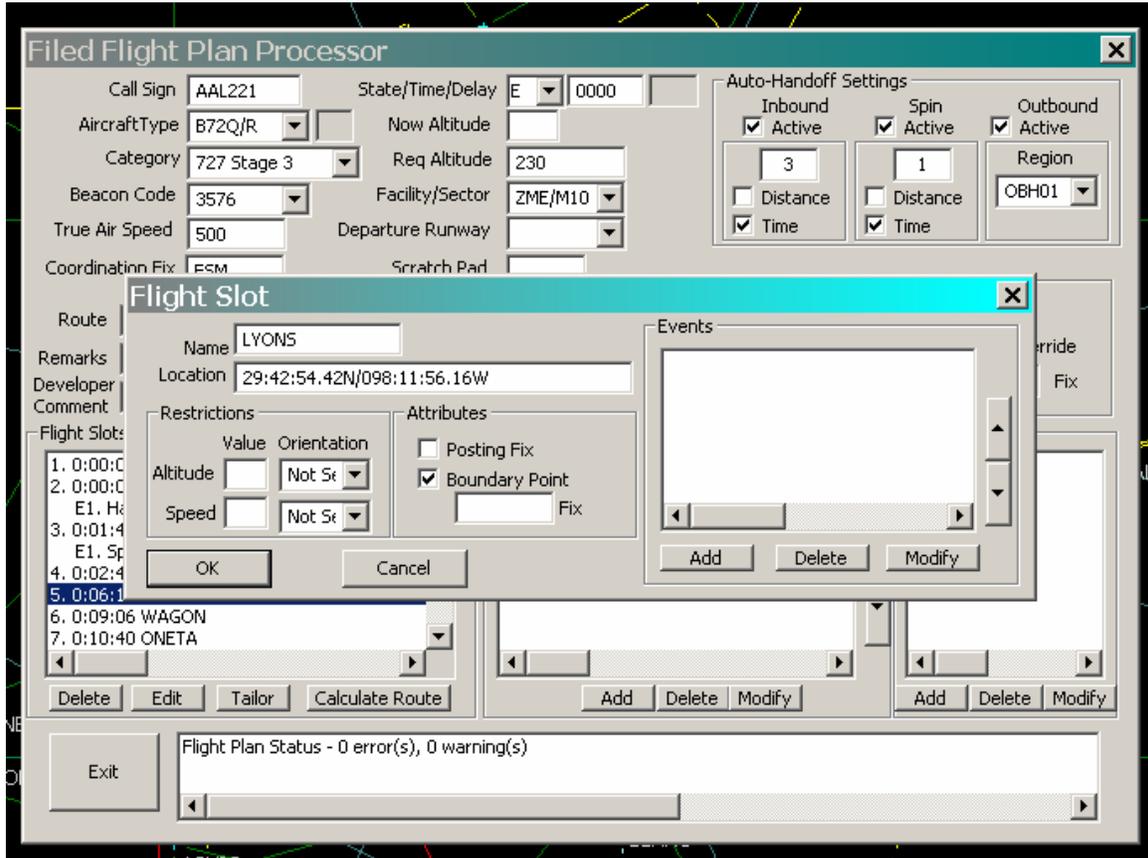


Events can either be entered as a Condition Event as seen on the Flight Plan Window or as a Positional Event that is associated with a Flight Fix Slot. In both cases, the events that are available are the same as found in the **SIGNAL Pilot Users Manual** under **Pilot Commands**.

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6.1.2.1.5.11 Flight Slot

Flight Slots are the points in space that this aircraft is to fly to. Event associated with this Flight Slot's location can be input and managed here.

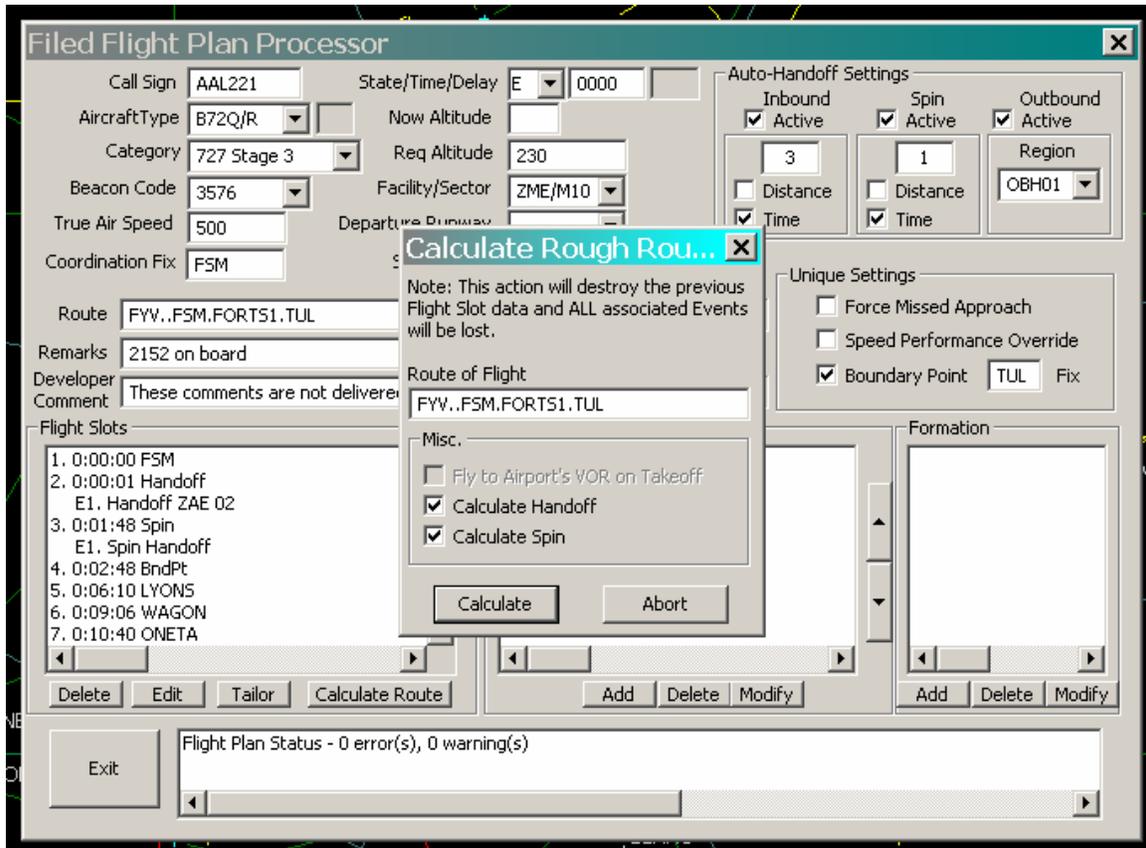


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6.1.2.1.5.12 Rough Route

Initialization of this window copies the flight plan Route into the Route of Flight edit window.

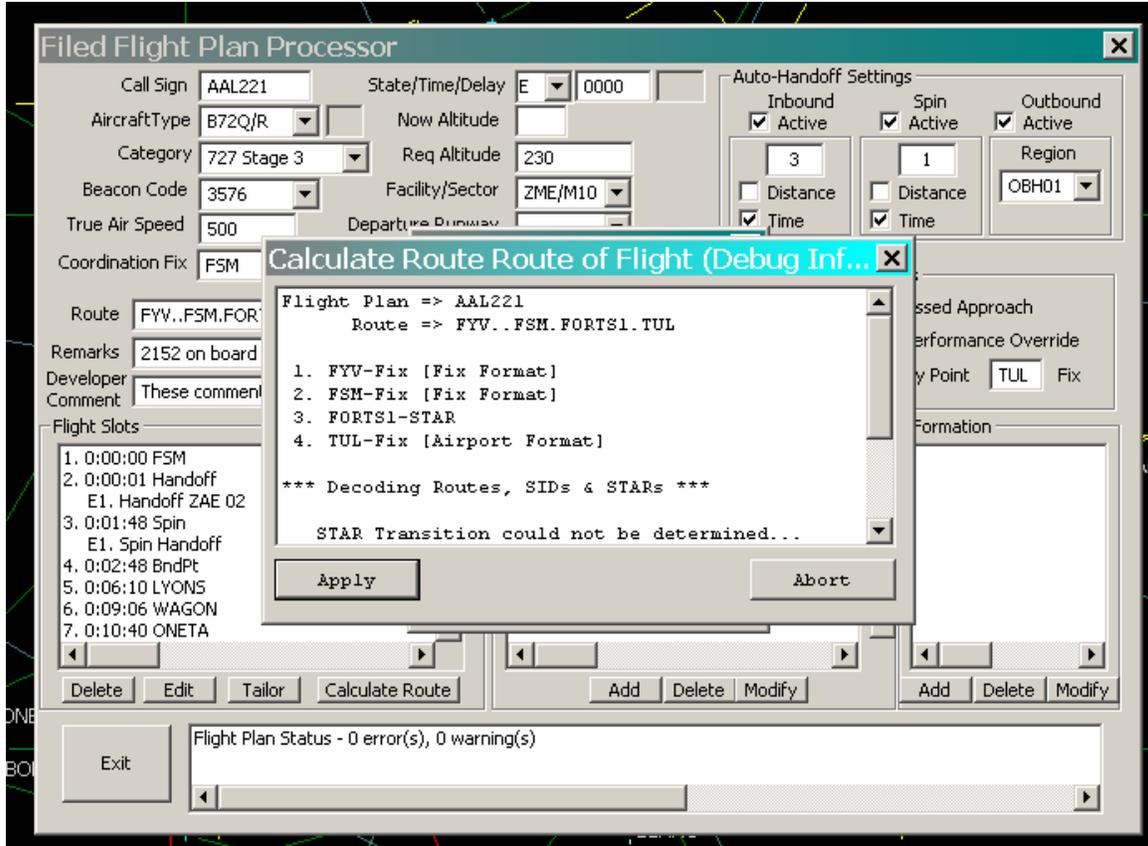
Note: When inputting a Route, if using a format that has a period(.) as part of the format, then the parameter must be enclosed in square brackets [].



Pressing the Calculate button will cause a new array of fix slots to be generated based on the Filed Flight Plans data. Abort returns back to the FFP window.

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6.1.2.1.5.13 Rough Route Calculation

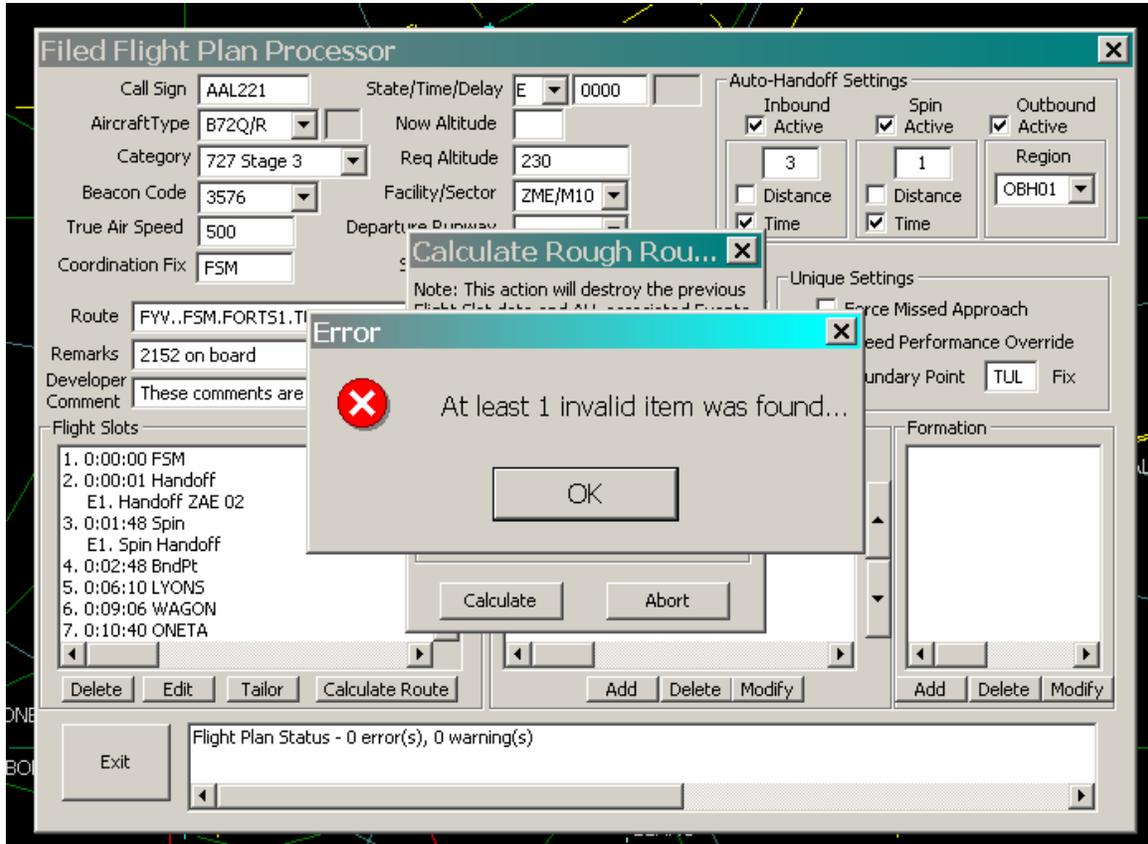


Once the Calculation has been performed, Apply causes the fix slot data to be updated. Abort returns back to the FFP window.

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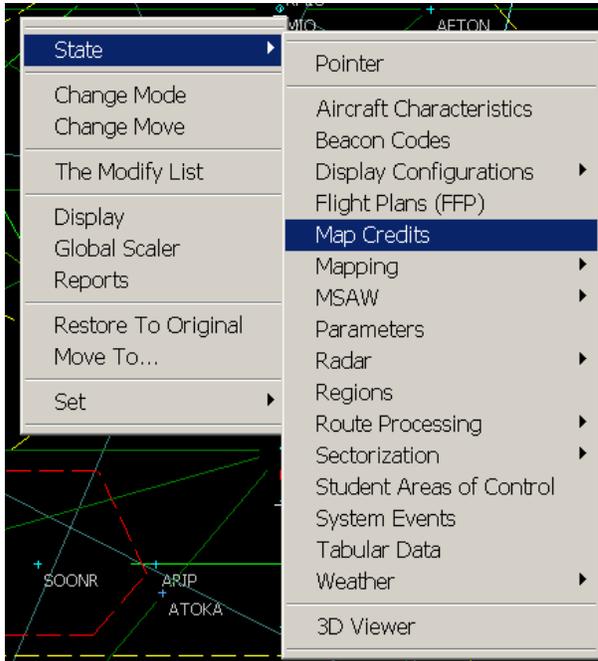
6.1.2.1.5.14 Rough Route Errors

In the event that the Flight Plan Route references a data item, that can not be resolved, this dialog window will be displayed to let the user know that a problem has occurred. The invalid data items are dropped from the new fix slot data so that the remaining data would be valid.

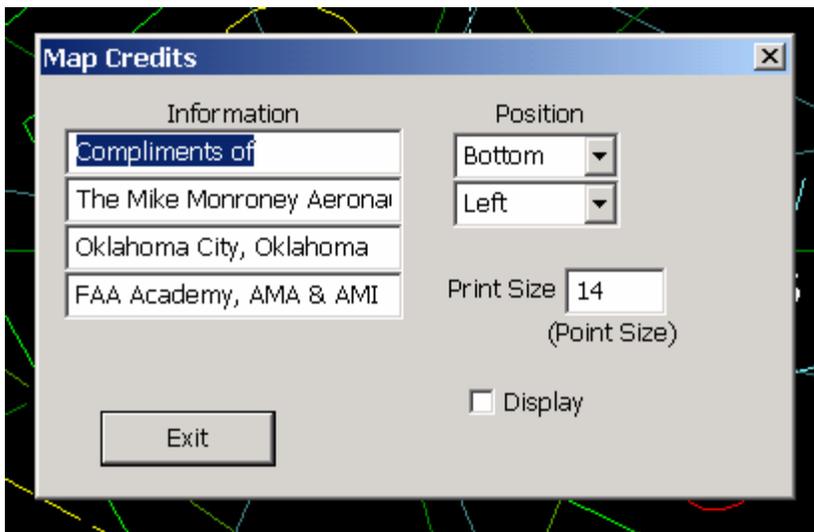


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6.1.2.1.6 Map Credit



The Map Credits window is used to mark the display and printed maps with a credits paragraph. Both a Scenario and Master can access and change this window's information, but only the Master can save this information. All Scenario changes are only temporary and intended to allow unique printing of maps.

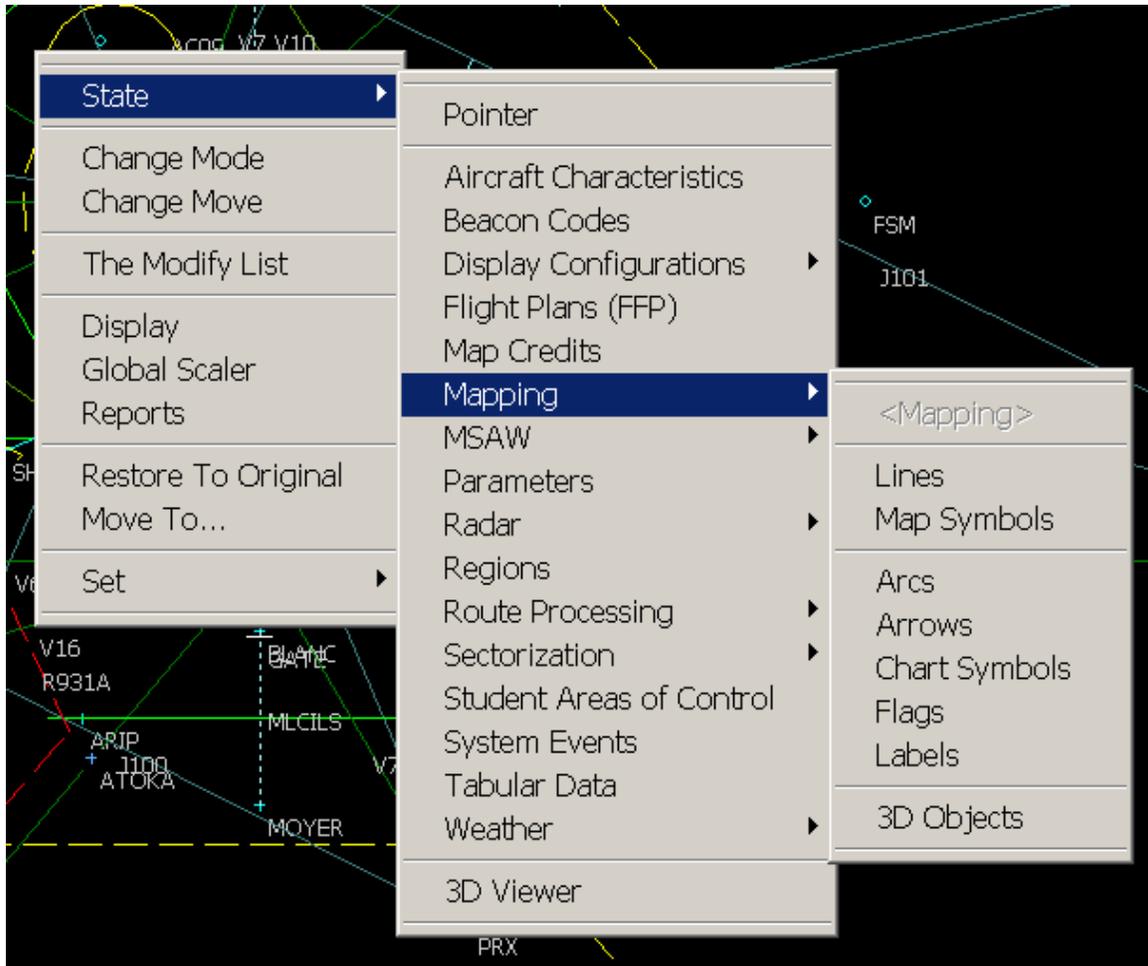


Position	The credits can be position vertically at the top or bottom and horizontally left, center and right.
Print Size	This is in terms of Pitch. 14 would be a 14 Pitch font.
Display	This enables and disables the display of the Map Credits information.
Information	This is where any message can be input as a map credits paragraph. This area has 4 lines of input.
Exit	This exits the Map Credit area.

3/24/2005

6.1.2.1.7 Mapping

This is a Master only function.

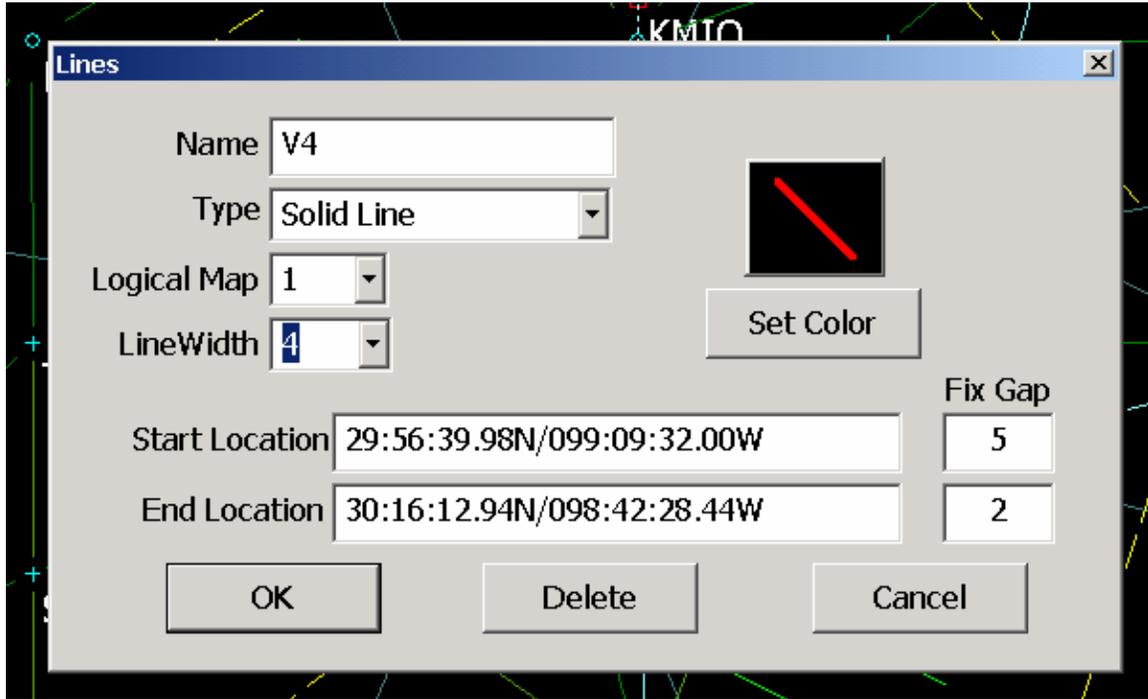


This State allows the user to get to a lower sub menu on the Mapping items. Arrows, Arcs & Lines require two mouse clicks to determine placement, while all the rest require only one.

3/24/2005

6.1.2.1.7.1 Lines

Lines are used to build most airways and boundaries. They can also be used to manually build symbols & shapes not found in Create2000 symbol set.

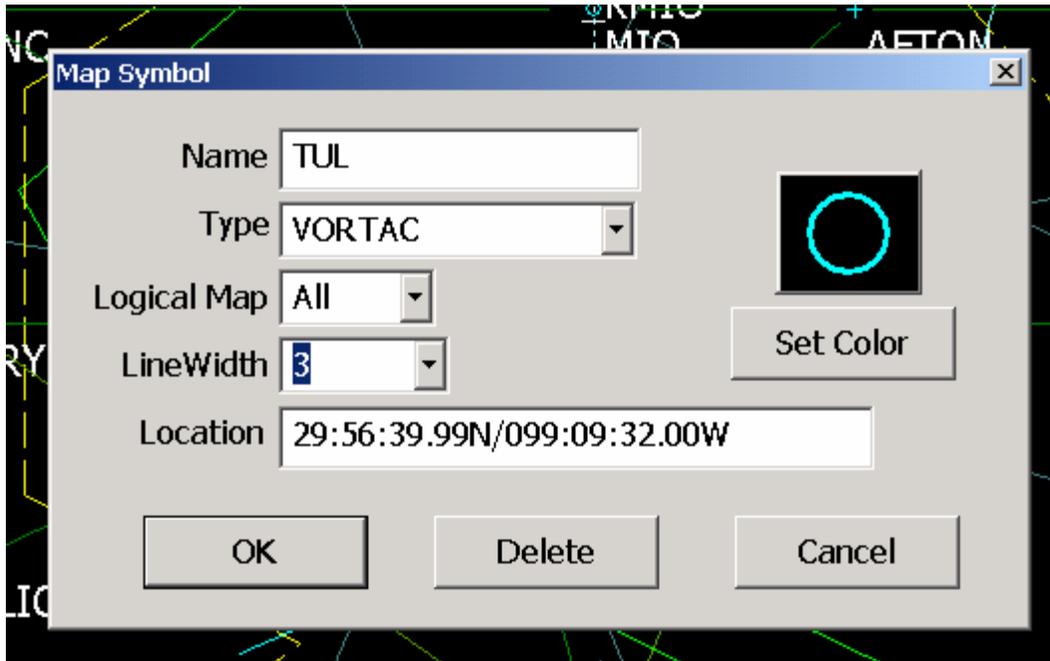


Name	This is where the name of the line is input.
Type	The Types are Solid Line, Short Dash Line & Long Dash Line.
Logical Map	This assigns which logical map the line is associated with. The range is 1-10 and All.
Start Location	This is the first latitude/longitude location of this line.
End Location	This is the second latitude/longitude location of this line.
Fix Gap	This allows a gap to be shown around an intersection or symbol. This field is in terms of how many miles the gap should be.
Set Color	Reference the Set Color dialog information in the Other Windows area of this document.
Line Width	This allows each line to be set to a unique line width. Default is 1.

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6.1.2.1.7.2 Map Symbols

The Map Symbols are all viewable on the Pilot and Controller displays of SIGNAL.



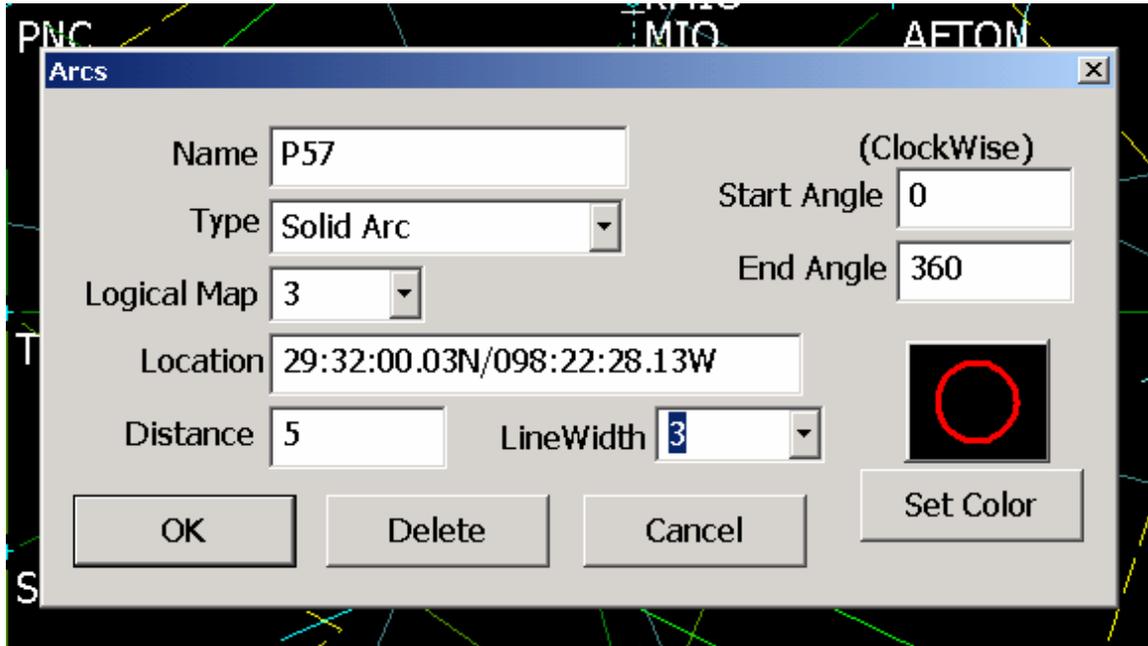
Name	This is where the name of the Map Symbol is input.
Type	The Types are Major Airport, Satellite Airport, VORTAC, TACAN, Parrot, Obstruction and Intersection.
Logical Map	This assigns which logical map the line is associated with. The range is 1-10 and All.
Location	This is the latitude/longitude location of this Map Symbol.
Set Color	Reference the Set Color dialog information in the Other Windows area of this document.
Line Width	This allows each Map Symbol to be set to a unique line width.

Note: Chart Symbols & Map Symbols are different. Chart Symbols are used generally for maps that are to be printed, they are not viewable on either the Pilot displays or the controller displays.

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6.1.2.1.7.3 Arcs

The Arcs are used to build any arc from a complete 360 circle to a small pie arc. Arcs are excellent for approach plates.

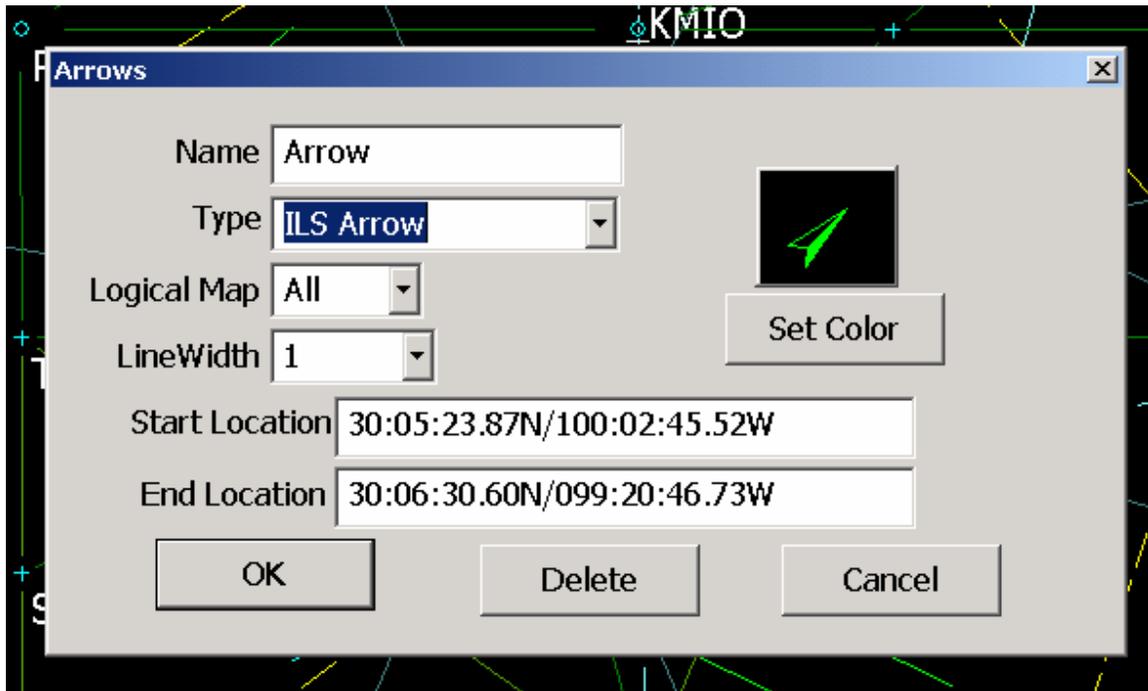


Name	This is where the name of the line is input.
Type	The Types are Solid Arc, Short Dash Arc & Long Dash Arc.
Logical Map	This assigns which logical map the arc is associated with. The range is 1-10 and All.
Location	This is the latitude/longitude center location of this Arc.
Distance	This is the Radius of the Arc in miles.
End Location	This is the second latitude/longitude location of this line.
Set Color	Reference the Set Color dialog information in the Other Windows area of this document.
Start Angle	Starting angle of the Arc.
End Angle	Ending angle of the Arc.
Line Width	This allows each Arc to be set to a unique line width.

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6.1.2.1.7.4 Arrows

The Arrows are intended for maps that are to be printed. The arrows do not show up on the Pilot or Controller displays.

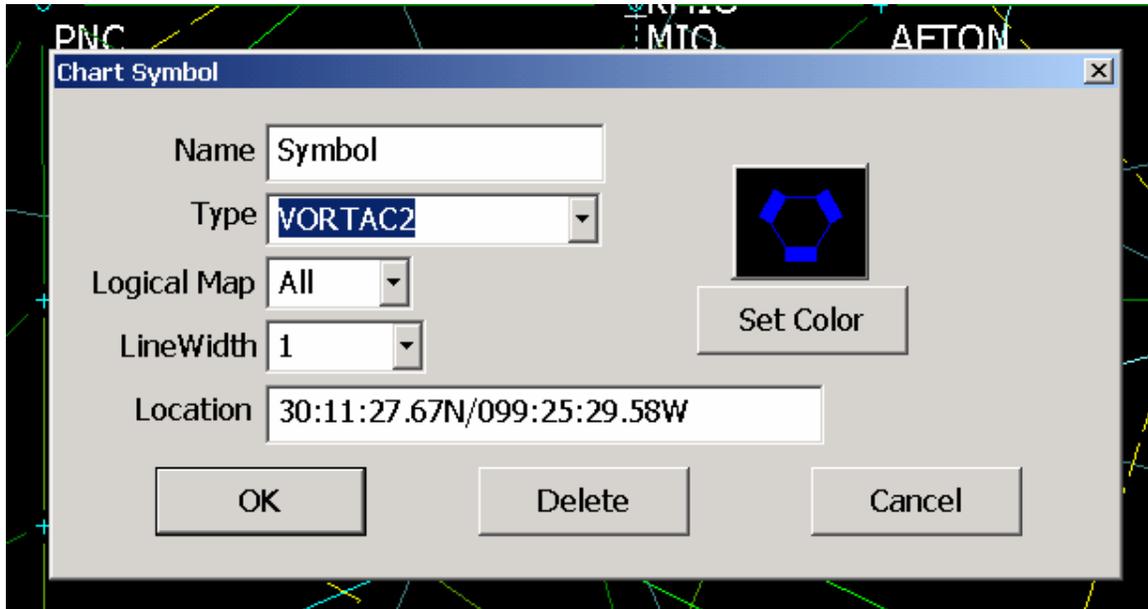


Name	This is where the name of the Arrow is input.
Type	The Types are ILS Arrow, SDF Arrow & LF/MF Arrow.
Logical Map	This assigns which logical map the Arrow is associated with. The range is 1-10 and All.
Start Location	This is the first latitude/longitude location of this Arrow.
End Location	This is the second latitude/longitude location of this Arrow.
Set Color	Reference the Set Color dialog information in the Other Windows area of this document.
Line Width	This allows each Arrow to be set to a unique line width.

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6.1.2.1.7.5 Chart Symbols

The Chart Symbols are additional symbols that are intended for use when building maps for printed only. The Chart Symbols do not show up on Pilot or controlled displays.

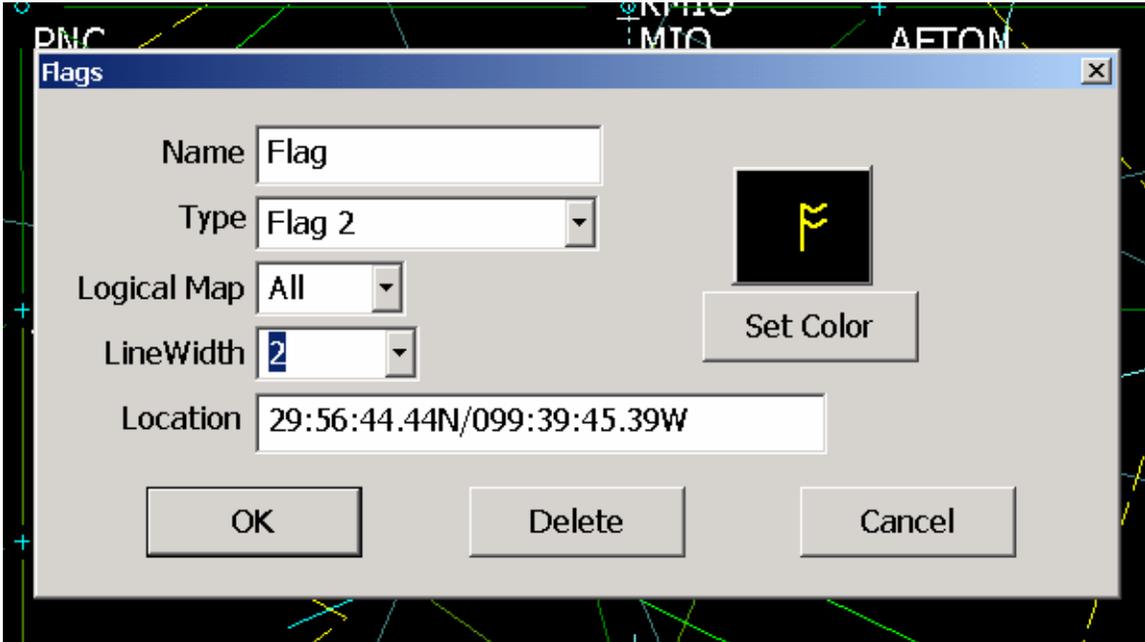


Name	This is where the name of the Chart Symbol is input.
Type	The Types are NDB DME, VOR DME, VOR, VORTAC2, & TACAN2.
Logical Map	This assigns which logical map the Chart Symbol is associated with. The range is 1-10 and All.
Location	This is the latitude/longitude location of this Chart Symbol.
Set Color	Reference the Set Color dialog information in the Other Windows area of this document.
Line Width	This allows each Chart Symbol to be set to a unique line width.

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6.1.2.1.7.6 Flags

Flags are generally used only for "Place Holders". They are not viewable by any other programs except Create2000.

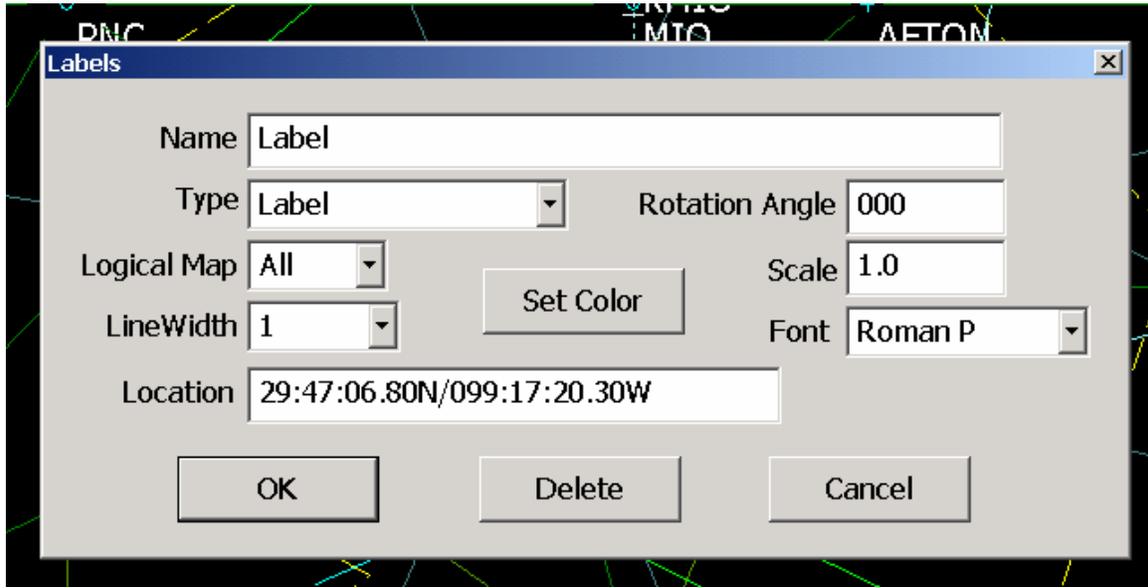


Name	This is where the name of the flag is input.
Type	The Types are Flag1, Flag2, & Flag3.
Logical Map	This assigns which logical map the flag is associated with. The range is 1-10 and All.
Location	This is the latitude/longitude location of this flag.
Set Color	Reference the Set Color dialog information in the Other Windows area of this document.
Line Width	This allows each Flag to be set to a unique line width.

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6.1.2.1.7.7 Labels

A Label is used to place text on the map in a particular way in relation to size, angle, color, and line width.

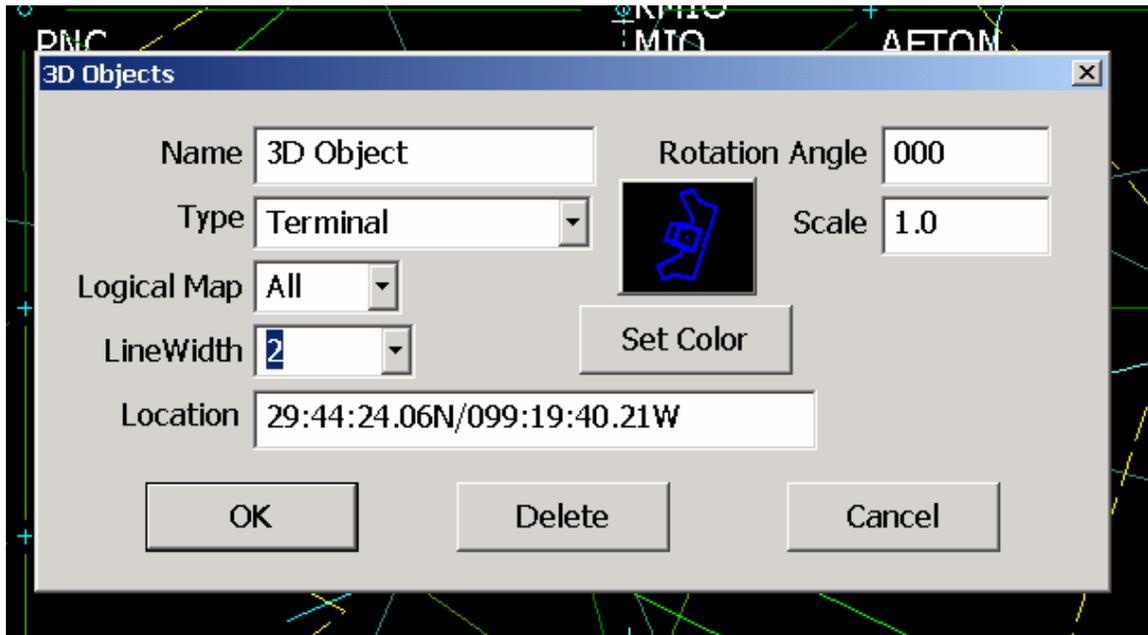


Name	This is where the name of the label is input.
Type	The Type is Label.
Logical Map	This assigns which logical map the label is associated with. The range is 1-10 and All.
Location	This is the latitude/longitude location of this label.
Set Color	Reference the Set Color dialog information in the Other Windows area of this document.
Rotation Angle	Used to rotate the Label to a desired angle. This field uses a mathematical angle, where 0 is right and flat and the rotation is counter-clock wise.
Scale	Used to scale the Label to the desired size.
Line Width	This allows each Label to be set to a unique line width.

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6.1.2.1.7.8 3D Objects

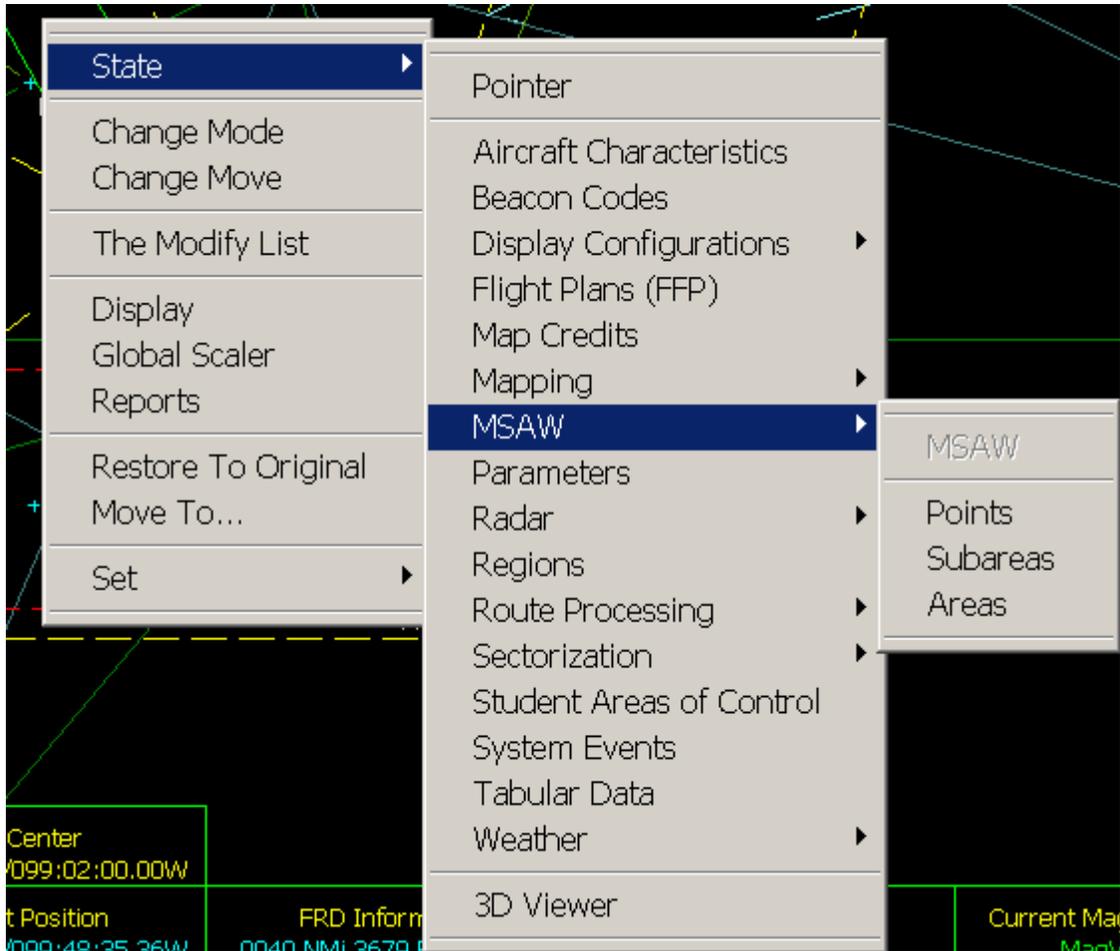
The 3D Objects option is an area of new development and are not usable yet. These shapes do not show up on the Pilot or Controller displays.



Name	This is where the name of the 3D Object is input.
Type	The Types are AT Tower, Antenna, Bridge, Hanger, Mountain, Radar Site, Terminal, & Water Tower.
Logical Map	This assigns which logical map the 3D Object is associated with. The range is 1-10 and All.
Location	This is the latitude/longitude location of this 3D Object.
Set Color	Reference the Set Color dialog information in the Other Windows area of this document.
Rotation Angle	Used to rotate the object.
Scale	Used to scale the object
Line Width	This allows each 3D Object to be set to a unique line width.

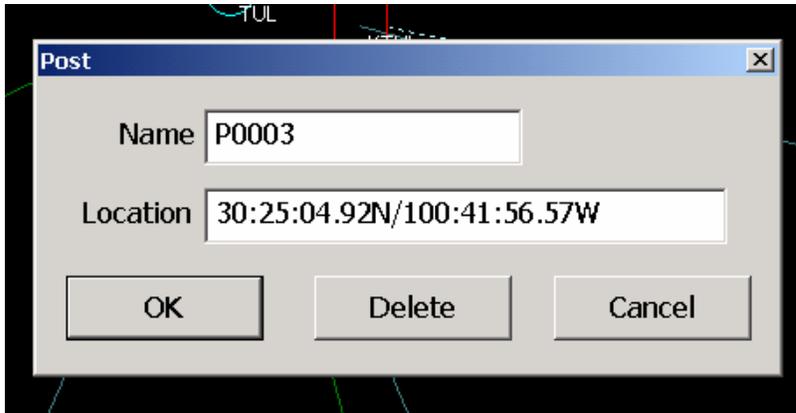
3/24/2005

6.1.2.1.8 MSAW



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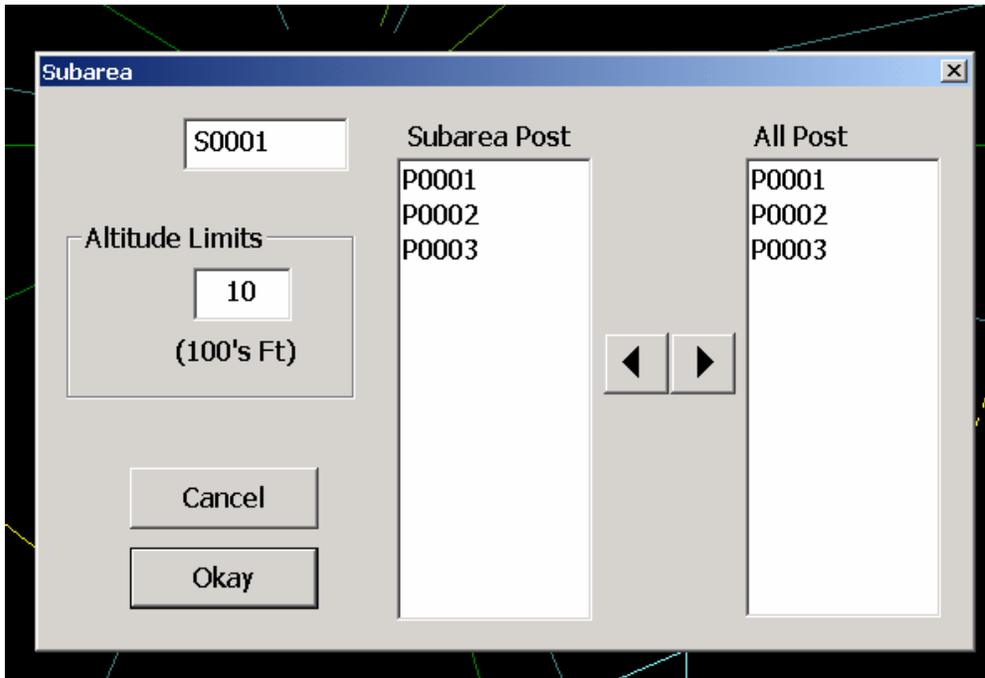
6.1.2.1.8.1 Posts



6.1.2.1.8.2 Subareas

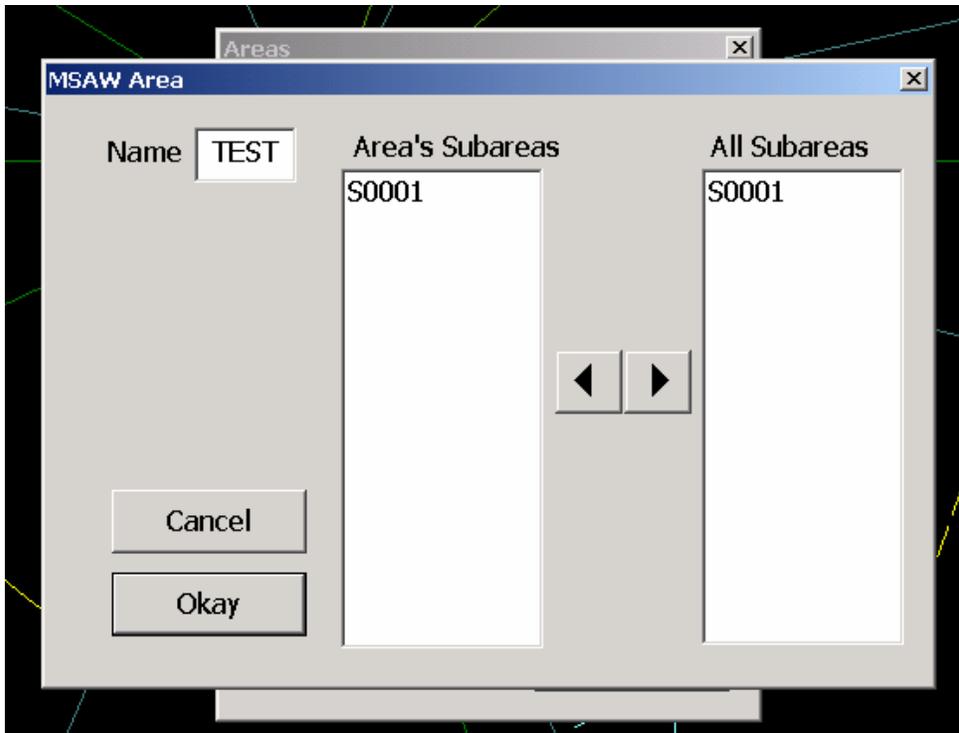


3/24/2005



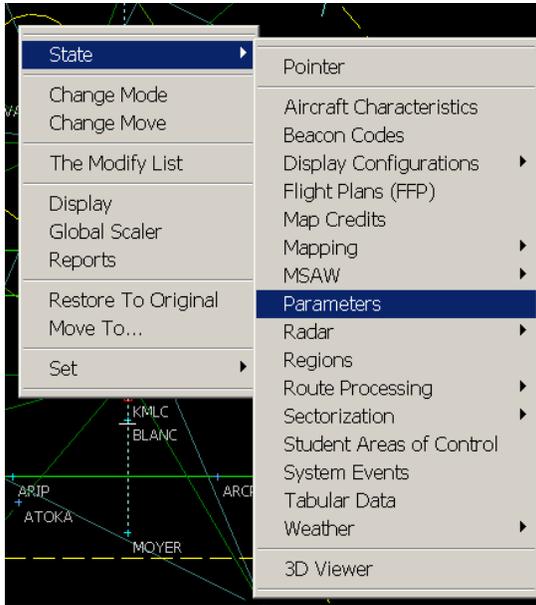
3/24/2005

6.1.2.1.8.3 Areas

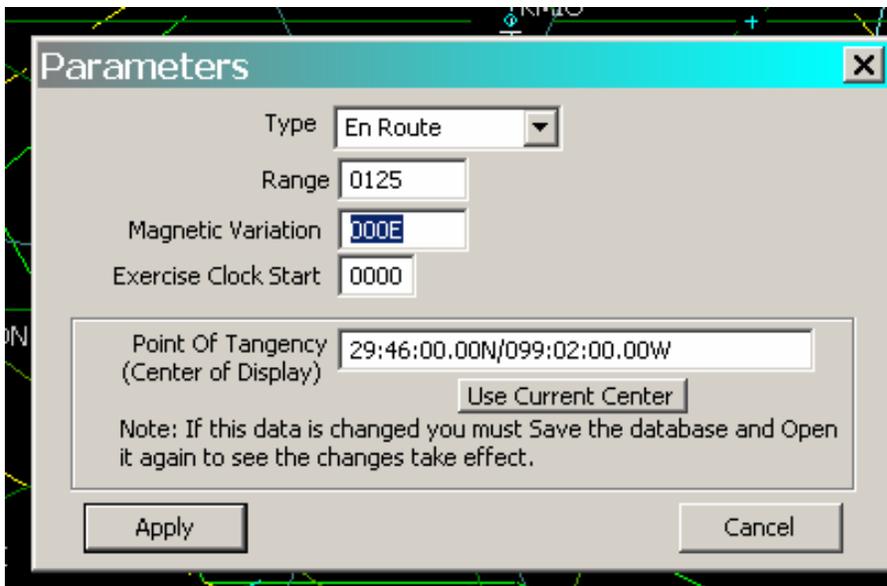


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6.1.2.1.9 Parameters



Both Scenarios and Master databases have a Parameters file. This data area is used to determine a starting configuration when a database is loaded. Also anytime the "Restore to Original" button is pressed, this information is used to determine that configuration.

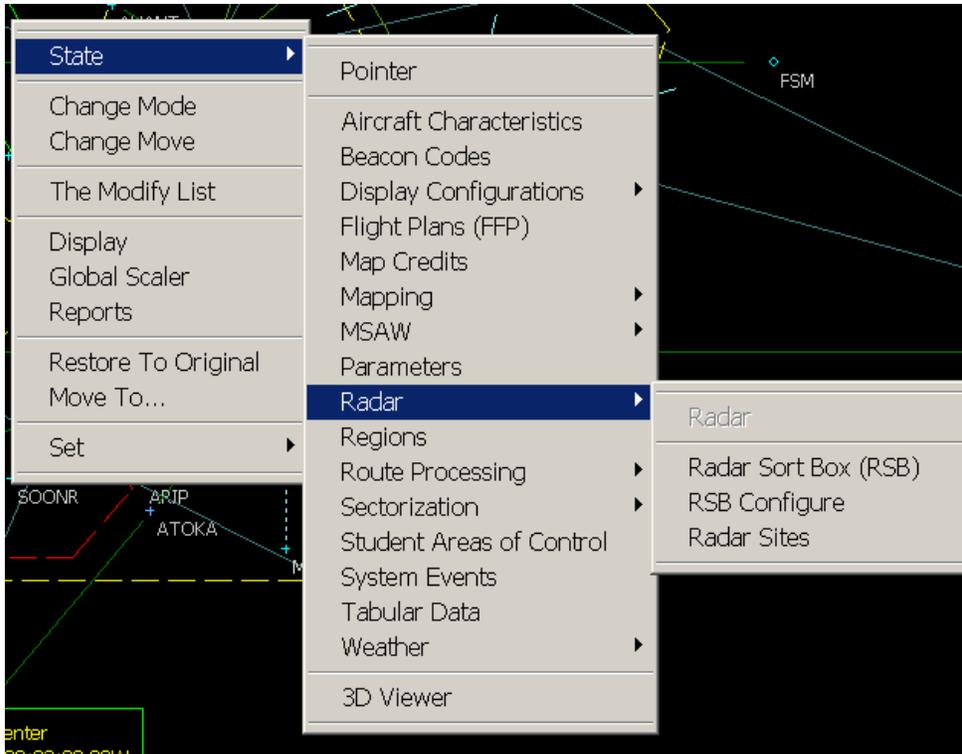


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Type	This is where the type of database is set.
Range	This is in terms of nautical miles.
Magnetic Variation	The Magnetic Variation field is used to determine where True North is from Magnetic North. The Controller displays handle this information differently. Some displayed rotate to show Magnetic North straight up while other displays add the Magnetic Variation to an Aircraft's heading.
Exercise Clock Start	This field is used to offset the displayed starting time. Format is HHMM where HH(Hours) is 0-23 and MM(Minutes) is 0-59.
Point of Tangency	The Point of Tangency is the geographic Latitude/Longitude center of the database. This is also known as the "Center of the Display".

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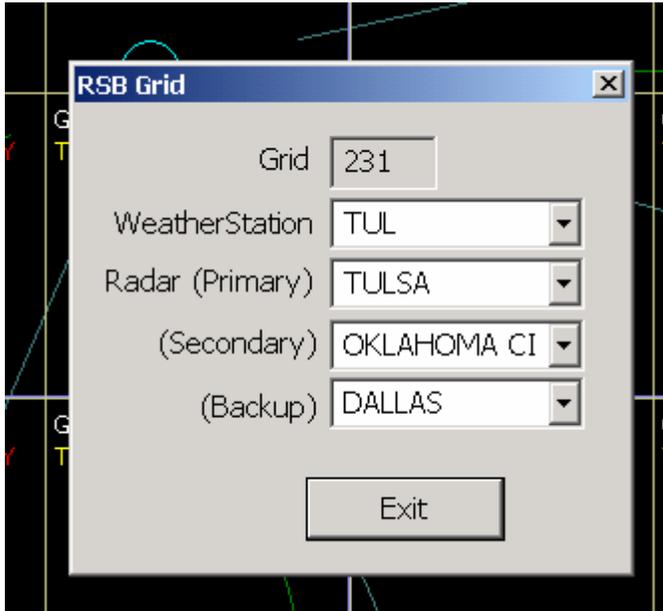
6.1.2.1.10 Radar



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6.1.2.1.10.1 Radar Sort Box (RSB)

This is a Master only function.

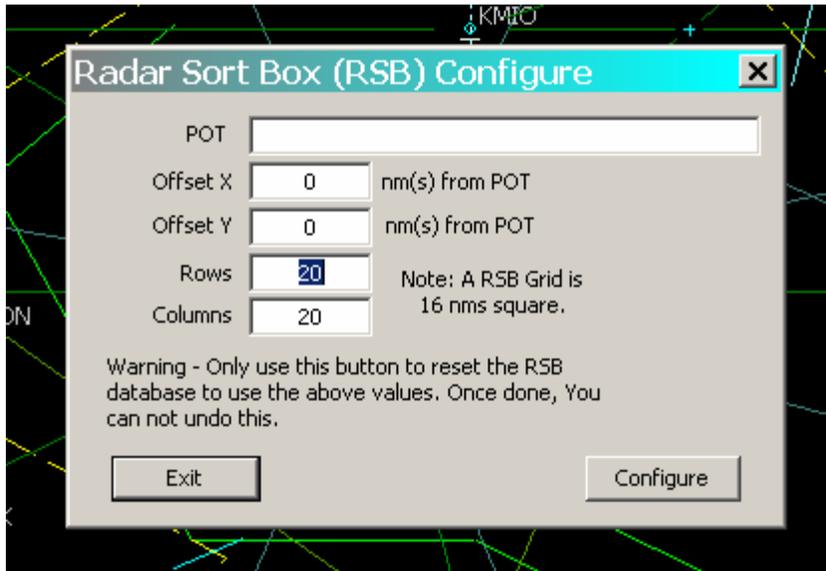


This Window allows the user to changes the WeatherStation and selected Radars in a RSB grid. To activate this window change the state to RSB and click on a RSB grid box.

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6.1.2.1.10.2 RSB Configure

This is a Master only function.



This Window allows the user to configure the MSAW grid for this database.

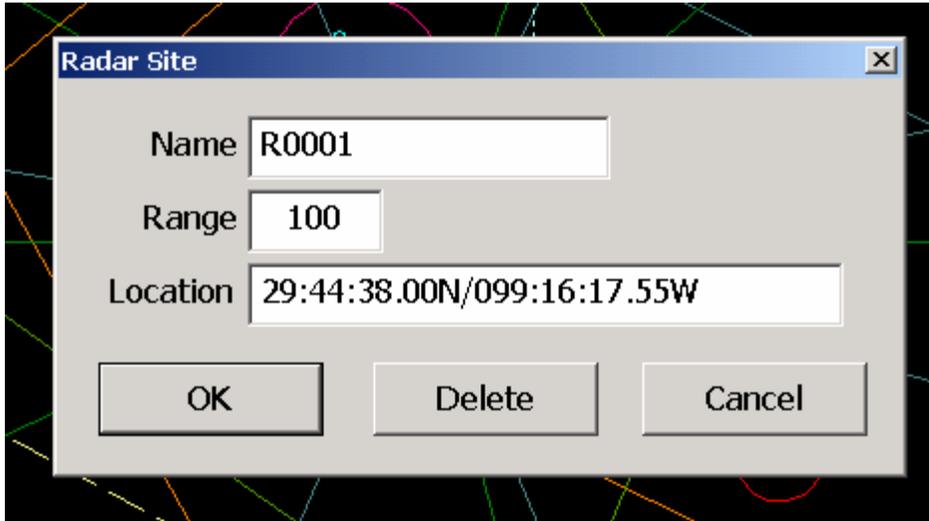
Range	This is where the range for the RSB grid is input. This is in terms of nautical miles.
Grid Size	This is whether the grid size of the RSB grid is input This is in terms of nautical miles.
Configure	This activates the configuration software and generates a new RSB grid. Note: this will destroy any already existing RSB grid and its configuration.
Exit	This Exits the RSB Configure part of the software.

All RSB grids are square in shape. To calculate the size of the RSB grid, **((Range / Grid Size) + 1) * 2** is equal to how many rows & columns in grid.

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6.1.2.1.10.3 Radar Sites

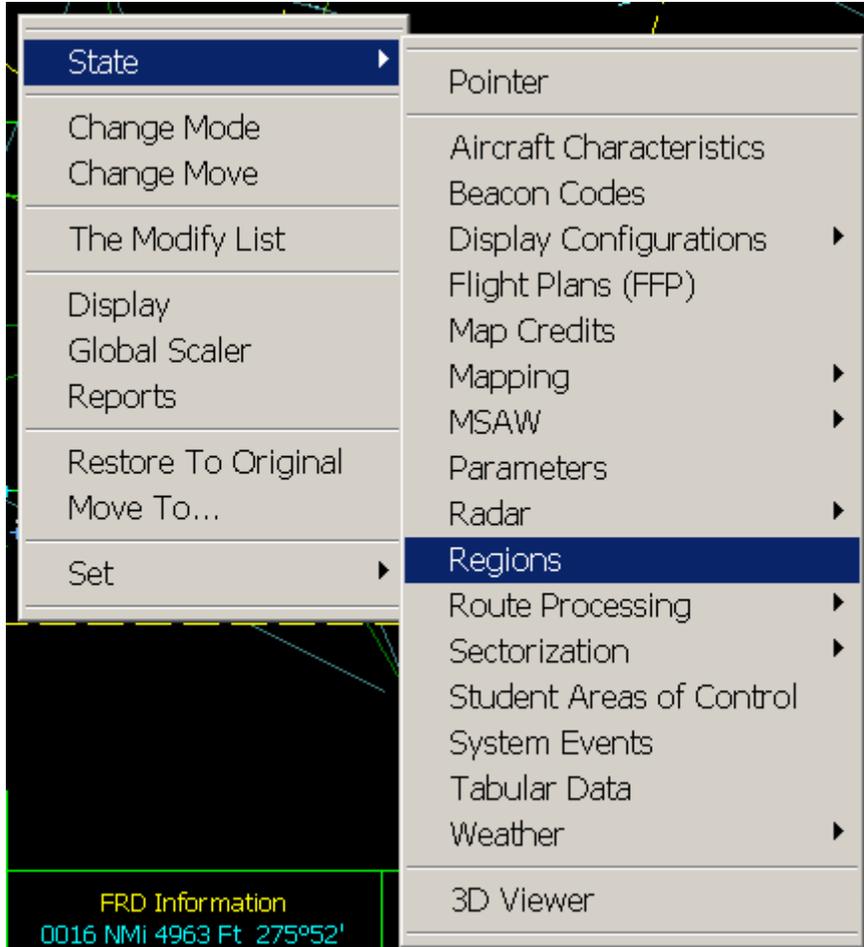
This is a Master only function.



Radar Sites are used to determine how to draw Analog Weather patterns on the Controller displays. Analog Weather is displayed a series of Radial Line center on a Radar Site and covering the weather area. This generates a kind of pie slice look. Also a Radar Site cannot generate a weather pattern directly above it, so usually the Radar Site is located off the displayed map. Normally, a database only has one Radar Site.

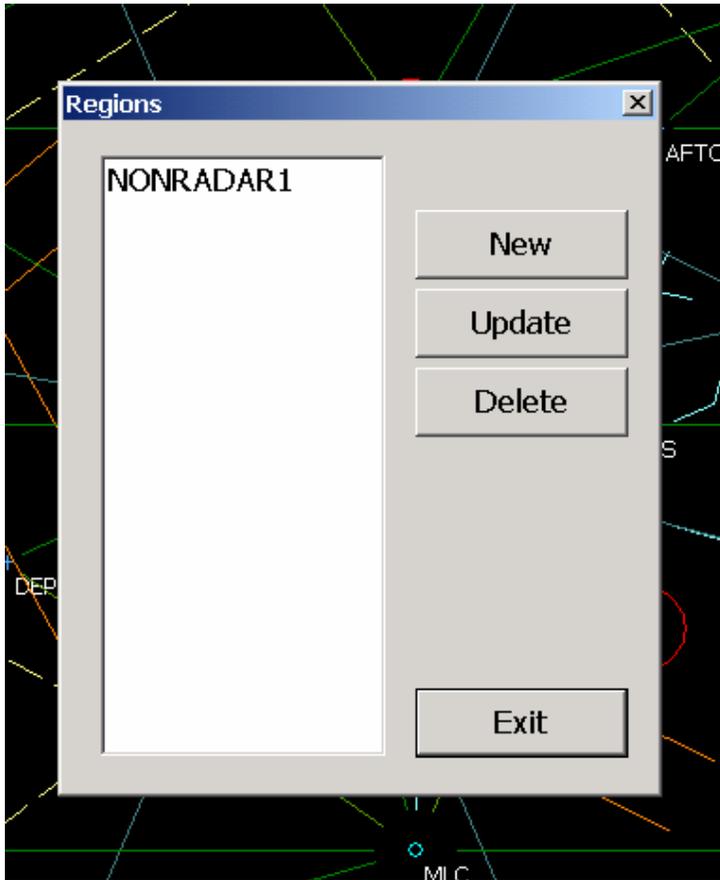
3/24/2005

6.1.2.1.11 Regions



This is a Master only function. When pressed the below list window is displayed. This window will contain a list of all the existing Regions. The user can now perform the following function: New, Update, Delete or Exit.

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New	This function generates a new Region with no data points.
Update	The user must first select a Region from the list and then pressing this button allows access to the Regions data.
Delete	The user must first select a Region from the list and then pressing this button allows the user to delete the Region. The Confirm Delete Box is displayed and "Yes" must be selected before the delete will happen.
Exit	This deletes the Region list window, exits the Regions State and return to the Pointer State.

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This window is displayed when a Region Add or Update is selected.

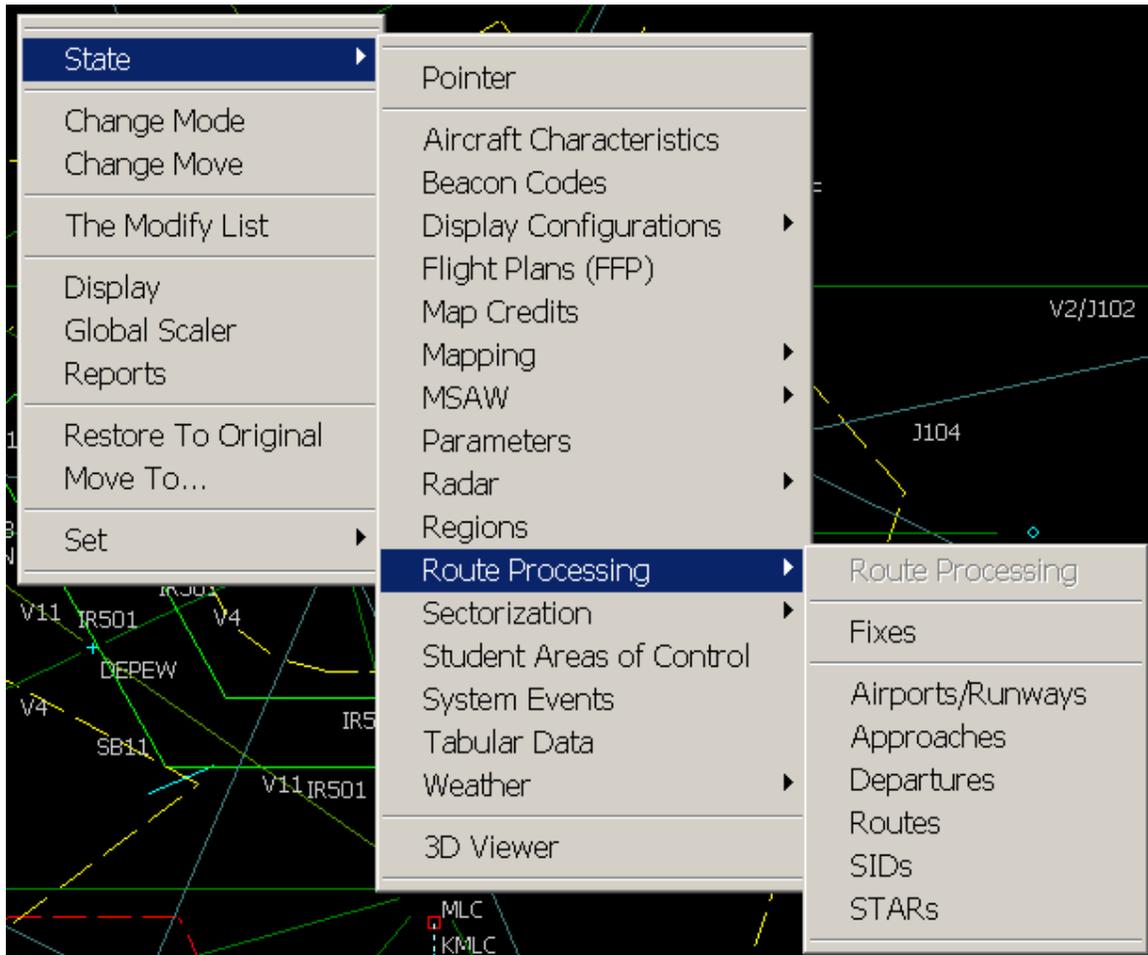
The screenshot shows a software window titled "Region". It has a blue title bar with a close button. The main area is light gray. On the left, there are input fields: "Name" with the text "NONRADAR1", "Type" with a dropdown menu showing "Non-Radar Area", and "Altitude Limits" with "Upper" set to "070" and "Lower" set to "000" (100's Ft). On the right, a list box titled "Region's" contains four lines of coordinates: "1. 29:01:42.43N/099:36:29.8", "2. 29:01:32.52N/100:03:56.1", "3. 29:13:52.47N/100:04:50.8", and "4. 29:13:42.33N/099:36:10.3". At the bottom, there are buttons for "Exit", "Tailor", and "Delete Point", and a checkbox labeled "Add Only To END".

Name	The user can assign a name here. A name is automatically generated.
Type	The user can set the Type of Region this is.
Altitude	The user can set the upper and lower altitude of the Region here.
Tailor	This allows access to the points that make up the polygon that defines the Region. To exit this mode press Enter or End on the Keyboard.
Delete Point	This allows the user to select a point of the region from the list and delete that point. The deletion must be confirmed.
Exit	This Exit this Region window back to the Region List window.

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6.1.2.1.12 Route Processing

This is a Master only function.

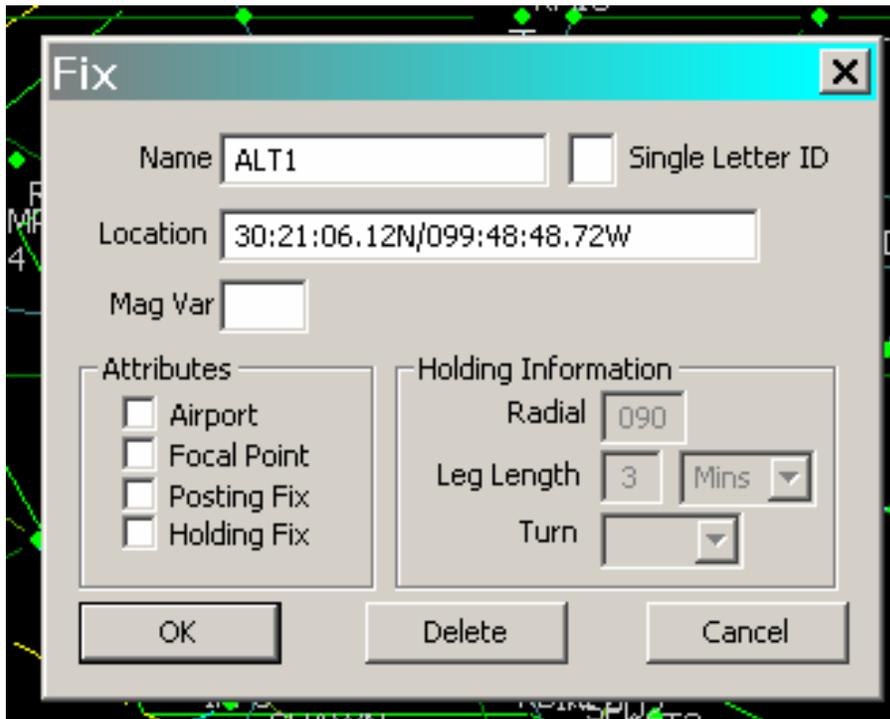


This submenu allow the users to access the areas that allow Add, Modify and Delete of the Fixes, Airport/Runways, Approaches, Departures, Route, SIDs and STARs as described in the following sections. All these submenu functions are Master only.

3/24/2005

6.1.2.1.12.1 Fixes

This is a Master only function. This is the window that is displayed when adding or modifying a fix.

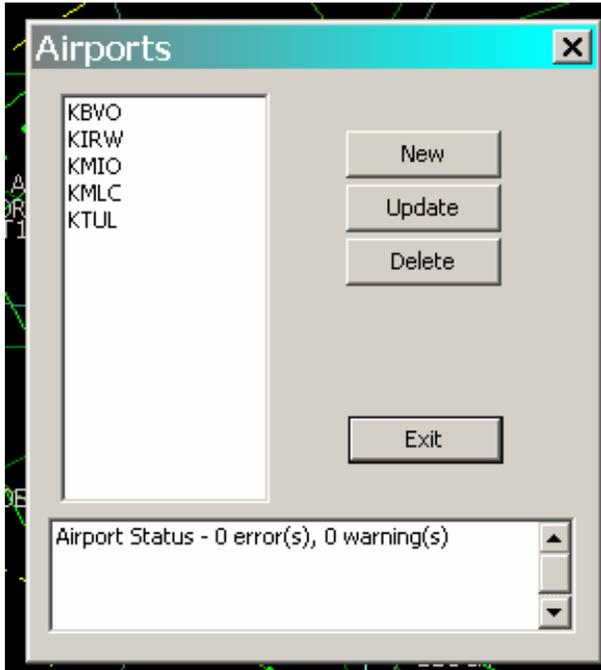


Name	This is where the name of the fix is input.
Location	This is the latitude/longitude location of this fix.
Mag Var	This is the Magnetic Variation for this fix. The format is ###C where ### is a number from 0-360 and C is equal to E for East or W for West.
Single Letter ID	If the fix is also known by a single letter, it can be input here.
Attributes	Allows a fix to be known as a airport, focal point, posting fix or holding fix. As many of these as are needed may be set at one time.
Holding Information	This area consist of 3 data items; Radial, Leg and Turn. In order to input data, the Holding Fix attribute must be set.

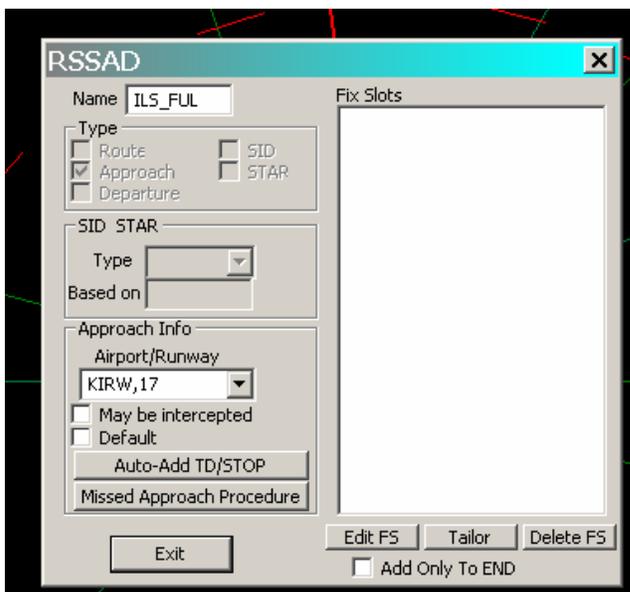
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6.1.2.1.12.2 Airport/Runways

This is a Master only function.



The above window allows a new airport to be created or an existing one to be modified or deleted. When New or Update is selected the below window allows for the airport data to be input or modified.

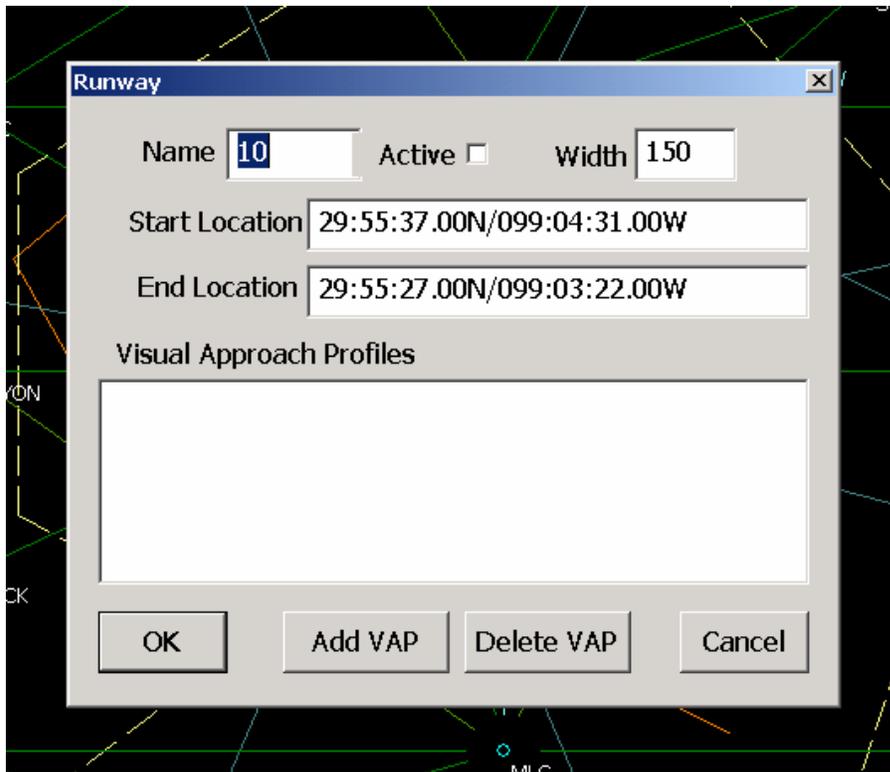


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At this point the below data area can be modified.

Name	This is where the name of the airport is input.
Associated Navaid	This is a fix that is associated with the airport. En Route like to fly to this fix, while Terminal does not.
Elevation	This is elevation of the fix in feet.
FDEP	This is selected if the airport is a FDEP facility.

The ability to Add, Delete and Modify, the runway data is also available at this time. The next level of window displayed is when the Add or Modify button is pressed.

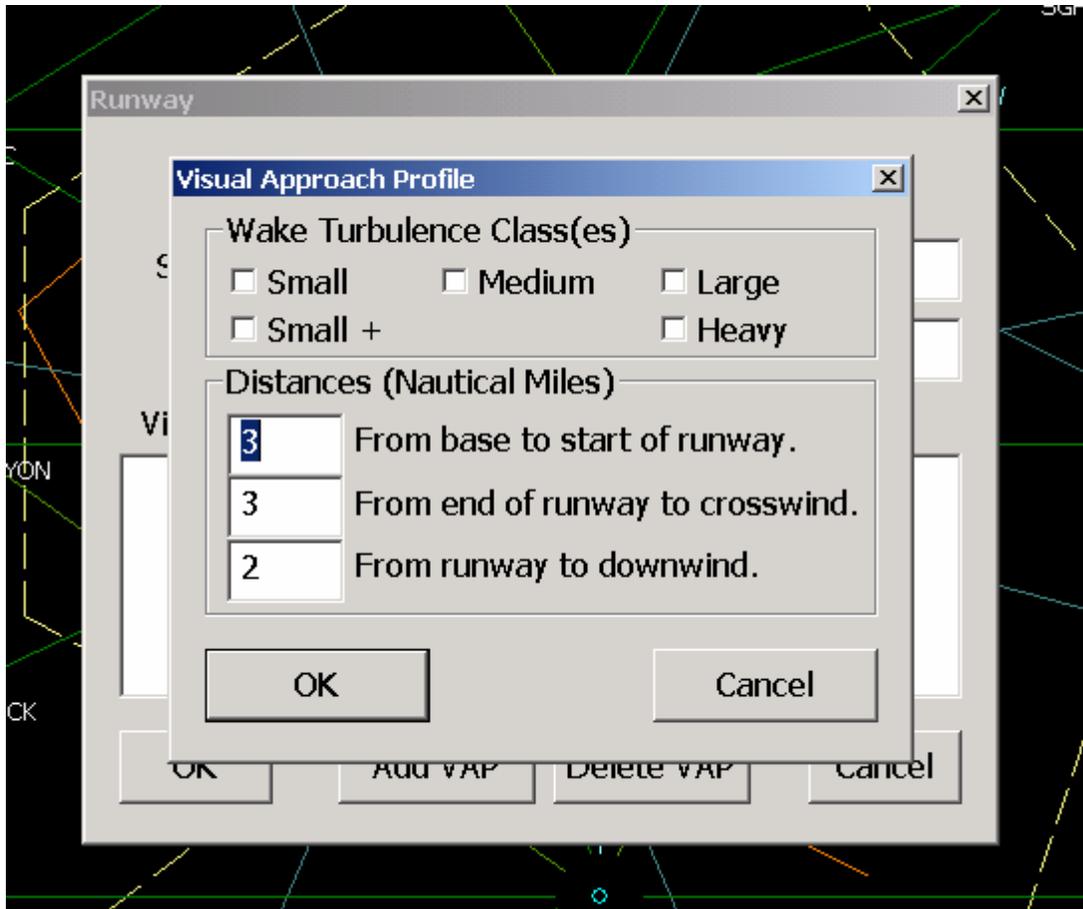


From this window the following can be input.

Name	This is where the name of the runway is input.
Active	This is whether the runway is active or not.
Width	This is the width of the runway in feet.
Start Location	This is the first latitude/longitude location of this runway.
End Location	This is the second latitude/longitude location of this runway.

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At this time the user can choose to go one level deeper into the Visual Approach Profile (VAP) area by selecting Add VAP and this window is displayed.



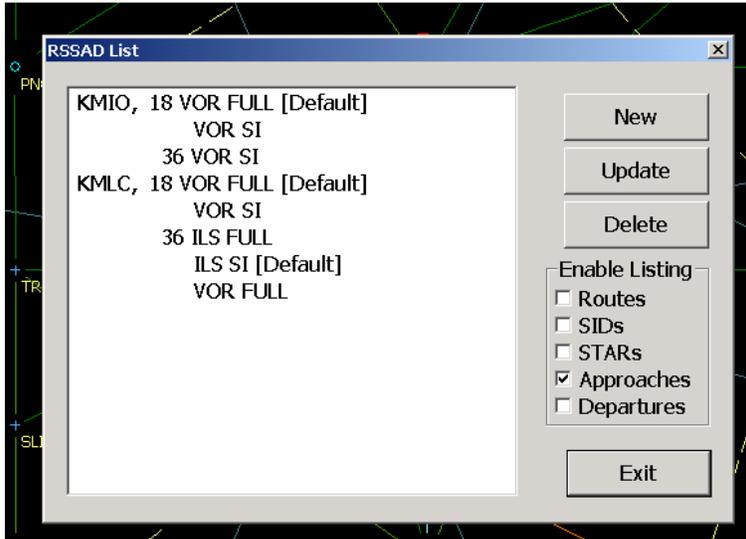
The user is required to select the Weight Classes that are appropriate. The distances are required for Base to Start of Runway, End of Runway to Crosswind and Runway to Downwind.

Finally, once a runway is built the user is asked if they would like to opposite runway to be generated automatically.

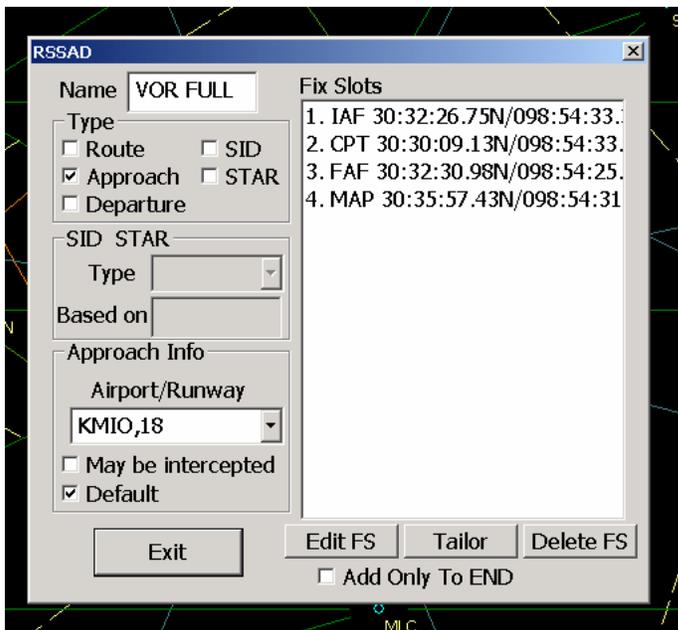
3/24/2005

6.1.2.1.12.3 Approaches

This is a Master only function.



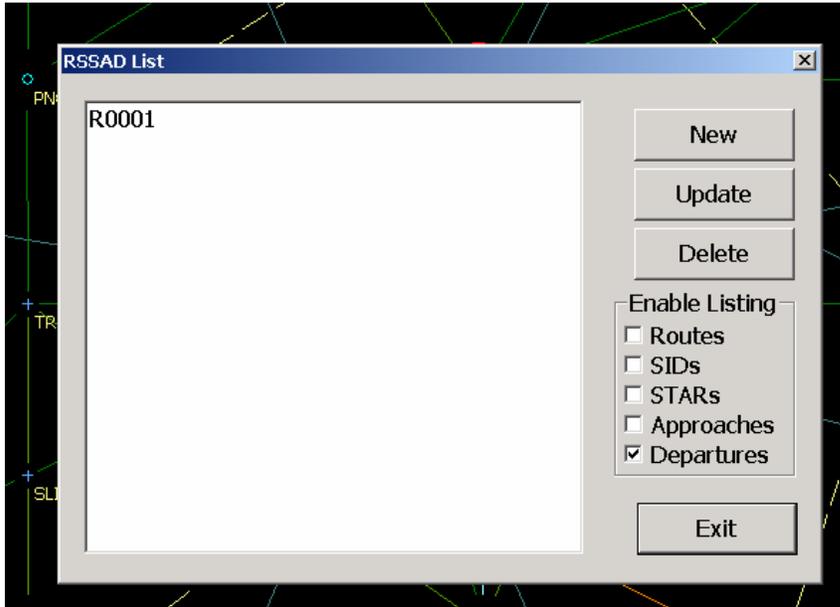
This window allows the user to create a new Approach, Modify an existing approach or Delete an existing approach. The existing Approaches are displayed in the list and indentation is used to indicate relationship. Example: KMIO in the window above has 3 approaches, two for runway 18 and one for runway 36. Redundant information is not displayed. By selecting, New or Update this next window will be displayed.



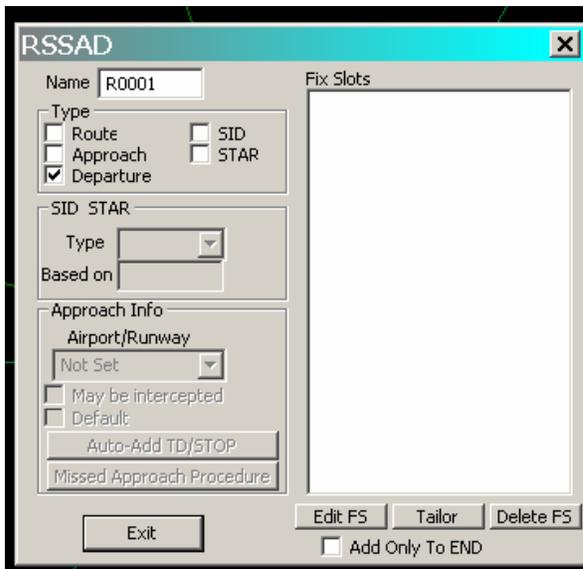
3/24/2005

6.1.2.1.12.4 Departures

This is a Master only function.



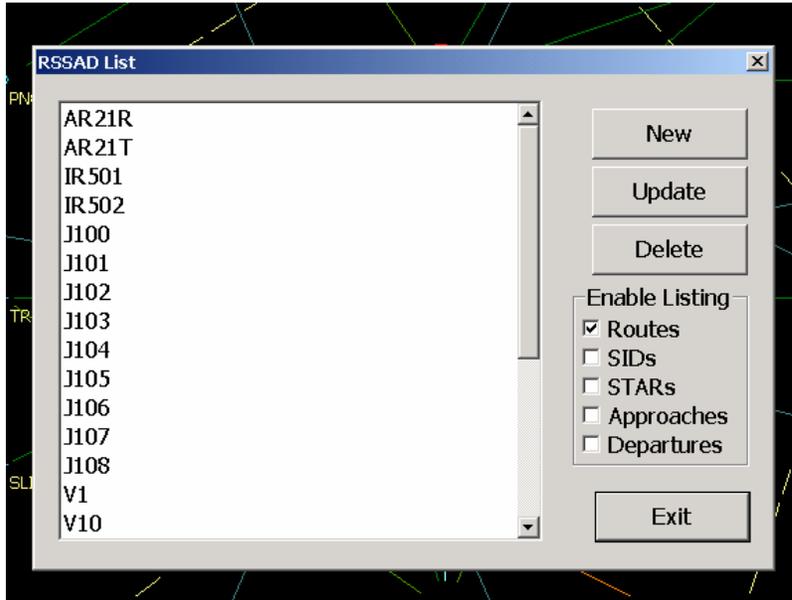
This window allows the user to create a new Departure, Modify an existing Departure or Delete an existing Departure. The existing Departures are displayed in the list. By selecting, New or Update this next window will be displayed.



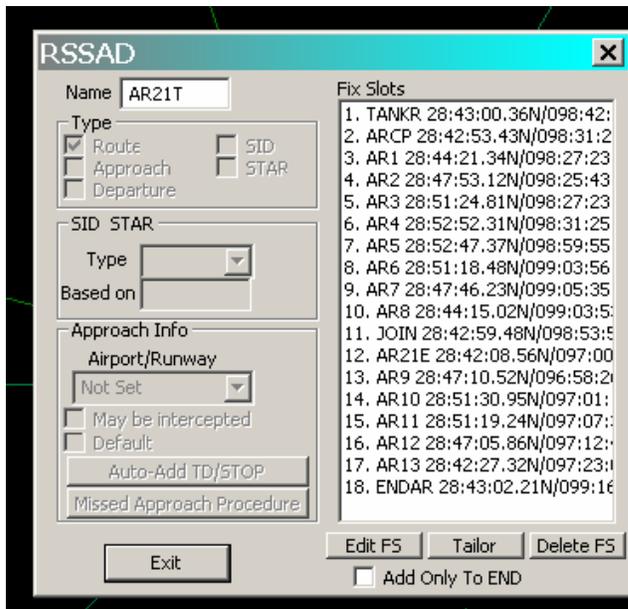
3/24/2005

6.1.2.1.12.5 Routes

This is a Master only function.



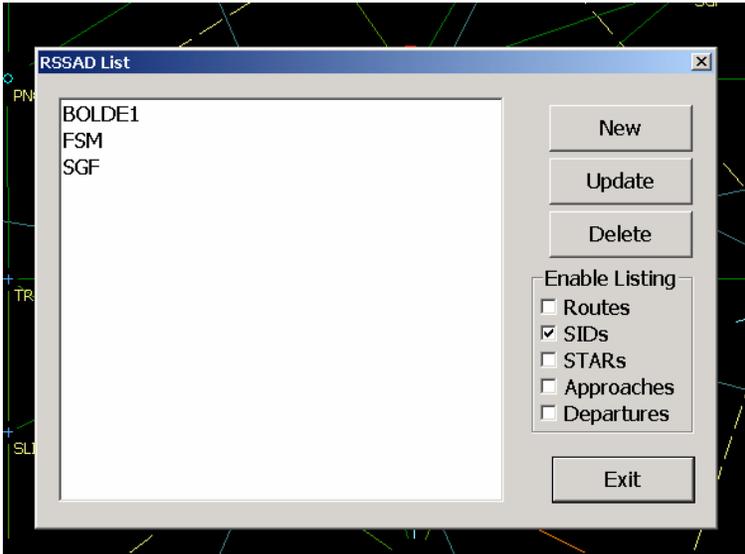
This window allows the user to create a new Route, Modify an existing Route or Delete an existing Route. The existing Routes are displayed in the list. By selecting, New or Update this next window will be displayed.



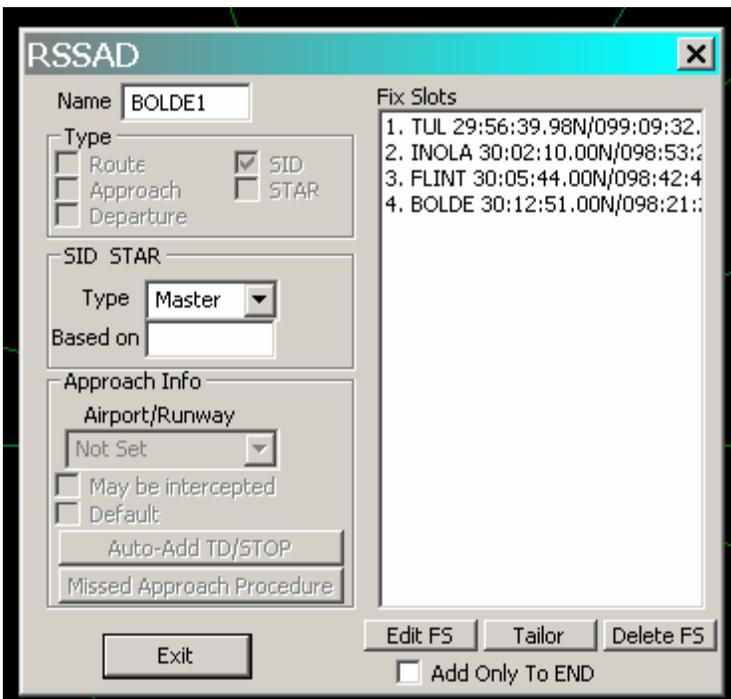
3/24/2005

6.1.2.1.12.6 SIDS

This is a Master only function.



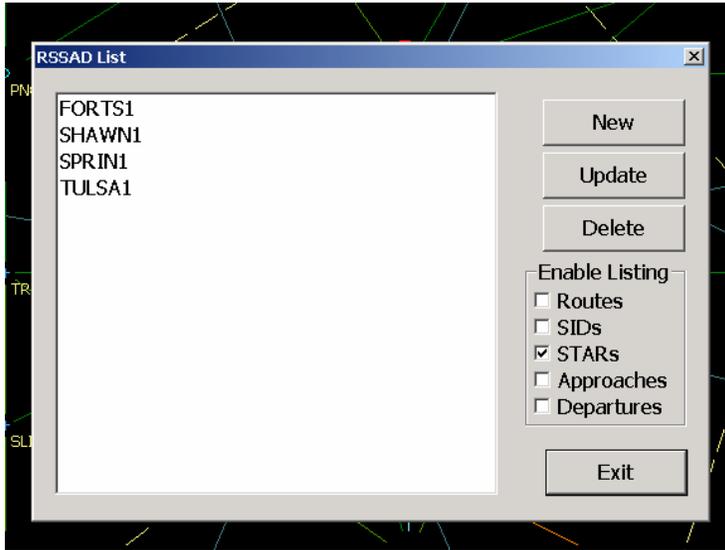
This window allows the user to create a new SID, Modify an existing SID or Delete an existing SID. The existing SIDs will be displayed in the list. By selecting, New or Update this next window will be displayed.



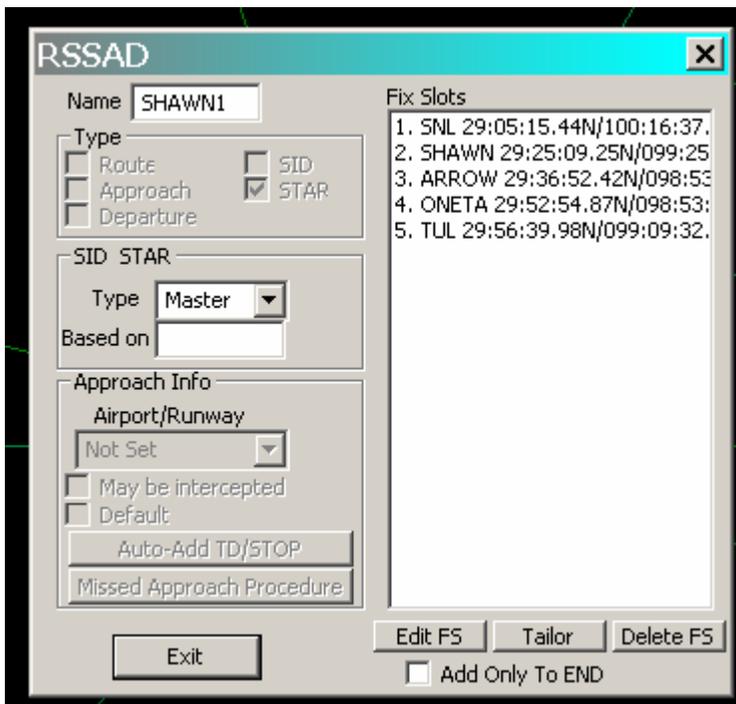
3/24/2005

6.1.2.1.12.7 STARs

This is a Master only function.



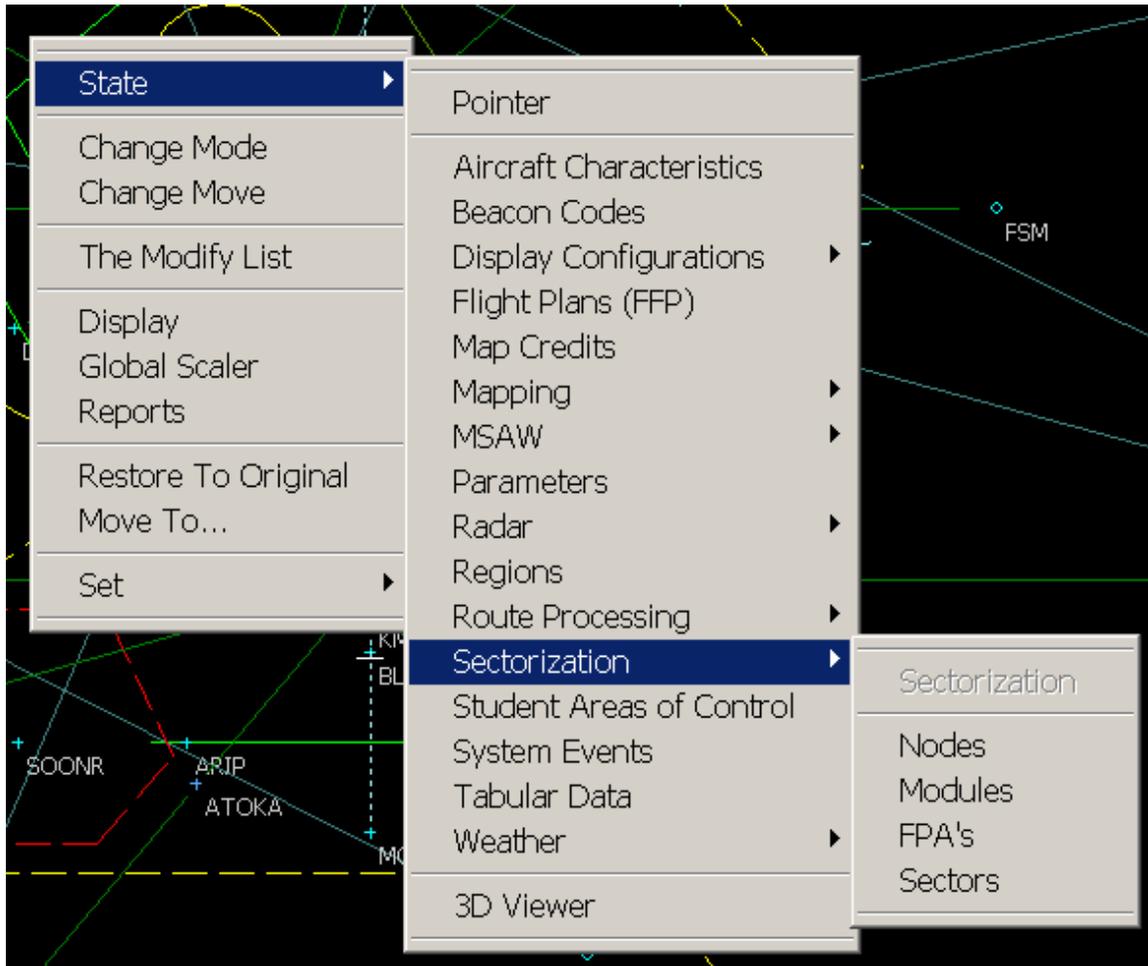
This window allows the user to create a new STAR, Modify an existing STAR or Delete an existing STAR. The existing STARs are displayed in the list. By selecting, New or Update this next window will be displayed.



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6.1.2.1.13 Sectorization

This is a Master only function.

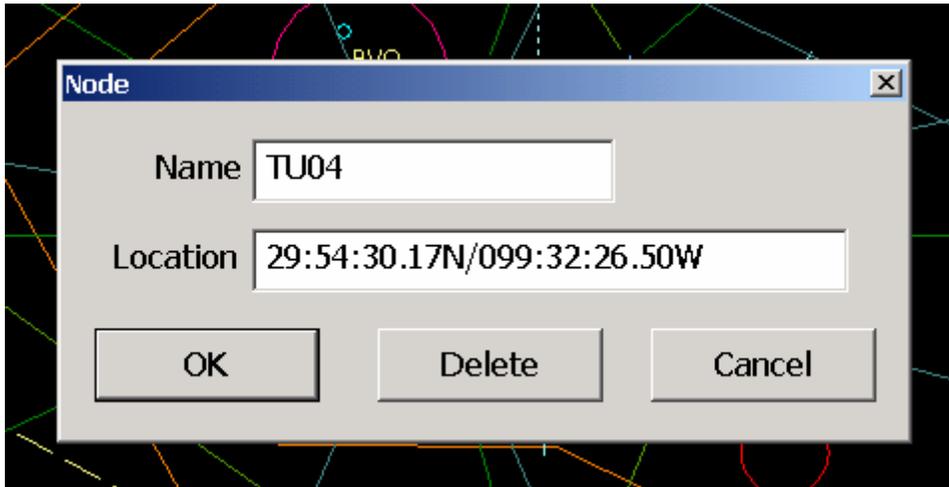


This submenu allow the users to access the areas that allow Add, Modify and Delete of Nodes, FPAs, Sectors, Transition Lines, MSAW Post, MSAW Subareas, MSAW Areas, Radar Sort Box Configuration, RSB & Radar Sites as described in the following sections. All these submenu function are Master only.

3/24/2005

6.1.2.1.13.1 Nodes

This is a Master only function.

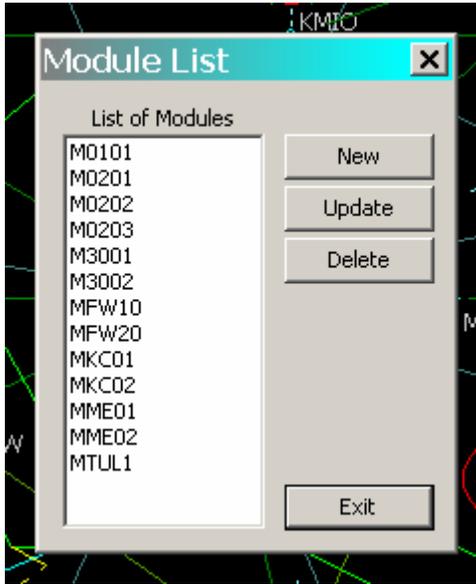


Nodes are used to identify a Latitude/Longitude position with a name. When building a FPA (Fix Posting Area), you reference Nodes to describe the Modules physical shape.

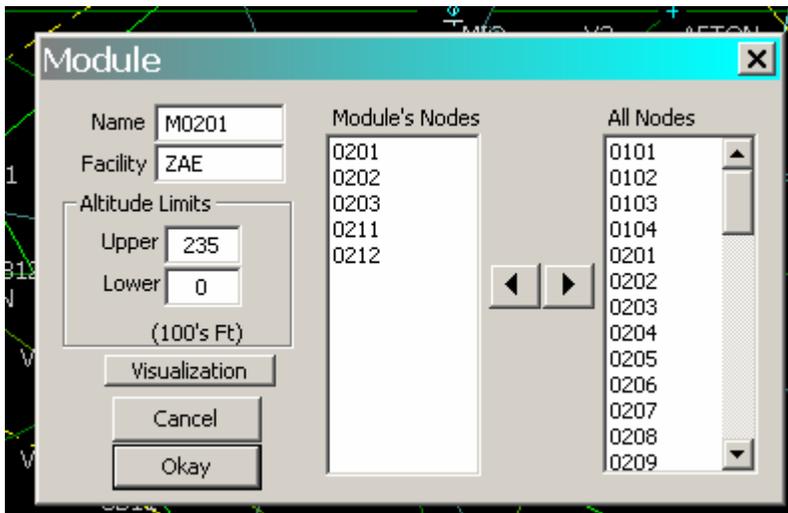
3/24/2005

6.1.2.1.13.2 Modules

This is a Master only function.



This window allows the user to create a new Module, Modify an existing Module or Delete an existing Module. The existing Modules are displayed in the list. By selecting New or Update, this next window will be displayed.

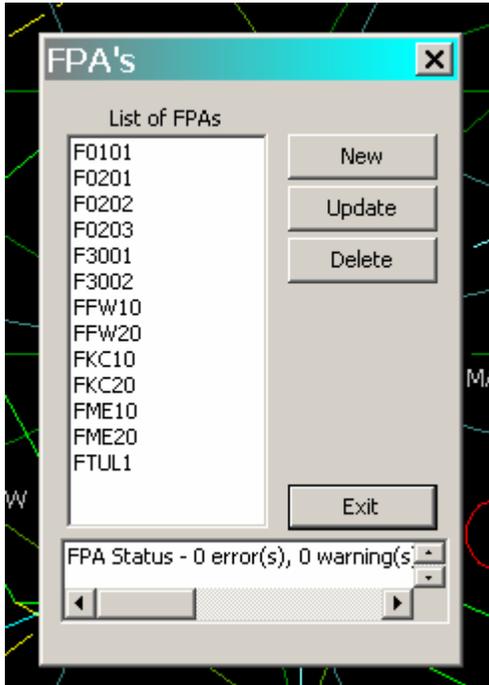


This window is used to configure a Module. A Module is a collection of Nodes.

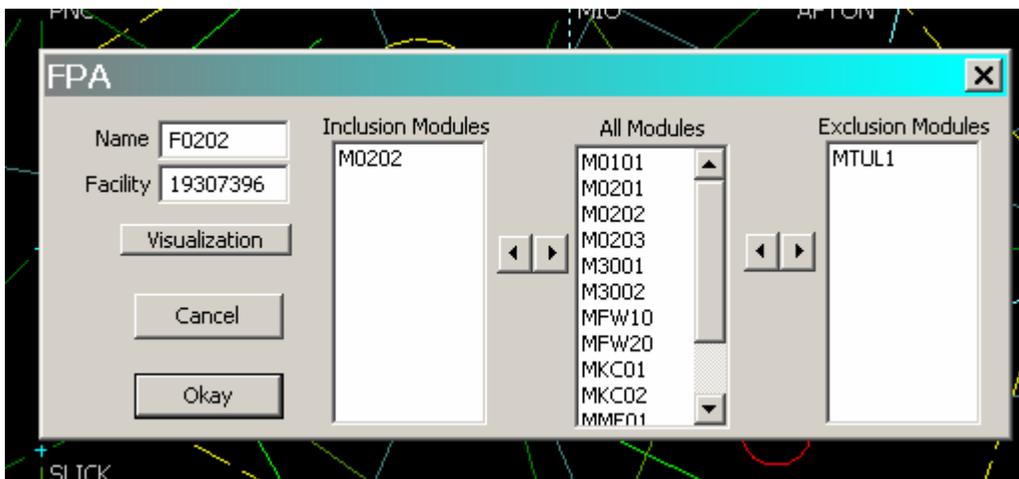
3/24/2005

6.1.2.1.13.3 FPA's

This is a Master only function.



This window allows the user to create a new FPA, Modify an existing FPA or Delete an existing FPA. The existing FPAs are displayed in the list. By selecting New or Update, this next window will be displayed.

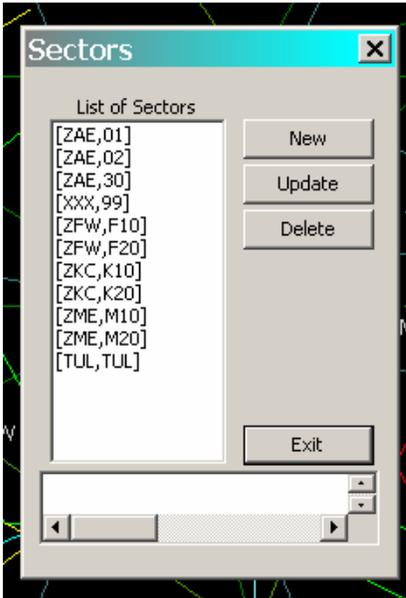


This window is used to configure a FPA. A FPA is a collection of inclusion and exclusion Modules.

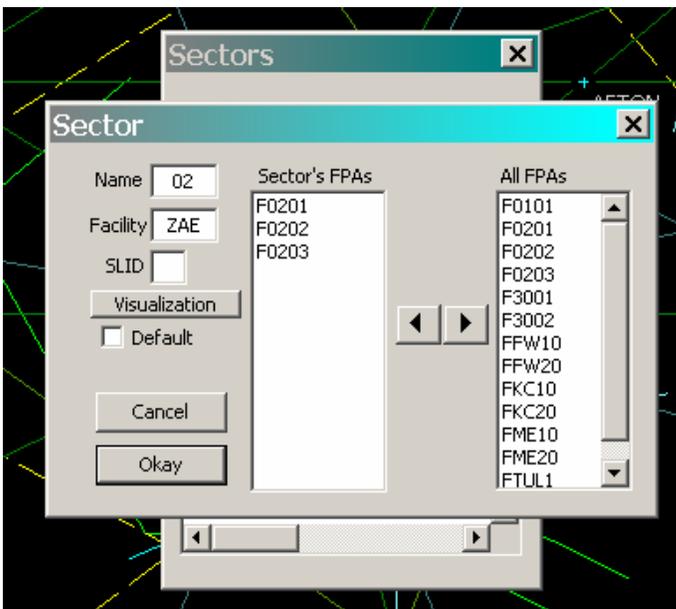
3/24/2005

6.1.2.1.13.4 Sectors

This is a Master only function.



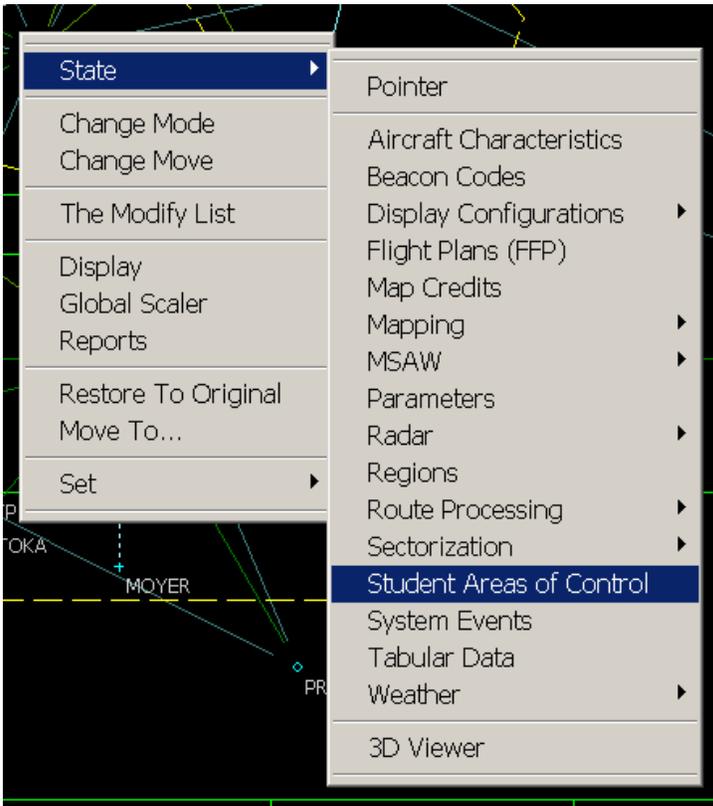
This window allows the user to create a new Sector, Modify an existing Sector or Delete an existing Sector. The existing Sectors are displayed in the list. By selecting New or Update, this next window will be displayed.



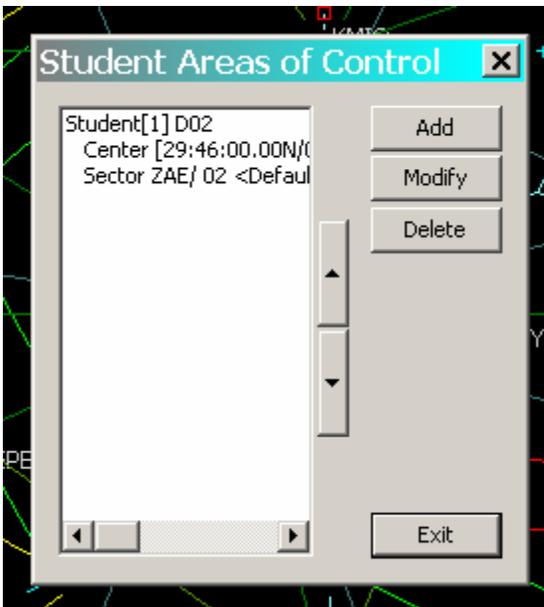
This window is used to configure a Sector. A Sector is a collection of FPAs.

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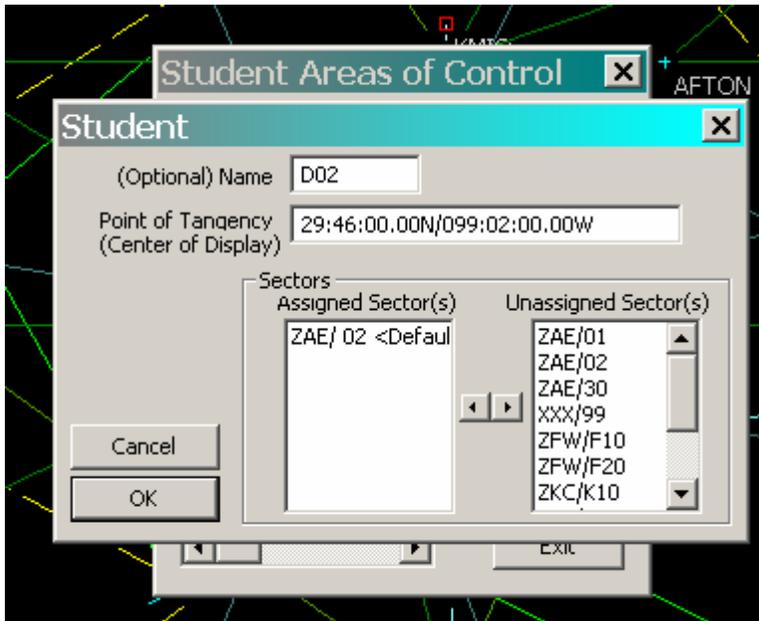
6.1.2.1.14 Student Areas of Control



This area allows the users to setup the Students for the Scenario.



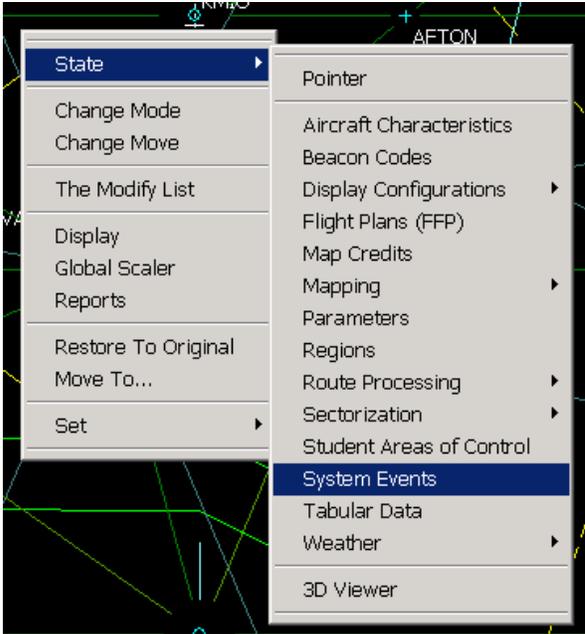
3/24/2005



A Student has an assigned name, center of display and assigned sectors. This window allows this type of interaction.

3/24/2005

6.1.2.1.15 System Events



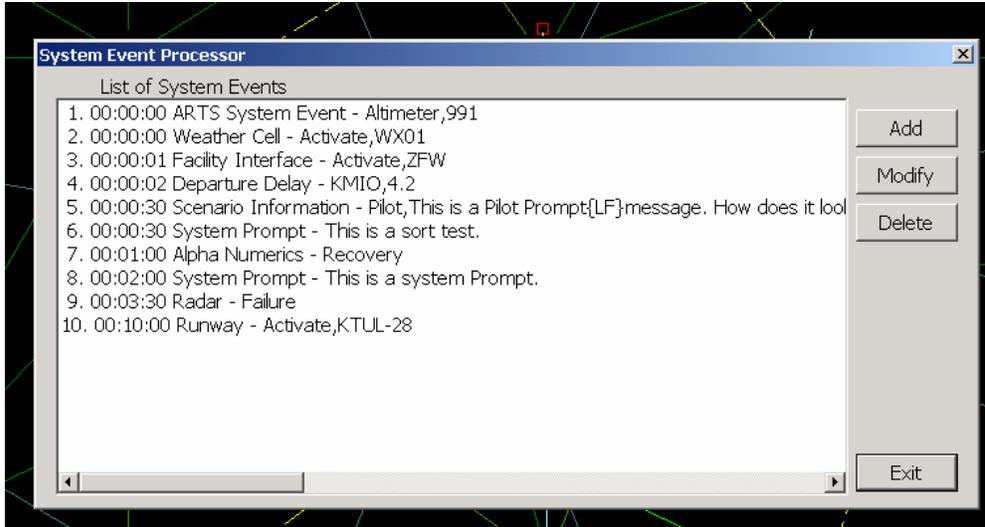
System Events are used to control the scenario environment, not aircraft. These events are as follows;

- Alpha Numerics (Failure/Recovery)
- ARTS System Events(Altimeter, ATISC, General Information, Operational Level, Environmental Data)
- Departure Delay(Airport & Time)
- Facility Interface(Facility)
- Radar(Failure/Recovery)
- Runway(Activate/Deactivate)
- Scenario Information(Text)
- System Prompt(Text)
- Weather Cell(Activate/Deactivate)
- Weather Station(Altimeter, Report).

Selecting the System Events menu item will display the System Event List window.

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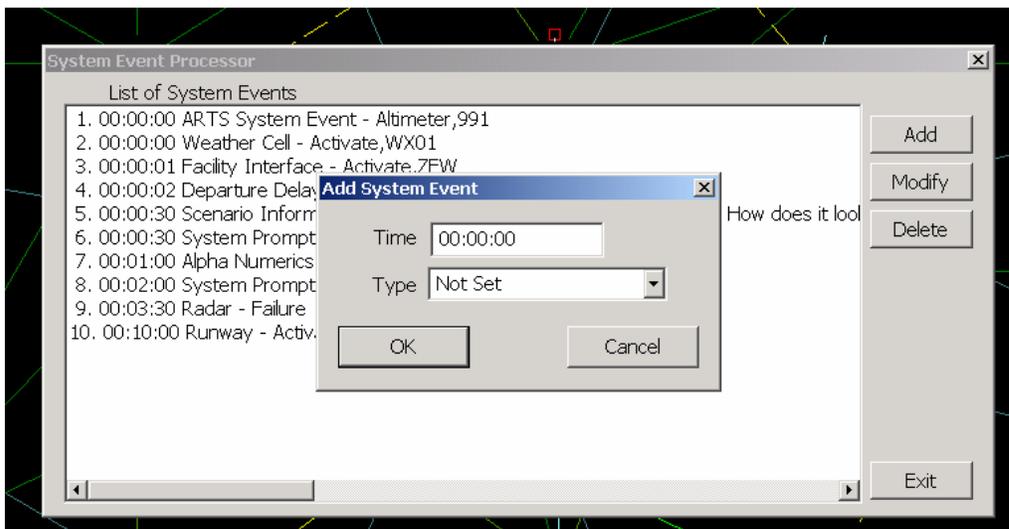
6.1.2.1.15.1 System Event List



The Delete Button requires that a System Event be selected from the List and then the Delete must be confirmed.

The Modify Button allows the modification of the System Event data and requires that a System Event be selected from the List first. Double clicking on a list item will take that System Event into the Modify mode.

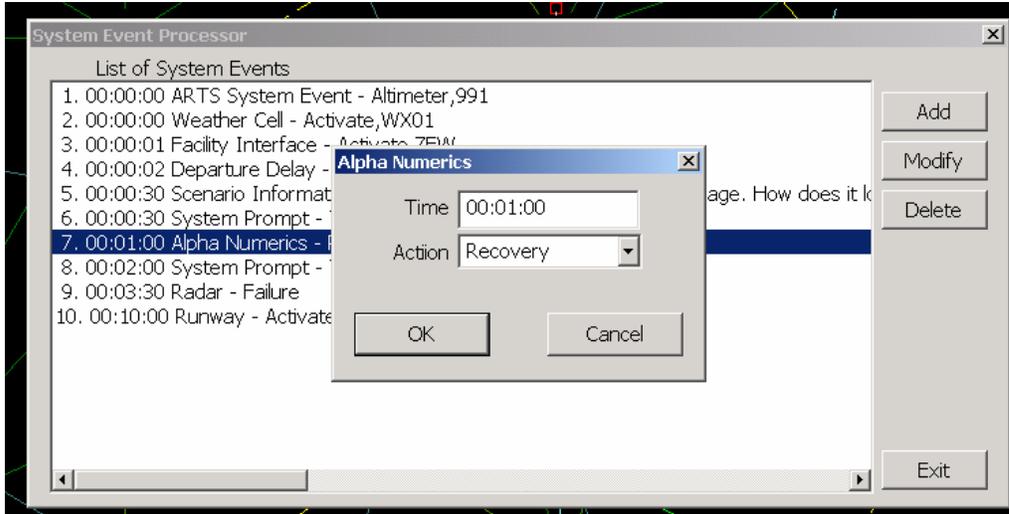
The Add Button will display this window. The Time and Type of event can be set at this time. Once an event is added the Type for that event cannot be changed. The Time can be changed during modify at anytime.



The Exit button will exit the System Event Area.

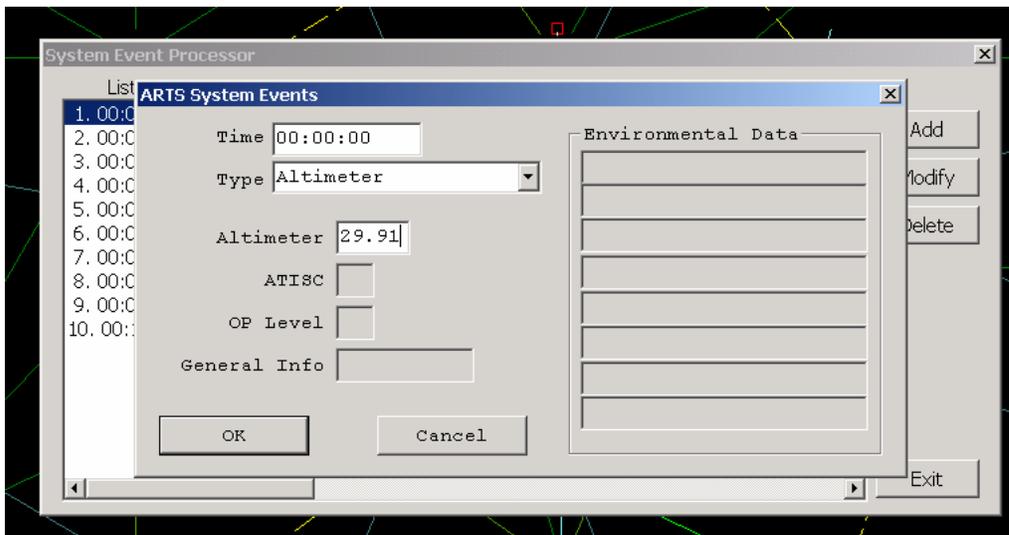
3/24/2005

6.1.2.1.15.2 Alpha Numeric Event



This System Event controls the display of Alpha Numeric Data on the Controller display. Valid actions are Failure & Recovery.

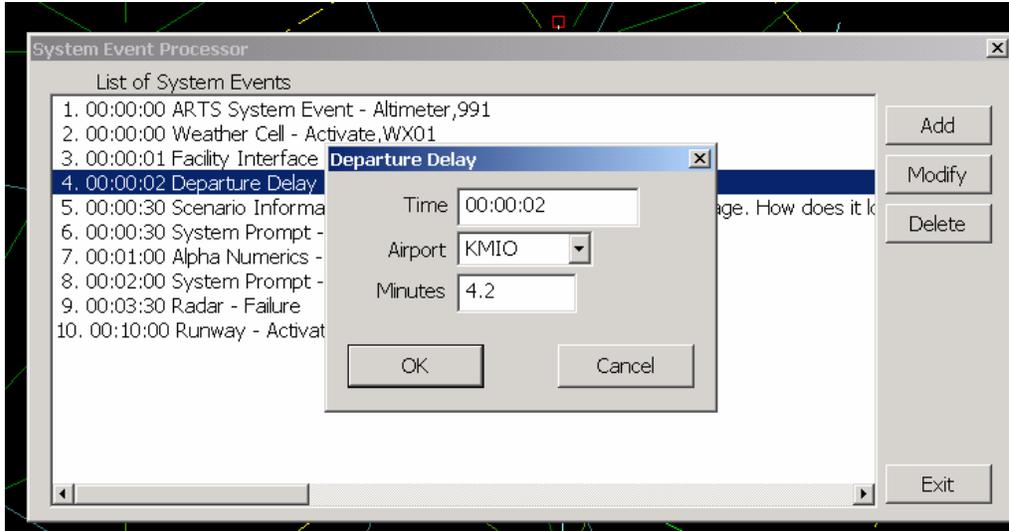
6.1.2.1.15.3 Arts System Event



This System Event is used to change ARTS configuration data. The Altimeter, ATISC, Operational Level and General Information field in the System Data Area can be changed. The Environmental Data display area can be changed also.

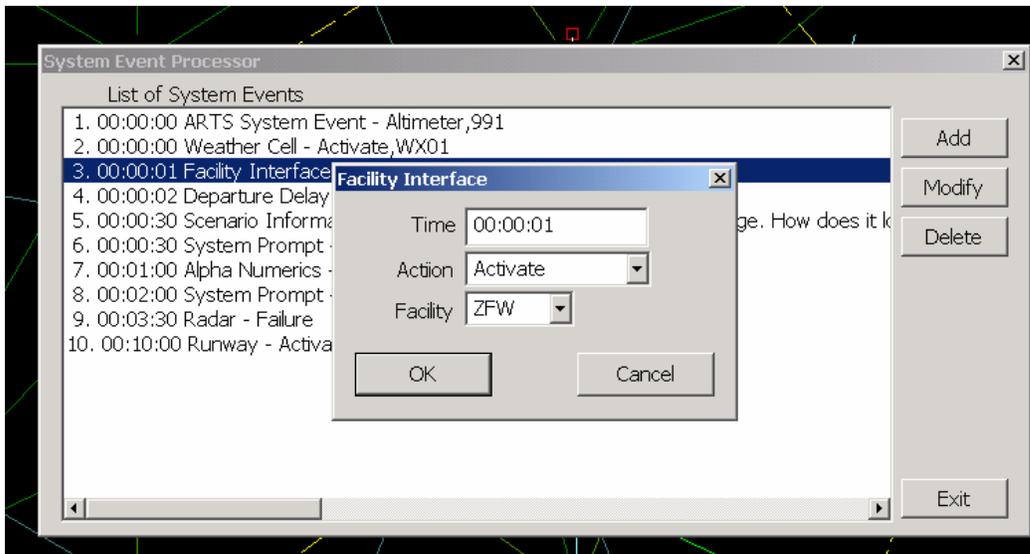
3/24/2005

6.1.2.1.15.4 *Departure Delay Event*



This System Event allows an Airport's Departure Delay time to be changed.

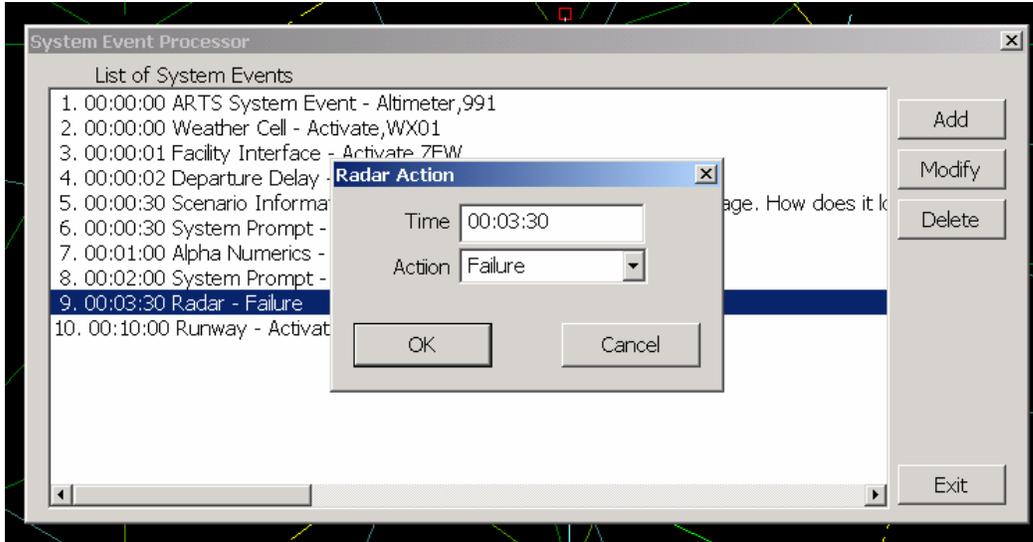
6.1.2.1.15.5 *Facility Interface Event*



This System Event allows the Interfacing between Facilities to Activated or Deactivated.

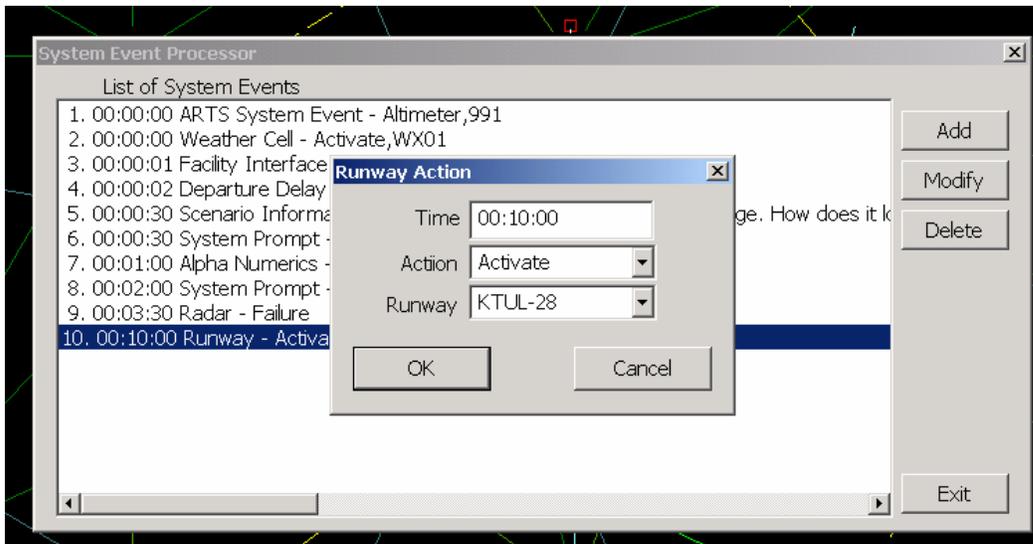
3/24/2005

6.1.2.1.15.6 Radar Event



This System Event allows the Radar to be Failed or Recovered.

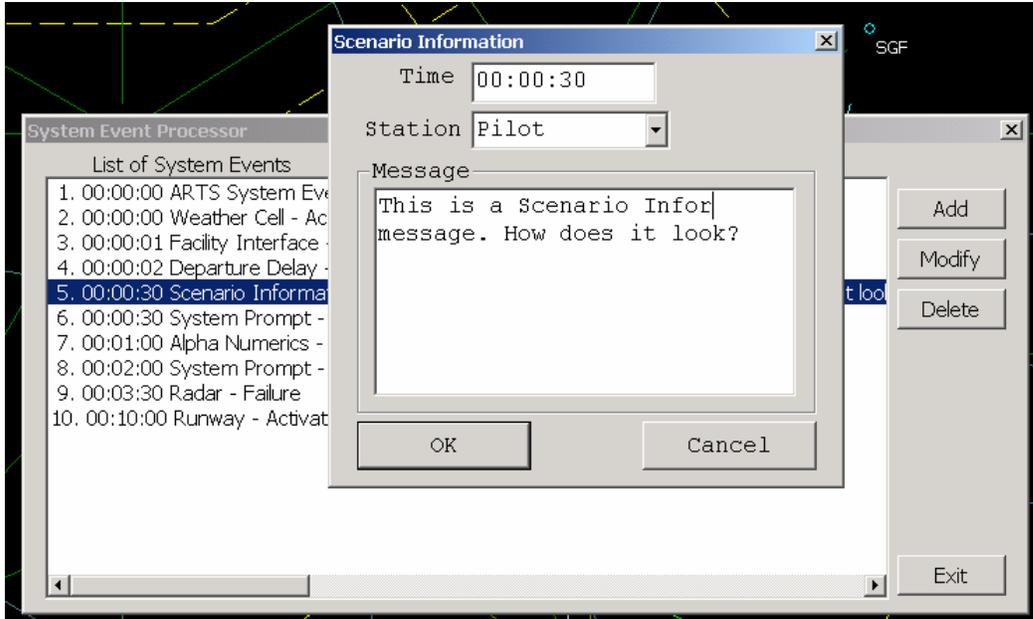
6.1.2.1.15.7 Runway Event



This System Event allows a Runway to be Activated or Deactivated. This only effects the List of Valid Approaches available for Pilot Selection.

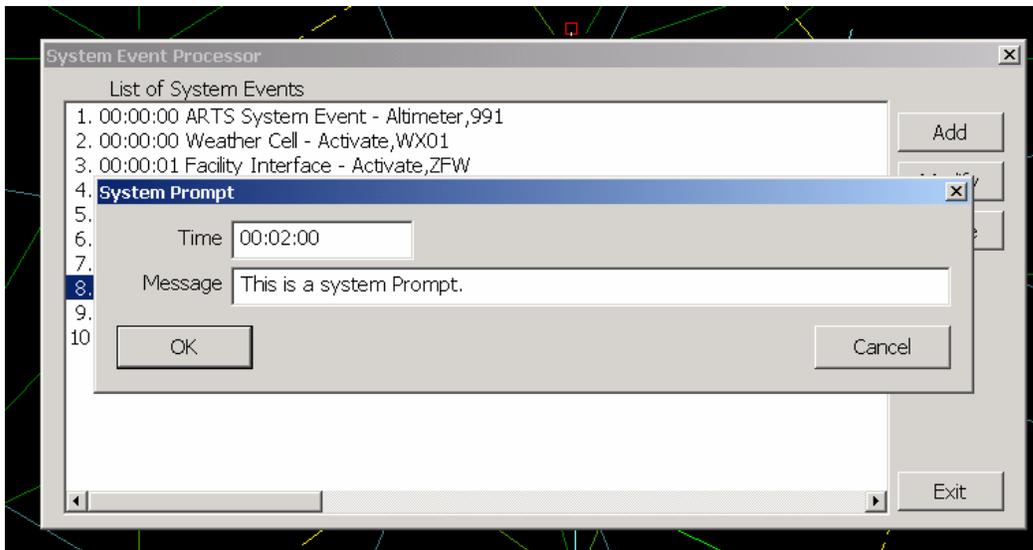
3/24/2005

6.1.2.1.15.8 Scenario Information Event



This System Event allows a story like text to be sent to either the Pilot or Controller or Both. This is used to acquaint the student and pilot of important information needed in the scenario.

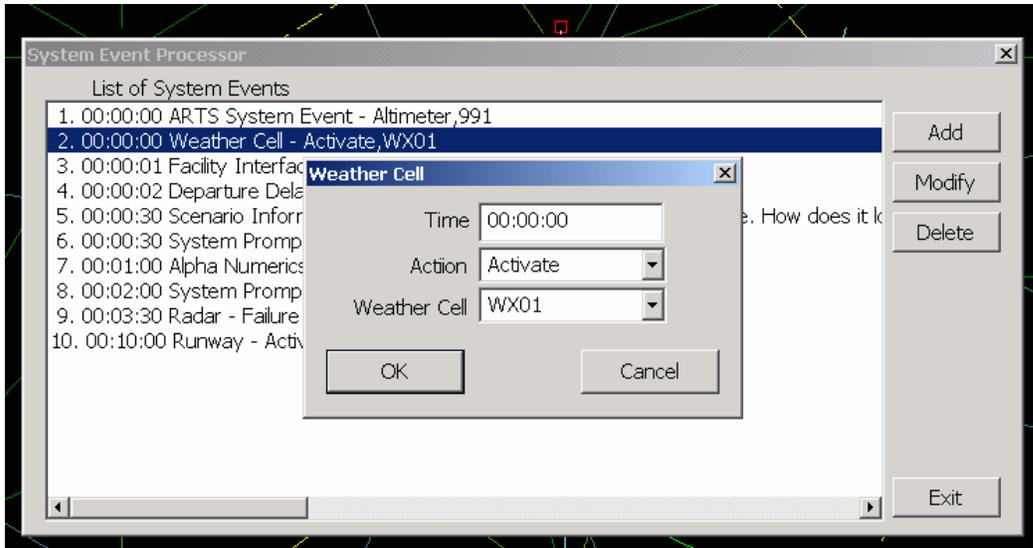
6.1.2.1.15.9 System Prompt Event



This System Event is used to Prompt the Pilot of an event that is about to happen.

3/24/2005

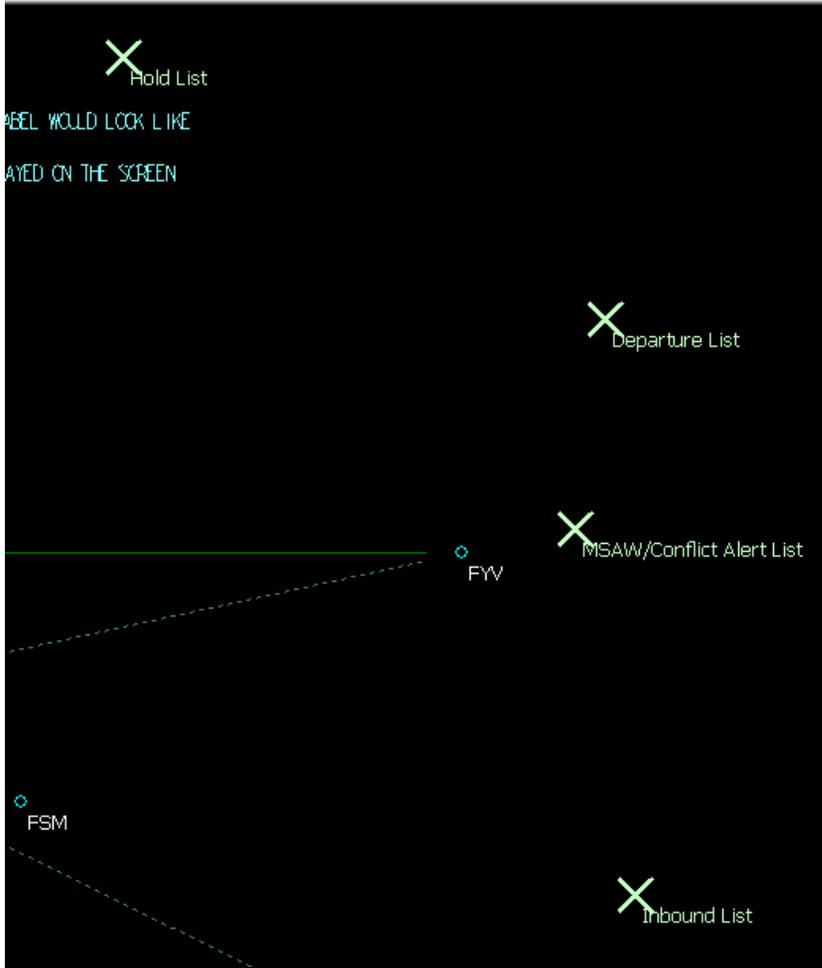
6.1.2.1.15.10 Weather Cell Event



This System Event is used to Activate or Deactivate a Weather Cell.

3/24/2005

6.1.2.1.16 Tabular Data



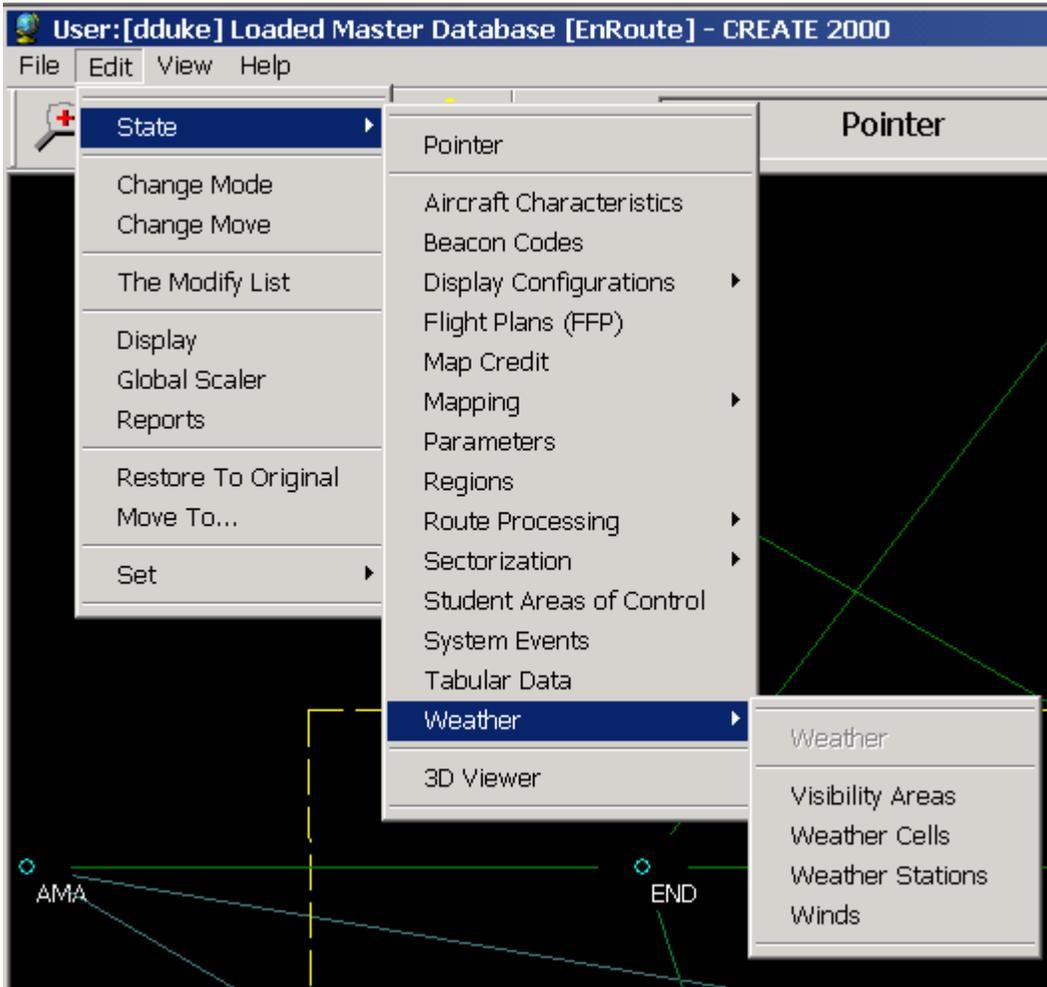
This is a Master only area. This area controls the placement of display on the Control's display. Only list associated with the Type of database, i.e. Terminal, En Route, etc. will be displayed. This software allows these list position indicators to be moved to a desired place on the screen.

A light green X is used to indicate the location of the list. These markers can be dragged anywhere on the screen as desired.

3/24/2005

6.1.2.1.17 Weather

This is a Master only function.



These areas are Master only.

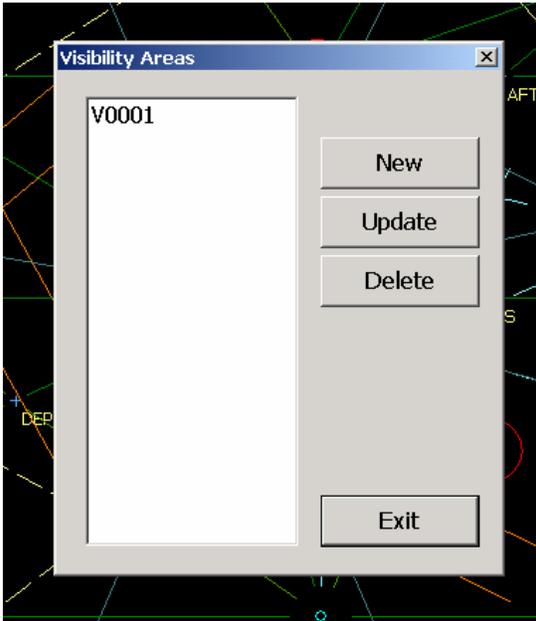
1. Visibility Areas
2. Weather Cells
3. Weather Stations

The Winds are part of the Scenario data area and can be modified by a Master or a Scenario. Normally the Winds would be in the Scenario only.

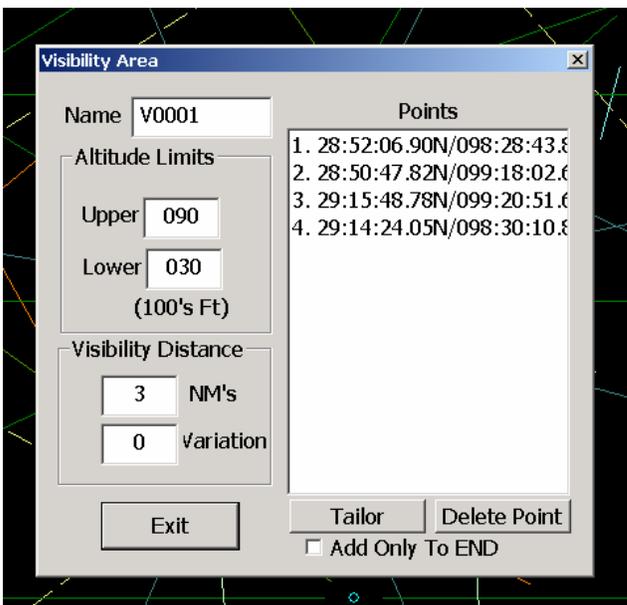
3/24/2005

6.1.2.1.17.1 Visibility Areas

This is a Master only function.



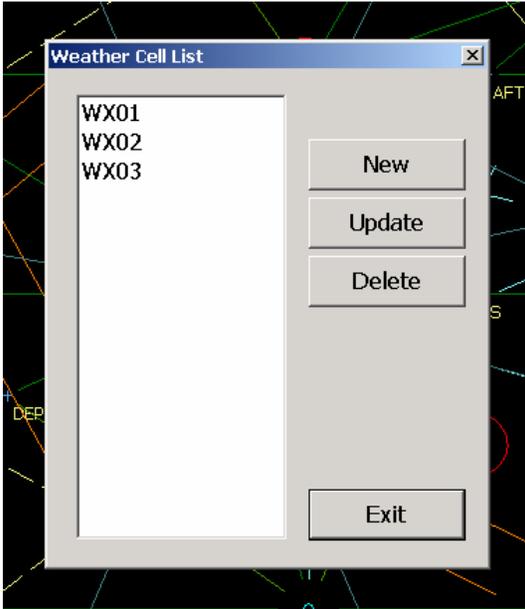
This window allows the user to create a new Visibility Area, Modify an existing Visibility Area or Delete an existing Visibility Area. The existing Visibility Areas are displayed in the list. By selecting New or Update, this next window will be displayed.



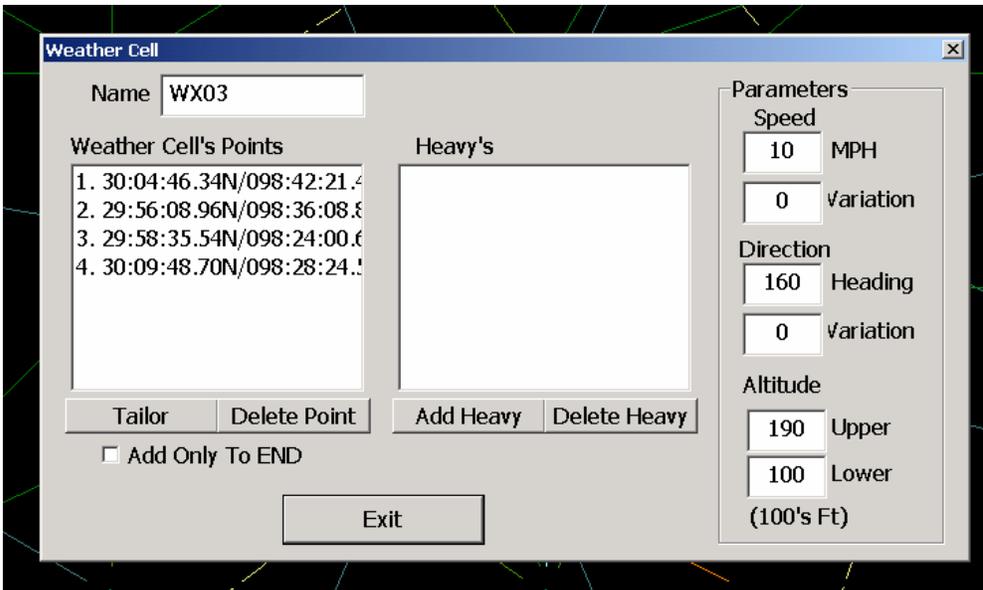
3/24/2005

6.1.2.1.17.2 Weather Cells

This is a Master only function.



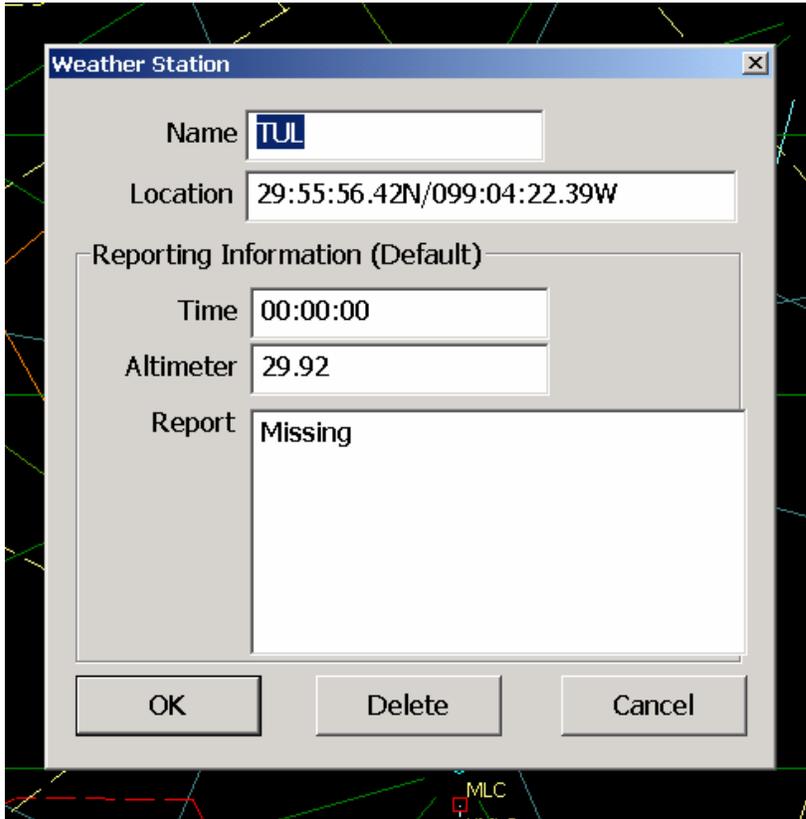
This window allows the user to create a new Weather Cell, Modify an existing Weather Cell or Delete an existing Weather Cell. The existing Weather Cells are displayed in the list. By selecting New or Update, this next window will be displayed.



3/24/2005

6.1.2.1.17.3 Weather Stations

This is a Master only function.

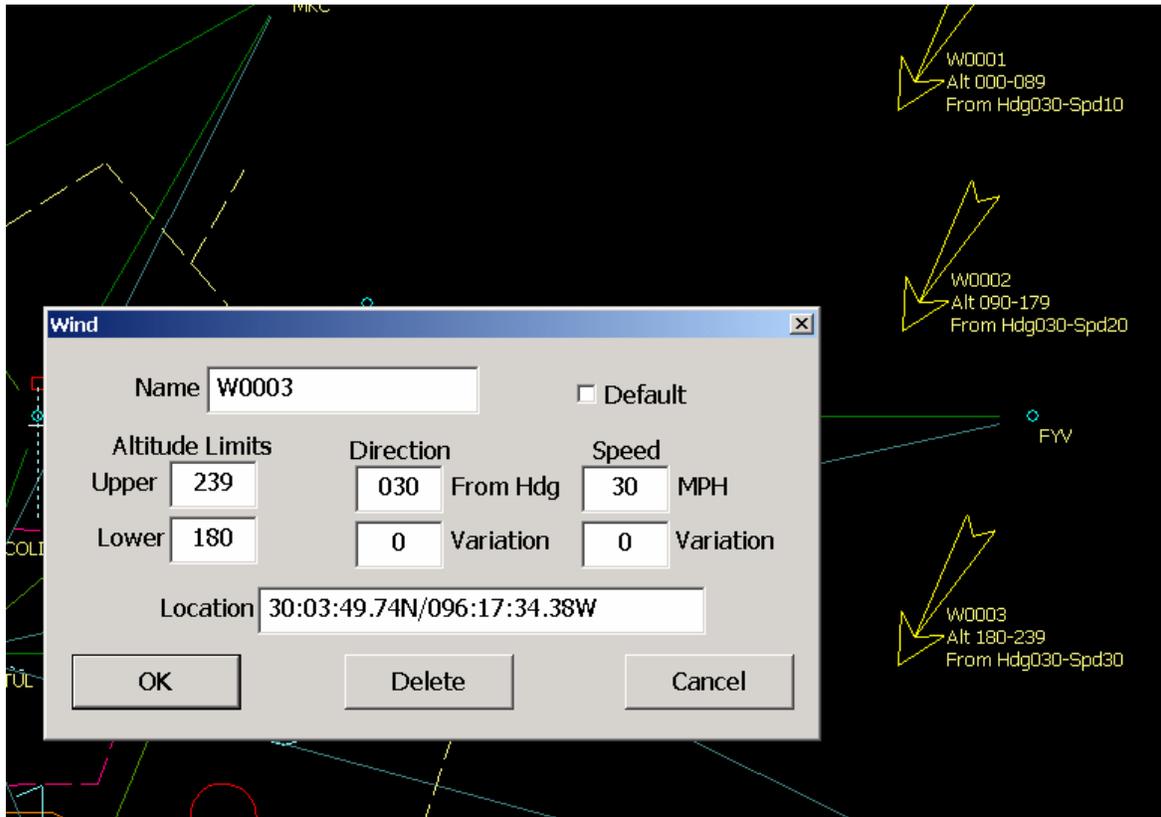


Weather Stations are used to add weather information to a scenario. These Weather Stations hold the original Time, Altimeter and a Weather Report. System Events are used to update these pieces of data as the Scenario is being run on the simulator.

3/24/2005

6.1.2.1.17.4 Winds

This is a Master or Scenario function.

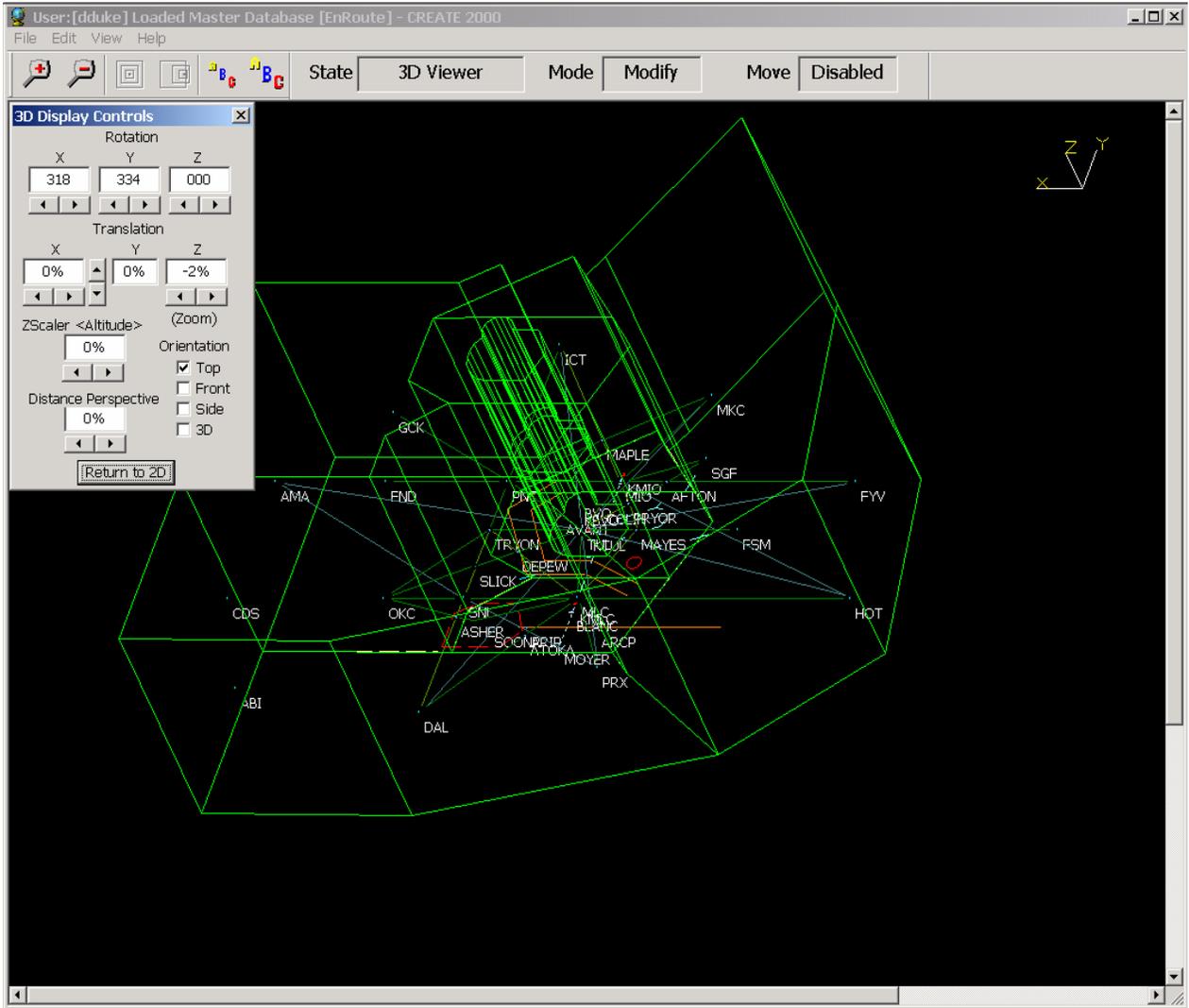


The above window is used to configure a Wind object. As many Wind object as necessary can be created. The Wind objects are activated and deactivated by using System Events.

Note: Active Wind objects should not overlap. If this occurs, the resulting outcome would not be predictable.

3/24/2005

6.1.2.1.18 3D Viewer

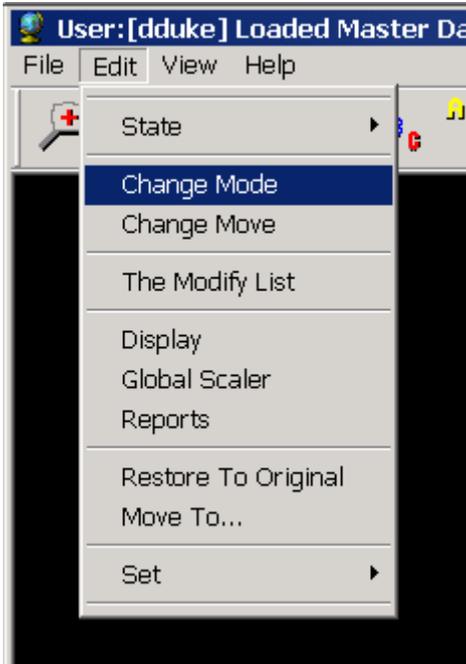


This toggles the 3D Display Controls Up/Down. The 3D Display Controls allow the user to view the database in a 3D mode. Reference the section concerning the Keyboard Functions to determine the associated keys for the Viewer.

Note: The keyboard allows a much smoother operation of the Viewer. Some functions are not assigned to the keyboard and must be performed on the Viewer window itself.

3/24/2005

6.1.2.2 Change Mode



This toggles the Mode between Add to Modify. The current Mode state is displayed in the Toolbar across the top of the Main Window.

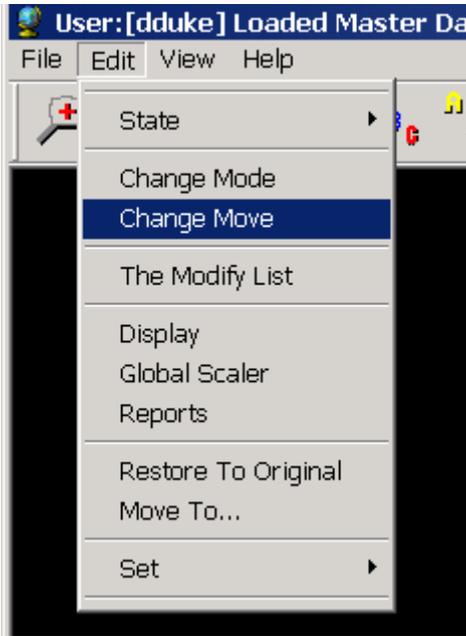


The Mode is used to determine how each State is to function and to help determine Mouse actions. For some States the mode is not used. As a general rule, when you are working with the map window, then the Mode is used.

Reference the Keyboard Function section to see how to engage this function via the keyboard.

3/24/2005

6.1.2.3 Change Move



This toggles the Move between Enabled and Disabled. The current Move state is displayed in the Toolbar across the top of the Main Window.

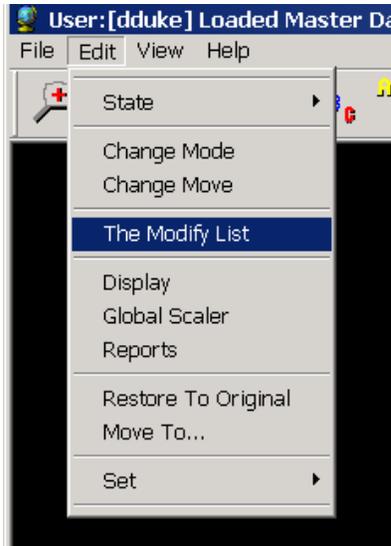


The Move is only active when Mode is in the Modify mode. It is used to determine if an existing item for a State can be captured and drug around on the screen. As a general rule, when you are working with the map window, then the Move is usable.

Reference the Keyboard Function section to see how to engage this function via the keyboard.

3/24/2005

6.1.2.4 The Modify List



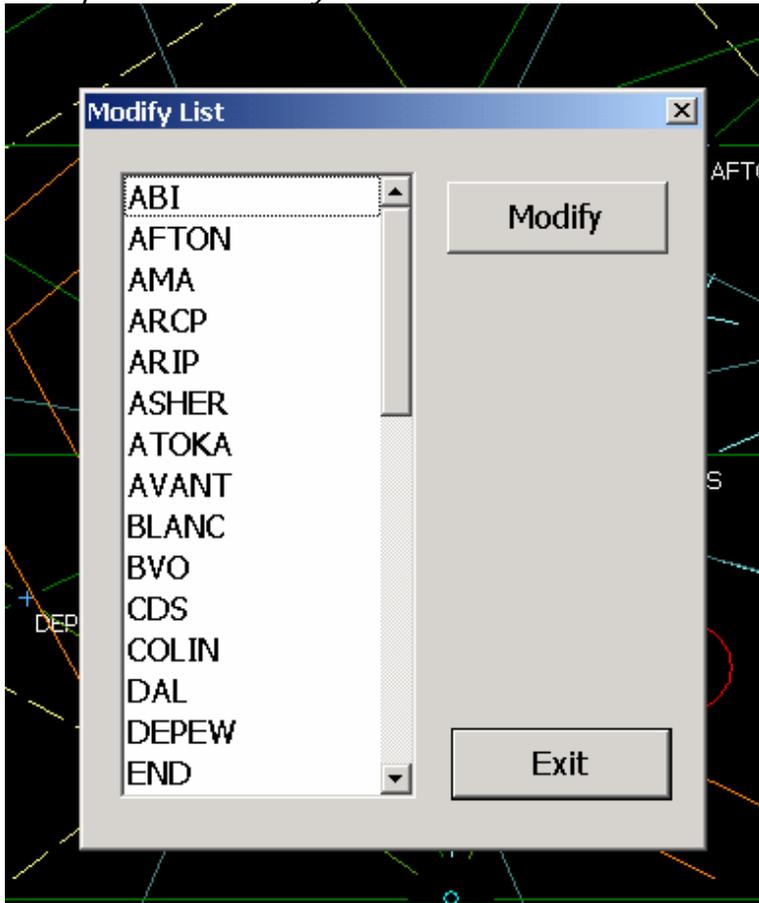
The Modify List can only be displayed when the Mode is set to Modify and one of the following States is currently set.

- Fixes**
- Nodes**
- Radar Sites**
- Weather Stations**
- Winds**
- Transition Lines**
- Arcs**
- Arrows**
- Chart Symbols**
- Flags**
- Labels**
- Lines**
- Map Symbols**
- 3D Objects**

The List will contain a list of add the items for that State.

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Example of The Modify List

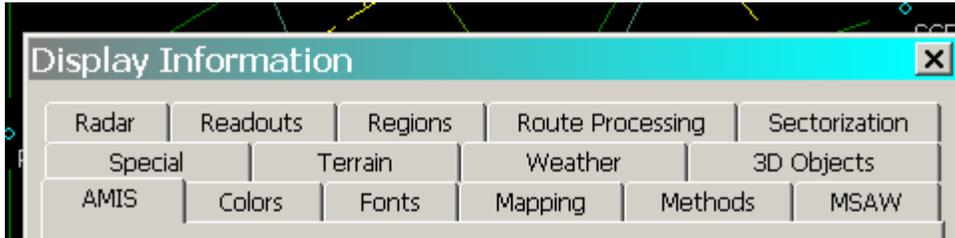


This window function by selecting an item from the list and press the Modify button. All the Data Type that can use this window also allows the items to be selected by simply clicking the left mouse button on the item. This window was intended to allow the selection of items that are presently at a location off the screen for modification.

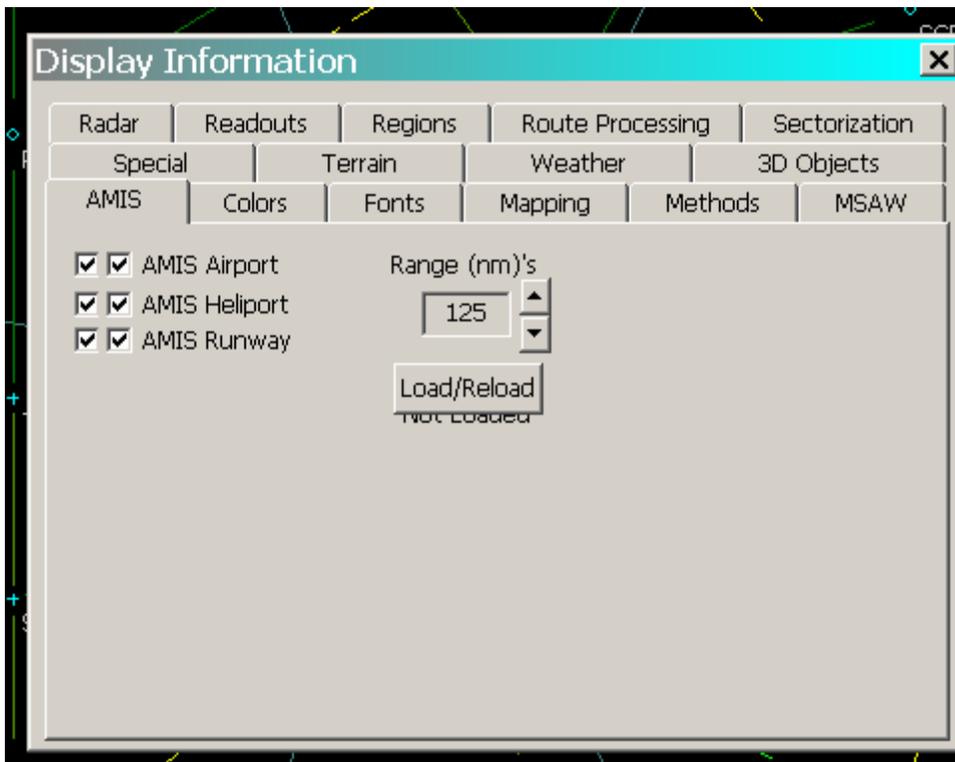
3/24/2005

6.1.2.5 Display

The Display Window is a Property Sheet that has many Property Pages. To access a page, simply click on the desired tab of that page.



6.1.2.5.1 AMIS



This Window allows the display of the AMIS data that exist in the database. Only real world database will have AMIS data. This data is automatically added by pressing the Load/Reload button.

3/24/2005

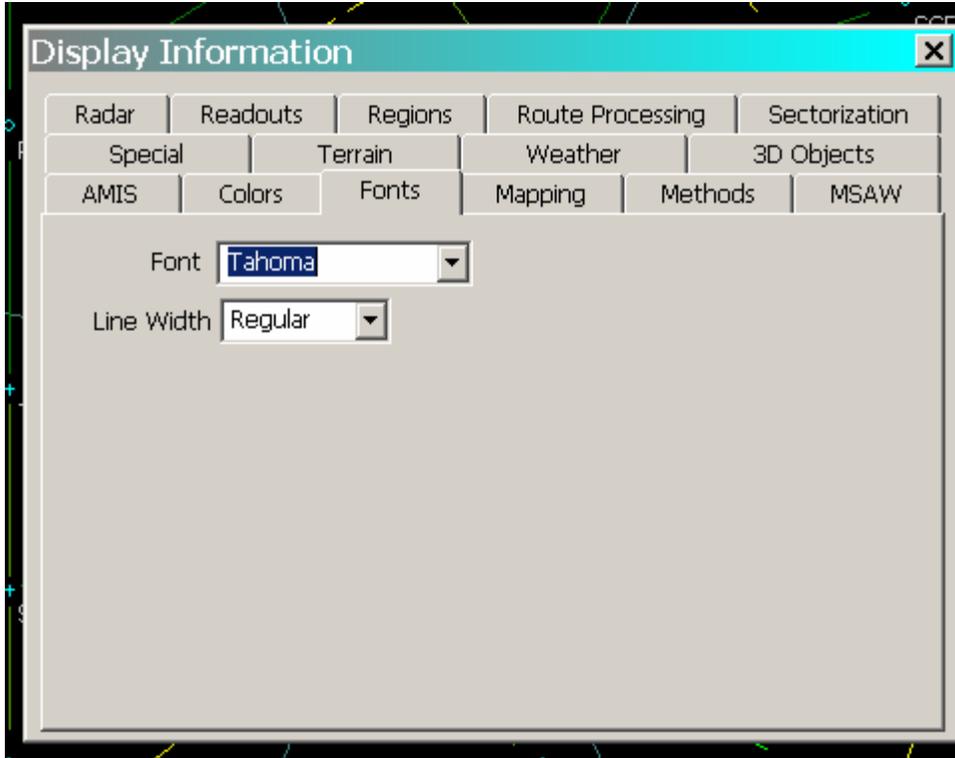
6.1.2.5.2 Colors



This Window allows the user to change the Background & Label Color. The change is immediate to the display. This information is saved when the database is saved and is used when the database is loaded in the future to set the initial state of these items.

3/24/2005

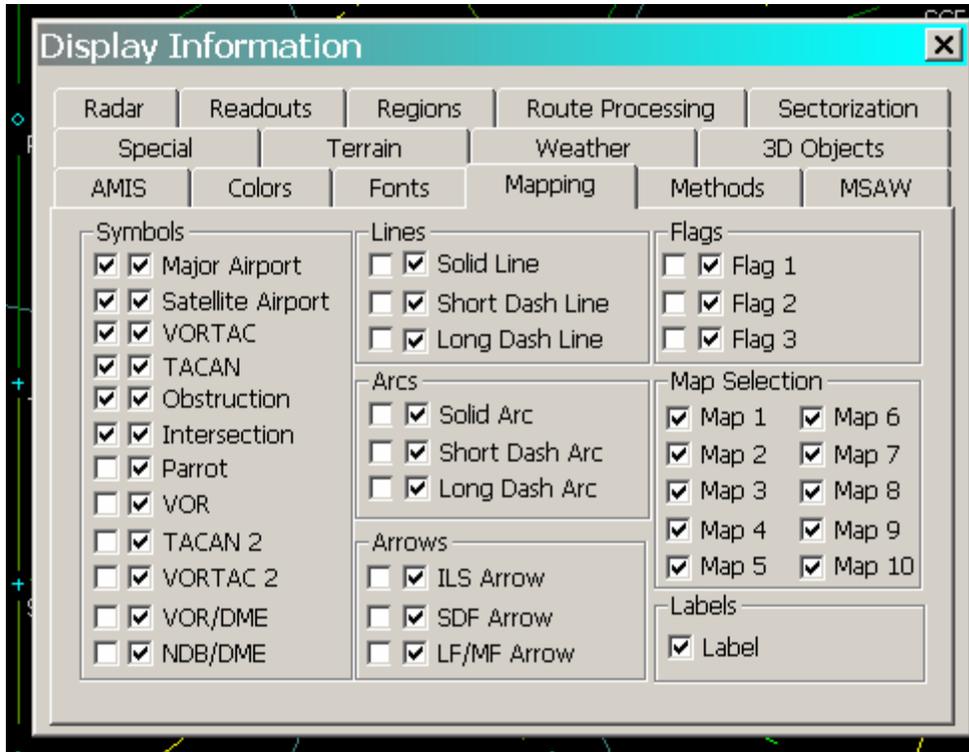
6.1.2.5.3 Fonts



This Window allows the user to change the Font used on the display. The change is immediate to the display. This information is saved when the database is saved and is used when the database is loaded in the future to set the initial state of these items.

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6.1.2.5.4 Mapping



This Window allows the user to configure the Maps that are to be displayed and how they are to be displayed. Most items have two check boxes, the right box enables the display of the item, the left box turn the label for the item. The label is not displayed unless the item is also being displayed.

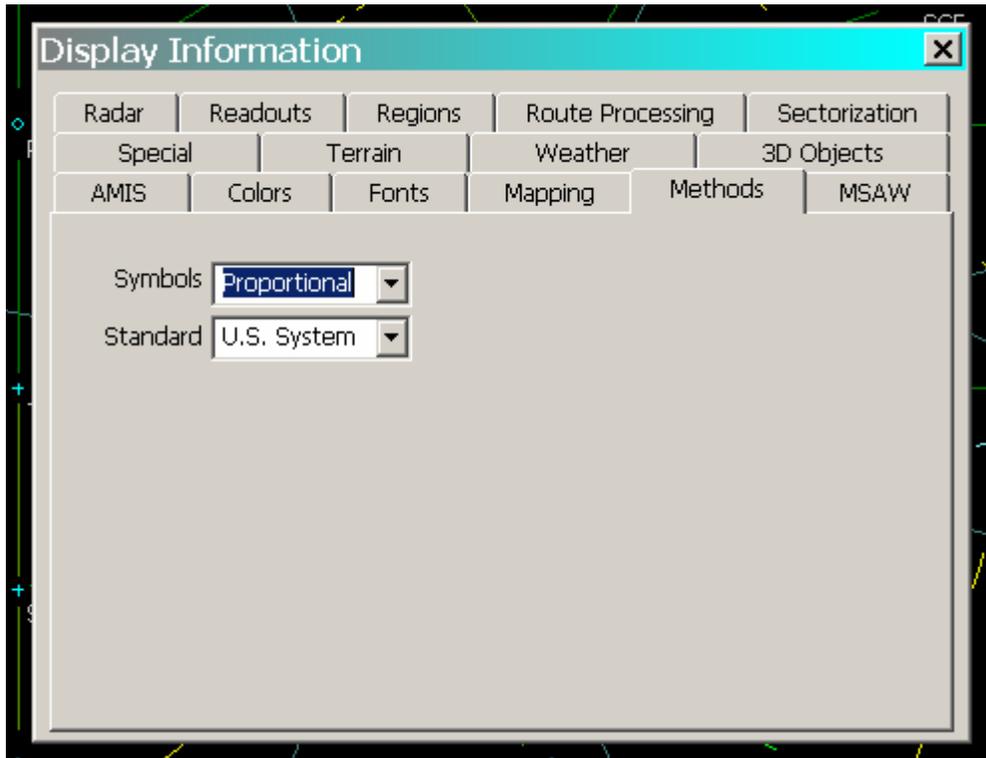
Another function on this page is the Map Selection which controls of which maps are being displayed. Each Map item when created is assigned to a particular map (1-10) or to the "All" maps.

Note: Mapping items that are assigned to "All" maps will only be displayed, if at least one of the 1-10 maps is displayed, otherwise they are not displayed.

3/24/2005

6.1.2.5.5 Methods

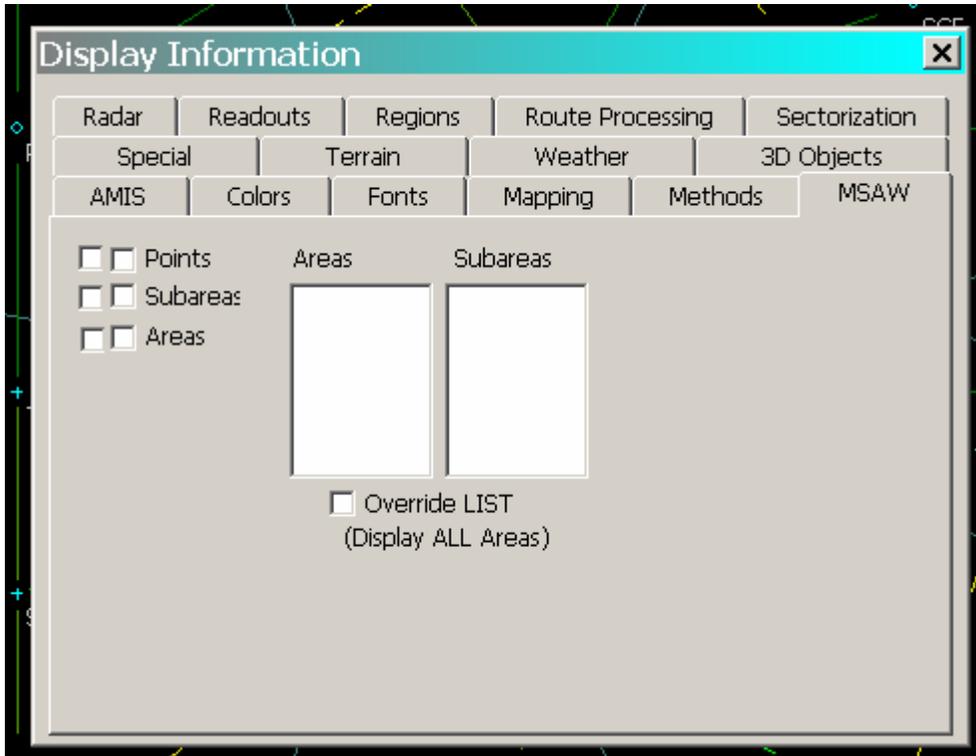
This Window allows the user to change the default Methods used by Create2000.



Symbols	Choices are Proportional or Fixed. This is used to determine when scaling a map, whether the symbol scale with the map or stay the same size.
Display	Choices are Jump or Smooth. This function is no longer a needed function. This function can about when processors could not draw very fast and this was used to let the user is something happening while waiting for the screen to finish updating.
Standard	Choices are U.S. System or Metric. This changes the displayed information of a FRD from miles to kilometers.

3/24/2005

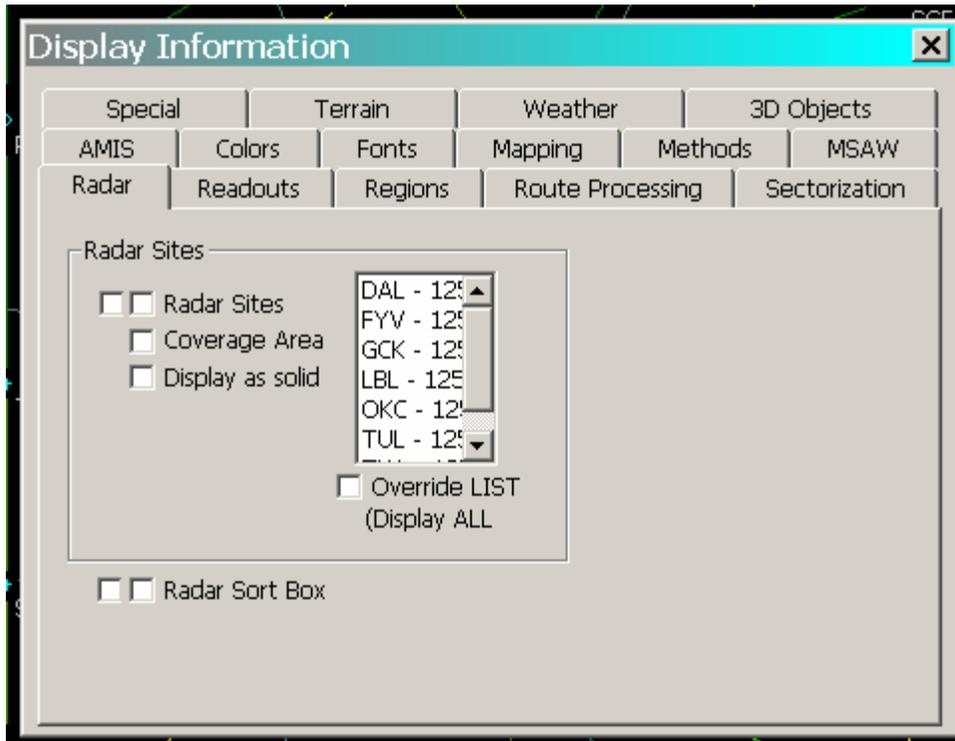
6.1.2.5.6 MSAW



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6.1.2.5.7 Radar

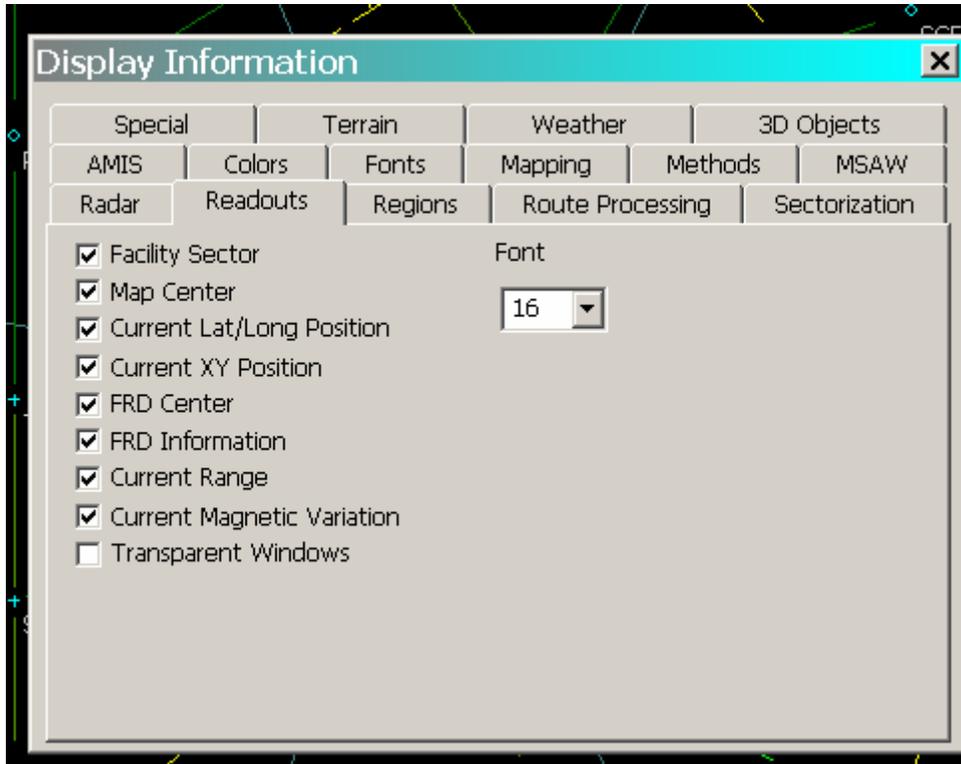
This Window controls the display of the Radar associated items.



Radar Sites	The right check box allows the Radar Sites to be displayed on the map. The left box allows the Radar Site's names to be displayed. The Names are not displayed if the Radar Sites are not enabled.
Coverage Area	This will draw a circle showing the different Radar Sites coverage areas on the map.
Display as Solid	If the Coverage Areas are being displayed, this changes the displayed of these areas from being a circle to a solid circle. Warning: Radar Sites may be covered up using this.
Radar Sort Box	The right check box allows the Radar Sort Box to be displayed on the map. The left box allows the Radar Sort's information to be displayed. The information is not displayed if the Radar Sort Box is not enabled.

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6.1.2.5.8 Readouts



The Readouts are located at the bottom of the map window. These windows are intended to displayed pieces of information of interest for the user. If a Readout window is not selected, then the remaining windows are consolidated to the Left of the Map window. Also, if a large Font Size is set, the Readout windows may grow to require multiple lines for display.

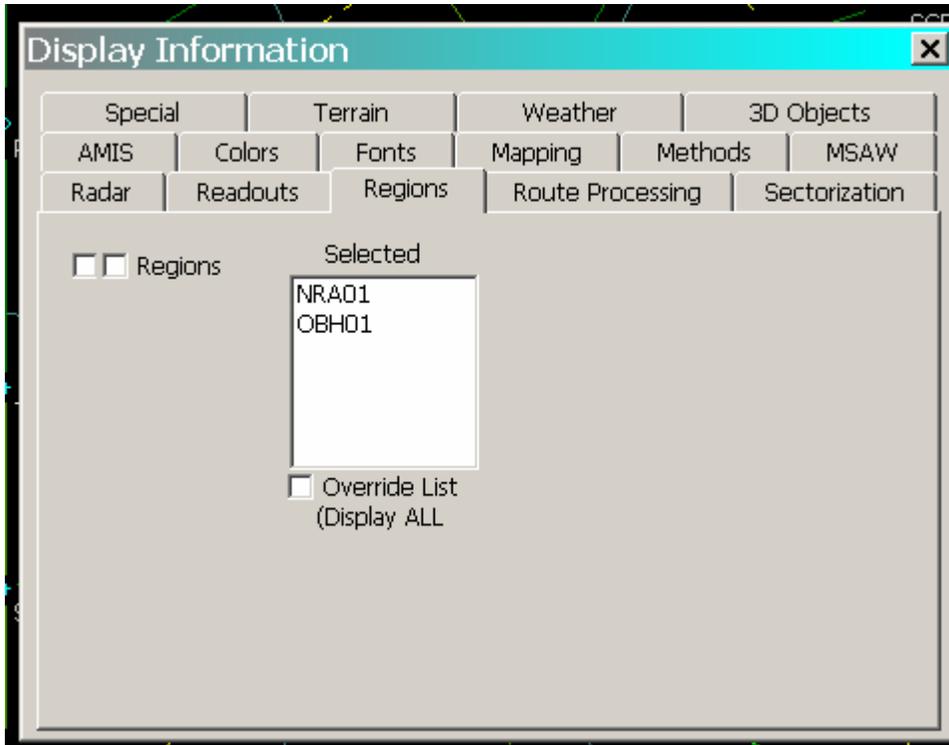
Facility Sector	Selecting this information for display will show a continuous readout of the Facility/ Sectors at the present mouse location and the altitude strata associated with them.
Map Center	This will display the current Map Center. Initially, this is the same as the Parameters Data Point of Tangency. Once the map is offset this now holds this location.
Current Lat/Long Position	Selecting this information for display will show a continuous readout of the present mouse location in terms of Latitude/ Longitude.
Current XY Position	Selecting this information for display will show a continuous readout of the present mouse location in terms of XY miles.

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FRD Center	This will display the current FRD Center. Initially, this is the same as the Parameters Data Point of Tangency. Once a new FRD Center is set, this now holds this location.
FRD Information	Selecting this information for display will show a continuous FRD readout of the present mouse location in terms of the FRD center.
Current Range	This will display the current Range. Initially, this is the same as the Parameters Data Range. Once a new Range is set, this now holds this Range.
Current Magnetic Variation	This will display the current Magnetic Variation, which is the Parameters Data Magnetic Variation. If this data is changed this window will reflect the change.
Transparent Windows	If this is selected the readout window will be displayed as transparent window. This allows any information under the Readout window to be shown through the Readout window.
Font Size	This allows the Font Size of the Readout windows to be set.

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6.1.2.5.9 Regions



This Window allows the user to configure the Regions that are to be displayed and how they are to be displayed. There are two check boxes, the right box enables the display of the item, the left box turn the label for the item. The label is not displayed unless the item is also being displayed.

Regions must be selected in the list for display. As many regions as desired, may be selected. Selected Regions are displayed with a dark background in the list.

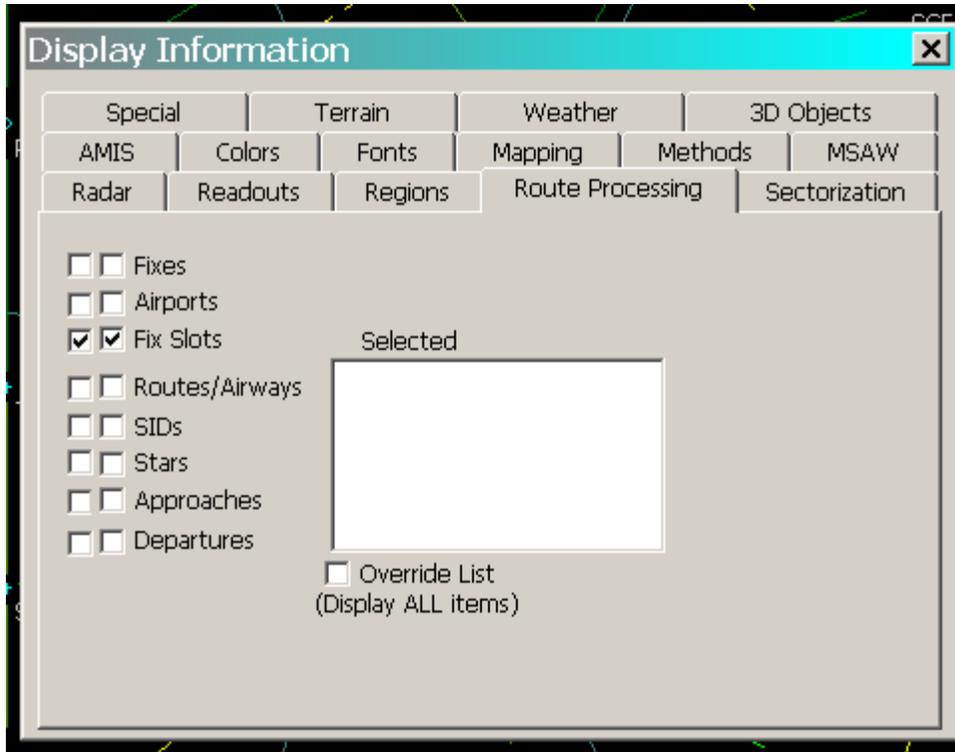
To Select or De-Select a list item, simply click on the item in the list. This function is a toggle.

Finally, the Override List checkbox if selected will display all the Regions.

All changes to page are immediately shown on the map window.

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6.1.2.5.10 Route Processing



This Window allows the user to configure the Route Processing Items that are to be displayed and how they are to be displayed. There are two check boxes, the right box enables the display of this type of item, the left box turn the label for the item. The label is not displayed unless the item is also being displayed.

As Fixes & Airports is Selected or De-Selected, the map window is update to shown the Selected data.

As for Fix Slots, this information is only shown, once a Route/Airway, SID, STAR, Approach or Departure is displayed.

As Route/Airways, SIDs, STARS, Approaches or Departures is Selected or De-Selected, the list window will be reconfigured to hold all the Selected type of data items. Route Processing item must be selected in the list for display. As many Route Processing items as desired, may be selected. Selected Route Processing items are displayed with a dark background in the list.

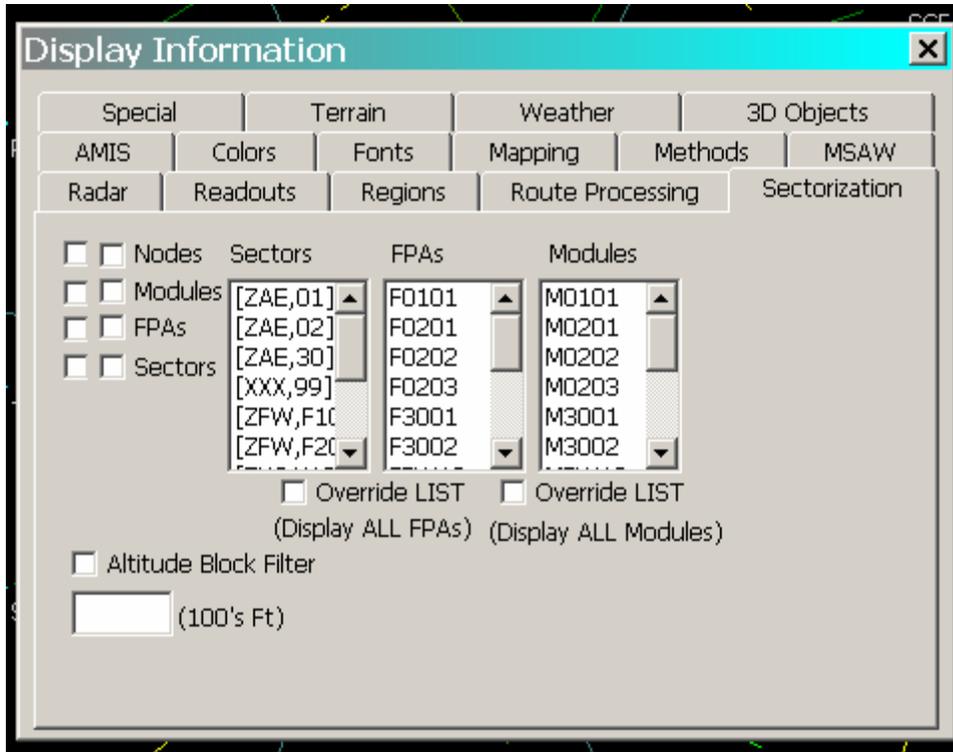
To Select or De-Select a list item, simply click on the item in the list. This function is a toggle.

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Finally, the Override List checkbox if selected will display all of the Route Processing item displayed in the list. All changes to page are immediately shown on the map window.

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6.1.2.5.11 Sectorization



This Window allows the user to configure the Sectorization Items that are to be displayed and how they are to be displayed. There are two check boxes, the right box enables the display of this type of item, the left box turn the label for the item. The label is not displayed unless the item is also being displayed.

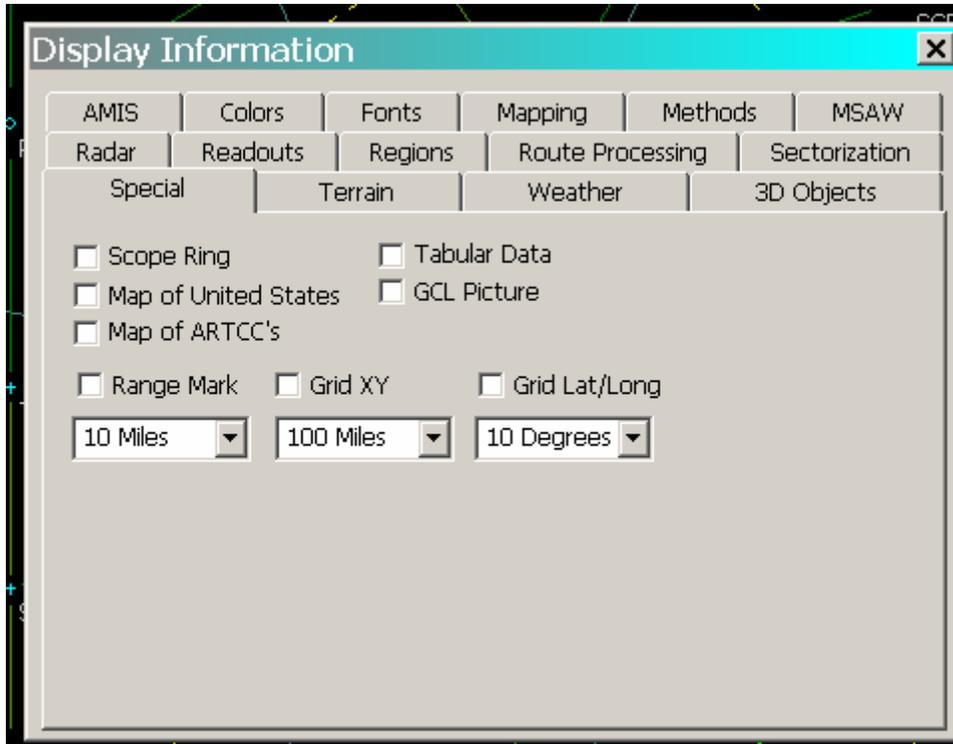
Nodes	Displays all the Nodes in the database.
FPA's	This allows FPAs to be displayed. The list selection must also be performed in order to see a FPA displayed.
MSAW	This displayed the current MSAW grid. If labels are also selected then the altitude configuration for the grid is also displayed.
A Line, B Line, D Line, S Line, T Line	This controls the display of these types of Transition Lines.
Altitude Block	The edit box allow a altitude range to input and then by selecting Altitude Block the altitude range is used to determine which FPA are displayed.
Override List	If selected, this displays all the FPAs in the list.

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Items selected in the Sector list, auto-select the corresponding FPAs that make up that Sector. FPAs in the FPA list can be Selected or De-Selected as needed. To Select or De-Select a list item, simply click on the item in the list. This function is a toggle. All changes to page are immediately shown on the map window.

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6.1.2.5.12 Special



This window holds a collection displays item.

Scope Ring	This will display a Ring that depicts the location of the edge of the display for circular displays.
Map of United States	This will display a map of the United States.
Map of ARTCC's	This will display a map of the boundary of the different ARTCC's in the United States.
Tabular Data	This will display the Tabular Data items at their locations for the database.
GCL Picture	This allows a GCL picture to be displayed as a background. This is used when building a T2D database to confirm the location of the various items on the map.
Range Mark	This allows Range Marks to be displayed at the selected interval designated in the Pop-down window.
Grid XY	This allows a XY Grid to be displayed at the selected interval designated in the Pop-down window.
Gird Lat/Long	This allows a Latitude/ Longitude Grid to be displayed at the selected interval designated in the Pop-down window.

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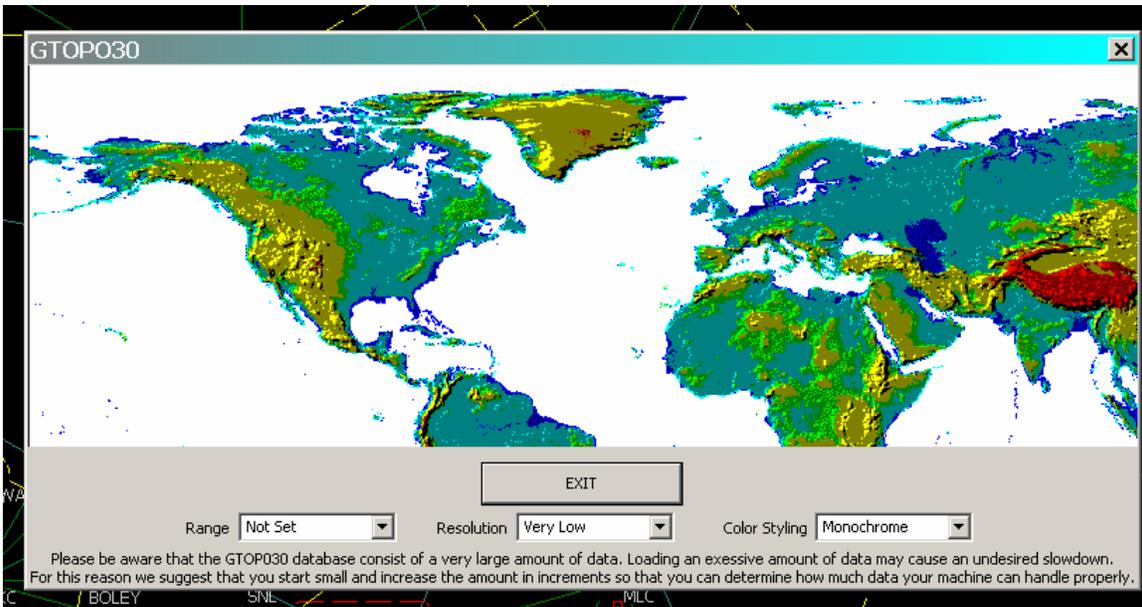
All changes to page are immediately shown on the map window.

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6.1.2.5.13 Terrain

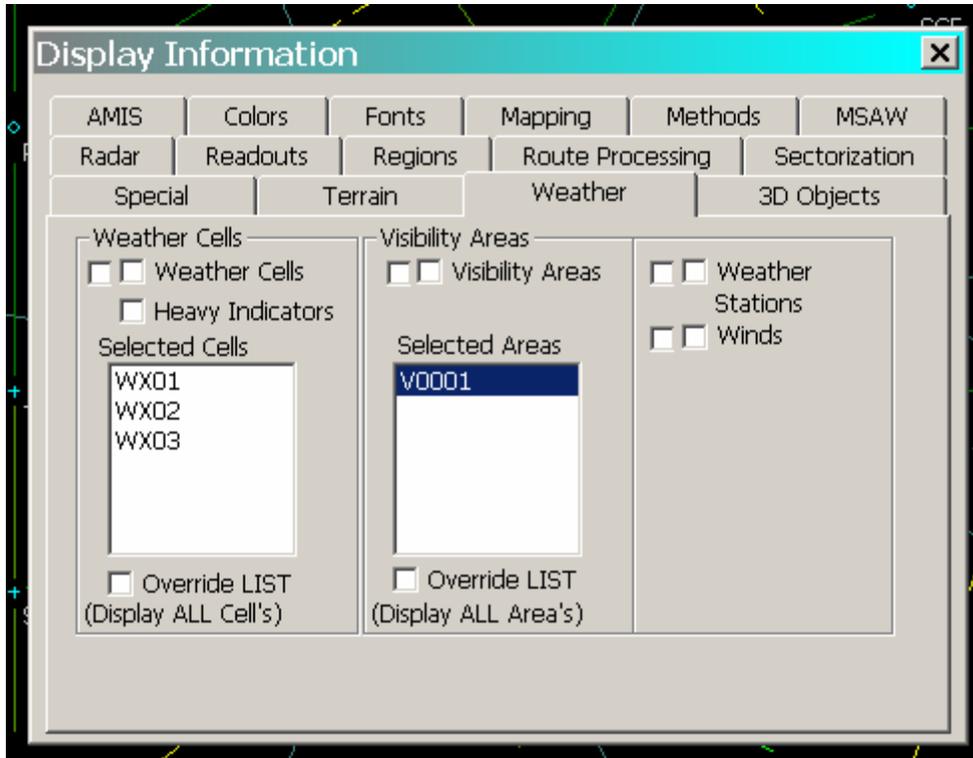


3D Terrain data can be selected for display. At this time only the GTOPO30 data is available, but this data does cover the entire world. **Caution: displaying to much terrain data can seriously effect the performance of the machine and software.**



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6.1.2.5.14 Weather



Weather Cells and Visibility Areas – Both have a common design and the interface is the same. Each area has two check boxes. The right one allows the display of the item the left one controls the display of the label for the item. The label will not be displayed if the right button is not selected. Weather Cells has an additional check box for allowing the display of the Heavy Weather Indicators.

The two areas each have a list to select items with. To Select or De-Select an item, simply click on the item. This is a toggle.

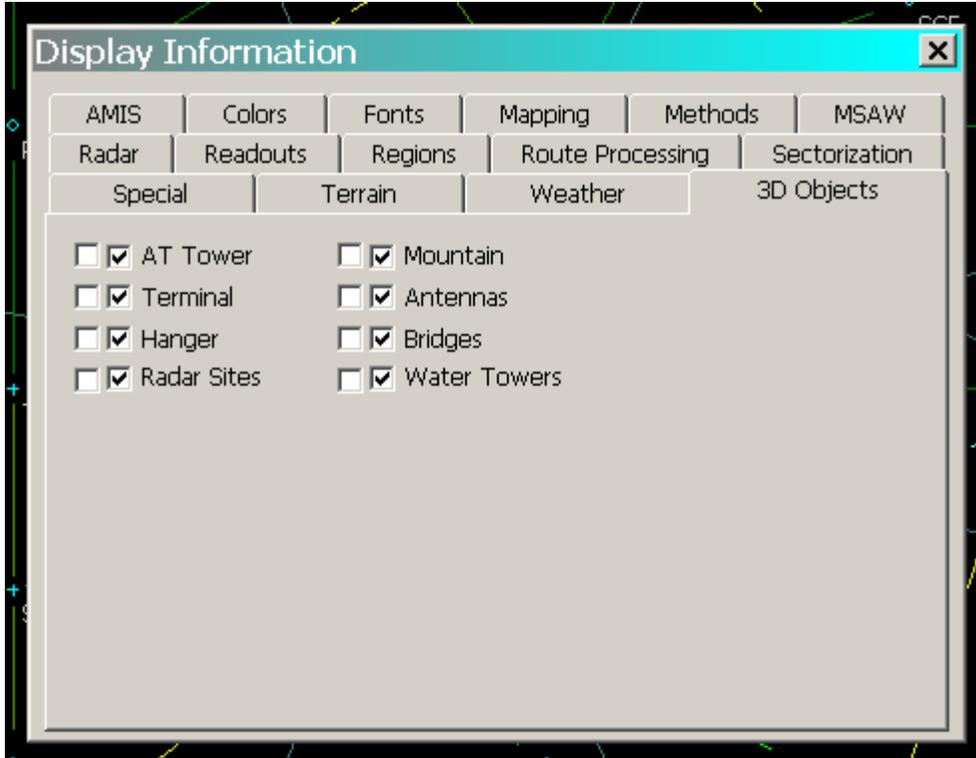
Both areas also have a Override List checkbox. This allows all items in the list to be displayed without being selected.

Weather Station and Winds - They both follow the above rules for when a item has two check boxes. The right one allows the display of the item the left one controls the display of the label for the item. The label will not be displayed if the right button is not selected.

All changes to page are immediately shown on the map window.

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6.1.2.5.15 3D Objects



All items follow the rules for when a item has two check boxes. The right one allows the display of the item the left one controls the display of the label for the item. The label will not be displayed if the right button is not selected.

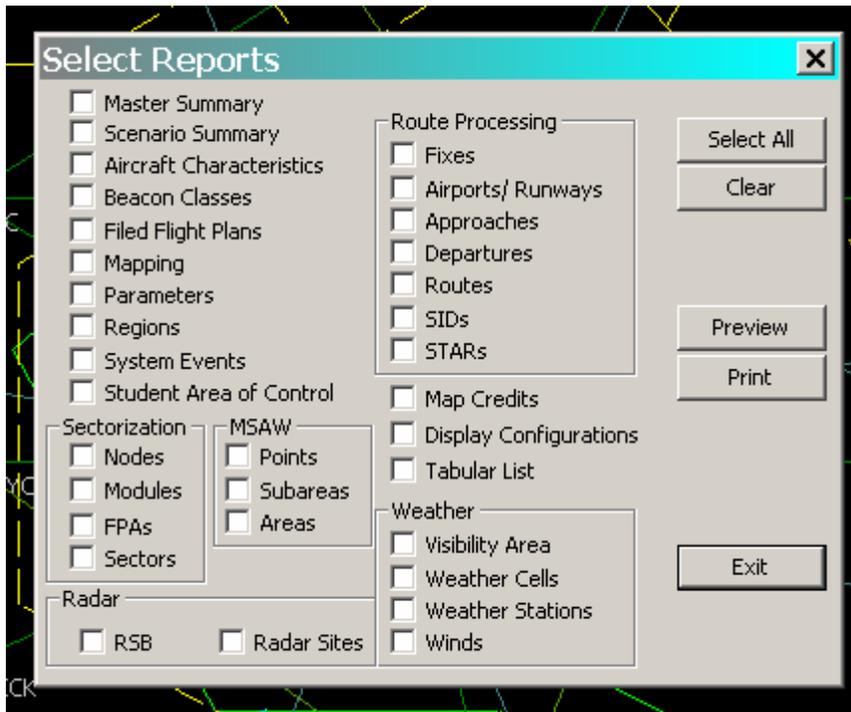
All changes to page are immediately shown on the map window.

Note: The 3D Objects data is not intended for use yet. This is just a new development area that could potentially evolve into a 3D modeler for the future 3D Tower project.

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6.1.2.6 Reports

The Reports menu is used to display the report dialog.



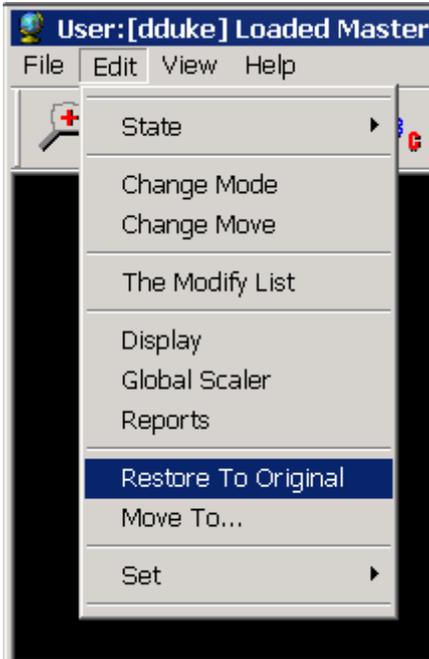
This menu allows the user to generate reports for viewing or printing. The Print Setup page allows the configuration of the Printer.

Select all the reports that are desired and then select the method for viewing, Printed or Displayed on the screen.

The Select All button Selects all reports and the Clear button De-Selects all the reports.

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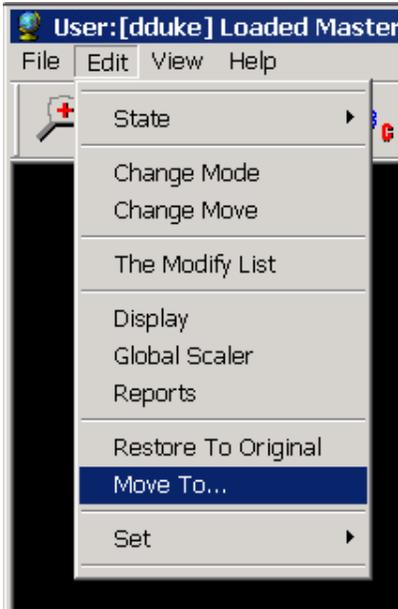
6.1.2.7 Restore To Original



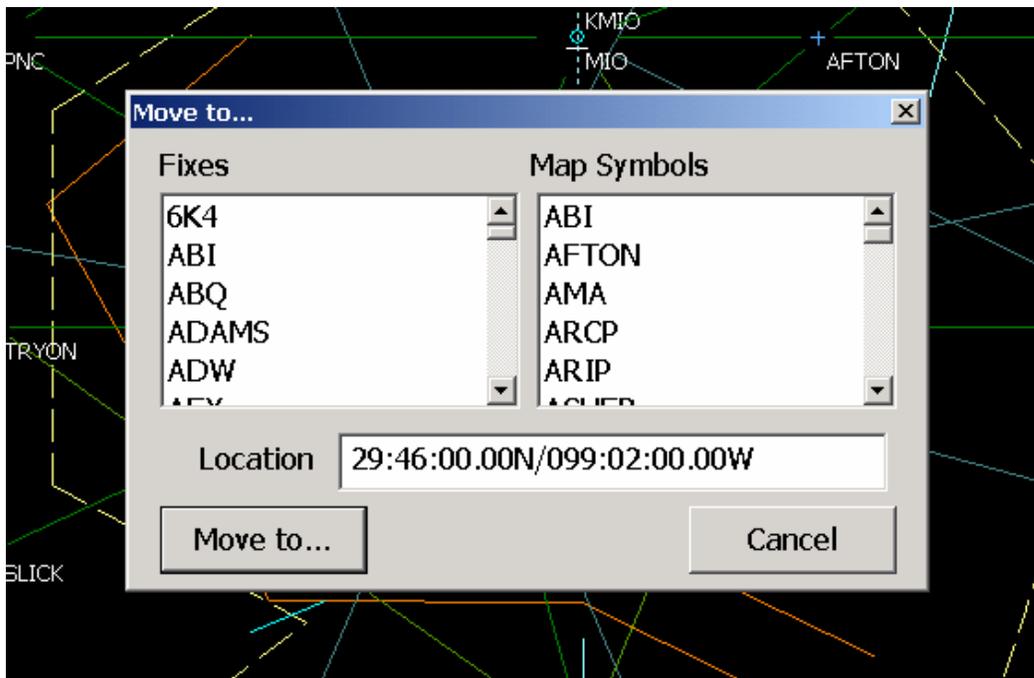
The "Restore To Original" menu resets the map center and range to original setting. This information is the data found in the Parameters area.

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6.1.2.8 Move To...

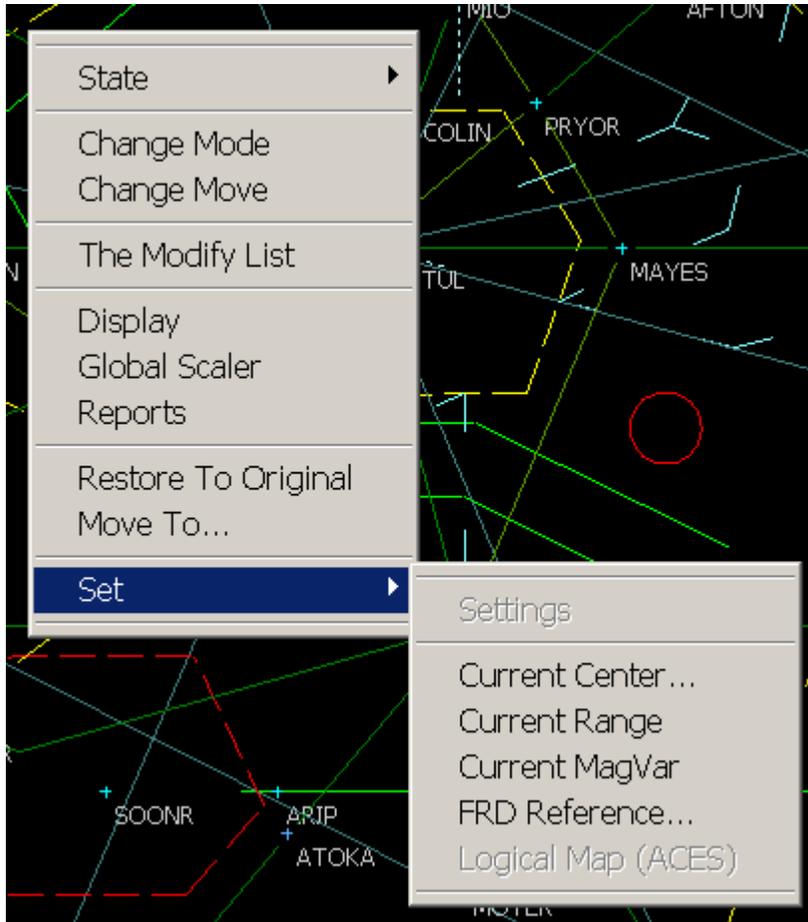


The "Move To" menu displays this window, which allows the user to select a fix or a Map symbols name from the list and then move the center of the map display to that location. Also, the Location field allows additional inputs as identified in paragraph **Location** as valid input.



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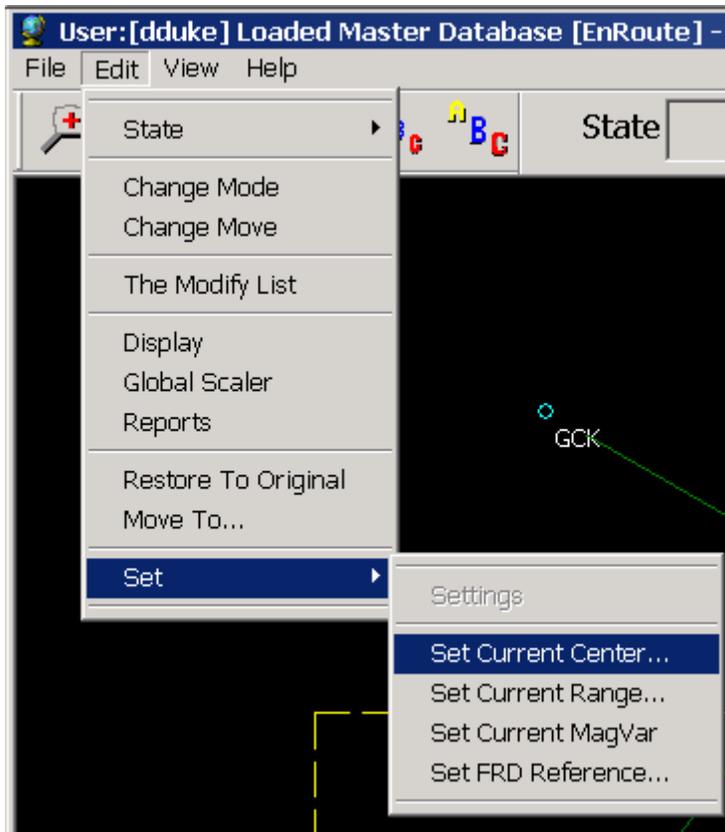
6.1.2.9 Set



The Set menu allows the user to set the following items, Current Center, Current Range, Current MagVar (Magnetic Variation) and Current FRD Reference point.

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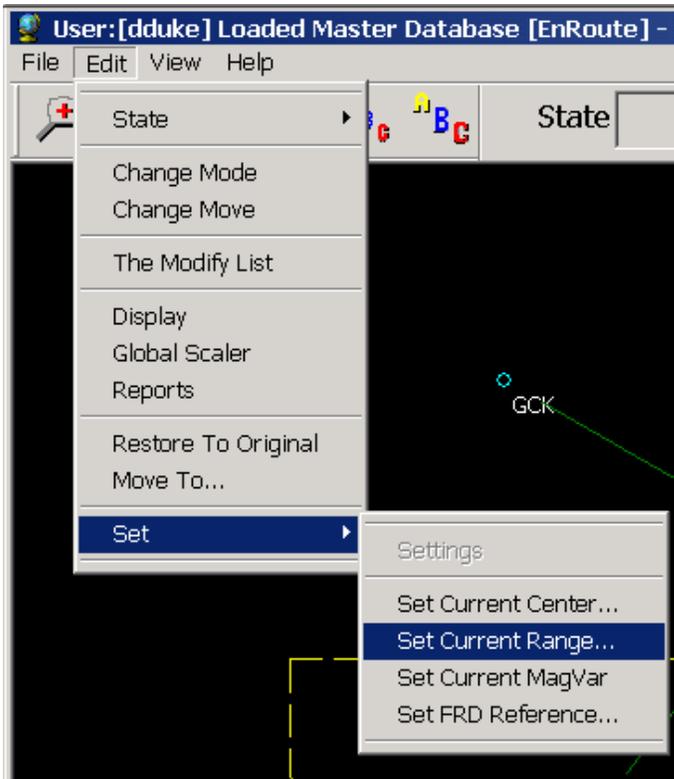
6.1.2.9.1 Set Current Center



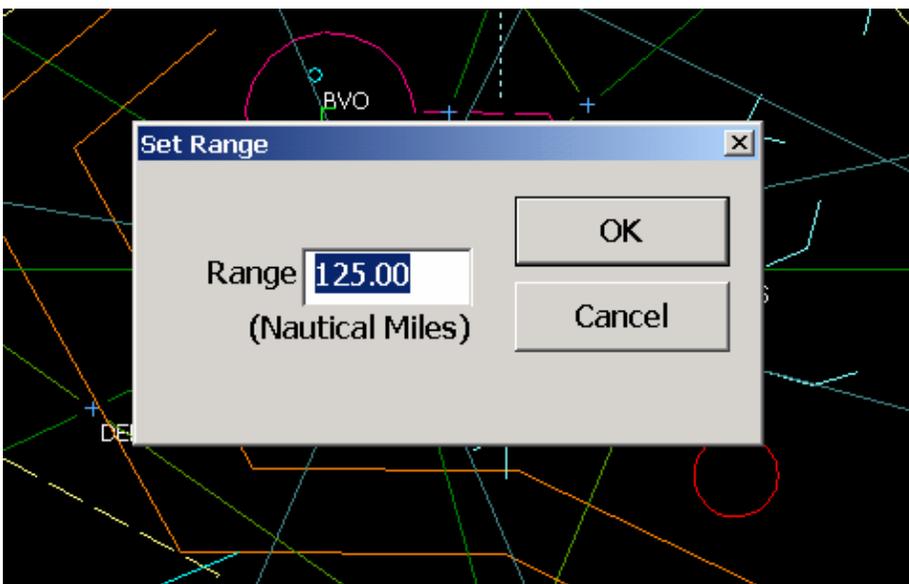
The Set Current Center works the same way as discussed in **Center & Offset Center**.

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6.1.2.9.2 Set Current Range

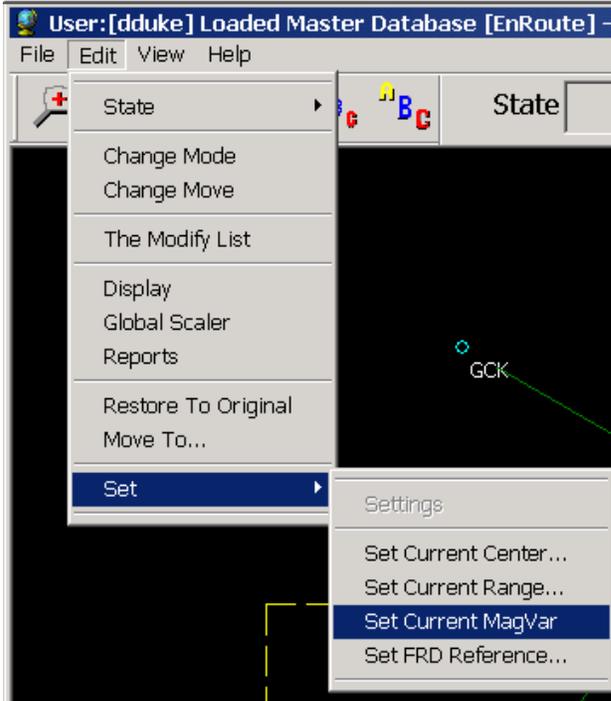


The Set Range menu allows the user to set the range for display. This input is in terms of nautical miles.

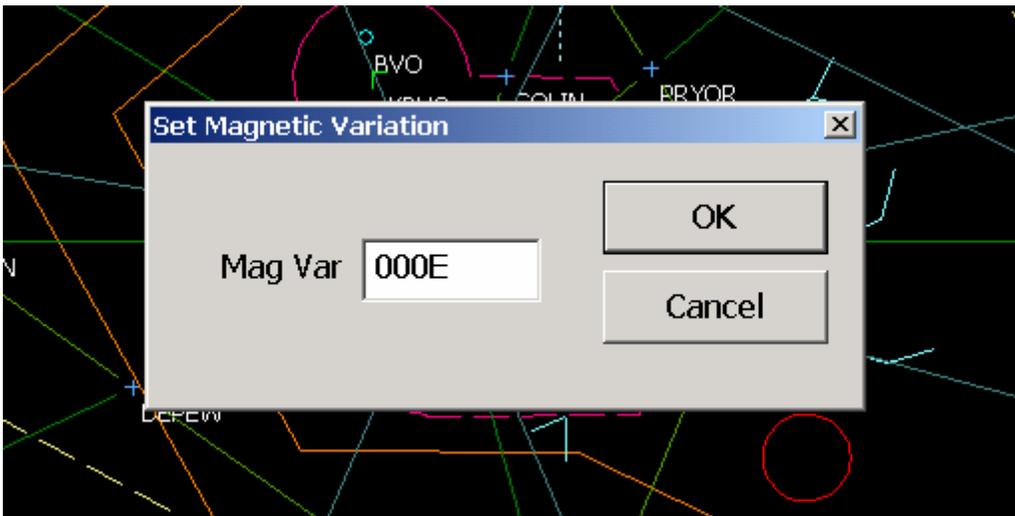


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6.1.2.9.3 Set Current Mag Var (Magnetic Variation)

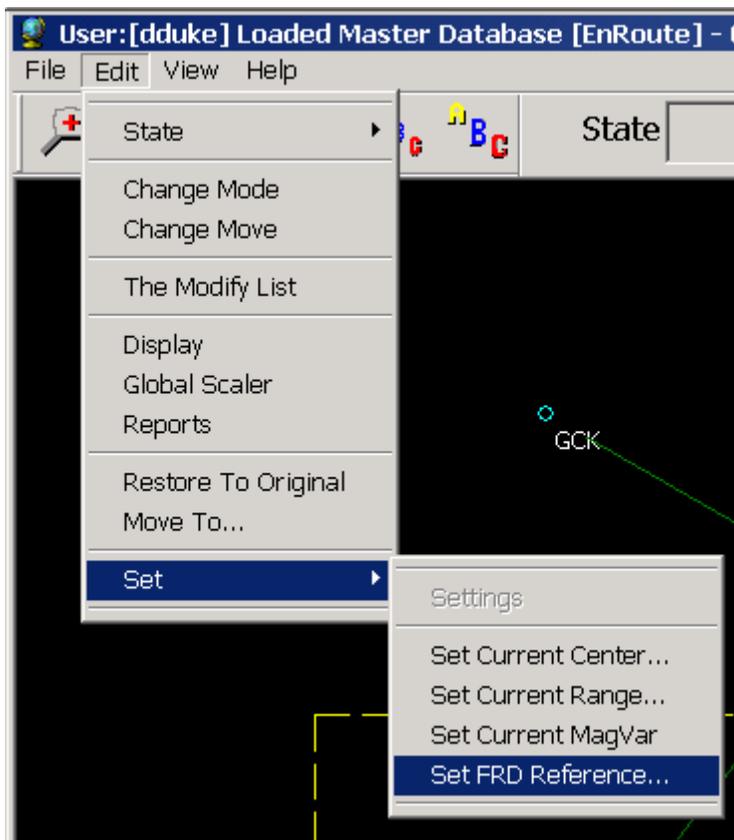


The Set menu allows the user to set the following items. The format for input is ###C where ### is a number **0-360** and C is **E** for East or **W** for West.



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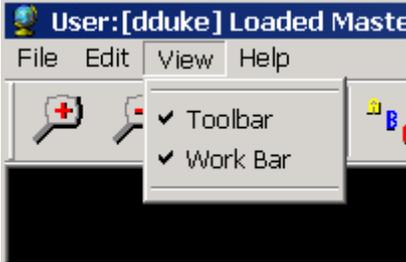
6.1.2.9.4 Set FRD Reference



This allows the user to select a new FRD center location via clicking the mouse on the map in the location you wish to be the new FRD center. The FRD readout is then updated based on the new FRD center location.

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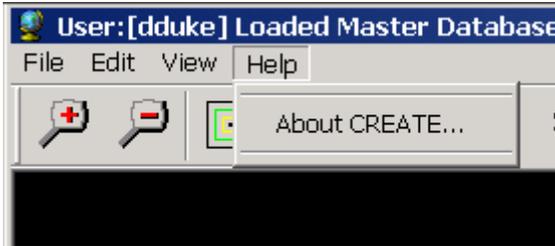
6.1.3 View



The View menu is used to select or deselect for display the Toolbar and the Workbar. Reference **Toolbar** and **Workbar** for additional information.

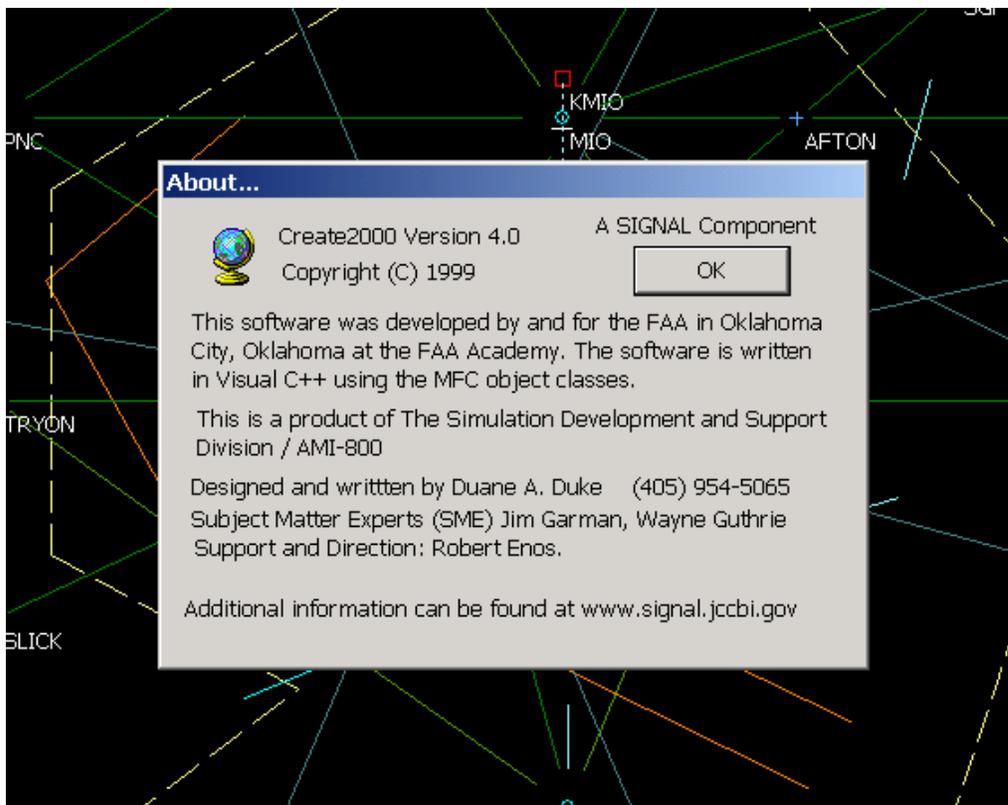
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6.1.4 Help



The Help menu allows the display of the About box. This is the standard Microsoft way of allowing the author to convey development information about the program to the user.

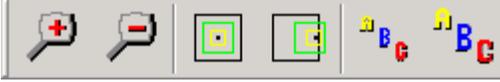
6.1.4.1 About Box



The About Box is used to convey information about this program such as the origin, author, subject matter expert, support and additional information locations. This box has no other function.

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6.1.5 Toolbar



This toolbar allow three basic function of Zoom, Center and Font Size change. This toolbar can be taken down/up by selecting/deselecting the Toolbar button on the View menu of the Main menu.

6.1.5.1 Zoom In & Out



The icon that has a plus (+) is used to zoom in and the icon that has a minus (-) is used to zoom out.

6.1.5.2 Center & Offset Center



The icon with the boxes centered, when pressed, causes to map to be centered. When the icon with the boxes not centered is pressed the user is allowed to select a new center via clicking the mouse on the map in the location you wish to be the new center. The map is then displayed using this new center.

6.1.5.3 Font Size Increase & Decrease



The icon with the smaller letters allows the user to decrease the font size of the labels on the mapping window. The icon with the larger letter increases the font size of the labels on the mapping window.

The Readouts at the bottom of the mapping window are not affected by this process. To change the Readout's font size, reference the paragraph on Configuration dealing with Readouts.

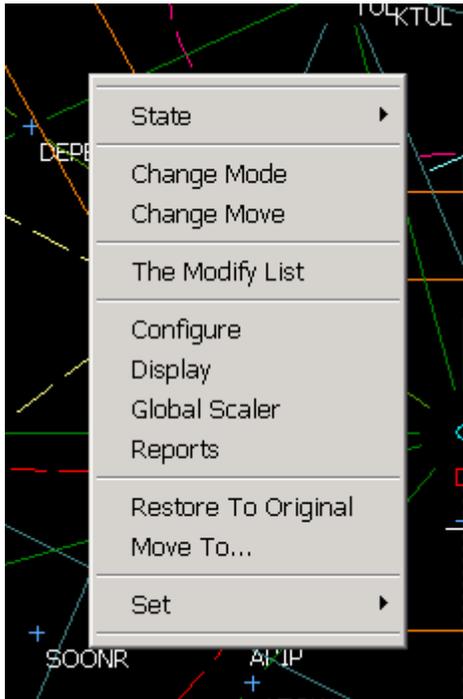
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6.1.6 Workbar



This toolbar allow the user to determine State, Mode (Add/Modify) and whether Move is enabled or disabled. This toolbar can be taken down/up by Selecting or De-Selecting the Workbar button on the View menu of the Main menu.

6.2 Context Menu



The context menu can be displayed by clicking the right mouse button on the program window. This menu's functions and submenu functions are the same as the Main menu's Edit menu. For addition information reference the paragraph on the **Edit** menu.

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7 Keyboard Functions

These buttons have been programmed to perform specific function as listed below.

<Key	Function	>
F1	This function button brings up the Select State window.	
F2	This function button toggles the Mode between Add & Modify.	
F3	This function button toggles the Move between Enabled & Disabled.	
F4	This function button toggles the 3D Viewer up & down.	
F5	This function button brings up the Set Range window.	
F6	This function button toggles the display of the Display window.	
F7	This function button toggles the display of the Configure window.	
F8	This function button toggles the display of the Report window.	
F9	This function button brings up the Modify List window.	
F10	This function button toggles the display of the Global Scaler Window.	
F11	This function button toggles the display of the Track Animator.	
Enter, End	These buttons allow the user to exit the tailor mode.	
+	This button Zooms in.	
-	This button Zooms out.	
Up Arrow	Active only when the 3D Viewer is active. This causes a positive rotation on the X axes.	

(Continued)

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<Key **Function** **>**

Down Arrow	Active only when the 3D Viewer is active. This causes a negative rotation on the X axes.
Right Arrow	When the 3D Viewer is active, pressing this button causes a positive rotation on the Y axes. When the Global Scaler is active the size of the items is increased.
Left Arrow	When the 3D Viewer is active, this causes a negative rotation on the Y axes. When the Global Scaler is active the size of the items is decreased.

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8 Mouse Functions

The Create2000 has been written to use the standard 2-button mouse. Many function have been programmed to take advantage of the mouse. Below is a listing of these functions.

Left Button The Left mouse button is used to input and modify almost all the Create2000 data items. It is used to set the Latitude/Longitude location for items. Below is some of the other function the Left mouse performs.

Set Center & Range The mouse can be used to set a new center and range. This is done by holding down the Ctrl button on the keyboard then clicking the left mouse button down on the location you want to be the new center. While holding down the mouse button move away from the center to where the desired range is within the displayed white circle, then release the left mouse button. The display should then be redrawn using the new center and the calculated new range based on the radius of the circle.

Set Center The left mouse button is used to complete the "Edit Set" function "Set Center". Simply click on the location of the map that you desire to be the new center. The map should be redrawn using the new center selected.

Pointer The left mouse button is used to select objects when in the Pointer State. This selection causes temporary labels for these mapping items to be displayed.

Set FRD The left mouse button is used to complete the "Edit Set" function "Set FRD". Simply click on the location of the map that you desire to be the new FRD center. The readout displayed at the bottom of the map should not use the new FRD location to determine the displayed FRD information.

Right Button This button is used to bring up the Context Menu or Popup Menu. This menu allows selection of all the functions found on the Main menu Edit submenu.

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9 Other Windows

This area covers all the miscellaneous windows and their functions. These windows are generally used in many places as needed.

9.1 Confirm Delete Window



Anytime an item is being deleted, this window is used to confirm that delete action. If the "NO" button is pressed the delete is halted.

9.2 Invalid Input Window



Anytime a user's input cannot be determined, this window is displayed.

9.3 Nothing Selected Window



This window is displayed anytime a user is required to select an item from a list before performing the desired action and has not done so.

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9.4 Not Unique Window



This window is displayed if the data item name is not unique and it is required to be so.

9.5 Save Database Window



This window is displayed if the user tries to exit the program and the software has determined that changes have been made to a database and that database has not been saved.

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9.6 Progress Write



This indicator is displayed when a database is being saved.

9.7 Progress Read

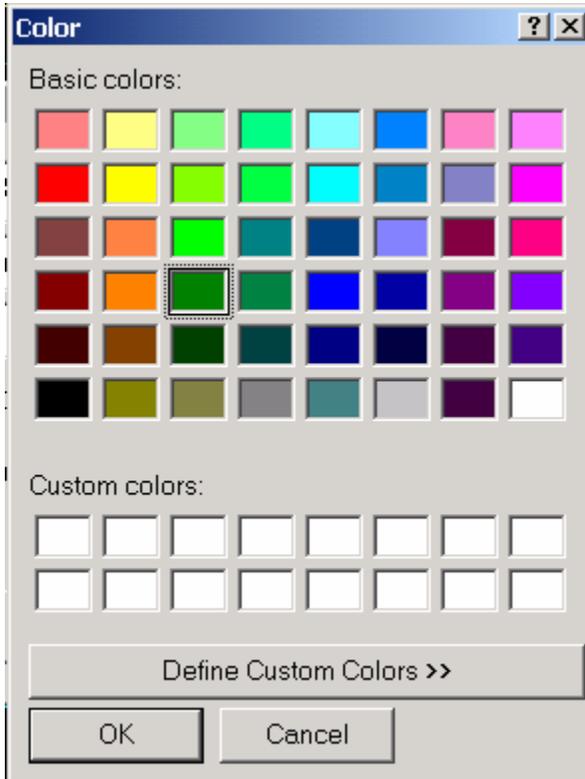


This indicator is displayed when loading a Master or Scenario. The top progress bar indicates the loading of the Master and the bottom progress bar indicates the loading of the Scenario.

Note: Even when loading just a Master the data areas for a Scenario are loaded with the data from the Master because a Master can store both Master and Scenario data.

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9.8 Set Color



This window is displayed by pressing the "Set Color" button on a window. This window allows the user to select a color for the item. The color will be stored as a RGB value.