

# Fleet Battle School Chart Editor Help File

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## 1. Introduction

This help file covers how to run the FBS Chart Editor and how to create and modify charts using it. When the Chart Editor is run, it will prompt you for the name of an existing chart file. All chart files have the extension ".cht". After opening a file, you can view and edit it as described below.

## 2. Making New Charts

To start a new chart, you need two **PNG** graphic files of the same size:

- An image of the chart, typically in color, that you will use to create the chart.
- A grayscale image of the chart that is used when the chart is part of a scenario. This image should be grayscale since it will be overlaid in the game with the sea and land characteristics in color and thus it will be used to provide a texture.

The color image will only be used to create and edit the chart and is not needed after that.

A hex on the chart will be 72 pixels high. The graphic image should be scaled according to this value. For example, if you want a hex to be 24 nm, then the image should be scaled so that 72 pixels in the image represents 24 nm in the actual region being represented. Or in other words, a hex in the chart will be as many nautical miles as 72 pixels is in the image.

To start a new chart, select the **New** option in the **File** menu. You will be prompted for the grayscale chart file which should be located in the main game folder. The color file that you use for editing should be the same filename as your grayscale file and located in the **Edit** subfolder. Both images need to be in the Portable Network Graphics (PNG) file format.

## 3. Editing a Chart

It is important to know that when you are editing a chart, the editor is in one of two modes: **Edit** mode or **View** mode. You use the default Edit mode when you are making changes to the chart. You use the View mode to see how your chart will look in the game. You toggle between these modes using the **Space Bar**.

In the editor, you can zoom in and out in two ways:

- You can use the scroll wheel on your mouse to zoom in and out.
- You can press the predefined zoom scales 1, 2, 3, and 4 on the keyboard (across the top, not the numeric keypad).

You can scroll around the chart by moving the mouse to the edge of the screen and that will scroll the chart in that direction.

A given hex on the chart can be either a **Sea** hex or a **Land** hex. By default in a new chart, all hexes will be **Sea** with Depth and Clutter values of 0. There are 4 characteristics you can specify for a hex, 2 for Sea hexes and 2 for Land hexes:

- **Depth** – This represents the depth of a Sea hex. Depths are specified from 0 through 5.
- **Clutter** – This represents the surface traffic clutter of a Sea hex. Clutter is specified from 0 through 3.
- **Terrain** – This represents the terrain in a Land hex. Terrain is specified from 0 through 6.
- **Elevation** – This represents the elevation of a Land hex. Elevation is specified from 0 through 3.

The numeric values given above are how you specify the value you wish while in the Chart Editor. However, in the game, there are names and color values that are used to display the chart. You can review these by viewing the text files:

- **Depth.dat** – The RGB color values (0 through 255) followed by the name of each depth value.
- **Clutter.dat** – The RGB color values (0 through 255) followed by the name of each clutter value.
- **Terrain.dat** (TBD) - The RGB color values (0 through 255) followed by the name of each terrain value.
- **Elevation.dat** (TBD) - The RGB color values (0 through 255) followed by the name of each elevation value.

These colors and names apply to all charts in the game.

To define a hex as a Sea hex or to change the values of a Sea hex, select either a Depth value or a Clutter value and then click on the hex using the **left mouse button**. Depending on whether you specified a Depth or Clutter value, this will define the hex as a Sea hex if it was not already and specify the Depth or Clutter value for that hex respectively. You can continue left clicking on hexes to specify the same value for each of these hexes.

In Edit mode, the boundary between Sea and Land hexes will be shown with a green line, the Depth of a Sea hex will be shown as a white number in the center of the hex, and the Clutter will be shown as a gray rectangle for value 1 and a black rectangle for value 2. The example shown here shows two hexes of Depth 1 with Clutter 1 and two other hexes with Clutter 2.



As mentioned previously, if you press the Space Bar, you will toggle between Edit and View mode so you can see how the chart will look in the game. This mode uses the grayscale image plus color overlays as defined by the dat files mentioned above.

To define a hex as a Land hex or to change the values of a Land hex, select either a Terrain value or an Elevation value and then click on the hex using the left mouse button. This works the same as specifying a value for a Sea hex and you can continue to specify Land hexes with the same values by left clicking on the chart.

If you click on the chart using the **right mouse button**, then that hex will be restored to a Sea hex with default Depth and Clutter values of 0.

If you change the background image of a chart to be larger or smaller, you can resize the existing chart to fit the new background image by using the **Resize** option of the **Chart** menu.

## 4. Area Fill

Although left clicking in individual hexes works, it is tedious to use especially with larger charts. It is possible to use an **Area Fill** feature to fill an area of multiple hexes at one time.

**Important Note:** While the Area Fill feature works extremely well when done properly, it can lead to disastrous changes to your chart if you make any mistakes in using it. For that reason, you are advised to save your chart before using it so you can recover your chart by re-opening it without saving the undesired changes.

The Area Fill feature is invoked by clicking with the **right mouse button** while holding down the **Ctrl** (Control) key. When you do this, the hex you select as well as all hexes adjacent to that hex will be recursively be set to the current value as specified by the Depth, Clutter, Terrain, or Elevation menus. This will continue recursively to adjacent hexes until hexes are reached that already have that value at which point the process will stop.

To use the Area Fill feature, you typically start by left clicking the boundary of the area you wish to define. Once you have specified a continuous boundary *with no gaps*, then you right click while holding down the Ctrl key in the interior of the area and the interior will be filled with the same values. Note that it is essential that your area boundary have no gaps or otherwise the process will continue through that gap and probably corrupt you chart. This is the reason as mentioned previously that you want to do a save of your chart prior to invoking the Area Fill feature in case this should happen.

## 5. Creating a Subchart

You can take an existing chart and create a subchart consisting of a portion of the original chart using the **Subchart** option of the **File** menu. You will be prompted for the origin and size of the subchart and you will be prompted for the filename of the new image files to create (default and edit images). Upon completion, the editor will display the new subchart which will reference the new image files.

## 6. Saving the Chart

You can save the chart by using the **Save** or **Save As** options of the **File** menu. A chart file must have the ".cht" filename extension. Typically you name the file using the same root filename as your grayscale overlay but this isn't required. For example, if your image file is named "Beacarium.png", then you would typically call your chart file "Beacarium.cht" but you can change the root filename if you want to have multiple charts with different data that refer to the same graphic image.