Using NOAA Custom Chart 3.0 Tutorial
Transcript

0:00

This video provides an introduction to the online NOAA Custom Chart application and demonstrates how to create, save, and update NOAA Custom Charts that are derived directly from the latest NOAA electronic navigational chart or ENC data.

At the top left of the application window are five icons that open one information panel and four control panels.

These panels are used to access more information about how the application works or to control various settings that define the chart.

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Creating, outputting, and saving a custom chart is accomplished by progressing through each of the control panels from left to right, entering the information such as a chart title or scale, and selecting other settings such as paper size.

The Help and Feedback panel provides links to a short quick start guide, a more detailed 19-page user's guide, video tutorials, and a 100-page document called *US Chart No. 1*, which describes the nautical chart symbols used by NOAA and the National Geospatial-Intelligence Agency.

1:07

There is also a link to a list of commercial printers who each have a dedicated web page to accept customer orders to print custom chart PDFs on large format plotters.

The panel also has a link to the NOAA Office of Coast Survey Customer Assist Feedback tool to submit questions or comments about the NOAA Custom Chart application or other Coast Survey products and services.

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On the What's New tab, there is a list of major changes implemented in the latest release of the NOAA Custom Chart application.

The **Layer Settings** panel can be used to display the footprints and scales of NOAA Electronic Navigational Chart or ENC data for which the NCC charts are derived.

This is useful for determining the scale that should be used to create a custom chart in any particular area.

The **Chart Settings** panel is where the chart title, scale, paper size, orientation, and shallow water tins are specified, as well as selecting the chart's position.

2:05

The **Add Compass Roses** panel does exactly that. This is where the user can place compass roses on their custom chart.

The final step in creating a custom chart is to output a portable document format or PDF file of the chart for printing.

The **Export Function** panel is where this is accomplished. It takes a minute or two for each chart to be exported.

Once a chart PDF is exported, the user-specified chart parameters such as the chart extent, title, scale, etc., can be saved to a chart catalog.

2:35

This facilitates reloading the same chart back into the NOAA Custom Chart application at a later date to refresh it with the most up-to-date ENC data.

But how would you know when a custom chart should be updated?

Once a chart catalog is created in the custom chart application, a catalog can be input to the new online **NOAA Navigational Updates** application, which replaces the old weekly chart updates website.

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The new website shows information about all changes to the ENC data and enables users to search for updates by ENC cell name, US Coast Guard District, and user-defined geometries.

Most importantly for NOAA Custom Chart users, the update searches can also be directed specifically to a custom chart extent that is input from a NOAA Custom Chart catalog.

This is all done within the **Advanced Search** panel of the NOAA Navigation Updates application.

Charts that are identified as having updates available may then be re-exported in the custom chart application with all the ENC data applied.

3:37

Now we'll make a few custom charts in Florida to demonstrate how this all works.

First, a 1:12,000 scale custom chart for Tampa, then two 1:40,000 scale charts covering Tampa Bay.

When the NOAA Custom Chart application opens up, the **Help and Feedback** panel is displayed.

To start making a chart, click on the **Layer Settings**.

We will be making a harbor chart over Tampa.

4:03

So, to start, we'll click off all data sets and click on the harbor intended uses box.

Then we can pan and zoom over to the Tampa area.

And you can see in the area we want to make a chart of has 1:12,000 scale ENC coverage.

We can now go to the **Chart Settings**, type in a chart title, Tampa.

4:33

The scale, 12,000.

We want to make a 34 by 44 inch or ANSI E size sheet.

We're going to keep the portrait format, keep the depth tints at their default settings, and then click the create new chart button.

You want to click about in the center of where you want the chart to be.

You almost always want to move the chart, so click the move chart and adjust the location.

5:04

Normally you would go on to put compass roses on the chart before making another, but we're going to make the two 40,000 scale charts now.

First, we'll go back to the **Layer Settings** panel.

Click the approach chart intended uses box on and click the harbor chart intended uses box off.

This will show us where ENC data in about the one to 40 or one to 80 thousand scale range exists.

5:29

Then we can go back to the **chart settings** panel.

Name the Tampa Bay.

40,000.

Keep everything else the same.

We zoom out to see where our 40,000 scale coverage is.

Again, click create new chart.

Adjust the position.

6:06

If we're using the same parameters, we can just click the create new chart button again.

Click the center of the second chart.

Move that down a touch.

6:30

So, now we can go to **Add Compass Roses**.

First step is to select active chart.

So, the application knows which chart you're putting the compass roses on.

And you can see that the second chart I made is covering up the smaller footprint, larger scale harbor chart.

If you run into this problem, you can go to the **Export Functions**.

Click on the chart.

You want to pop to the top of the stack and then go back to add **Compass Roses** panel.

7:07

Click on the select active chart button again, and you should be able to select the chart.

You usually want to zoom in a bit to see where you're placing the roses.

And then click the add compass roses.

Put one up here.

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One in the middle.

And one on the bottom.

The actual compass rose is not generated until the chart is exported.

The blue circle represents the extent of the outer ring of the compass rose.

Now we can place the compass roses on the other two charts.

So, click select active chart again.

8:00

Click the chart.

Add compass rose and the same exercise.

You can see that the size of the circles is different because it's showing the proportional size of the compass rose on that particular scale chart.

If you want to move one; this is a little close to the neat line.

8:30

So, I'm going to move that down a bit.

Select the last chart.

Add compass rose.

If you place a compass rose in an area where two charts overlap, the application will keep track of which compass rose belongs to which chart.

9:05

If you decide to move a chart after you've placed compass roses, all the roses disappear.

So, you want to be sure to have your chart in the final position before you place compass roses.

9:36

There is a limit of three compass roses per chart.

If you try to place a fourth rose, you'll get an error message.

Now we're ready to create a PDF of the chart image in the **Export Functions** panel.

And you notice I forgot to rename the third chart.

So, you can change the name of a chart in this panel.

You can see that this is the Tampa Bay.

10:01

And we want to change the name of this chart to Entrance to Tampa Bay.

So, now we have our Tampa chart, 1:20,000 and two, 1:40,000 Tampa Bay and Entrance to Tampa Bay charts.

It's always important to remember to go back to **Layer Settings** and ensure that all data sets is clicked on.

10:30

This ensures that any areas that aren't covered by the scale of the chart can be filled in with ENC data from other scales.

After the All data sets box is checked, you can go back to the **Export Functions** panel.

To export a chart, simply select the chart and click on the export selected charts button.

You may also select multiple charts by holding down the control key and selecting a group of charts.

Then hit the export selected charts button.

Exporting each chart takes a minute or two.

11:02

Once the open buttons appear, can click the button to open the chart.

Here is the 1:20,000 scale chart that we just created, including the compass roses,

the zone of confidence diagram and the associated notes.

You can save the chart to your computer using browser's download function.

You should also save your chart designs in a chart catalog.

To do so, select the charts and then click on the add selected charts to chart catalog button.

11:36

This opens the chart catalog viewer with the charts that you've created displayed in the table.

Click the create save chart catalog button.

Give your catalog a name, “Tampa Charts,”

and save the GeoJSON catalog file.

To reload your charts from a catalog, open the NOAA Custom Chart application.

Go to the **Export Functions** panel.

12:01

Click the open chart catalog viewer.

Click open existing chart catalog.

Select the GeoJSON file and click open.

Then you can select individual charts or click the select all button and then click the add selected charts to chart queue button.

This will take a few seconds for each chart.

Then you can click on a chart in the queue and the application will zoom to the chart.

12:39

You can now re-export the charts.

And any changes that have been made to the underlying ENC data used to make NOAA Custom Charts will be reflected on the new charts.

For more information and tips on how to make the best custom charts, check out the new 19 page NOAA Custom Chart version 3 user guide.

13:01

To learn more about the new online **NOAA Navigation Update** application and how it can be used to determine when ENC data used to make a custom chart has been updated,

watch the *Updating your NOAA Custom Charts* video tutorial.

The user guide, videos, and other helpful resources are linked from the NOAA Custom Chart **Help And Feedback** panel.

13:28