CGECS – Vega ECS Software (1.3.9.X):
Install Charts / Load Charts and Chart Sets

JOB AID

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Training Branch
United States Coast Guard
Command and Control Engineering Center (C2CEN)
4000 Coast Guard Blvd
Portsmouth, VA
CGWEB.LANT.USCG.MIL/C2CEN
PREFACE

This document contains the Coast Guard Electronic Charting System CGECS – Vega ECS Software (1.3.9.X): Install Charts / Load Charts and Chart Sets Job Aid as designed, developed, and approved by the Training Branch of the United States Coast Guard Command and Control Engineering Center, Portsmouth VA.

This Job Aid pertains to CGECS – Vega ECS Software (1.3.9.X) and has a publish date of 16 February 2010. Confirm that you have the latest version of this Job Aid by checking the C2CEN website:

CGWEB.LANT.USCG.MIL/C2CEN/JOBAIDS.HTML

NOTE

Before using the CGECS – Vega ECS Software (1.3.9.X): Install Charts / Load Charts and Chart Sets Job Aid, the operator should have a basic understanding of electronic charting operations.
CGECS – Vega ECS Software (1.3.9.X): Install Charts / Load Charts and Chart Sets
JOB AID

JOB AID APPROVAL

Reviewed by Senior Course Designer: Patricia A. Dobbins
(Signature) 2/19/10

Reviewed for content by Product Leader: LT. Arthur P. Martin
(Signature) 1/4/10

Reviewed by Training Program Manager: Robert C. Daniels
(Signature) 1/3/10

Approved by Training Branch Chief: LT. Patrick J. Gallagher
(Signature) 1/3/10

Training Branch
United States Coast Guard
Command and Control Engineering Center (C2CEN)
Portsmouth, VA 23703
CGWEB.LANT.USCG.MIL/C2CEN

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INTRODUCTION

The CGECS – Vega ECS Software (1.3.9.X): Install Charts / Load Charts and Chart Sets Job Aid provides detailed steps to install and update charts, load charts, and load and edit chart sets utilizing the Vega system. It is normally performed by the CO, OIC, Navigator, OOD, JOOD, or other qualified bridge watchstanders.
DOWNLOAD CHARTS / CHART UPDATES FROM NOAA WEBSITE

NOTE

Updates to both RNC (BSB) and ENC charts are available at the following web addresses:
http://www.charts.noaa.gov/ENCs/ENCs.shtml
http://www.charts.noaa.gov/RNCs/RNCs.shtml

The procedures for downloading BSB and ENC charts are the same except where ENC procedures are shown.

1. Utilizing a Standard Workstation III (SWIII), open Internet Explorer.

2. Access NOAA at the following Web Address:
http://www.charts.noaa.gov/ENCs/ENCs.shtml.

Continued on next page.
3. Ensure that there is a blank CD in the CD drive.

4. Click on a link from the following categories:
   A. All ENCs
   B. ENCs by Coast Guard Districts
   C. ENCs by State/Region
   D. Individual ENCs

Click here for Zip files of Individual ENCs

Continued on next page.
5. Read the USER AGREEMENT and click **OK** at the bottom of the window.

*Continued on next page.*
6. Click the Save button.

Continued on next page.
7. From the Save in dropdown menu, select the desired location to save the file (e.g., CD Drive (D:)).

8. Click Save.

**NOTE**

The Download may take several minutes if grouped charts were selected.

Continued on next page.
9. Click Close when the download is complete (if necessary).

10. Close the USER AGREEMENT window.

11. Repeat steps 4 thru 11 as necessary.

12. Exit Internet Explorer.

Continued on next page.
NOTE

Steps 14 thru 18 are necessary ONLY if you saved zip files directly to a CD.

13. Access the CD drive on the SWIII.

14. Select **Write these files to CD**.

![CD Drive with Write these files to CD task selected](image)

*Continued on next page.*
15. Change the CD name if desired, Click Next.
16. Click **Finish** after the files are written to the CD.

17. Remove CD from SWIII.
INSTALL/UPDATE CHARTS

In order for the operator to load/display charts on Vega’s Graphic Window, the proper format of charts; Electronic Navigational Charts (ENC) or Blue Marble Geographics, Seawall, Better Boating Bureau (BSB) must be installed in the system.

NOTE
Charts can be installed and updated from a Monthly Updated CD or from a zip file that has been downloaded from the NOAA website.
The procedures for Installing/Updating BSB and ENC charts are the same except where ENC procedures are shown.

1. Insert the Monthly Update CD, a downloaded zip file CD, or other approved external storage device containing zipped chart data.

2A. Select Charts> Add/Update Charts> BSB or ENC and then proceed to step 5;

Or,

2B. Select Tools> Charts on the System Menu Bar.

Continued on next page.
3. On the Charts window, select the **ENC** or **BSB** tab.

![Charts window with ENC and BSB tabs selected](image)

4. Click the **Add/Updates Charts** button found under the ENC or BSB tab.

5. Select **Directory of ENC/BSB Charts** or **Compressed (zipped) file of ENC/BSB charts** radio button.

![Add/Update ENC/BSB Charts dialog boxes](image)

6. Use **Browse** to select the location of the folder containing the directory of charts or to select the location of the compressed (zipped) file.

**NOTE**

*If a monthly update CD is loaded prior to chart installation, the Location will automatically populate with the CD directory.*

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Continued on next page.
a. Highlight (click) the file or folder and click **Open**.

![Open dialog box](image1)

b. Click **Next**.

![Add/Update ENC Charts](image2)  
![Add/Update BSB Charts](image3)

*Continued on next page.*
Select Installation Options if desired (see decision chart below):

<table>
<thead>
<tr>
<th>IF:</th>
<th>THEN:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(ENC ONLY) System seems to be loading charts to the display slowly</td>
<td>Ensure “Pre-process for performance” is selected (this is the default) to improve load time</td>
</tr>
<tr>
<td>Installing an older chart to an updated system</td>
<td>Check “Overwrite newer”</td>
</tr>
<tr>
<td>(ENC ONLY) Overriding checksum errors</td>
<td>Check “Override checksum errors”</td>
</tr>
<tr>
<td>(BSB ONLY) Override reprojection of non-mercator charts</td>
<td>Check “Override reprojection of non-mercator charts”</td>
</tr>
</tbody>
</table>

7. Click **Next**.

*Continued on next page.*
8. Select the charts to be installed.

![Chart Installation GUI](image)

**NOTE**
Vega will automatically select charts that are not yet installed or charts that are more up-to-date than existing charts. Vega will **NOT** select older versions if Overwrite newer was not checked in step 7.

9. Click **Install** (this process may take several minutes to complete).

![Install Confirmation](image)

*Continued on next page.*
10. Review the Install Summary, click **Close**.
LOAD CHARTS

There are four chart loading methods:

Automatic
Right Button Option
Load From Chart Window
Load Chart Set

Load Charts – Automatic Selection

1. Click **Auto Select Charts.**

2. Click **Show BSB Charts** to load BSB charts for the area.

3. Click **Show ENC Charts** to load ENC charts for the area.

**NOTE**

*In Automatic mode, Vega selects the best chart type for the area. Both BSB and ENC chart types may be loaded/displayed at the same time.*

**NOTE**

*No other chart load method (i.e., Chart Window, Right Button Option, or Chart Set) will function when automatic mode is active.*
Load Charts – Right Button Option

1. Left click on the Show BSB Charts and/or the Show ENC Charts (ensure that Auto Select Charts is deselected).

2. Right click on the Graphic Window.


   Zoom
   Recenter
   Routes
   Marks
   Overlays
   Rail Motion
   Get/Close Chart At Cursor
   Close Menu

   REC: US2EC03M, Cape Sable to Cape Hatteras, 1:200000

4. Select chart.

   NOTE
   VEGA will place “REC:” before the chart it recommends based on cursor position and current chart width/scale.
Load Charts – From Chart Window

1. On the System Menu bar, select **Charts > Display Charts**.

2. Place a check next to the chart type (BSB or ENC).

3. On the System Menu bar, select **Tools > Charts**.

4. On the Charts window, scroll down to the desired chart.

5. Check **Show Coverage** to display an outline of the chart area (NOT required).

6. Check **Show Chart** for each chart you want to load.

7. Minimize or close the Charts window, if desired.
CHART SETS

A chart set is a collection of charts selected by the user for a specific Geographic area. This selection will demonstrate how to create, load, edit and delete chart sets.

Create a Chart Set

1. Select **Tools > Chart Sets**.

2. Click **New Chart Set** icon.

Continued on next page.
3. Type an entry for the New Chart Set Name.

4. Click the Add Charts Selected For Display to add the charts which are currently loaded/displayed on the Graphic Window.

Continued on next page.
5. Click the **Add a New View** button.

**NOTE**
A Chart View allows the user to preset a specific display center (i.e., lat/long) and chart scale/width. When selected, the Vega display will focus on the designated position at the specified scale/width.

6. Type an entry for the defaulted View, e.g., Cape Hatters approach View 1.
7. To change the center of the View, click the **Capture Mouse Position** button.

**NOTE:**
The Latitude and Longitude of where the mouse cursor is clicked becomes the new center of the View, but does not change the current Graphic Window display.

6. Select the **Position** field, change the Position if desired.

7. Click the **Width** drop-down button.

8. Select the chart width to be displayed for the View being created.

9. Repeat steps 5 thru 7 for each new View to be added to the Chart Set.

**NOTE:**
The Chart Set and Views are saved as you create them; they will remain until you delete them.

*Continued on next page.*
Export a Chart Set

1. Click the **Export** button to save the Chart Set to a location outside of Vega.

2. **Check** Chart Set(s) to export.

3. Click the **Export** button.

*Continued on next page.*
4. Type in the File name.

5. Click the **Save** button.

![](Image)

**Import a Chart Set**

1. Click the **Import** icon.

![](Image)

*Continued on next page.*
The Open dialog box will appear with a display list of all summary files in the “Chart Sets” or a uniquely defined directory.

2. Left click on the file you want to import.

3. Click “Open.”

The Import Chart Sets dialog box opens.

4. Click “Import.”

Continued on next page.
The Chart Set appears in the “Chart Sets” dialog box.

![Chart Sets dialog box]

**Load a Chart Set**

1. Select **Tools > Chart Sets**.

![Tools menu]

2. Expand a Chart Set by clicking on the plus (+) sign.

*Continued on next page.*
3. Double-click the desired Chart View to load.

**NOTE**
The View is displayed on the Graphic Window, at the location and chart width that the View was saved.
Remove Chart from Chart Set

1. Select **Tools > Chart Sets**.

2. Select the chart to be removed from the Chart Sets dialogue box.

3. Click the **Remove Selected Chart** button.
Add a View to Existing Chart Set

1. Select **Tools > Chart Sets**.

2. Select the chart set from the Chart Set dialog box.

*Continued on next page.*
3. Click the **Add a New View** button.

4. Rename the View.
Remove View

1. Select Tools > Chart Sets.

2. Click the Delete Selected View button.

Continued on next page.
3. Click **Yes** to confirm removal of View.
DELETE CHART SET

1. Select **Tools > Chart Sets**.

2. Select Chart Set to be removed.

3. Click the **Delete Selected Chart Set** button.

4. Click **Yes** in the Confirm Chart Set Deletion Dialog box.
TERMS / ABBREVIATIONS / ACRONYMS

BSB  A type of Raster Nautical Chart
CGECS  Coast Guard Electronic Charting System
CO  Commanding Officer
C2CEN  Command and Control Engineering Center
JOOD  Junior Officer of the Deck
NOAA  National Oceanic and Atmospheric Administration
OIC  Officer In Charge
OOD  Officer of the Deck
RNC  Raster Navigational Charts
SWIII  Standard Workstation III
VRM  Variable Range Marker