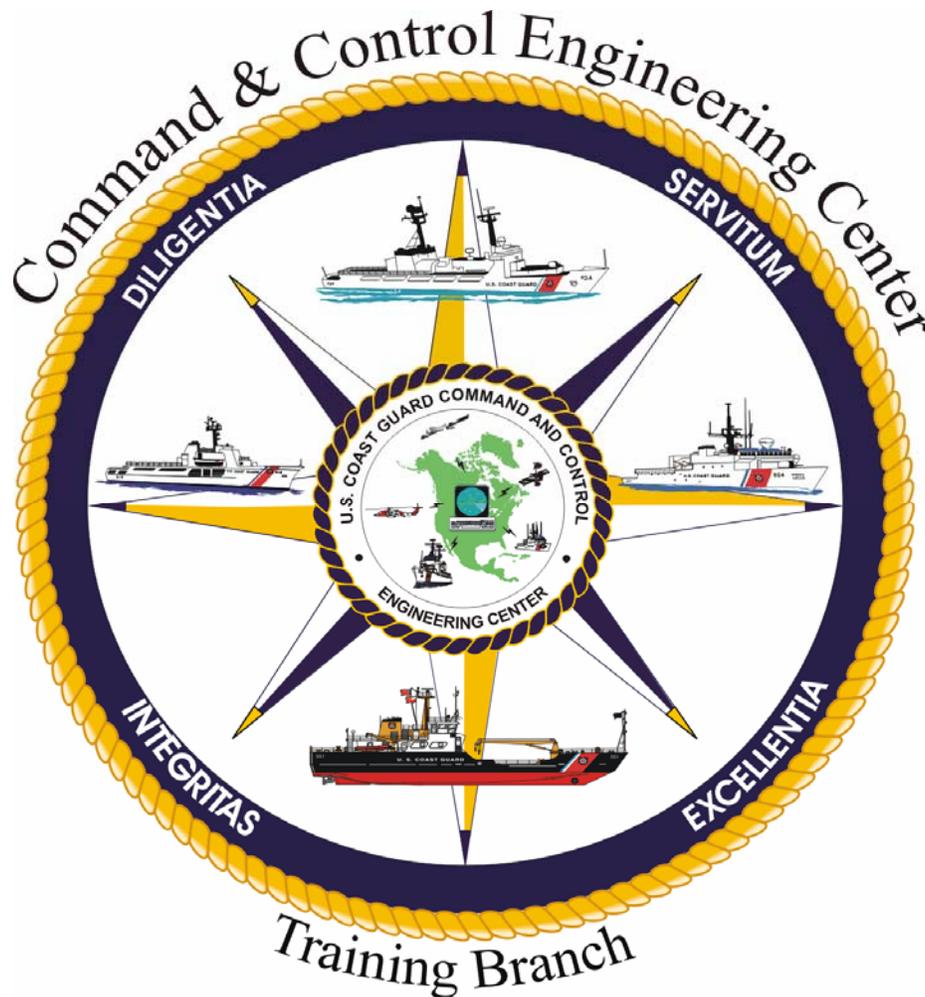


CGECS – Vega ECS Software (1.3.9.X): Install Charts / Load Charts and Chart Sets

JOB AID



Version 3.0

16 February 2010

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

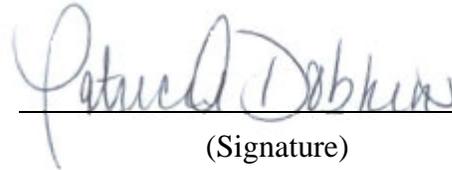
Before using the CGECS – Vega ECS Software (1.3.9.X): Install Charts / Load Charts and Chart Sets Job Aid, the operator should have a basic understanding of electronic charting operations.

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
(Date)

Reviewed for content
by Product Leader:

LT. Arthur P. Martin


(Signature)

1 MAR 10
(Date)

Reviewed by Training
Program Manager:

Robert C. Daniels


(Signature)

1 Mar 10
(Date)

Approved by Training
Branch Chief:

LT. Patrick J. Gallagher


(Signature)

1 MAR 10
(Date)

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

TABLE OF CONTENTS

Preface.....	i
Job Aid Approval.....	ii
Table of Contents.....	iii
Introduction.....	iv
Download Charts / Chart Updates From NOAA Website.....	1
Install/Update Charts	10
Load Charts – Automatic Selection	16
Load Charts – Right Button Option.....	17
Load Charts – From Chart Window.....	18
Chart Sets.....	19
Create a Chart Set	19
Export a Chart Set.....	23
Import a Chart Set.....	24
Load a Chart Set.....	26
Remove Chart from Chart Set.....	28
Add a View to Existing Chart Set.....	29
Remove View.....	31
Delete Chart Set	33
Terms / Abbreviations / Acronyms.....	34

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.

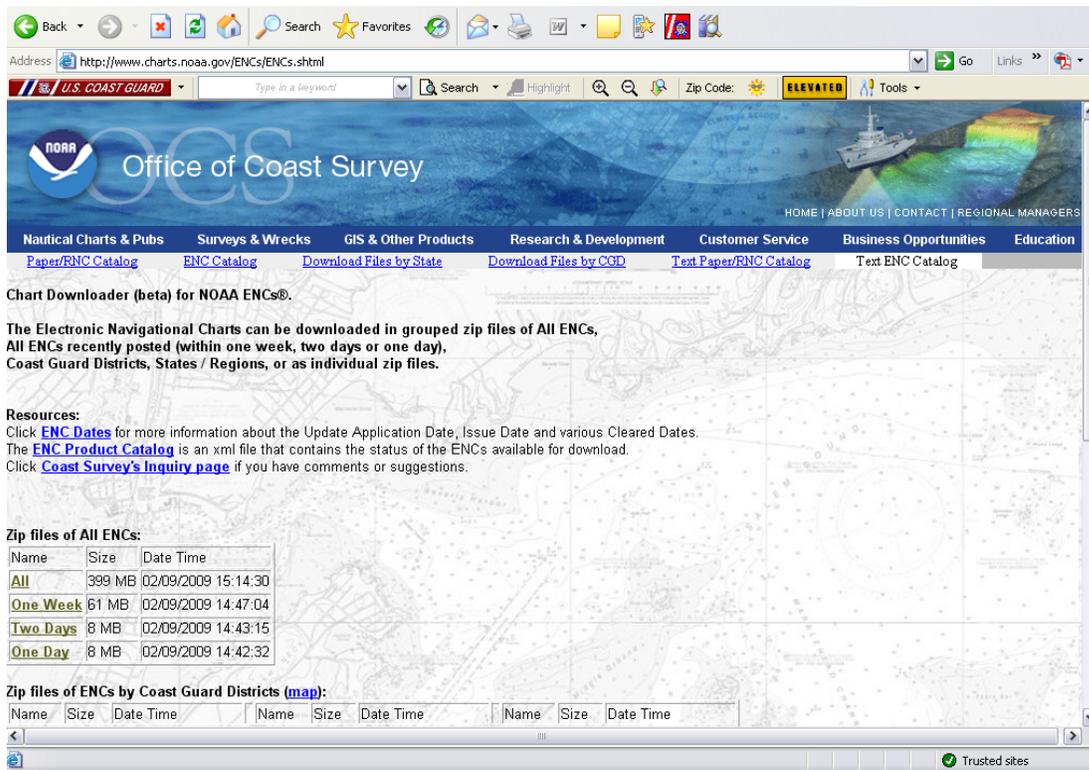
DOWNLOAD CHARTS / CHART UPDATES FROM NOAA WEBSITE

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>.



The screenshot shows the NOAA Office of Coast Survey website. The page title is "Chart Downloader (beta) for NOAA ENC's®". The main content area contains the following text:

The Electronic Navigational Charts can be downloaded in grouped zip files of All ENC's, All ENC's recently posted (within one week, two days or one day), Coast Guard Districts, States / Regions, or as individual zip files.

Resources:
Click [ENC Dates](#) for more information about the Update Application Date, Issue Date and various Cleared Dates.
The [ENC Product Catalog](#) is an xml file that contains the status of the ENC's available for download.
Click [Coast Survey's Inquiry page](#) if you have comments or suggestions.

Zip files of All ENC's:

Name	Size	Date Time
All	399 MB	02/09/2009 15:14:30
One Week	61 MB	02/09/2009 14:47:04
Two Days	8 MB	02/09/2009 14:43:15
One Day	8 MB	02/09/2009 14:42:32

Zip files of ENC's by Coast Guard Districts ([map](#)):

Name	Size	Date Time	Name	Size	Date Time	Name	Size	Date Time
------	------	-----------	------	------	-----------	------	------	-----------

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 ENC**s
 - B. **ENCs by Coast Guard Districts**
 - C. **ENCs by State/Region**
 - D. **Individual ENC**s

Zip files of All ENCs:

Name	Size	Date Time
All	398 MB	02/04/2009 16:46:33
One Week	59 MB	02/04/2009 16:22:14
Two Days	35 MB	02/04/2009 16:18:32
One Day	18 MB	02/04/2009 16:16:21

Zip files of ENCs by Coast Guard Districts ([map](#)):

Name	Size	Date Time	Name	Size	Date Time	Name	Size	Date Time
01 CGD	57 MB	02/04/2009 15:56:41	05 CGD	50 MB	02/04/2009 16:00:01	07 CGD	66 MB	02/03/2009 18:29:29
08 CGD	52 MB	02/04/2009 16:03:44	09 CGD	39 MB	02/04/2009 16:06:40	11 CGD	22 MB	02/03/2009 18:35:13
13 CGD	32 MB	02/04/2009 16:09:09	14 CGD	5 MB	12/23/2008 13:52:03	17 CGD	90 MB	02/04/2009 16:14:30

Zip files of ENCs by State / Region:

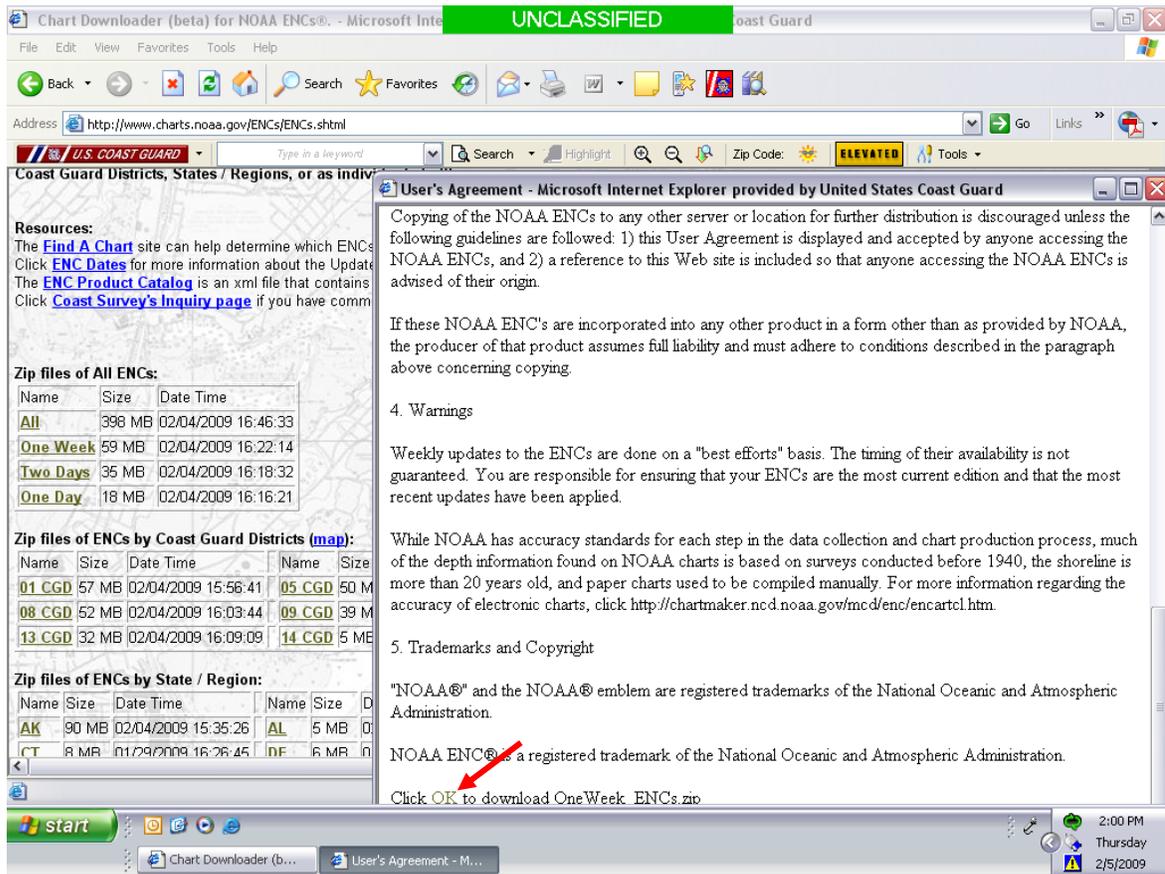
Name	Size	Date Time	Name	Size	Date Time	Name	Size	Date Time
AK	90 MB	02/04/2009 15:35:26	AL	5 MB	02/03/2009 17:59:16	CA	21 MB	02/03/2009 17:58:47
CT	8 MB	01/29/2009 16:26:45	DE	6 MB	01/29/2009 16:29:56	FL	41 MB	02/03/2009 18:09:33
GA	14 MB	01/26/2009 14:27:11	HI	4 MB	12/23/2008 13:38:42	ID	0 MB	10/28/2008 16:00:22
IL	2 MB	01/15/2009 14:45:02	IN	1 MB	01/15/2009 14:45:15	LA	28 MB	02/04/2009 15:42:36
MA	16 MB	02/04/2009 15:37:14	MD	19 MB	02/04/2009 15:46:05	ME	23 MB	02/04/2009 15:38:57
MI	25 MB	02/04/2009 15:48:55	MN	3 MB	01/29/2009 16:34:04	MS	6 MB	02/04/2009 15:43:15
NC	9 MB	02/04/2009 15:46:49	NH	6 MB	02/04/2009 15:39:32	NJ	15 MB	02/04/2009 15:50:31
NV	N/A	N/A	NY	21 MB	02/03/2009 18:11:21	OH	4 MB	02/04/2009 15:47:14
OR	11 MB	01/28/2009 15:00:26	PA	4 MB	02/04/2009 15:49:32	PO	2 MB	11/10/2008 14:05:45
PR	10 MB	01/08/2009 12:25:32	RI	8 MB	01/29/2009 16:32:16	SC	14 MB	01/26/2009 14:28:23
TX	16 MB	02/04/2009 15:40:38	VA	23 MB	02/04/2009 15:44:43	VT	N/A	N/A
WA	32 MB	02/04/2009 15:52:38	WI	7 MB	01/30/2009 11:18:02	Note: PO = Pacific Ocean		

Click [Here](#) for Zip files of Individual ENC

Privacy | Disclaimer | NOAA's National Ocean Service | NOAA | U.S. Department of Commerce
Trusted sites

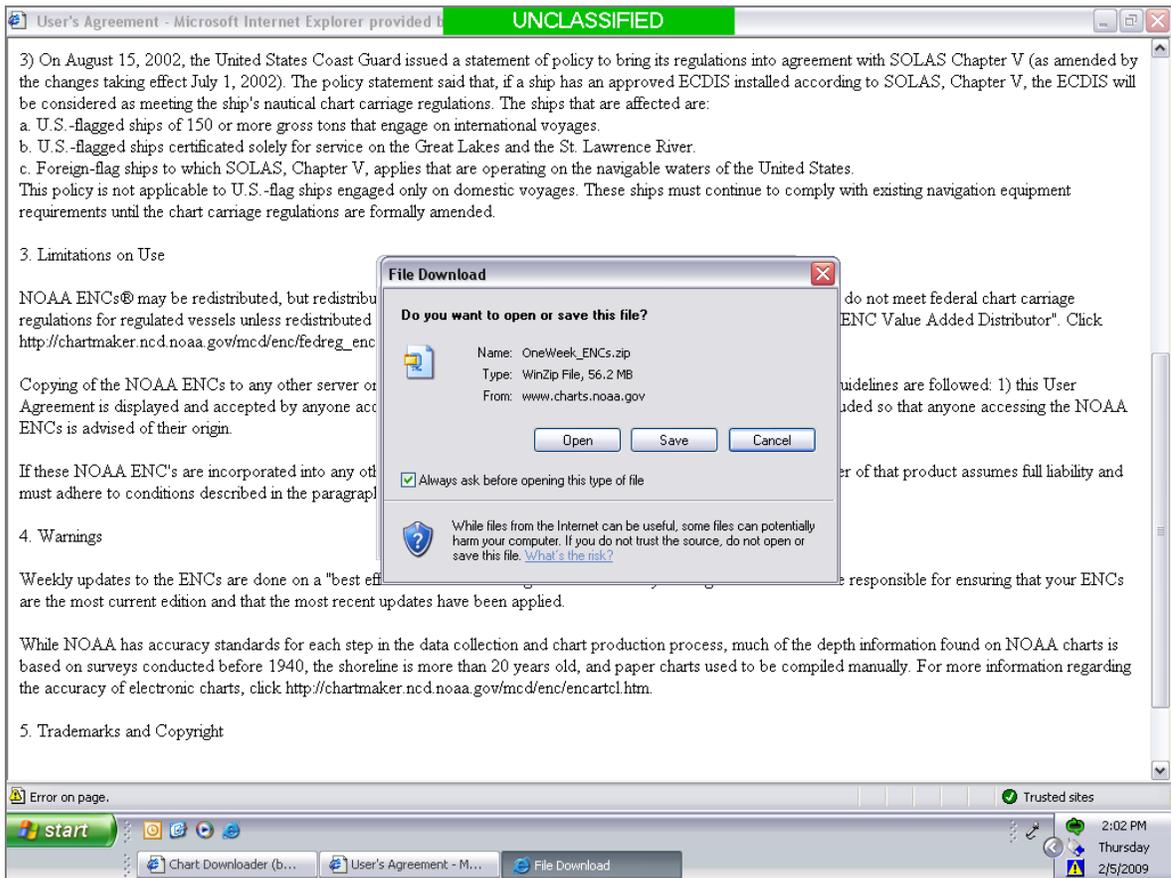
Continued on next page.

5. Read the USER AGREEMENT and click **OK** at the bottom of the window.



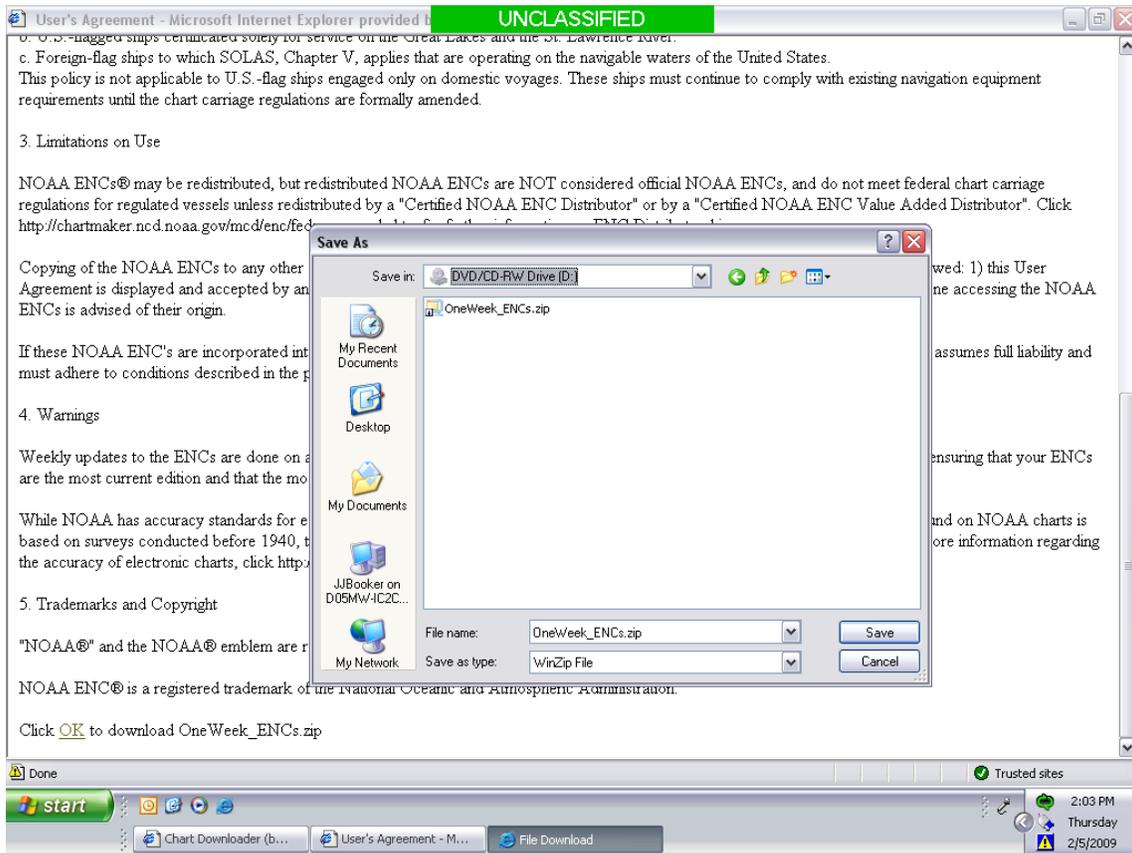
Continued on next page.

6. Click the **Save** button.



Continued on next page.

- From the *Save in* dropdown menu, select the desired location to save the file (e.g., CD Drive (D:)).



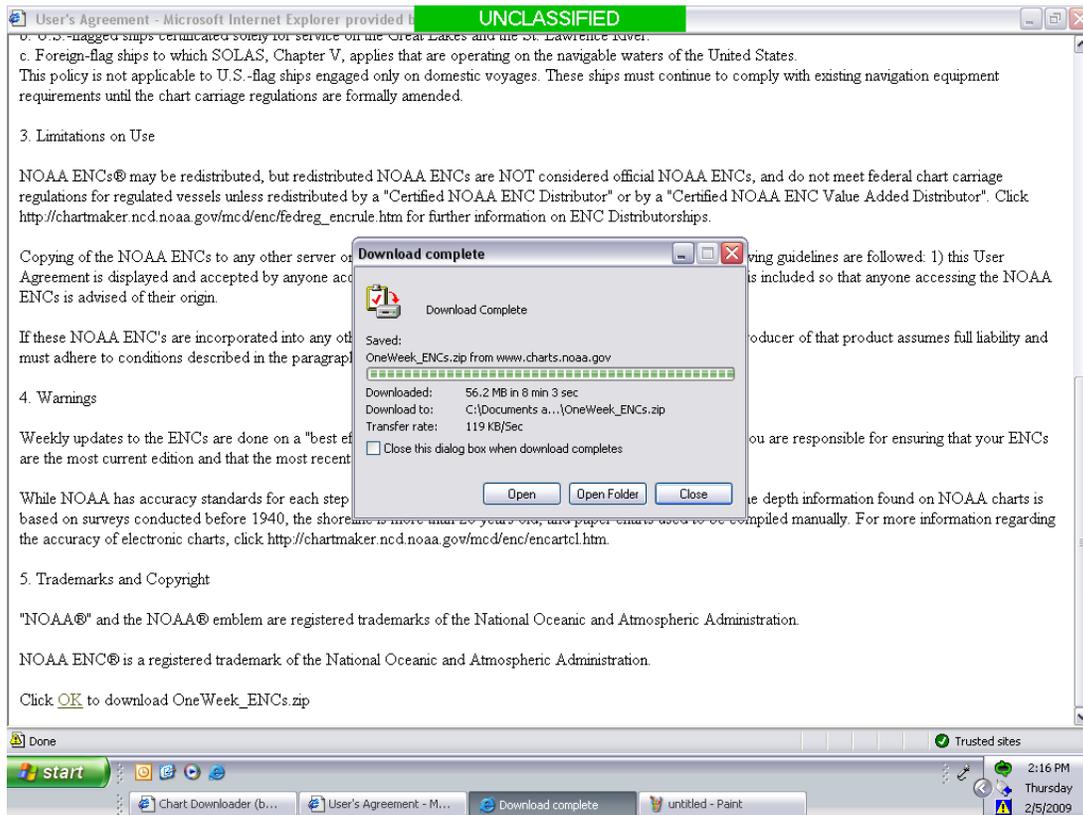
- Click **Save**.

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.

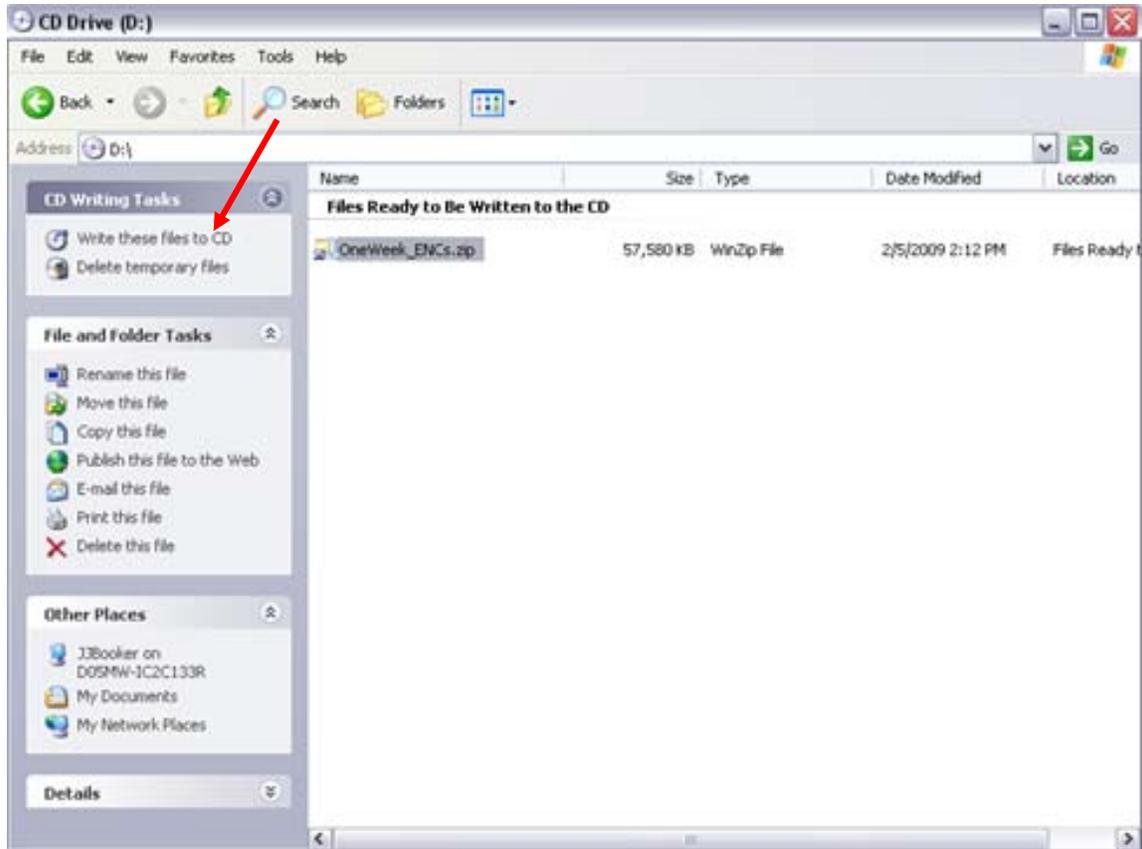
Continued on next page.

NOTE

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

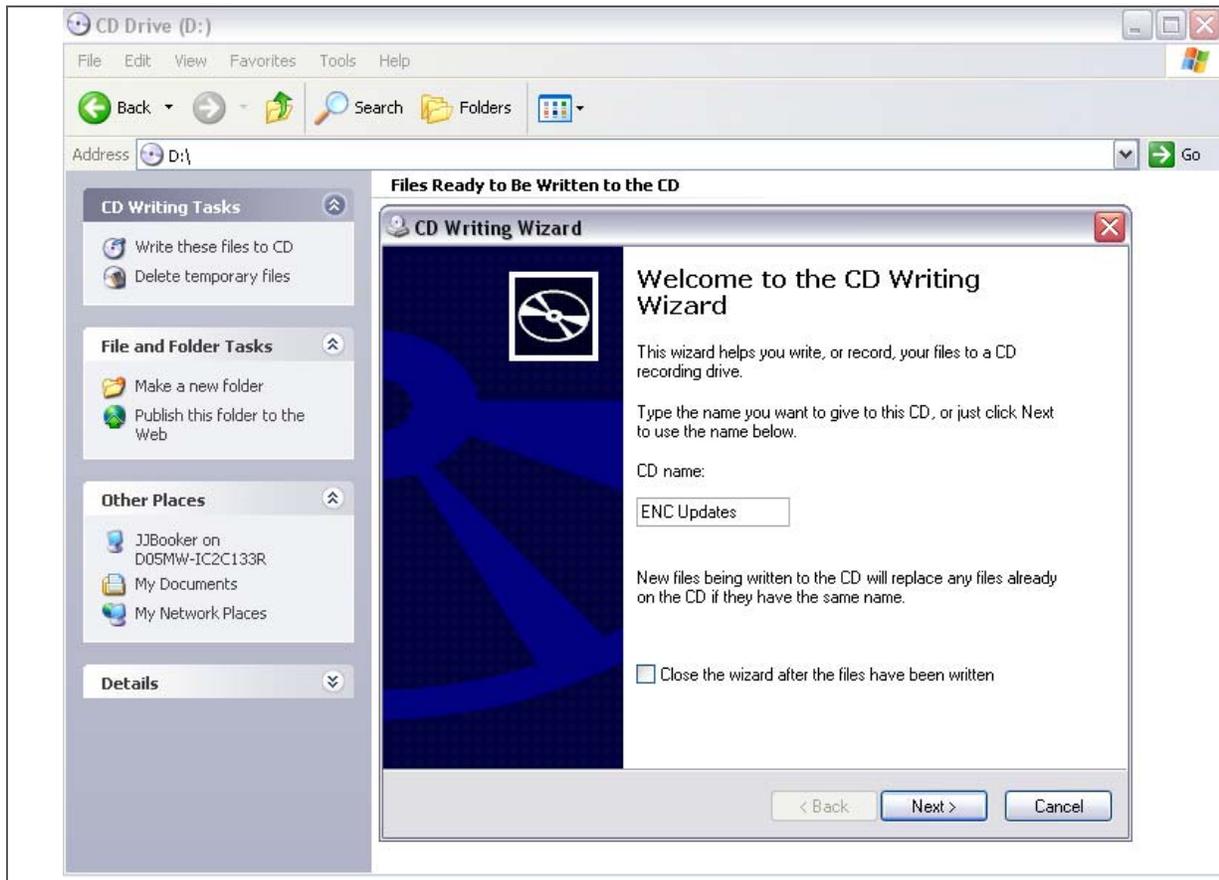
13. Access the CD drive on the SWIII.

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



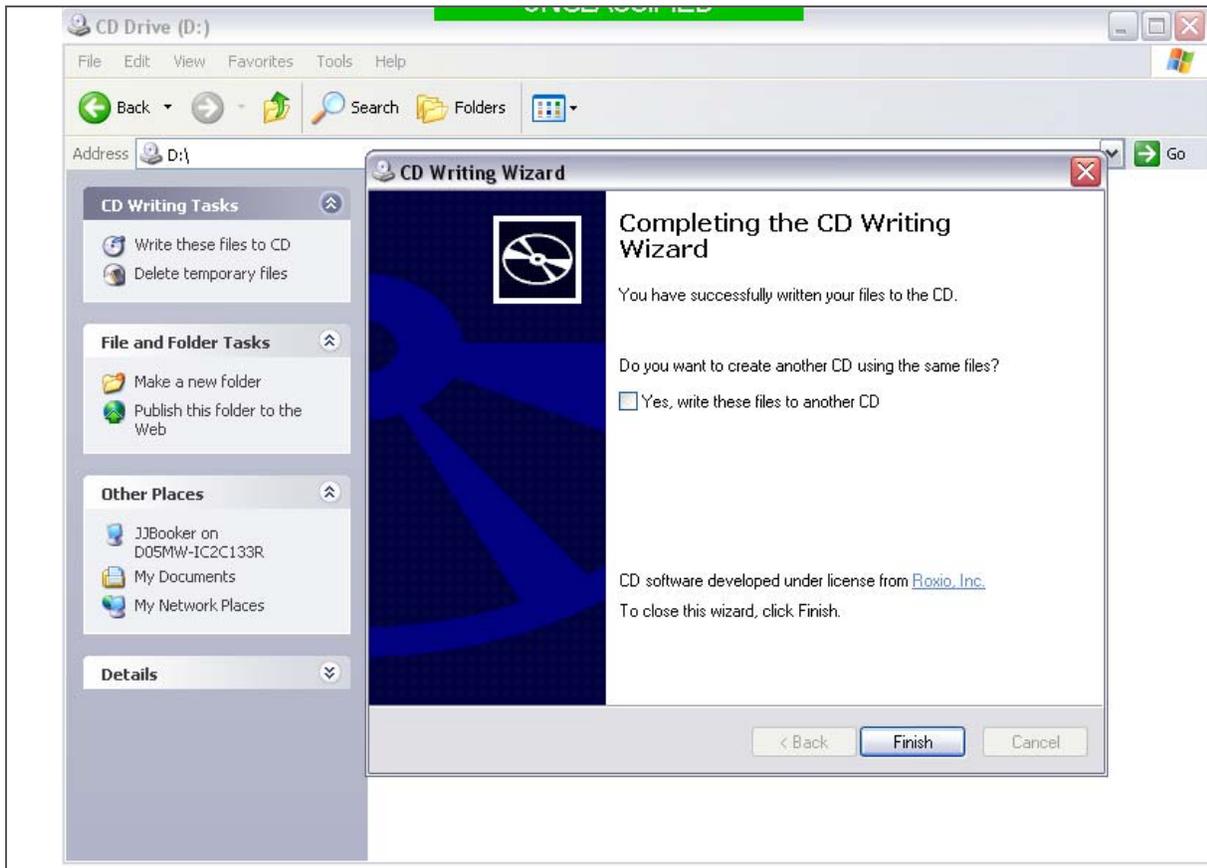
Continued on next page.

15. Change the CD name if desired, Click **Next**.



Continued on next page.

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.

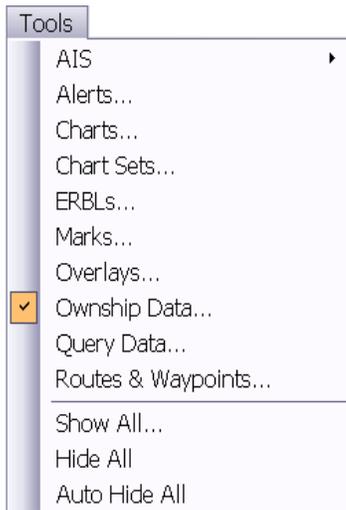
NOTE

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.

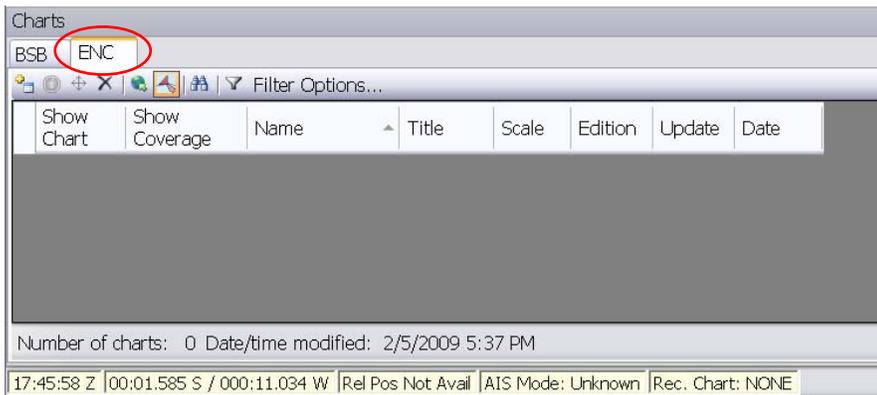
1. Insert the Monthly Update CD, a downloaded zip file CD, or other approved external storage device containing zipped chart data.

- 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.

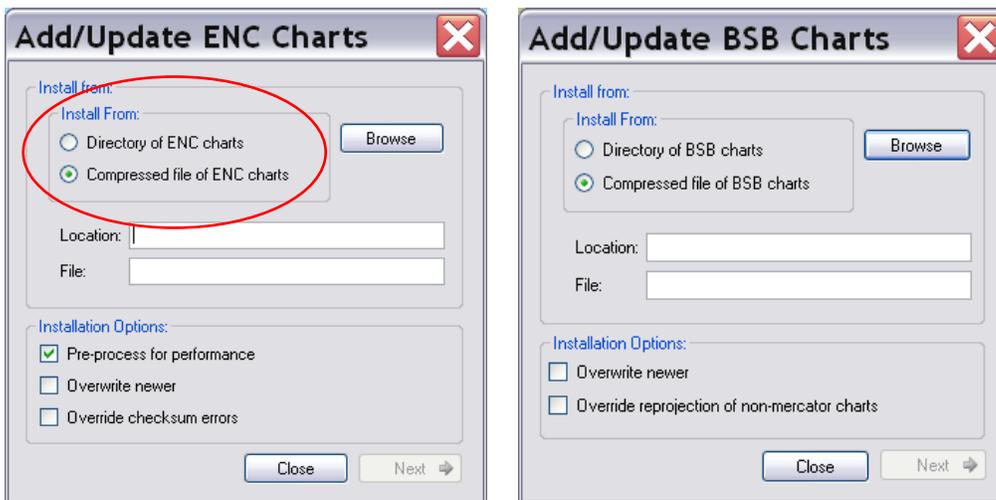


Continued on next page.

3. On the Charts window, select the **ENC** or **BSB** tab.



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.



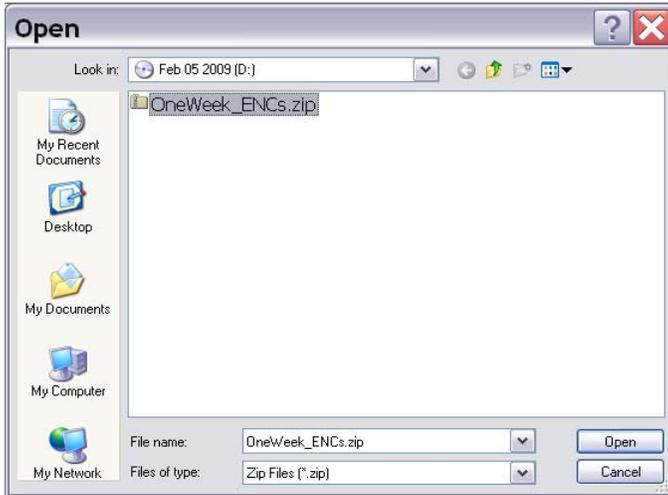
6. Use **Browse** to select the location of the folder containing the directory of charts or to select the location of the compressed (zipped) file.

NOTE

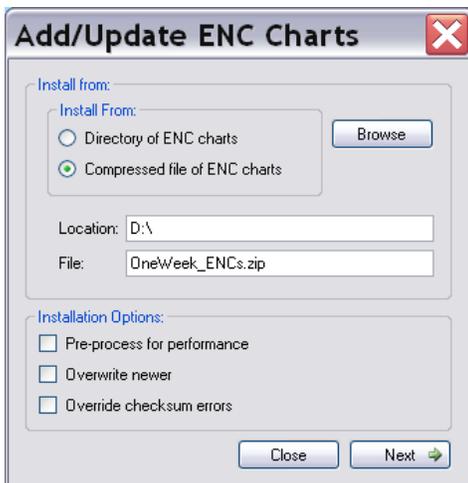
If a monthly update CD is loaded prior to chart installation, the Location will automatically populate with the CD directory.

Continued on next page.

a. Highlight (click) the file or folder and click **Open**.



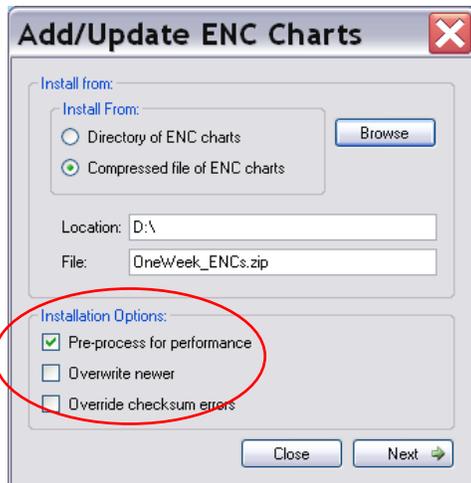
b. Click **Next**.



Continued on next page.

Select Installation Options if desired (see decision chart below):

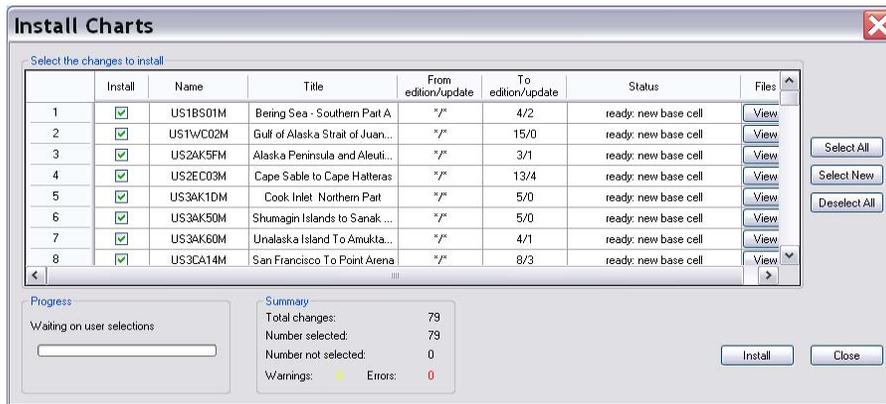
IF:	THEN:
(ENC ONLY) System seems to be loading charts to the display slowly	Ensure “Pre-process for performance” is selected (this is the default) to improve load time
Installing an older chart to an updated system	Check “Overwrite newer”
(ENC ONLY) Overriding checksum errors	Check “Override checksum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



7. Click **Next**.

Continued on next page.

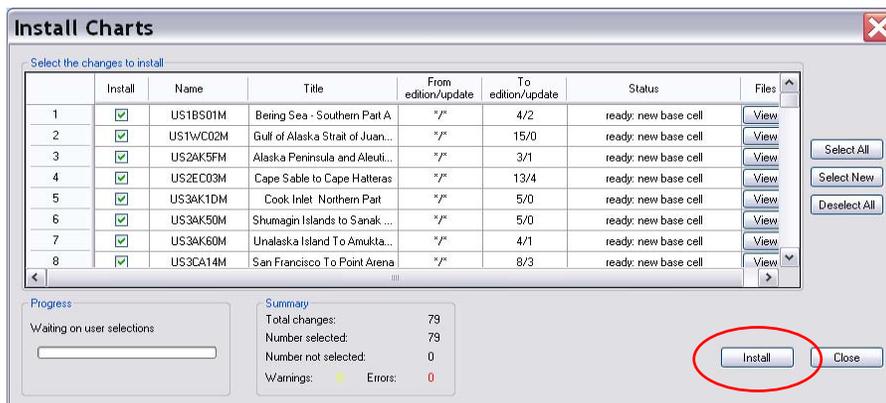
8. Select the charts to be installed.



NOTE

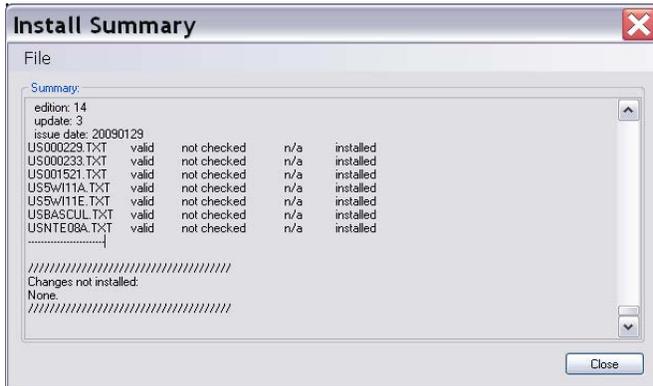
*Vega will automatically select charts that are not yet installed or charts that are more up-to-date than existing charts. Vega will **NOT** select older versions if Overwrite newer was not checked in step 7.*

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



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

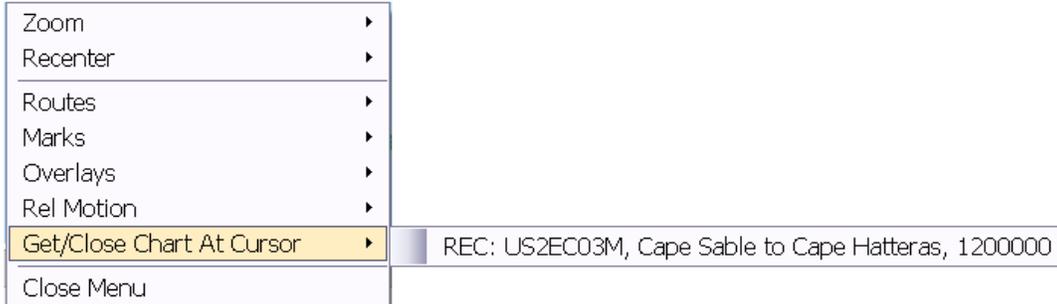
In Automatic mode, Vega selects the best chart type for the area. Both BSB and ENC chart types may be loaded / displayed at the same time.

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.
3. Select **Get/Close Chart at Cursor**.



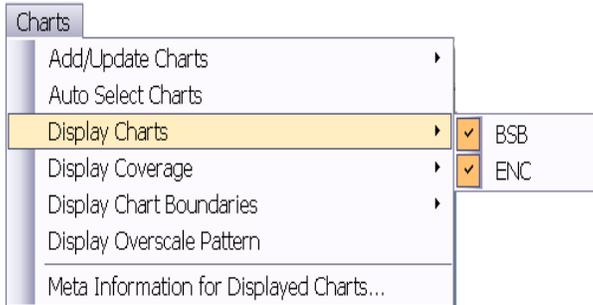
4. Select chart.

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).

The screenshot shows the 'Charts' window with a table of charts. The 'Show Coverage' column header is circled in red. The table contains the following data:

Show Chart	Show Coverage	Name	Title	Scale	Edition	Update	Date
<input type="checkbox"/>	<input type="checkbox"/>	US5VA17M	Norfolk Harbor an...	20,000	16	0	20090127
<input type="checkbox"/>	<input checked="" type="checkbox"/>	US5VA24M	Chesapeake Bay - ...	40,000	9	2	20090116
<input type="checkbox"/>	<input type="checkbox"/>	US5VA27M	Potomac River - C...	40,000	10	1	20090203
<input type="checkbox"/>	<input type="checkbox"/>	US5WA22M	Tacoma Harbor	15,000	5	6	20090203
<input type="checkbox"/>	<input type="checkbox"/>	US5WA26M	Hood Canal - Sout...	25,000	6	0	20090127
<input type="checkbox"/>	<input type="checkbox"/>	US5WI11M	Duluth-Superior H...	15,000	14	3	20090129

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

The screenshot shows the 'Charts' window with the 'Show Chart' column header circled in red. The 'Show Chart' column for the first three rows is checked.

Show Chart	Show Coverage	Name	Title	Scale	Edition	Update	Date
<input checked="" type="checkbox"/>	<input type="checkbox"/>	US5VA17M	Norfolk Harbor an...	20,000	16	0	20090127
<input checked="" type="checkbox"/>	<input type="checkbox"/>	US5VA24M	Chesapeake Bay - ...	40,000	9	2	20090116
<input checked="" type="checkbox"/>	<input type="checkbox"/>	US5VA27M	Potomac River - C...	40,000	10	1	20090203
<input type="checkbox"/>	<input type="checkbox"/>	US5WA22M	Tacoma Harbor	15,000	5	6	20090203
<input type="checkbox"/>	<input type="checkbox"/>	US5WA26M	Hood Canal - Sout...	25,000	6	0	20090127
<input type="checkbox"/>	<input type="checkbox"/>	US5WI11M	Duluth-Superior H...	15,000	14	3	20090129

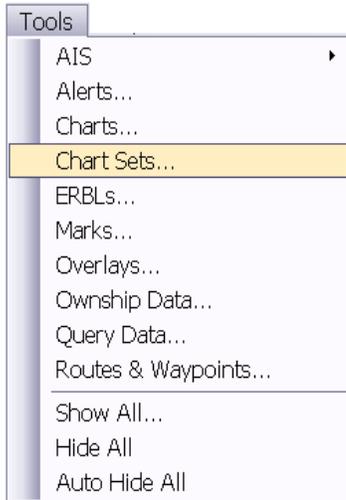
7. Minimize or close the Charts window, if desired.

CHART SETS

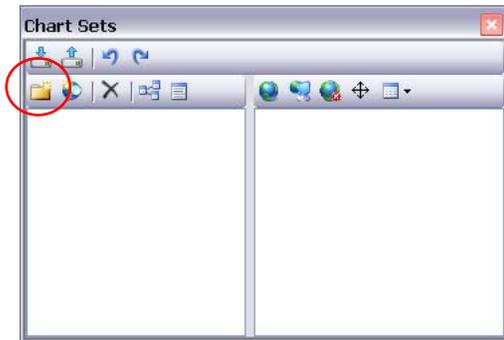
A chart set is a collection of charts selected by the user for a specific Geographic area. This selection will demonstrate how to create, load, edit and delete chart sets.

Create a Chart Set

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

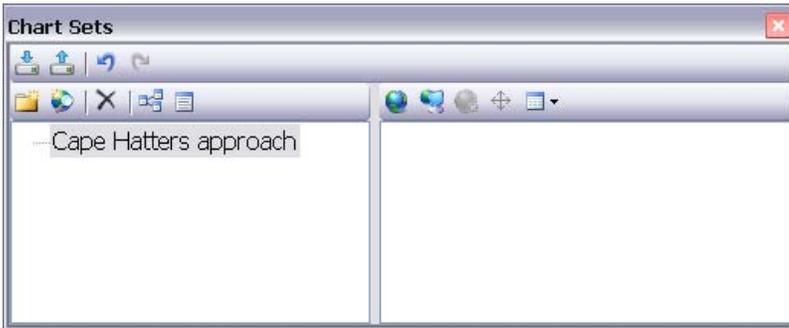


2.  Click **New Chart Set** icon.

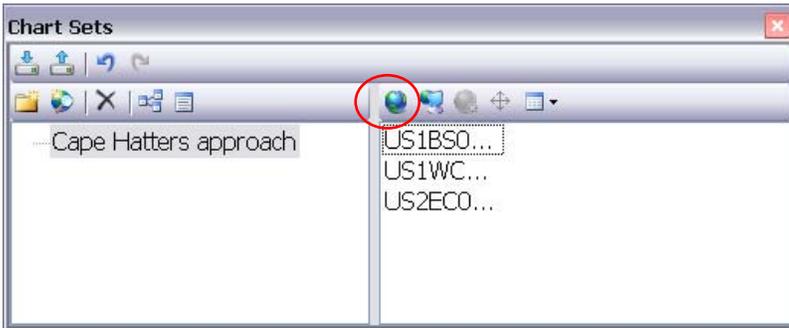


Continued on next page.

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.

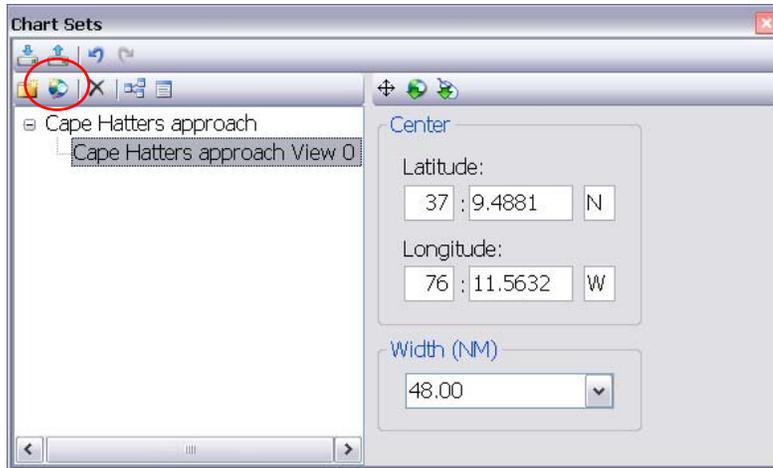


Continued on next page.

5.  Click the **Add a New View** button.

NOTE

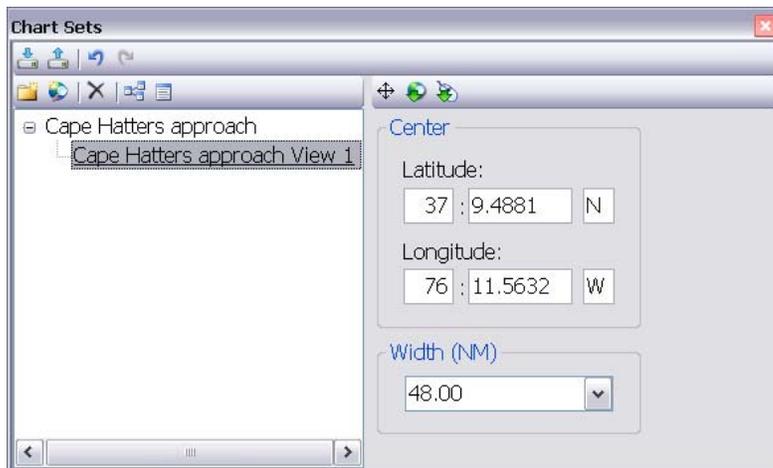
A Chart View allows the user to preset a specific display center (i.e., lat/long) and chart scale/width. When selected, the Vega display will focus on the designated position at the specified scale/width.



NOTE:

The default View is the center and width of the current graphic window.

6. Type an entry for the defaulted View, e.g., Cape Hatters approach View 1.



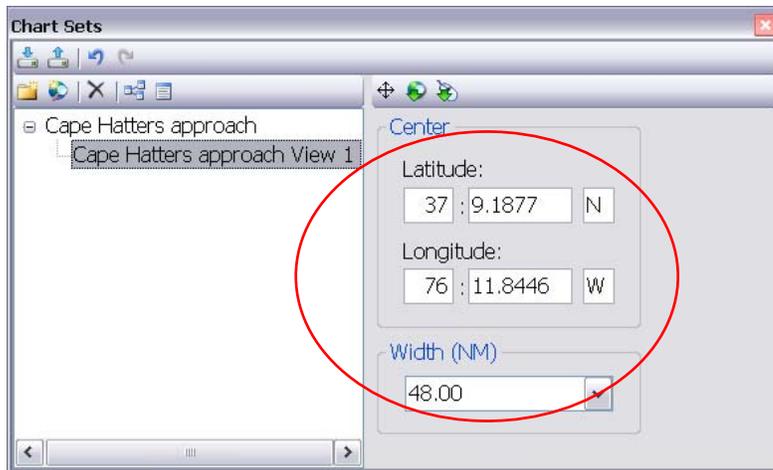
Continued on next page.

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.

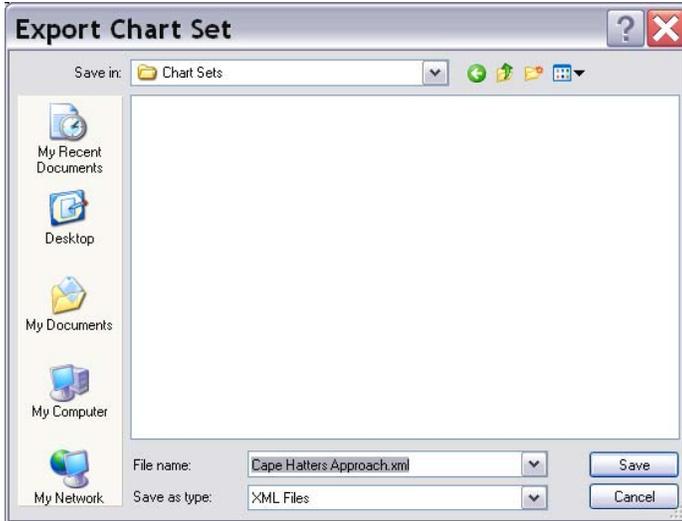


2. **Check** Chart Set(s) to export.
3. Click the **Export** button.



Continued on next page.

4. Type in the File name.
5. Click the **Save** button.



Import a Chart Set

1.  Click the **Import** icon.



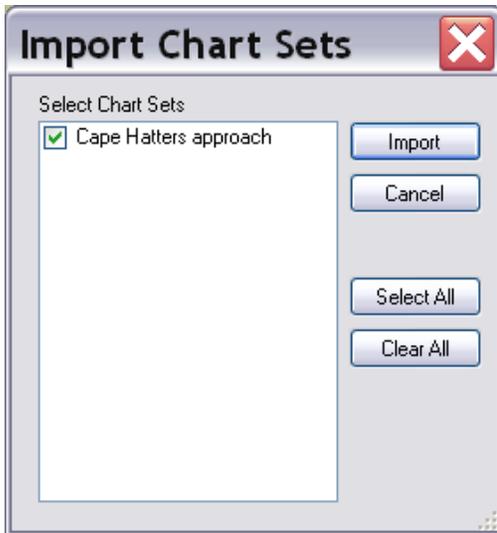
Continued on next page.

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.”

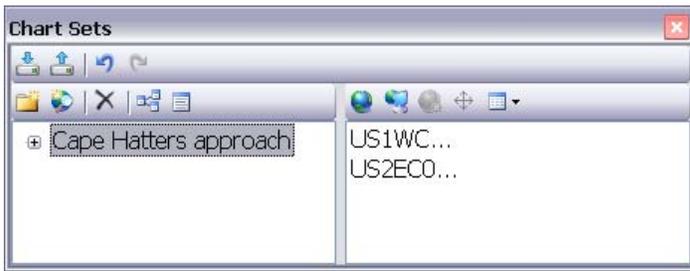
The Import Chart Sets dialog box opens.



4. Click “Import.”

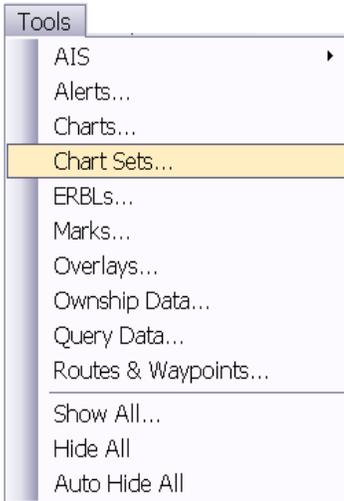
Continued on next page.

The Chart Set appears in the “Chart Sets” dialog box.



Load a Chart Set

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



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

Continued on next page.

3. Double-click the desired Chart View to load.

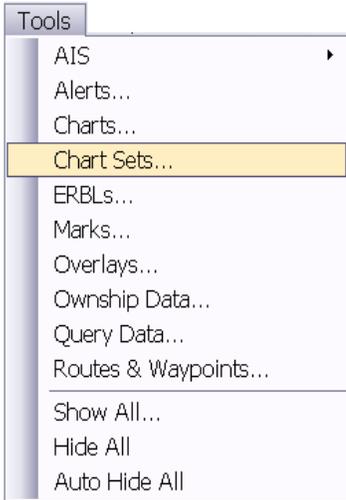


NOTE

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**.



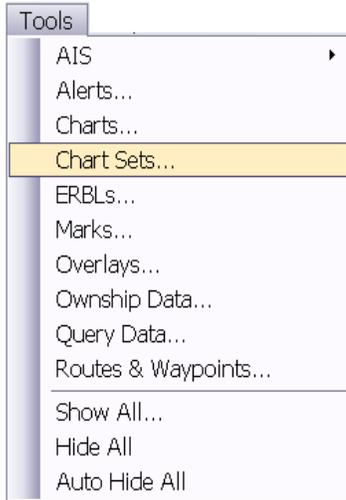
2. Select the chart to be removed from the Chart Sets dialogue box.



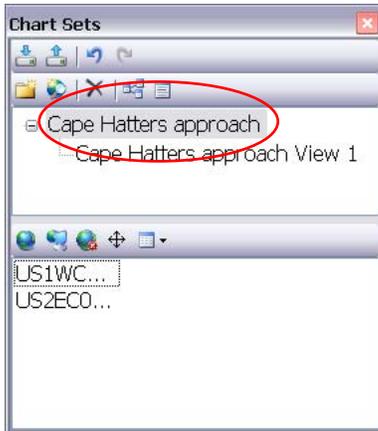
3.  Click the **Remove Selected Chart** button.

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.

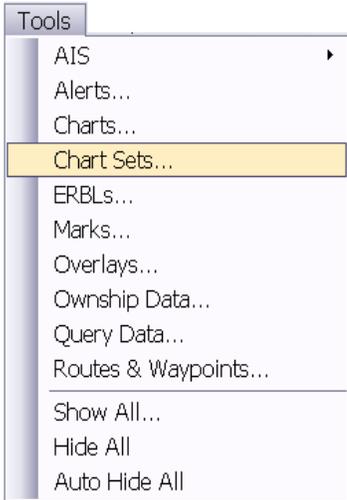


4. Rename the View.

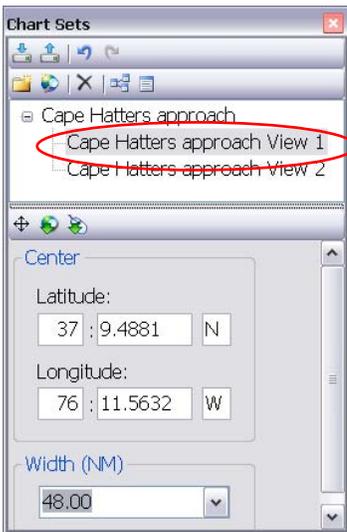


Remove View

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



1. Select View to remove from the Chart Set dialogue box.



2.  Click the **Delete Selected View** button.

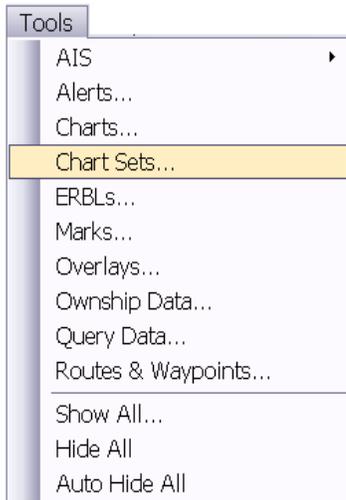
Continued on next page.

3. Click **Yes** to confirm removal of View.

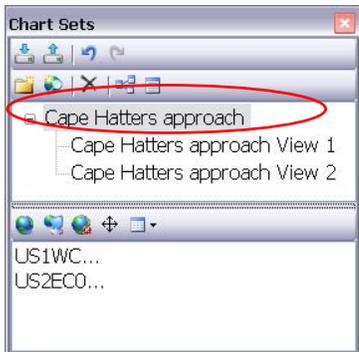


DELETE CHART SET

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



2. Select Chart Set to be removed.



4.  Click the **Delete Selected Chart Set** button.
5. 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