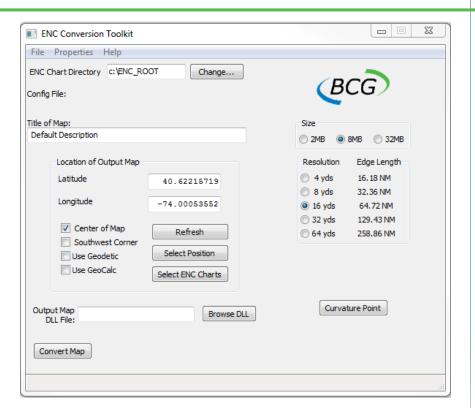
## Radar Landmass Database Generator





A common thread throughout all of BCG's simulator systems (MaST, PCS-3XX, and any of our radar emulators) is the database file used to establish the exercise training area. In the past, radar databases were created by manually digitizing paper charts in a process exclusive to BCG. Now BCG creates radar databases using custom designed software that reads and interprets ENC / S-57 data as its source information. These new database files represent not only 'fresher' data than the paper chart versions, but the radar image now correlates more closely with an ECDIS display that utilize the same data for its presentation.

With the use of our family of simulators, there may be a need for additional training areas (databases). Each port area serviced by a ship becomes a potential training area for the mariners aboard that vessel. Though BCG still creates customized radar databases for our customers, we now offer the same tools we use for database generation. As an option to our simulator product line, BCG offers our Radar Landmass Database Generation (ENCKit) Workstation to support this need.

The Radar Landmass Database Generation Workstation allows the operator to create a radar database for a specific geographical area he or she wishes to train in, and does so directly from unencrypted ENC / S-57 data. The resulting database files can then be distributed to any BCG radar emulation, the PCS-300, or PCS-100VMS simulator used by our customers.

## **Features**

The RLDG offers the following user controls:

- Location of the radar database
- Size of operational area
- Selection of charts used to create the radar database
- Resolution used for the database
- Cultural and/or navigational aids to be included in the database
- Manually add or remove objects from the database
- Selection of land Fill parameters

DNC Data: For our US Government Customers that utilize DNC data, we offer a software package that uses DNC in place of the ENC/S-57 data.

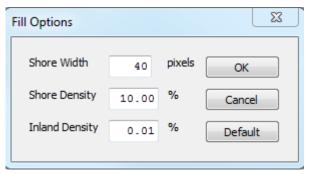


Figure 1

Select ENC Layers that define Land Area...
Select ENC Layers that define Coastline...
Select ENC Layers for Radar Entities...
Select ENC Layers that define Depth Properties...

Figure 2

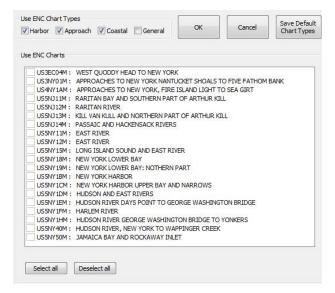


Figure 3

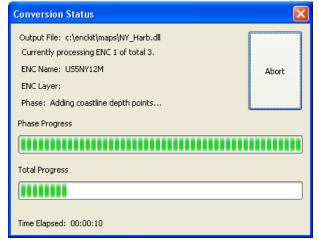


Figure 4

## **User Advantages**

- Ability to build training databases for any geographic area covered by ENC / S-57 data, at any time.
- Ability to maintain and control the distribution of all training databases used by BCG simulators
- Ability to re-create radar databases as new ENC / S-57 updates are released.

## **Product Details:**

The RLDG ENC Conversion software is a Windows application that utilizes ENC chart data to create radar databases suitable for use with BCG simulator products. The RLDG provides the user the flexibility to offer simulated training using any port in the world, thereby offering pre-mission familiarity to the student mariner.

The RLDG Control Window contains three menus: The **Properties Menu** allows user to set parameters that impact how the database is created during the conversion process. The **Properties Menu** contains two items: **Fill Options** (allowing in-land clutter modeling), and **Map Data Options** (selection of ENC Layers) as shown in Figures 1 & 2. The **Config Menu** allows user to create, load and save your Database Configuration File information via six items: **New, Load, Load from Archive, Save, Save As,** and **Exit.** The final option for the RLDG Control Window is the **Help Menu.** 

After setting the initial parameters in the Main Control Window, the user is provided with the **ENC Chart Select Dialog** (Figure 3). This window allows the user to choose which ENC charts are used in the database conversion. The areas covered by each chart are also displayed in graphically when they are selected.

Once the conversion process is started, another dialog window appears titled "Conversion Status" (Figure 4) showing the progress of the database generation. The amount of time required for conversion to complete is variable, depending on several factors, such as: the speed of the computer, the amount of available memory, the size of the coverage area, the complexity of the ENC data, and whether the ENC data is being read directly from a CD. When the conversion has completed the user will return to the main dialog window. The file is then ready for simulation.

For customers requiring a wide range of operational training areas, or desire the ability to update their own radar databases, the RLDG is a perfect tool.