

# Rollin' on the river, electronically

By Terri Jackson

Out with the old and in with the new. The future of modern navigation is here. Technology is increasingly changing the way things are done at the Corps.

NOD now maintains River Electronic Navigational Charts (ENC) for the Atchafalaya River. The Atchafalaya River begins in Louisiana at the lower confluence of the Red River and the Lower Old River, flowing 165 miles to the Gulf of Mexico.

"Two years ago while collecting data to update the navigation and hydrographic survey books, the district decided to initiate a river ENC of the Atchafalaya River as a pilot project," said Mark Nettles, cartographer in Engineering Division.

River ENCs are digital databases, regulated as to content, structure and format for use with electronic charting systems in navigable rivers and waterways. It contains all the chart and hydrographic information

necessary for safe navigation on inland waterways. River ENCs are used with other shipboard equipment such as radar, sonar, and global positioning systems (GPS) in a software or hardware form.

With this new river electronic navigation chart, mariners have "instantaneous view of their location on the river," said Nettles. The river

route planning and monitoring," Nettles said. They display additional navigation and chart related information such as water depths, current flow and weather.

The Atchafalaya River ENC is a venture into a new technological field for the Corps. The district has converted the chart data from printed, paper products to a full

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ENC provides a computer-based navigation information system capable of determining a vessel's position in relation to land, charted objects, navigation aids and unseen hazards.

"The Corps' goal is to make river ENCs as readily available to our customers as GPS receivers are today," explained Nettles.

"As an automated, interactive navigation tool, it also assists the mariner in

hydro version of a Geographic Information System (GIS) and digital data production for the Internet.

"For one week in May, we conducted field tests 160 miles along the Atchafalaya River," Nettles said. "We chose significant features and points to evaluate the accuracy of the River ENC." The testing started at the Old River Control Structure and ended at Eugene Island near the Gulf of Mexico.

The data proved to be exceptionally accurate. "Overall, the Atchafalaya River conversion was highly successful," Nettles said.

To get a firsthand view of the ENC database for the Atchafalaya River, visit the Maps and Data page at [www.mvn.usace.army.mil](http://www.mvn.usace.army.mil). Click on "Atchafalaya River Electronic Navigational Chart."

Contacts for the Atchafalaya River ENC are Julie Vignes, Operations, and Ralph Scheid, Engineering.

Presently, NOD is initiating an extensive electronic chart for the lower Mississippi River. A river ENC of the lower Mississippi River will eventually be available via the Web.



*courtesy photo*

**Mark Nettles onboard the survey boat MV Burrwood, where he tested 160 miles of the Atchafalaya River ENC in May.**