

## Channel Turns in the Cape Fear River

The Wilmington District of the Corps of Engineers has dredged a channel in the Cape Fear River with turns that do not comply with the Corps' Engineering Manual.

This chart shows the lower reaches of the Cape Fear River, as they exist. The curved line shows the centerline of a hypothetical channel conforming to the Corps criteria for turn radius.

In the period 2000-2004, the Wilmington District deepened the channel in the Cape Fear River to 42 feet to accommodate "Panamax" vessels, the largest vessels able to navigate the Panama Canal. In the engineering report leading to that project, the Wilmington District recognized that the turns did not meet the Corps criteria, but "It was decided that the authorized turn designs were adequate at this time. The turn widths will be studied during preparation of the plans and specifications as part of the ship simulation model."

The Corps of Engineers arranged for a simulation study. In that study, under various conditions of tide and current, the pilots were unable to navigate the subject vessel around the turns without leaving the marked channel.

The Wilmington District proceeded with the dredging project with the original turn configuration.

The Wilmington District has advised NoPort Southport that the reconnaissance study for a new channel for larger vessels will use the same route for that channel.

