



Cape Fear Firebird

The Light of Save the Cape

October 15, 2011

The worst environmental maritime disaster in New Zealand.
–Prime Minister of New Zealand

An Unfortunate Event

On October 6, the container ship *M/V Rena* grounded on a reef in New Zealand's Bay of Plenty, damaging the hull and causing a list. Approximately 350 tons of the 1700 tons of fuel oil on board have leaked out, and so far about 50 tons have found their way to New Zealand's most popular beaches. The 1368 containers on board contained such unsavory things as alkylsulfonic acid, trichloroisocyanuric acid, potassium nitrate, and ferrosilicon (which burns in contact with water). Eighty-eight have gone over the side.

Although this is already New Zealand's worst environmental calamity ever, the ship is in danger of breaking in two, releasing the remainder of its fuel oil and container cargo.

The *M/V Rena* is a medium-size container ship, with a capacity of 3351 twenty-foot equivalent units (TEU). The Asian container ships moving in the Cape Fear River to Wilmington are larger, ranging up to 5000 TEU. The State Ports Authority plans the port at Southport for 12,000 TEU vessels.



The capacity of the Cape Fear River for large vessels was exceeded long ago. The channel, carved out by dredging, is twice as deep as the natural depth of the river. The shape of the mouth of the river confines the channel to a difficult "S" curve. The turn around Battery Island is far sharper than the Corps of Engineers manual requires, but the Wilmington District went ahead with the last channel deepening project in 2000 anyway. Even after a simulation study showed that the ships for which the project was designed could not navigate the turn and remain within the marked channel.

The result is a challenge for the river pilots. They have been successful, mostly, but nobody's perfect. There have been groundings, including the *M/V Lijnsbaanscracht* at Battery Island in 2005 and the *M/V Glory Sky* and *M/V YM South* upriver in 2006.

Yet the Ports Authority and the Wilmington District of the Corps plan to make things worse. They propose larger ships and a deeper channel for Wilmington; even larger and deeper for a new port at Southport. Using the same nasty "S"-curve. Extensive areas would be cut through rock. Rock would line the sides of the channel. Rock is unforgiving when struck by a vessel hull. Oil is relentless when striking a beach. It's an actuarial issue: when will it happen and how bad will it be?