Project Name: East Coast Air Combat Maneuvering Range

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## **Organizations/People Involved:**

FPO-1

Date: 1977

## **Project Summary:**

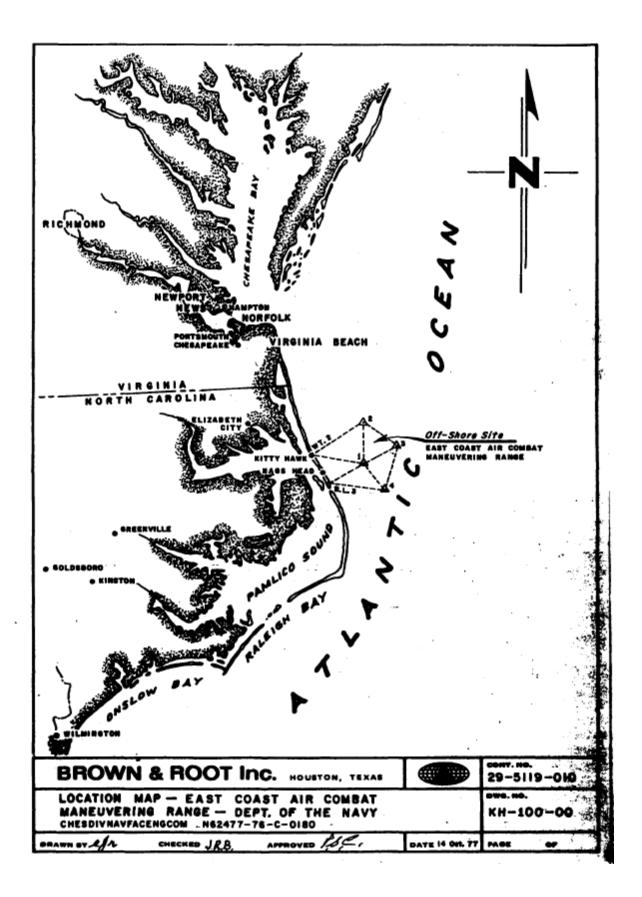
FPO-1 became part of the Air Combat Maneuvering Range program, the first Navy Ocean military project, when it was tasked to design, fabricate and install four large offshore towers in the Atlantic Ocean 15 to 25 miles off Kitty Hawk, North Carolina in 85 to 105 feet of water. The range encompasses an approximate 30-mile circle capable of tracking aircraft from 50 to 60,000 feet in the air, and requires strategically positioned instrumentation towers to make it work. When the pilot fires the weapon system, the missiles are electronically simulated with the data transmitted through the towers to a ground control site onshore.

The work was accomplished using a design-build contract managed by FPO-1. Each structure is composed of three major components: an above water tower with triangular shaped upper and lower decks supported by 75-foot vertical columns, jackets that rest on the seafloor and extend to just above the water's surface, and steel pilings that were driven 250 feet into the seabed. The towers and jackets were fabricated onshore and barged to the construction site. A floating crane was used to lift the jackets and lower them into the water, where divers released flood valves. The jackets reoriented themselves to an upright position and were set down on the seafloor. Piles were driven through the jacket columns. The towers were then placed atop the piles and welded to the jacket. Divers inspected the welds.

## **Project Report Link:**

Navy Ocean Facilities Booklet (date unknown)

East Coast ACMR Survey Report - ADA182693







Swinging the jacket around the stern of the derrick barge.

