Figure 4. Aerial Photograph: Bogue Inlet 1978

SURVEY METHODLOGY

There were two (2) types of geotechnical surveys conducted for this scope of work: a jet probe survey and a vibracoring survey. Both surveys used Mean Lower Low Water (MLLW) as the vertical datum, which is 1.2 foot below Mean Sea Level for this area. The horizontal datum used was the North Carolina State Plane Coordinate System North American Datum of 1983.

Below is a general description of the two surveys.

Jet Probe Survey

The jet probe survey was conducted using CPE's twenty-four (24) foot semi-enclosed cabin survey boat with a Trimble Real-time Differential Global Positioning System (DGPS). Coastal Oceanographic "HYPACK Max" navigation system was used for vessel navigation and data collection/storage.

From July 16th to July 18th 2002, Coastal Planning & Engineering, Inc. (CPE) geologists and surveyors conducting twenty-seven (27) jet probes within and adjacent to the proposed channel location or along the margins of Bogue Inlet (Figure 5). Jet probing is an efficient method for obtaining the variations in sediment thickness, sediment types and sediment characteristics such as color, visual estimate of grain size, carbonate and shell content.