Project Name: AUTEC Noise Measurement Array Repair

Author: Don Wells

Organizations/People Involved:

NUSC Newport

AUTEC

FPO-1: SEACON

Date: 1979

Project Summary:

The AUTEC Noise Measurement Array is a complex suspended array with multiple components fixed in a specific location of the Tongue of the Ocean in the Bahamas. Any repairs to the array would require a ship capable of station keeping with good precision for long periods of time.

The Noise Measurement Array was damaged in 1979, Loss of this array has a direct impact on the readiness of the Atlantic fleet surface, subsurface and air training assets. FPO-1 was requested to provide SEACON to assist in the repairs of the array.

The repair effort required six days of continuous precision station-keeping in 6,000 feet of water. The upper portion of the array was retrieved, new mechanical and electrical components replaced and tested, and the array reinstalled. During this entire period, the lower portion of the array remained moored to the seafloor so that any substantial drift or movement off station would have damaged the in-water portion of the array. Maintaining the SEACON within 33 feet of the desired position was accomplished in winds of 25 knots and seas up to 8 feet in height. A picture of the array configuration is shown on the next page.

The timely repair of this critical facility assured availability of this range to support scheduled fleet training and readiness operations.

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