**Project Name: Classic Thicket** 

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**Organizations Involved:** LCDR Don Wells, FPO-1 personnel; LCDR Mike Weyler, UCT-1 and UCT-1 divers; MOD UK, NUWC White Oak; Naval Station Roosevelt Roads, St. Croix Underwater Tracking Range, RCA Range Operational Staff

**Date:** 1973

**Project Description:** Project Classic Thicket was a joint Ministry of Defense, UK and US Navy Antisubmarine Warfare (ASW) research project to test more advanced methods in detection of enemy submarines. At the time this project was conducting the experiments, the project was classified.

In our early formative years at FPO-1, the project office was focused on getting more experience in ocean projects and less worried about the quality of systems provided to them to perform the project. Project Classic Thicket became a prime example of not taking on a project before you have the chance to inspect every aspect of the project before it is given to you to be accomplish.

The Navy Surface Warfare Center, Carderock, MD (NSWC) was the government lab managing Project Classic Thicket for the Navy and coordinating with the MOD UK. NSWC got in trouble financially with this project so they started cutting corners in procurement of the component parts of what was to be put in the ocean for these experiments. FPO-1 therefore, were stuck with trying to make this work with less than reliable systems. Also, the ship that was assigned to perform this work was a Navy Landing Craft with a single propeller so positioning was less than adequate.

Project Classic Thicket included installing several magnetic detection arrays suspended in the water column in 3,000 feet of water in precise locations and one magnetic detection system immersed in a cryogenic fluid and placed on the seafloor in about 30 feet of water depth. The operational location for this project was on the Underwater Tracking Range, St. Croix, Virgin Island.

With staff members from FPO-1, Seabees from UCT-1 and Navy Fleet sailors from Naval Station, Roosevelt Road, Puerto Rico, LCDR Don Wells assembled an operational team to perform this construction operation in St. Croix. The team installed the cryogenic magnetometer off the southwest corner of St. Croix. This facility had a rectangular table on four legs which had to be leveled on the seafloor and the cryogenic magnetometer sat on a lazy susan-like circular plate that had to be rotated to align with magnetic north. NSWC provided FPO-1 a cable to bring the signals from the platform to shore which they got from Cape Canaveral previous used on land. It was not made for ocean use and had almost no tensile strength to be laid from a ship in the ocean. The team nevertheless got it installed in the ocean under the most difficult conditions to keep from breaking the cable.

Everything on the platform had to be non-magnetic for it to work correctly. It was installed and removed probably 4-5 times because it was not performing correctly. FPO-1 were accused of causing the failure until the platform was finally taken out of service one last time. It was brought

back to the range project site and where the legs of the platform were checked and found to be magnetic causing the problems. It seems a low-level procurement clerk at NSWC decided it was too expensive to buy non-magnetic adjustable legs so he changed the order to magnetic ones which were cheaper. This one mistake caused millions of dollars of lost time and a failure to complete the project objectives.

FPO-1 also experienced failures with the suspended magnetometers as well. These had to be assembled on the Landing Craft platform from which the team then lowered them in a controlled fashion to the desired position on the seafloor. The array assembly had an explosive release mechanism installed near the anchor so that the array could be released on command by signal to bring it back to the surface to be retrieved. The problem with these arrays is that the explosive release mechanism fired on several occasions on its own and thus the experiment had to be stopped until the team could reinstall the array. Most often, this occurred after the FPO-1 staff had returned to Washington and the Seabees to Norfolk, VA.

The team performed their mission successfully for Project Classic Thicket. Unfortunately, due to the problems created by NSWC, the objectives of this experiment were not fully achieved and a lot of fleet operations time for the Navy and MOD UK were wasted.

DTIC Link: none