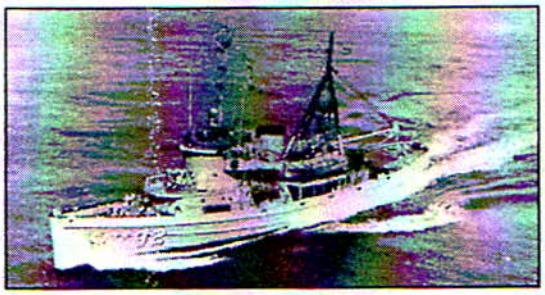
Tawasa & Betty

USS Tawasa ATF 92 is the only US Navy vessel to be connected to a nuclear device when it was detonated. Tawasa was hooked to a barge with a six mile towline and beneath this barge was suspended a MK 90 B-7 Betty 30 kiloton atomic bomb at a depth of 2,000 feet. The page below was sent in by NAFTS member, John Waters, from the National Association of Atomic Veterans newsletter. John participated in the Operation Crossroads Atomic Tests aboard Arikara ATF 98.

Operation " Wigwam " - 1955



It was on the early afternoon of ***(ATF-92)*** became the first ***May 14, 1955*** that the ***USS Tawasa*** (and only) US Navy vessel in history, to be physically attached to a ***Mk 90, B-7 Betty, 30 kiloton Atomic Bomb*** at the time of detonation. The test occurred off the Pacific coast of California, and was code named ***"Operation Wigwam."*** It was the culmination of a plan developed by the *Atomic Energy Commission* (***AEC***), the *Department of Defense* (***DOD***), and the *Scripps Oceanographic Institute*, to test and measure the destructive forces of a large underwater nuclear weapon on submarines, pre-positioned at various depths and distances from the center of detonation. The ***Wigwam*** nuclear weapon test would be the **65th** (of a total of **1,149**) nuclear weapon detonation since the birth of the age of atomic weapons on ***July 16, 1945***, at Alamogordo, New Mexico.

The ***Wigwam*** Project Director was Dr. Alfred Focke, a Navy explosives expert assigned to the Scripps Oceanographic Institute, San Diego, Ca. His military assistant was Cmdr. Roger Revelle, a former Navy expert in the oceanographic aspects of atomic testing, having participated in ***Operations Crossroads*** (1946), ***Sandstone*** (1948), and ***Greenhouse*** (1951).

Other team members included Navy Cap. Jack Loffland, two marine biologists from Scripps, and Dr. W. R. Boss, an official from the *Atomic Energy Commission* (***AEC***). Rear Admiral John Sylvester was assigned by the ***DOD*** to command and oversee the entire test operation. Sylvester's command included **26** Navy ships, **5** Scripps research vessels, **36** Navy & Air Force surveillance aircraft, and **6,700** military personnel and three (test subject) submarines containing special monitoring instruments.

Many of those military (and civilian) personnel who participated in ***Operation Wigwam*** have since succumbed to illnesses precipitated by their exposure to ionizing radiation from " hot " seawater, airborne particles and post test events, (secondary radiation exposure exercises and maneuvers.) The U.S. Government and Veteran's Administration has continued to deny all but a few claims for radiation induced cancers and other illnesses experienced by Wigwam participants, citing official ***DOD*** statements which minimizes the "apparent degree of radiation exposure." This response has been commonplace for all of the atmospheric and underwater test operation, from 1945 to 1962. ***NAAV Inc.*** is working closely with other military groups to convince the U.S. Government to change it's position related to these matters, before there no Atomic Veterans left to submit any additional radiation illness claims.

Operation Wigwam was a single nuclear detonation and, therefore, both the operation and the single detonation test are known as Wigwam. It was conducted 400-500 miles SW of San Diego CA in 16,000 foot deep water to investigate the vulnerability of submarines to deep nuclear weapons, and the feasibility of using depth bombs in combat. The test device was a B-7 Mk-90 Betty depth bomb that was suspended by a 2000 ft. cable from a barge. The dry weight of the bomb was 8250 lbs. but only 5700 lbs. when submerged.

6800 personnel from 30 ships participated in Operation Wigwam. During the test a 6 mile towline was connected to the USS Tawasa ATF 92 and the barge. Suspended from this towline at varying distances were three "Squaws", which were submarine-like pressure hulls equipped with recording instruments and cameras.

The ships conducting the test were five miles upwind from the barge, with the exception of the USS George Eastman YAG 39 and USS Granville S. Hall YAG 40. These two ships were equipped with heavy shielding and were stationed five miles downwind. Both ships were contaminated but, due to the relatively dilute radioactivity (since the shot was at such a great depth) and the heavy shielding, exposures were within the Operation Wigwam dose limit of 3.9 rems. Nearly all personnel were issued film badges to measure radiation exposure, and some 10,000 badges were processed. Three personnel were measured as having doses exceeding 0.5 rems.

Right: The Wigwam Test shot broaches the surface from 2,000 feet below

NAFTS Member, RJ Ritter, a retired CPO who was aboard Tawasa during the Wigwam test wrote this reflection in an email online to the U.S. Atomic Veterans:

I was in the "Wigwam" operation. My vessel (USS Tawasa - ATF92) was the ship that towed the entire array, including the device when it was detonated. I was assigned the duty as an observer that day, and was on the fantail with several of my shipmates and some scientist types from shore.

When the light bubble broached the surface, it was a spectacular display of pure uncontrolled hell. We had only one minute to get into the ship through the only open hatch on the main deck. The initial shock wave damaged several hydraulic and water lines, as well as our main shaft bearing.

After retrieving several radiation monitors, which were subsequently stored on the fantail deck and along the port side rail area, our galley was soon found to be radiated to the point where we could not enter. As a result, we ate cold cut sandwiches and the cook made coffee over a blow torch - in other areas of the ship not deemed to be contaminated by the " white coats," until we were able to get the ship washed down in port.

When we returned to San Diego, we were sworn to an oath of secrecy, under severe penalty, and I was told not to have any x-rays taken for at least 10 years from that date. I feel lucky that after all these years, I have not exhibited any signs of radiation induced illness, but am concerned that I have not been able to contact any other members of the crew since my duty cycle aboard the Tawasa.