

A BRIEF HISTORY

NAVY NUCLEAR WEAPONS PROGRAM: 1947 TO 2001

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In the late 1940's several events combined to set the stage for the burgeoning Navy Nuclear Weapons Program we knew from the mid 1950's to its end in the 1990's. The first of these was the initial stockpile inspection conducted by the Atomic Energy Commission when they inherited the weapons program from the Manhattan Engineering District. In what was perhaps the first the first Nuclear Technical Proficiency Inspection (NTPI) the commissioners discovered deplorable conditions at Los Alamos. In April of 1947 commissioner David Lilienthal reported to President Truman there were many components from which to assemble weapons but there was not one operable nuclear weapon in the arsenal, and it would take months to build, test and deploy one if it were required. This may not have been the complete story, but there were severe restraints in assembly teams and delivery aircraft. In late 1947 it was reported that the US Air Force had thirty-five nuclear capable B-29's but only twenty crews were fully trained crews to man them. A very concerned Truman asked the AEC what its plans were for remedial action.

One year after the commissions report to Truman Operation Sandstone, a weapons test series performed at Eniwetok Atoll in the Pacific, proved the efficacy of U235 implosion weapons. The greater nuclear efficiency realized in these tests freed significant quantities of plutonium for use in the manufacture of more and newer type weapons. The now-available fissionable material made possible more than a 60% increase in the number of weapons in the coming years. Sandstone also emphasized the need for additional assembly teams when it was learned that the test series occupied the entire national weapons assembly resources. This was at the time when the US and its allies were squaring off against the Soviet Union over a divided Germany and General Curtis Lemay was in command of US Air Forces Europe. General Dwight Eisenhower, the Army representative on the Joint Chiefs of Staff, directed immediate and accelerated steps be taken to rectify the military manpower and training shortfall.

The Navy's response to the need for delivery capability was the deployable Special Weapons Units; first the 471 in 1947, quickly followed by the 802 in 1948, then 1233. They deployed from Albuquerque and later from Norfolk and San Diego. They supported nuclear deployment in aircraft carriers, begun in 1948 when the first weapons were introduced aboard USS Midway.

The national policy of nuclear pre-emption was formulated and implemented in 1954. It was accompanied by a massive build-up in nuclear capability. Records indicate there were a total of 298 US nuclear weapons in 1950. That number increased to 2422 by 1955, jumped to more than 18,000 by 1961 and exploded to 27,100 by 1962.

The increased numbers and types of weapons in the military inventory demanded increased logistics flexibility and a more decentralized control. The deployable teams were disbanded in

19XX. Their members distributed throughout the fleet to become "ships company" W Divisions in the carriers, to form the basis of the military units at the weapons stations, and inoculate the non-nuclear capable units with the expertise of the experienced "dragon keeper". By the close of the 1950's the nuclear weapons infrastructure expanded into virtually all Navy commands and ship types. The big-deck carriers of the Forrestal Class, with their redundant fore and aft magazine suites, deployed with unbelievable numbers of weapons aboard. Regulus armed submarines that had initiated ballistic missile patrols in 19XX were relieved, in turn, by Polaris and Posiden boats, each missile capable of boosting multiple warheads into the stratosphere. Destroyers were armed with W-44 warheads in the nuclear capable ASROC. Attack submarines gained nuclear SUBROC capability and the ASTOR torpedo with its multi-use W-34 warhead. That same warhead appeared in aviation ASW units as the MK 101 "Lulu" depth bomb and aboard carriers as the MK 105 "Hotpoint" surface attack retarded bomb. The miniscule W45 was carried aloft as the payload of the beam riding Terrier anti-air warfare defense missile and on the backs of special forces sailors and marines as the Strategic Atomic Demolition Munition (SADM).

The 1960's proved to be a time of weapons transition as the older manually built and maintained warheads like the W5 and W7's in their gravity bomb, depth charge, and Regulus missile configurations gave way to the logistically simpler weapons such as the W27 and B-28. Massive amounts of test and handling equipment were retired from the ships and stations. Terminology such as FAT (Final Assembly Test), IFI (In-Flight Insertion), capsule and pit, birdcage, roadable container, elephant legs, and battery shop began to disappear from the lexicon. They were replaced by continuity tester, thermal battery, and permissive action links (PAL).

The B-28 had so many applications and configurations that it's multi-purpose security cover looked like a pile of rags when laid out on deck

Manpower transition was in progress too. The original deployable team members, formerly commissioned officers, warrant officers, and very senior enlisted, and had given way to more junior personnel in response to the services need for increased numbers of nuclear trained men in many, many billets. When the teams disbanded their complement consisted of E-5s through O-4s with a myriad of rates represented. In 1960 the W Division of USS Kitty Hawk was made up of men in the rates of Boatswain Mate, Electrician Mate, Machinery Repairman, Gunners Mate, Stewards Mate, Aviation Ordnanceman, and others.

There was also that new breed of cat coming out of the "A" school in Albuquerque, NM, the Nuclear Weaponsman. In 1960 the school-made NWs were the junior men, E-3 through E-5. They were young and bright, having been culled from the pool of men volunteering for service in the Navy. Their selection began with the Navy's basic battery of tests administered by the recruiting districts, continued with boot camp screening, observation during E&E "P" School (electricity and electronics preparatory school), and qualification during the months of specialized training at the joint armed forces school at the Defense Nuclear Agency, Albuquerque. Boot camp orders to NW school initiated the career-following series of local record checks, National Agency Checks, Background Investigations, and special investigations. They were conducted by local law enforcement agencies, Navy Investigative Services and the Federal Bureau of Investigation. While in school it was not uncommon to receive letters from our parents reporting that NIS or the FBI had asked questions of our friends and relatives. They wondered out loud what we had gotten ourselves into.

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