



**National Association of  
Atomic Veterans, Inc.**  
Including Nuclear Veterans



To: Ohio Rep. Chair Haraz Ghanbari, Vice Chair Mike Loychik, Ranking Member Adam Miller, and members of the House Armed Services and Veterans Affairs Committee,

From: Mr. Keith Kiefer, NAAV (National Association of Atomic Veterans) National Commander, & Enewetak Radiological Cleanup Veteran (1978)

May 3, 2021

Subject: SCR. No. 1 (134 session), Sponsor; Senator. Schaffer, Tittle; Enact Mark Takai Atomic Veterans Healthcare Parity Act

I would like to thank this Committee and Senator Schaffer for their interest in and support of Atomic Veterans and the opportunity to testify.

My name is Keith Kiefer, I have the honor to serve as the NAAV National Commander. I was also part of the Enewetak Radiological Cleanup Project in 1978. This project was conducted from 1977 to 1980.

NAAV, its members, other Atomic Veterans, their family members and friends are interested in passage of this resolution and the Mark Takai Atomic Veterans Healthcare Parity Act.

Between 1977 to 1980 4,033 Army, Navy and Air Force Veterans along with 4,000 Civilians, Government contractors, DOE, DOD and other agencies were involved with the Enewetak Atoll Radiological Cleanup Project. The mission was to remove the Radioactive material, soil and debris left from 43 atomic bomb tests and other operations with the intent of restoring the atoll to a safe radiation level so the native islanders could return to their home lands.



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This cleanup operation included, among other things, scraping up the contaminated top soil, pushing it into the lagoon or loading on Maggie boats or LARCS and transporting over to Runit (pronounced Ru - - nit) island, unloading and then transporting to Cactus crater and dumping the load into the crater. Approximately 110,000 cubic yards of contaminated soil, 430 bags of Plutonium and other radioactive material was deposited into the crater then capped with 18 inches of cement made with contaminated soil and portland cement. Cactus crater, on Runit island, is a crater approximately 350 feet in diameter and 35 feet deep. It was created by one of the atomic blasts code named Cactus. Cactus was part of Operation Hardtack detonated on May 5, 1958 in Enewetak Atoll. It yielded the equivalent of 18 kilotons of TNT.

Proper personal protection was not provided during this cleanup operation and was also impractical due to the high temperatures and humidity. Even dust masks were often unavailable. Most Veterans worked in shorts, t shirt, socks and boots while handling contaminated materials. Some of the ways personnel were exposed to ionization radiation was through direct contact, inhalation (dust), and ingestion (contaminated food and water). The drinking water was provided by pulling contaminated sea water from the lagoon (in which atomic detonations occurred and contaminated soil was deposited) for desalinization. In hindsight this doesn't seem like a smart plan

The half-life for radioactive decay of plutonium-239 (Pu-239) is 24,100 years. This means a pound of Pu-239 after 24,000 years will still have one half a pound of Pu-239 and other radioactive elements remaining. Even though atomic testing occurred decades before the cleanup, radioactive elements still remain today.

I learned through a 60 minutes report, March 1980 titled "Remember Enewetak" that our mission failed. Even after all of the cleanup, the islands were still too radioactive for the islanders to return.

Despite the facts;

- A) That the Islands were too “hot” (radioactive) for the islanders to live there, and we lived there during the cleanup operation 24/7.
- B) The title of the project was “Enewetak Atoll Radiological Cleanup Project” and the islands are still too “hot.”

Yet DTRA/VA denies we were exposed to ionization Radiation. (This begs the questions if their wasn't radiation, why the project and how were we not affected in light of improper protective equipment?)

Presently, the Enewetak Radiological Cleanup Veterans are in a state of limbo. They are not included in the Federal definition of an “Atomic Veteran” in Section 1112(c)(3)(B) of title 38, United States Code, nor has the VA administration and/or law included them as “Occupational Exposure” Veterans.

Since documentation of radiation exposure levels for Atomic Veterans has been non existent, missing, destroyed, or in question as to reliability, a list of twenty-one diseases are contained in Section 1112(c)(2) of title 38, United States Code “Presumed” to be caused by ionization radiation during a “radiation risk activity.”

Section 1112(c)(3)(B) of title 38, United States Code presently does not include the Enewetak Radiological Cleanup Operation as a “radiation risk activity.” The Mark Takai Bill seeks to rectify this situation.

Additionally, the Enewetak Radiological Cleanup Veterans have not been included as “Occupational Exposure” Veterans. It should be noted that the VA web site includes many veterans, as it should, such as: Fukushima nuclear accident and Depleted Uranium (DU) as “Occupational Exposure” Veterans. As an “Occupational Exposure” Veteran they are placed in “Priority Groups” , “Group 6”. The difference of being included in this group is even without an approved compensate-able “Service Connected” disability, “Occupational Exposure” related services and prescriptions are covered 100%.

It may come as a surprise that, like the Enewetak Radiological Cleanup Veterans, Congress and possibly the Senate has been misled by a number of agencies. There are some highly edited documents prepared by spin doctors that would lead one to believe there was less radiation than you would see in the United States. These same documents contradict themselves. To those that are predisposed to believe these documents, I would ask the common sense question: If the level of

radiation was safe, why was the name of the project titled “Enewetak Atoll Radiological Cleanup Project”? Why wasn’t it titled “ Enewetak Atoll Cleanup Project”? Why are the islands still considered unsafe for human habitation? Why is the thyroid incidence of the indigenous people at a twenty eight percent rate when the national average is 0.028%, and of that 7 out of 8 are women? Why did approximately 111,000 cubic yards of contaminated soil have to be scraped up and transported to Cactus Crater on Ruint Island, then capped with eighteen inch thick concrete? Why are the Coconuts from the island containing Cesium 137 unsafe for human consumption? How did Plutonium, with a half life of 24,100 years disappear in about 30 years? Why are there numerous documents and evidence disputing these reports? The list goes on.

As I mentioned earlier, I am an Enewetak Radiological Cleanup Veteran. I would not benefit from the passage of Mark Takai. That being said I, NAAV and the 14 other Veteran organizations strongly advocate for its passage. Veterans like Paul Edward Laird II who has dealt with Kidney cancer and Renal Cell Carcinoma Bladder cancer at the same time. Each was a different type of cancer. Paul has since lost his battle with cancer.

I was stationed at Nellis AFB, Nevada at the time I received TDY (Temporary Duty) orders to go to Enewetak Atoll for 180 days as part of the Enewetak Atoll Radiological Cleanup Project. I was told by those handling the project from Nellis AFB that I would not receive any more radiation than walking the streets of New York City or wearing a watch with a Radium dial. As part of the project, I received no baseline Sperm count, Blood analysis or Urine analysis. I was young, naive, a late bloomer (going into the service at 6 ft 1” 160 lbs. and leaving the service at 6 ft 5” 160 lbs.) and believed I would not knowingly be put in harms way. Prior to leaving for Enewetak Atoll, on my own I had a Sperm Count test completed which came back normal. I arrived at Hickham AFB late on a Saturday. On Monday I was issued several Jungle fatigues, Combat boots and a “Rat Patrol“ hat. No orientation or any other instructions. Tuesday morning, I was on a C130 landing on Wake Island for a several hour layover and refueling. We arrived late evening, possibly Wednesday. I was placed, by myself, in what appeared to be an abandoned building with no side walls, a hole ridden corrugated roof, no fan, just my duffle bag, a cot, and a sheet. The heat and humidity was intense. I awoke the next morning with several Geckos on my stomach. I was amazed at the dilapidated state of everything, lack of vegetation and the existence of abandoned damaged WW II ships and other military equipment. This was more primitive than any of my duties in remote Alaska. Again, I received no orientation related to the Radiological Cleanup Project or associated risks.

My AFSC (US Air Force Specialty Code) was 30434 Ground Radio Repair and Maintenance. Like many of my assignments, because of our expertise and versatility we were assigned tasks outside of our normal duty and function. Enewetak was not an exception. I was on just about every island digging up damaged/cut communication lines, repairing and burying the cables. Often new trenches would have to be hand dug to place and bury cables. The soil was contaminated with radioactive material. I was never issued a film badge or dosimeter. I had no respirator or even dust mask. I never saw any of the soil wetted down when being excavated and there always was dust due to winds and other operations. I was involved with the operation, maintenance and repair of the three 10KW HF transmitters, teletype, MARS (Military Amateur Radio Station) and PBX (phone system). We were also responsible for emergency generators. I was involved with most communications for Medivac operations (communication to aircraft and doctors in Hawaii or Kwajalein during emergency medical situations.) Most of the medical situations were due to shark or eel attacks (they were particularly mean and aggressive) and heat stroke. The communications equipment was salvaged from a Navy ship. We worked 10 to 12 hour days, six days a week for \$345 a month. We received an air lift of fresh vegetables, fruit, milk, meat and mail once a week. We were allowed one five minute call a week back state side. The toilets and other none potable water was sea water drawn in from the lagoon. Potable water was provided through a desalinization plant. The water again was pulled from the lagoon. The lagoon water which we bathed in, swam, snorkeled, dived and boated in was more than likely contaminated with radioactive material due to the past underwater nuclear tests and pushing contaminated soil into it. The EIS (Environmental Impact Study) and other documents state this was not done, but I saw it in progress. Hind sight, it was not very smart getting water from the lagoon. While on the atoll many of us drank coconut milk and the meat of coconuts grown on the islands as well as some fish caught. I was not told or aware these items were contaminated until years later. The first indication I had that my health was more than likely compromised by my time on the atoll was upon getting out of the service and returning home to my wife. During the entire time we have been married we have never used any birth control methods. My wife was not getting pregnant. After months I was tested and found to be considered sterile. The Gonads and reproductive organs are the most sensitive to radiation. Many studies have shown both Military and civilian pilots flying at high altitude have a lower sperm count and more likely to have daughters than sons due to the higher level of cosmic radiation exposure. The order of the body's sensitivity to radiation most sensitive to least is the Gonads, Thyroid, immune system, blood, bones, etc. Radiation causes premature aging and the younger the person is, the greater the effect. Some are more sensitive to radiation than others. I continued for years having unexplained fevers, muscle and deep bone pain that would come and go without any of the normal

causes being present. I went to doctors trying to find answers to the cause of these symptoms. I even had one doctor suggest it was all in my head. I felt the doctors were not competent to solve my problems and I was wasting my time, money, and their time. I stopped going to the doctors for years, still suffering. Through my wife's research, she believed I had an auto immune disorder call Lupus SLE. I didn't test positive for this. I continued to suffer with these symptoms and intermittent diarrhea for years until one day while in bed, my lower back felt like it was on fire. I called my wife over, asking her if it was my imagination or was my back on fire. She said "Yes, your back is burning up" and "Have you been laying on a heating pad?" to which I replied "No." I thought maybe I had a kidney infection, so once again went to the doctor. The first doctor ran a number of tests and exams believing I had Rheumatoid Arthritis. Prior to referring me to a Rheumatologist, he wanted me to have a full physical first. I had a full physical and this doctor found I had a thyroid problem. This was after 1996 and the Atomic Veteran oath of Secrecy had been lifted. I explained to the doctor about Enewetak and the Radiological Cleanup Project. He told me that it was clear to him that my problems were, more likely than not, due to my radiation exposure, I would have a life time of health problems and should apply for VA healthcare and a Service Connected Disability. My father had applied for VA Healthcare over a year earlier to the same facility. Within three months I was accepted and in the VA Healthcare. My father waited almost another year before being accepted. My Service Connected Disability claim was for Sperm count (sterile) and the thyroid condition due to Ionization Radiation. Over a year later, without any questions or communications, the claim was denied using the Sperm count which was normal before going over to Enewetak as the basis for denial, the thyroid condition was never addressed. This illustrates the predisposition to denial of a claim. My health continued to deteriorate. At about age forty I was told I had the bone structure of a ninety year old and needed to have both hips replaced. I have not been in sports or an occupation that would account for excessive wear and tear. Up until now I have been denied hip replacement claiming I was too young and would have them worn out prior to dying. I have had three surgeries on my feet due to abnormal bone growth. Strontium 90 found on Enewetak Atoll is known to affect bones. I have abnormal bone growths on my spine, degenerative bone disease, arthritis and spinal stenosis among other issues. I have a number of autoimmune diseases (radiation affects the immune system,) and have an abnormal blood disorder which causes blood clots. I have had five Pulmonary Embolisms (PE); on one occurrence a bilateral PE in which I came within seconds of dying. This has been, after much testing, determined to be caused by a disease called Lupus Anticoagulant, an autoimmune disorder. Again, blood and the immune system is affected by radiation. I have non diabetic neuropathy also known to be caused by radiation. Some of the additional ailments are a a duodenal ulcer, an enlarged prostate, pre cancerous polyps in the colon and several teeth that

have broken (fallen apart) while eating scrambled eggs. I also have severe sleep apnea. I have no approved Service Connected Disabilities, and no Social Security Disability while the State of Minnesota DMV (Department of Motor Vehicles) and Metro Transit classify me as disabled. I can add additional information as well as back up my statements with factual documentation should this committee desire it.

Just a few notes:

A film badge will not detect radiation from Plutonium.

It is difficult to determine the internal radiation dose due to cuts, inhalation or ingestion.

Islands were contaminated with other toxic materials such as Beryllium and Agent Orange.

Documents obtained under FOIA question why certain radioactive elements were not found at Enewetak Atoll during radiological surveys; i.e. uranium, since this is a decayed state of Plutonium.

I did not see any military personnel wearing PPE (Personal Protective Equipment,) only scientists.

The veterans involved with this operation are proud to have served their country and, if disappointed, it would be that the operation was not more successful and that the government is not acknowledging the health risks of the operation, nor taking care of those with radiation induced illnesses.

The first I knew the mission was not successful was from a CBS March 1980 60 Minutes report with Morley Schaffer titled Remember Enewetak.

Dupont stated in a memo that of those using respirators, they were the wrong type and would be ineffective with Radiation.

The Enewetak Atoll Radiological Cleanup Project was either the best planned scenario for plausible deniability or the poorest planned Radiological Cleanup Project.

Should you have further questions please call, FaceTime, Skype or write to the contact info below.

We favor this legislation and urge it's expedient passage.

Atomic Veterans have played a vital role in the defense of the Nation.

Thank you,

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