

*United States
Atmospheric & Underwater
Atomic Weapon Activities*

- 1945 "TRINITY"
ALAMOGORDO, N. M.
- 1945 "LITTLE BOY"
HIROSHIMA, JAPAN
- 1945 "FAT MAN"
NAGASAKI, JAPAN
- 1946 "CROSSROADS"
BIKINI ISLAND
- 1948 "SANDSTONE"
ENEWETAK ATOLL
- 1951 "RANGER"
NEVADA TEST SITE
- 1951 "GREENHOUSE"
ENEWETAK ATOLL
- 1951 "BUSTER - JANGLE"
NEVADA TEST SITE
- 1952 "TUMBLER - SNAPPER"
NEVADA TEST SITE
- 1952 "IVY"
ENEWETAK ATOLL
- 1953 "UPSHOT - KNOTHOLE"
NEVADA TEST SITE
- 1954 "CASTLE"
BIKINI ISLAND
- 1955 "TEAPOT"
NEVADA TEST SITE
- 1955 "WIGWAM"
OFFSHORE SAN DIEGO
- 1955 "PROJECT - 56"
NEVADA TEST SITE
- 1956 "REDWING"
ENEWETAK & BIKINI
- 1957 "PLUMBOB"
NEVADA TEST SITE
- 1958 "HARDTACK I"
ENEWETAK & BIKINI
- 1958 "NEWSREEL"
JOHNSON ISLAND
- 1958 "ARGUS"
SOUTH ATLANTIC
- 1958 "HARDTACK II"
NEVADA TEST SITE
- 1961 "NOUGAT"
NEVADA TEST SITE
- 1962 "DOMINIC I"
CHRISTMAS ISLAND
JOHNSON ISLAND
- 1965 "FLINTLOCK"
AMCHITKA, ALASKA
- 1969 "MANDREL"
AMCHITKA, ALASKA
- 1971 "GROMMET"
AMCHITKA, ALASKA
- 1974 "POST TEST EVENTS"
AMCHITKA, ALASKA

*"IF WERE YOU THERE
YOU ARE AN
ATOMIC VETERAN."*



NAAV

A Non-profit Atomic Veterans Association

[with O. H. Q. in Houston, Texas]



"No amount of exposure to ionizing radiation has ever been scientifically proven to be safe"

R. J. RITTER - Editor

Volume 25 No. 2

July, 2006



**GREENHOUSE "George" - 05-08-51 - Enewetak Atoll
225 Kiloton Tower Test of a Prototype Thermonuclear Device**

The Newsletter for America's Atomic Veterans



COMMANDER'S COMMENTS

The response to the April Newsletter was overwhelming positive, including phone calls, e-mails and congratulatory letters regarding the content, text and format of the total presentation. As I mentioned early on, my purpose for the new format is to pay tribute to all of those veterans who were a part of the events chronicled in each issue, and to those veterans who have since succumbed to the harmful radiation induced illnesses resulting from their participation in these

nuclear and thermo-nuclear " Cold War " atomic weapons tests. In a sad way, this is our common bond.

We will continue to include all of the major test series mixed with photos and first hand experiences from our membership. When forwarding comments, please include your name, address, phone number, branch of service, test series name and a short statement of your experiences in these atomic testing events.

I am actively pursuing a Corporate sponsor for our newsletter, since the annual exposure from both the printed and website versions is approx. 950,000. We would include a Corporate advertisement in each issue for a reasonable fee. We welcome any suggestions for sponsorship from our membership.

The St. Louis Convention registration form, in this issue, includes Banquet meal selections. If you have registered for the Convention, and want to list meal preferences, please make your selections and send the registration form to the address shown. We will then update your registration to reflect your meal selections.

I wish to also thank those members who forwarded " Good Samaritan " contributions dedicated to the continuance of our newsletters. This type of support is most welcome and we graciously accept your kindness on behalf of our entire membership.

WHAT IS IONIZING RADIATION ???

I have been asked this question many times, by D.V.A. personnel, atomic veterans and others. Radiation exposure is measured in "REM's" defined as Roentgen Equivalent Man, and is a standard unit that measures, or quantifies, the biological effects of ionizing Radiation (from Gamma, X-ray, Beta, Neutron or Alpha particles), on the human mechanism. A "M-REM" is 1000th of a "REM".

Ionizing radiation is defined as radiation capable of displacing (or stripping) electrons from atoms or molecules (a combination of atoms), thereby producing ions. Therefore; if an atom has 4 orbiting electrons,

and an ionizing radiation particle causes the atom to loose one or more of these electrons, the atom then becomes imbalanced. Such imbalances may then cause atoms to combine into a " mutated " (defective) molecule. Defective molecules can then group together to form defective compounds, etc.

When inhaled, or ingested, ionizing radiation particles will cause atoms or molecules to become imbalanced, in this manner, which could then produce mutations, which could then produce cancers, or other health issues of various types, which could then eventually cause death to the human mechanism effected in such a manner.

In many cases, these mutations can have effected the genetic reproductive processes of Atomic Veterans, thus causing birth defects in a large percentage of their children. These children are defined as Genetically Impaired Offspring.

Therefore, the health of a person who has inhaled or ingested ionizing radiation particles, in sufficient quantity, will (at some point in time) experience deleterious health anomalies both in the near term or several decades after the exposure event. Today's scientific community cannot say, with any degree of concrete accuracy, that this process does not occur, often 50 or so years after the radiation inhaling or ingestion event.

The general U.S. population receives about 0.36 "rem" per year from natural background radiation sources, (from Radon, cosmic rays, rocks, etc.,) and man-made radiation sources such as medical diagnostic X-rays and consumer products, according to the Nat. Council on Radiation Protection and Measurements (**NCRP**), Report No. 93, Table 8.1. The standard diagnostic chest X-ray delivers a radiation dose of approx. 0.02 "rem".

Editor's note: The Defense Threat Reduction Agency (**DTRA**) currently is in charge of deciding how much ionizing radiation an Atomic Veteran may, or may not have been exposed to, as long as 50+ years in the past, including exposure while performing post test duties in "hot zones". Because of the in-conclusive results obtained from every scientific radiation exposure study, the ability to arrive at a dose factor that would allow the VA to approve an Atomic Veteran's claim continues to be illusive, and not in favor of the Veteran.

***In Memory of our
Departed Members***

Vincent Adamo (TX)
 Wilbur "Dean" Carpenter (OR)
 Edward Martwick (WI)
 Robert " Doc" Campbell (CA)
 Robert Kuklenski (CA)
 Wayne Erickson (IL)
 Lawrence Mills (NJ)
 Hershaf Fox (AR)
 Norris Darbonne (LA)

" Rest in peace our veteran friends "



MEMBERSHIP DUES UPDATE REMINDER

The response to the membership dues up request, in the April 2006 newsletter, was excellent. We are still in a delicate position with several past due members, and hope they will be able to continue their membership in our organization. We have also added many new members to our database.

Again, we ask those who may be past due to consider updating their membership, so as to be current. This is your way of supporting our efforts to assist you and your fellow Atomic Veterans in the **DVA** service connected claims process, and in keeping you informed of current events in these areas of mutual interest and concern.

Additionally, if you have a military veteran friend or acquaintance who may qualify as an Atomic Veteran, please make a copy of the Membership Application in this newsletter, and pass it on, as our goal is to see that all of America's Atomic Veterans are properly represented and treated fairly.

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" AN OLD SAILOR'S PRAYER "

Old sailors still sit and chew the fat, about all those things that used to be.
Of the things they've seen, and the places they've been when venturing out to sea.
They remember friends, from long ago, and the times they had back then.
The money they spent, and beer they drank, during their days as sailing men.
Their lives are lived in days gone by, with thoughts that for- ever last.
Of bell bottom blues and winged white hats and those good old times in their past.
They recall the long nights, with a moon so bright, far out on the lonely sea.
And the thoughts they had, as youthful lads, when their lives were wild and free.
They know so well how their hearts would swell when ' Old Glory ' flew proud in the breeze.
And the " ship's sea pennant, " was a beautiful sight, as they plowed through the angry seas.
They talked of the chow old " Cookie " would make, and the shrill of the Bosun's pipe.
And how salt spray would fall like sparks from hell, when a storm struck in the dark of night.
They remember old shipmates, already gone, who will forever hold a spot in their hearts.
When sailors were bold, and friendships would hold, until death ripped them apart.
Their sailing days are gone away, and never again will they cross the prow.
They have no regrets, cause they know they are blessed for honoring their sacred vow.
Their numbers grow less with each passing day, as the final muster begins.
There's noting to lose, they have paid their dues, and will sail with shipmates again.
Their ship has come in, the boarding begins, and there is still more sailing to do.
And I have heard them say, before sailing away, " our God is Commanding the crew. "



Given that a series of improvements for the detonation of the implosion type (fission) bomb were under development and consideration at Los Alamos before the first atomic bomb test detonation (July 16, 1945), the end of the war with Japan derailed these efforts.

With the "Cold War" rapidly developing, there became an urgent need to bring these new improvements to the U.S. nuclear weapons stockpile as quickly as possible. Additionally, the "**Crossroads**" tests, at Bikini Island, successfully determined the effects of nuclear blasts on naval ships and vessels.

Thus, it was on June 27, 1947 that President Harry Truman authorized a new test series for weapons development to be undertaken in 1948 at Enewetak, a Marshall islands Atoll. This test series was code named Operation "**Sandstone**," and would be the second test series in the Marshall Islands.

Sandstone would include three tests as a joint military / civilian operation, under the command of Joint Task Force 7 (**JTF-7**), and would include key members of the Atomic Energy Commission (**AEC**), and the Department of Defense (**DoD**), reporting directly to the Joint Chiefs of Staff and the Commander-in-Chief.

The three **Sandstone** detonations were code named "**X-ray** ", "**Yoke**", and "**Zebra** ", and included **10,200** military and civilian participants. Given that the

"**Gadget**"(Trinity), "**Fat Man**" (Nagasaki) and "**Baker**" (Crossroads) bombs were all identical in basic fission design, the **Sandstone** bombs would introduced a second generation design with evaluations of several new principles. In addition, a number of design parameters were varied so as to further evaluate their effects on overall performance.



Sandstone " X-ray "

The original "**Fat Man**" pit design used a Christy solid Plutonium core, surrounded by a close fitting natural uranium tamper. The **Sandstone** devices all replaced the contiguous tamper-core approach with a "levitated core" in which the core was suspended within a larger hollow space within the tamper so that a gap existed between them.

The collision between the tamper and core would create more efficient compression of the core than the explosive-driven shock in the earlier wartime design. They apparently retained the solid core principle, however. These devices also abandoned the use of a pure Plutonium core since Oralloy (Uranium highly enriched in U-235) production exceeded Plutonium production by a factor of more than 3-to-1.

The first test, "**X-Ray**", used a composite Oralloy-Plutonium core. Both "**Yoke**" and "**Zebra**" used an all Oralloy-Plutonium core. The pits (tamper plus core) for all three devices weighed about the same.

Other tested features included varying the tamper thickness (which had been fixed in the earlier devices), varying the amount of fissile material within the core, and the effects of using a "minimum strength"



Sandstone " Yoke "

Polonium-Beryllium Urchin Neutron initiator.

Previously, Urchins containing the full load of 50 curies of Po-210 had been used in bomb tests.

Guidelines permitted the use of initiators with as little as 12 curies, but the adequacy of these had never been put to an actual test. Given the very short 138.4 day half life of Po-210,

this was an important question for maintaining a ready (and fresh) nuclear weapons stockpile that would not, over a period of time, lose its destructive detonation potency. Although the "Sandstone" tests continued to use the Mk-3 implosion system, they proof tested components that led to the fielding of the Mk-4 bomb.



Sandstone "Zebra"

The Mk-3 bomb used for the "Sandstone" devices was 60 inches in diameter and weighed 10,500 lb total; the explosive, core and firing system weighed 7,600 lb.

Both the principle of levitation and the use of Oralloid-Plutonium composite cores had been under development at Los Alamos during the war. If it had continued into the fall of 1945, both of these innovations would have been introduced to increase the size and efficiency of the stockpile.

Now, the confrontation with the Soviet Union impelled the inclusion of these innovations in deployed weapons. The results of "Sandstone" tests led to the immediate stockpiling of both "X-Ray" and "Zebra" core designs, replacing all other previous nuclear weapon designs. Taken together, this led to an immediate increase in total stockpile yield of approx. 75%.

The "X-Ray" bomb (April 14, 1948) was a 37 kiloton tower burst, and used a Uranium-Plutonium composite Type-B levitated pit. The Uranium-to-Plutonium ratio by weight was on the order of 2:1 or greater. Efficiency of utilization of the Plutonium in this core was

around 35%; Uranium utilization was in excess of 25%. Taken together this indicates a core containing about 2.5 kg of Pu-239, and 5 kg of U-235. This was the highest yield device tested to date.



Sandstone Air Sampling Crew being checked for radiation exposure.

The "Yoke" bomb (April 30, 1948) was a 49 kiloton tower burst, and also used an all Oralloid Type-B levitated pit. Test "Yoke" was the highest yield device tested, a record it kept until 1951, when "Super Bombs" arrived. Despite its high yield, it was regarded as an in-efficient device.

The "Zebra" bomb (May 14, 1948) was an 18 kiloton tower burst, and also used only highly enriched Uranium in the levitated pit. Despite its lower yield than "Yoke", it apparently had superior efficiency (at least for its size).

AGE ACTIVATED ATTENTION DEFICIT DISORDER (AAADD)

AAADD does not approach knowingly, and in most cases, this is how it manifests itself. I decide to water my garden, and as I turn on the hose in the driveway, I look over at my car and decide, oh well, my car also needs washing.

As I start toward the garage, I notice that there is mail on the porch table that I brought up from the mail box earlier, so I decide to go through the mail before washing the car and watering the garden. And so, I lay my car keys down on the table, put the junk mail in the garbage can under the table, and notice that the can is full.

So, I decide to put the bills back on the table and take out the garbage first. But then I think, since I'm going to be near the mailbox when I take out the garbage anyway, I may as well pay the bills first.

I take my check book off the table, and see that there is only one check left. My extra checks are in the desk in the study, so I go inside the house to my desk in the study, where I find a can of Coke that I had been drinking the last time I was in the study.

As I begin looking for my checks, I have to push the Coke aside so as to not accidentally knock it over. Realizing that the Coke is warm, and I decide I should put it in the refrigerator to keep it cold, so I can then consume the half empty can. Now, as I head toward the kitchen with the Coke, a vase of flowers on the counter catches my eye, and it is apparent that they need to be watered.

So now, I set the Coke down on the counter, and I discover my reading glasses that I've been searching for all morning. I decide I better put them back on my desk, but first I'm going to water the flowers. I set the glasses back down on the counter, fill a container with water and suddenly I spot the TV remote, that someone apparently left it on the kitchen table.

I realize that tonight when we go to watch TV, I will be looking for the remote, but I won't remember that it's on the kitchen table, so I decide to put it back in the den where it belongs, but first I'll water the flowers. I pour some water in the flowers, but quite a bit of it spills on the floor, so I set the remote back down on the table, get some towels and wipe up the spilled water. Then I head down the hall trying to remember what the hell it was that I was planning to do.

At the end of the day, the driveway is flooded; the car isn't washed; the bills aren't paid; there is a warm Coke sitting on the counter; and there is still only one check in my check book. I can't find the TV remote device; I can't find my glasses and I don't remember what I did with the car keys.

Then when I try to figure out why nothing got done today, I'm really baffled and confused, because I know I was busy as hell all day, and now I'm really tired, which confirms that I was busy as hell all day. I also now realize this is a serious problem, and I'll try to get some help for it, but first I'll check my e-mail, if only I knew where the hell the computer was, and could remember what the damn password is !!!

R. E. C. A. UPDATE - 2006

From: Pat Broudy

The Radiation Effects Compensation Act (RECA), enacted in 1990, was followed by Amendments in 2000, 2001 & 2002. Those amendments provided for expanded coverage to individuals who developed one of the diseases, specified in the Act, following exposure to radiation related to the atmospheric nuclear weapons program, with an effective date of April 22, 2004. The rules applying to Atomic Veterans differ from those of "down-winders", Uranium miners, and ore transporters. They are as follows:

- Leukemia (other than chronic lymphocytic leukemia).
- Multiple myeloma, or Lymphomas.
- Primary cancer of the thyroid, or female breast, or esophagus
- Primary cancer of the stomach, or the pharynx, or small intestine
- Primary cancer of the pancreas, or bile ducts, or salivary gland
- Primary cancer of the urinary bladder, or colon, or brain
- Primary cancer of the liver, or ovary, or the lungs

It must be stressed that if an Atomic Veteran chooses to apply for RECA funds, the maximum obtainable is set at \$75,000. Any veteran who is receiving service connected benefits, and who then is awarded a single payment under the RECA provision must be made aware that the benefits from the Veterans Administration will be reduced, on a monthly basis, until the \$ 75,000 RECA funds are " offset."

The Government will not allow you to draw funds from both sources. Also, be aware that there a few Lawyers who are wanting to assist Atomic Veterans in applying for the RECA funds - for a FEE, often demanding that a contract be signed, with penalties for cancellation.

Pat offers to assist any Atomic Veteran (or survivor,) who may want to apply for RECA compensation, at no cost. The only considerations are that she will not accept any " collect " phone calls, and that the Veteran, or survivor provide the necessary documentation (that may be required by the Dept. of Justice,) for the purposes of filing a claim.

Pat Broudy can be reached at: 949-661-0172

The Dept. of Justice number is: 202-616-4090 or 202-616-4129



THE VETERANS' BENEFITS ACT OF 2003

The Veteran's Advisory Board on Dose Reconstruction (**VBDR**) held it's third Congressionally mandated meeting in Austin, Texas on June 8th & 9th, 2006.

The purpose of the **VBDR** (as required by Section 601 of Public Law 108-183), is to provide guidance and oversight of the dose reconstruction and claims compensation programs for Atomic Veterans, and to assist the Defense Threat Reduction

Agency (**DTRA**) and the **VA** in improving communications with Atomic Veterans. Several population and group studies (performed by **VBDR** sub-committee's) were presented, including an update on the Nuclear Test Personnel Review (**NTPR**) Program. As exhibited at the previous two meetings (Tampa, Fl. - Sept., 2005 and Los Angles, CA. - Jan., 2006), the final conclusions of all reports presented, were the same for all radiation exposure test assessment schemes, that is: unchanged from the last two day session.

The outstanding statement, from all studies presented during the first day's proceedings, is that there is no concrete scientific method that will prove, with any accurate degree of certainty, the amount of ionizing radiation exposure levels required to precipitate adverse health conditions, including cancers of the skin and of the body's internal organs.

Using descriptive words such as " in-conclusive", or " un-obtainable", or "incomplete", and "uncertainty of results" is nothing more than saying that all radiation exposure dose reconstruction assessments, derived from exposure models, or mean average weighted calculations, are nothing more than a "crap-shoot" when determining the amount of radiation an Atomic Veteran may have been exposed to 55 years in the past. When asked by a Texas Atomic Veteran, during the Public Comment Session, only one of the Board member could say that he was actually present and on-site at an Atomic Bomb detonation test. That Board member was retired (Ret.) Army Col. Ed Taylor, who participated in Operation **Plumbbob**, test " **Pricilla**", and who is also a member of **NAAV**.

Recommendations that all skin cancers be added to the list of "presumptive" radiation induced illnesses, (suggested at the Los Angeles, Ca. meeting), are still in limbo, and may not be seriously considered by the **DTRA** or the **VA** until later this year, or perhaps sometime next year. The **VBDR** and **DTRA** will have members present at the **NAAV** St. Louis Convention. They will participate in informal question and answer discussions with all attendees. They will also present an update on improvements in service connected claims filing and processing procedures at both the **DTRA** and the **VA**. Additional information can be acquired (via the internet) from the **VBDR** website: www.vbdr.org



Cdr. R. J. Ritter with Col. Ed Taylor (U.S. Army Ret.) while participating in Austin, Tx. VBDR Congressional proceedings

" TIME IS RUNNING OUT ", SAY THOSE WHO BELIEVE THEIR HEALTH PROBLEMS ARE CONNECTED TO LONG-AGO NUCLEAR WEAPONS TESTS.

By: Corrie MacLaggan - AMERICAN-STATESMAN STAFF
Austin, Tx. - Saturday, June 10, 2006

After the atomic blasts, Joe Terry followed the fallout. In 1958 at Enewetak, a Marshall Islands Atoll in the South Pacific, Terry was a U.S. Navy Chief Radarman, assigned the task of tracking atomic radioactive cloud locations and speed, after test detonations.

"Every time it rained, the ship was hotter than a pistol," said Terry, 75, after telling his story to a Federal panel that met in Austin this week. "We didn't realize then, what it really was, because you don't feel it while it's happening. But 30 years after the fact, you and your body really feel it."

Terry, a great-grandfather, who lives in the greater Houston area, was one of about 450,000 military personnel and civilians involved in nuclear tests in the Pacific, or at the Nevada Test Site from 1945 to 1962, or who served in the post-World War II occupation of Hiroshima and Nagasaki, Japan, shortly after these cities were decimated by two Atomic Bombs in August, 1945.

They are "officially" classified by the Veteran's Administration as Atomic veterans. They suffer from a catalog of cancers and other diseases that they think are linked to radiation exposure. And they say the Federal Government's response has been sluggish and inadequate. It is estimated that fewer than 220,000 Atomic Veterans are still alive.

Terry's list of ailments has included skin cancer, prostate cancer, hypertension, diabetes and a disease that he says has stumped his doctors and is eating away at his muscles. He and about 10 other veterans made their case Thursday and Friday at an Austin meeting of a federal advisory board overseeing government response to the veterans' claims.

Determining whether his ionizing radiation exposure led to the diseases, as opposed to old age or other factors, involves scientific analysis by the Defense Threat Reduction Agency (**DTRA**), before the Veteran's Administration will process an Atomic Veteran's claim for service connected compensation.

Was the veteran actually exposed to radiation? (Sometimes that's hard to prove because the work was, at that time, highly classified). How much exposure did he or she receive? What is the probability that that level of exposure would lead to this type of cancer in a person with these characteristics? All of these questions are addressed by the **DTRA**.

According to the **DTRA**, about one in 1,000 Atomic veterans could have developed cancer because of their exposure while in the military, said members of the **VBDR** panel, which include physicists, doctors and an expert in ethics. That is based on the average "dose" of radiation that the veterans are thought to have received.

"There's a misunderstanding among the entire American public," said retired U.S. Navy (Ret.) Vice Adm. James Zimble, **VBDR** Chairman, and a former Surgeon General of the U.S. Navy. "There's an unrealistic fear of ionizing radiation."

"Nonsense" said Cmdr. R.J. Ritter, Managing Director and National Commander of the nonprofit National Association of Atomic Veterans Inc., founded in 1979. "It's not good enough; it's not conclusive," the Houston resident said of the board's findings. "There are Atomic Veteran's out there who are currently dying that's conclusive."

Cmdr. Ritter, the sole survivor of a seven-member team of U.S. Navy Divers, involved in Atomic weapons testing in the mid 1950's, would like to see every Atomic Veteran receive adequate compensation, and free medical assistance. And he'd also like to see the end of the "Dose Reconstruction", program, that will cost the federal government approx. \$12 million this budget year.

" A-VETS SEEK COMPENSATION " - cont.

The Government has spent more than \$150 million on this program, over the last several years.

More than 1,400 Atomic Veteran's claims are currently stalled in a paperwork log-jam, that was created when the Department of Veterans Affairs returned more than 1,200 (denied) claims to the Defense Threat Reduction Agency, in 2003, for additional review, and comments. These backlog cases have been stuck in the system for an average of three years, many of which have been in the system more than 6 years.

Thomas Pamperin, Asst. Director for the VA's Compensation and Pension Service Policy, could not say how many Atomic Veterans receive health benefits because of radiation exposure. But he said that the group is more likely to receive compensation than other veterans. Overall, approx. 11 percent of the nation's 24.5 million living veterans receive some degree of medical benefits.

Thomas Caffarello of Orlando, Fla., was charged with monitoring radiation levels during atomic bomb tests, while operating out of the air field at Kwajalein Island, in 1948. He now has thyroid cancer, urinary bladder cancer, skin cancer and other ailments. For more than a decade, he has been trying to prove to the government that his diseases are connected to his work in the Marshall Islands, 61 years ago. "They're waiting for all of us to die," said Caffarello. This statement is widely shared by his fellow Atomic Veterans.

NUCLEAR WORKERS FRUSTRATE WITH U. S. HEALTH COMPENSATION SYSTEM

The Feb. 2006 issue of The Insurance Journal, details Nuclear Workers' frustrations with U.S. Benefits System. Well now, America's Atomic Veteran should be so lucky !!

The federal government has paid out approx. \$1.5 billion in benefits to thousands of sick nuclear-weapons workers under a five-year-old program, (signed into law by then President William Jefferson Clinton), but more could be done for thousands of others, says a report by a federal official. The report, made public Feb. 17, 2006 was the first written by Donald Shalhoub, the Ombudsman to the Labor Department program.

He wrote that workers have reported extreme frustration with a requirement that they obtain workplace records, some of which are more than 50 years old, so as to validate a claim for work related radiation exposure compensation. In many cases, the report said, "records were not maintained at the time of exposure, or if made, were lost or destroyed."

In addition, workers thought the government takes too long to estimate how much radiation workers were exposed to. " Otherwise eligible claimants may die while waiting for a result," the report said. Workers also complained that claims examiners failed to return calls and that their cases were reassigned to new examiners unfamiliar with their histories.

The Labor Department is "working hard to avoid" such problems, Asst. Secretary Victoria Lipnic wrote in response. She also said some cases were reassigned because the agency added staff to more quickly compensate workers. " We are committed to working as quickly as possible to resolve these cases, and we are keenly aware of the urgency of claimants who are ill, and in many cases very elderly", Lipnic wrote.

Workers exposed to cancer-causing radiation or Beryllium and silica, which cause lung diseases, get a lump sum payment of **\$150,000 plus medical benefits**. Those exposed to other toxic hazards get compensated for disabilities and **lost wages**.

The most they can receive is **\$250,000**. Most of the workers were at Energy Department facilities in Colorado, Idaho, Iowa, Kentucky, New Mexico, Ohio, South Carolina, Tennessee, Texas and Washington.

A White House document, obtained by The Associated Press earlier this week, outlined the Administration's concerns about the

growing costs of the Compensation Program. The document discussed ways to cut costs, including requiring administration clearance of all benefits decisions.

Editors note: The best way to cut the costs of this program is to use the same **DTRA** theoretical Dose Reconstruction qualifiers that have denied America's Atomic Veterans their fair share of compensation (for being exposed to ionizing radiation, while serving their country,) the last 50 + years.

And so, the Atomic Veterans of America can safely say to those civilian (nuclear weapons) workers exposed to radiation while working as Defense Contractors for the Dept. of Defense, "welcome to the club, dudes; and don't hold your breath waiting for your benefits."

Support for Increased Veteran's Care Funding

May 2, 2006

**From: The House Committee on Veterans' Affairs
" Lane Evans Urges Speedy Action by House
to Meet Veterans' Funding Needs"**

Rep. Lane Evans (D-IL), ranking Democrat on the House Veterans' Affairs Committee, today called for prompt action by the House of Representatives to provide needed funding for veterans' health care. " We on the Veterans' Affairs Committee are beginning to hear of many of the same problems that plagued the VA last year when it had to finally confess to Congress that it needed an additional \$1 billion," said Evans. " It is simply unconscionable for Congress not to act swiftly to ensure that the funding is there to care for the men and women returning from Iraq and Afghanistan, and the men and women who have faithfully served our nation in the past. "

Last week the Senate, during consideration of H.R. 4939, labeled the " Emergency Supplemental Appropriations Act for Defense, the Global War on Terror, and Hurricane Recovery, " agreed to an amendment that added \$430 million for VA health care. On March 15th, the House majority rejected, on a procedural motion, an amendment offered by Representative John Salazar (D-CO) that would have provided \$630 million for VA health care.

" John and I wrote a letter to Speaker Hastert, signed by 126 House Democrats, detailing the very real funding needs faced by the VA today. It was heartbreaking that this amendment was shot down, " added Evans, who praised the Senate action. " I applaud the efforts of my colleagues in the Senate, led by Senator Akaka, to provide much needed veterans' funding now. Veterans should always be part of any spending measure that pays for our conflicts in Iraq and Afghanistan, because providing for our veterans and their families is an ongoing cost of our defense. I hope this vote by the Senate will encourage the leadership of the House of Representatives to provide the funding veterans need today when the final version of this spending measure is agreed to. "

Evans noted that Department of Veterans Affairs (VA) data indicate twice as many new veteran enrollees waiting for health care today, as compared to last year, and that this number has increased by over 400 percent in two years. "Furthermore," he stated, "it is clear that we need additional funding to begin to meet the mental health care needs of our veterans, as well as prosthetics and health care for some of our most grievously wounded veterans."

" Those of us working for veterans face a tough and difficult fight this year, " Evans summed up. " The Bush Administration failed to request the resources that my fellow Democrats and I believe the VA needs for next year. Soon, the House Appropriations Committee will be presenting a VA funding bill that, frankly, I don't see veterans being very happy with. We owe our veterans so much – making sure that as the representatives of the people we pass budgets that provide adequate funding to provide them with the health care and benefits they have earned is the very least we can do. "

(Provided by Kevin Secor - Vet. Service Org. Liaison
Office of the Sec. of Veterans Affairs - Washington, DC)

" GREENHOUSE " - 1951

The **GREENHOUSE** Test Series was conducted at Enewetak Atoll in April and May of 1951. It consisted of four relatively high yield tests, as measured by the standards of the time, and were designed to be proof tests of two new strategic bomb designs, the Mk-6 and the Mk-5 respectively.

The first test, code name "**Dog**" occurred on April 7, 1951 and incorporated a 300 ft. tower for the bomb test platform. The tower setup was on Runit Island, and the total measured yield was 81 kilotons. "**Dog**" was a proof test of the new Mk-6 strategic bomb, and was the highest yield test up to that time, which would then be superseded by the "**George**" test a month later. The "**Dog**" test evaluated the (stockpiled) MK-6 weapon using the new "How Double Prime" composite Uranium-Plutonium core.

The explosion lifted 250,000 tons of soil to an altitude of approx. 35,000 ft. The Mk-6 was an improved, large "**Fat Man**" type weapon, with a 60 inch diameter, a length of 128 inches, and a weight of 8,500 lb. The weight would later be reduced to 7,600 lb, which was a marked reduction from the earlier 10,900 lb. Mk-4 bomb. The Mk-6 had an improved 60 point implosion system that provided greater compression and higher efficiency. The Mk-6 was the first nuclear weapon stockpiled in large numbers by the United States, with over 1,000 eventually be produced for nuclear weapon inventory. The U. S. had begun stockpiling the Mk-6 bomb, on an emergency basis, at the time of the **Green-house "Dog"** test.

The second **Greenhouse** test was "**Easy**" (April 20, 1951), on Enjebi Island, again using a 300 ft. test tower platform. The total yield was measured at 47 kilotons, and this was a proof test of the TX-5D bomb, which was the result of a major advance in weight reduction for implosion type bombs. The weight was 2,700 lb., and the diameter was 40 inches, compared to 10,000 lb., 60 inch diameter for earlier designs. The TX-5D used a 92 point (92 lens) implosion system and a (Plutonium / Oralloy) composite core. This design was used as the primary in the first thermo-nuclear bomb test, that would be a part of Operation Ivy, test "**Mike**". The "**Easy**" test was also used to measure the nuclear weapon effects on various military structures, which were erected on Enjebi Island and nearby Mijakadrek Island.

Greenhouse "George" (May 9, 1951) on Eberiru Island, used a 200 ft. tower platform with a measured yield of 225 kilotons, which was the largest nuclear explosion to date, and a record that stood until Operation Ivy - shot "**Mike**", 17 months later. The "**George**" shot was the first true test of thermo-nuclear fusion, which is the release of fusion energy from thermally excited nuclei, and was a research experiment that studied Deuterium-fusion burning when heated by thermal radiation. As a physics experiment, "**George**" used a purely experimental device design that was unsuitable (on its own) as a nuclear weapon. The test device, named the **CYLINDER**, consisted of an enriched Uranium core which was imploded using a unique cylindrical implosion system. This device may have been the first to use external initiation to begin the fission chain reaction.

The **CYLINDER** fission device may have been based on a design by physicist George Gamow. The device itself, was a disk, approx. 8 ft. across and 2 ft. thick, and was perforated by an axial hole. The hole, compressed to a narrow channel by the implosion, conducted thermal radiation to a small Beryllium-oxide chamber containing a mixture of cryogenic Deuterium, with a small percent of Tritium, so as to lower its ignition temperature. The thermal radiation not only heated the fuel chamber to fusion temperatures, where the pressure in the BeO wall caused it to implode and compress the fusion fuel, thus accelerating its combustion.

The thermal radiation arrived ahead of the shock front of the fission explosion, thus allowing time for a reaction to occur before being engulfed by the expanding fission fireball. The yield of the fusion reaction was negligible compared to the fission device itself. The progress of the fusion burn was observed by measuring the thermal X-rays emitted by the fusion plasma. This required instruments that were shielded from the thermal X-rays and the gamma rays of the fission bomb, and were far enough away from the explosion to be able to measure and transmit data while the fusion burn was in progress.

This part of the experiment was designed by Hugh Bradner and Hebert York. The measurements were made by recording the fluorescence of a set of K-edge filters located at the base of the shot tower. X-rays from the fusion chamber reached the instruments through vacuum filled pipes that were inside a 4 ft. diameter lead pipe that blocked out extraneous X-rays and gammas, and weighed 235 tons.

The total weight of diagnostic equipment was 283 tons. Other diagnostics used were shielded photographic plates to detect the high energy fusion neutrons by the "proton streaks" left by protons ejected from the emulsion by neutron collisions.

The thermo-nuclear portion of the experiment was largely developed by Edward Teller, but based on a device patented by Johann Von Neumann and Klaus Fuchs in 1946. The Von Neumann-Fuchs invention was intended to be the ignition mechanism for the "**Classical Super**", the first proposed design for a hydrogen bomb that was later shown to be impractical.

The test fortuitously provided useful data on the radiation implosion principle, an essential element of the Teller-Ulam design which had been devised just two months prior. "**George**" left a large shallow crater in the coral and sand atoll that measured 1,140 ft. across and 10 ft. deep (such wide shallow craters were typical of atoll tower shots).

Greenhouse "Item" (May 24, 1951) on Injebi Island, used a 200 ft. tower platform, with a measured yield of 45.5 kilotons. "**Item**" was the first test of the principle of "fusion boosting", the use of a thermo-nuclear fusion re-action to inject neutrons into a fission core to boost efficiency. The "**Item**" bomb used a cryogenic Deuterium-Tritium mixture inside an enriched Uranium core. [Carson Mark later report-ed in an 1993 interview that it used D - T gas.]

The boosting doubled the yield over its expected un-boosted value, thus allowing for considerably less total bomb weight. And so the **Greenhouse** tests were a crucial part of the development of the larger, more powerful nuclear weapons of war.



Greenhouse " Dog "



Greenhouse " George "

From: Pat Broudy

Veterans Administration Announces Outreach Campaign
Washington – May 5, 2006

The Department of Veterans Affairs (VA) today announced a special outreach campaign to inform veterans about VA's disability compensation programs.

During the month of May, VA will be conducting outreach efforts in Illinois, Indiana, Michigan, Ohio, New Jersey and Connecticut to reach those veterans who may have a disability related to their military service, but are not currently receiving VA benefits for their disabilities.

"Our goal is to ensure that all veterans receive the benefits they have earned through their service to our nation," said the Honorable R. James Nicholson, Secretary of Veterans Affairs.

"This effort reaffirms our commitment to provide full, fair and equitable compensation for veterans," he also said.

Under the VA compensation program, monthly tax-free payments are made to veterans who have medical conditions that are determined to be the result of their military service.

VA was recently directed by Congress to undertake this special outreach in response to concerns that the average amount of VA disability compensation received by veterans in the six states is lower than in other states.

VA emphasized that all veterans with the same degree of disability should receive the same amount of VA compensation, regardless of where they live.

However, historical differences in the average amount of VA disability compensation received by veterans from one state to another have existed for decades and appear to relate to such factors as the wartime period served, the branch of a veteran's service, the number of officer and enlisted personnel in a state, as well as the number of veterans who apply for benefits and the number of disabilities claimed by veterans in certain areas.

So as to help get the word out, VA is distributing informational brochures and enlisting the support of Veterans Service Organizations, State and County Veteran's Offices, and Congressional offices throughout the States. Veterans already receiving VA disability compensation benefits, and for whom VA therefore has a current address, will receive a letter from VA advising them of the steps to follow if they want to reopen their disability claim.

About 326,000 veterans in the six states are included in the letter-mailing effort. These letters will be mailed over the next two weeks and will include a special flyer advising veterans how to submit a claim for increased benefits if they believe their service-connected conditions have worsened or they have an additional disability not previously claimed.

Information will also be provided on what may be required should a veteran believe that there was an error made in an earlier decision and would ask the VA to, once again, review his or her claim.



Mauldin's "Willie"

Veterans may visit their local VA Regional Office or call the toll-free 1-800-827-1000 for assistance.

A VA representative will provide additional information and help them file a claim.

Assistance is also available from the many Veterans' Service Organizations that are formally recognized to represent military veterans who may wish to file claims for disabilities.

In 1951, the Cold-War, had inspired an accelerating tempo of nuclear weapons development and testing activities, by both the United States and Russia, and led to the inauguration of a more complex joint operations and testing scheme between the Department of Defense (DoD) and the Nuclear Weapons labs (at this time consisting only of Los Alamos).

For example, the previous "Crossroads" test series, at Bikini Island, had been managed by the DoD, while the "Sandstone", "Ranger" and "Greenhouse" test series, in the Pacific and in Nevada, was managed by the Scientists teams out of Los Alamos, New Mexico.

In late 1951 two test series were joint-ventured, by two nuclear test development entities, for the first time. These were Operation "Buster" which conducted and managed by Los Alamos, and Operation "Jangle" which was conducted and managed by the DoD.

These tests involved a total of 7,800 DoD personnel, 6,500 of which were military troops who conducted field exercises in conjunction with the tests. These were the first such field exercises conducted in the United States proper.

And so, Operation "Buster-Jangle" was held at the Nevada Proving Ground, (later to be known as NTS), and had a number of objectives. The "Buster" series was primarily a weapons development effort. A number of pit configurations were fired in a Mk-4, high explosive, assembly to collect data for weapons design.

In addition, the newly developed TX-7E design was also proof fired, leading to the development of the Mk-7 "light weight" bomb. The DoD also participated in one of the "Buster" tests conducted at the Desert Rock I exercise, during the "Dog" shot.

The "Jangle" series evaluated the usefulness of atomic weapons in "cratering", by using both ground level and sub-surface bursts. The Desert-Rock II and Desert-Rock III troop exercises were held in conjunction with these tests. The purpose of the Desert-Rock exercises was to also gain experience in operations conducted within a nuclear weapons combat environment.

The "Buster-Jangle" test series released about 10,500 kilocuries of radio-iodine (I-131) into the atmosphere, as compared to the "Trinity" test release of approx. 3,200 kilocuries of I-131. This produced total (estimated) civilian radiation exposures amounting to 7.4 million person-rads of thyroid tissue exposure, or about 2% of all exposure due to continental nuclear tests.

According to the National Cancer Institute Study estimating thyroid risks from I-131, the amount of exposure could have been expected to eventually cause about 2,300 cases of thyroid cancer, leading to some 120 deaths.

Buster "Able" (October 22, 1951) and was a test of the petite Plutonium fission bomb, designed by Ted Taylor. It consisted of a standard 60 nch diameter bomb, weighting 10,000 lb. with an implosion type detonation system, incorporating a Plutonium core, reduced to what was estimated to be close to the minimum amount of fissile material for an appreciable yield. This was the lowest yield design yet tested, with a predicted yield of only 200 tons.

It was also the 18th atomic weapon device tested by the United States, and also was the first "fizzle", or failure to reach full detonation force. Rather than being a sign of ineptness, this failure was indicative of the increasingly aggressive, and thus very risky, U.S. experimental approach to atomic weapons



Buster " Dog "

" BUSTER / JANGLE " - cont.

development. It established a close lower bound on the minimum amount of Plutonium that could be used in a weapon to produce a significant yield, which is a very important benchmark in nuclear weapons design and development. This was inadvertently a "zero yield" test.

The device achieved super-criticality and produced detectable nuclear output, but the energy produced was negligible compared to the high explosive used. The tower was damaged but largely intact after the test.

The first attempt to fire this device on October 19th. was a true failure, in that nothing happened. The problem was traced to a control circuit breakdown.

Buster "Baker" (October 28, 1951) was a 3.5 Kiloton event, designated " *LT* ", and a Mk-4 bomb assembly consisting of a Plutonium core without a Uranium tamper.

Buster "Charlie" (October 30, 1951) was a 14 Kiloton event, designated "*PC*", also a Mk-4 bomb assembly of a composite Uranium-Plutonium core.

Buster "Dog" (November 1, 1951) was a 21 Kiloton, designated "*NF*", and a Mk-4 bomb assembly of a composite Uranium-Plutonium core.

Desert Rock I was the first U. S. nuclear field exercise on land, and was conducted in association with the **Buster "Dog"** shot. In the weeks before the test shot, the assembled troops from the 188th Airborne, the 127th Engineer Battalion, and the 546th Field Artillery Battalion, dug field emplacements to simulate a defensive deployment southwest of the test shot location.

The troops observed the shot from a point six miles from ground zero, and were transported to the defensive emplacements to view the weapon effects, and then conducted maneuvers in the immediate "ground zero" area. Since this shot was an airburst there was no local fallout, although some neutron-induced radioactivity existed during the exercises.

Buster "Easy" (November 5, 1951) was a 31 Kiloton event. It was also a test of the new TX-7E (Mk-7) bomb prototype, with a weight of only 1,800 lbs., and a diameter of only 30 inches. This bomb represented a drastic size reduction over its original "**Fat Man**" (10,000 lb, 60 inch diameter) predecessor. The design used an 800 lb. assembly of high explosive (primarily Octol 75 / 25), with a composite Uranium / Plutonium core.

Jangle "Sugar" (November 19, 1951) was a 1.2 Kiloton event, and was also a surface burst "*weapons effects*". Up to this time no surface burst had ever been fired (the fact that the center of the 60 inch diameter bomb was actually slightly above the surface later complicated attempts at accurate analysis).

This was the only surface test ever conducted in the United States proper (although sub-surface shots were subsequently fired at NTS that also produced several surface craters). The device, designated "**Johnny**", was identical to the **Ranger "Able"** device, and was chosen for its predictability and its limited yield (so as to minimize contamination).

It was a Mk-6 bomb using an all Uranium core. The test name "**Sugar**" was a mnemonic code for "*surface*", and left a crater 21 ft. deep and 90 ft. wide. At this time an 83 Kiloton surface burst, implosion bomb, was being considered for use as a "*cratering*" or "*bunker-buster*" weapon. The test indicated that such a weapon would produce a crater 300 ft. in diameter and 70 ft. deep.

Desert Rock II was conducted in conjunction with the "**Sugar**" test. The troops observed the detonation at a distance of 5 miles. Due to the intense local radioactivity from the ground burst, the maneuvers were conducted at a considerable distance from ground zero. Even though the distance was considered to be safe, the final radiation exposure to the troops is still questionable.



Buster "Charlie"

Jangle "Uncle" (November 29, 1951) was a 1.2 Kiloton event, and also a "*weapons effects*" test of a sub-surface burst. The device, designated "**Frankie**", was identical to the **Ranger "Able"** device. The test name "**Uncle**" was a mnemonic code for "underground".

The "**Uncle**" test left a crater 53 ft. deep and 260 ft. wide. The 17 ft. depth of burial was designed as a scaled down test of a 23 Kiloton ground penetrating, gun-type weapon. It was also being considered as a "*deep crater-maker*" or "*bunker-buster*" weapon.

The test indicated that such a weapon would leave a crater approx. 700 ft. in diameter and 140 ft. deep. **Desert Rock III** was conducted in conjunction with the "**Uncle**" test.

As with "**Sugar**", the participating troops observed the detonation at a distance of 5 miles and did not closely approach ground zero. Near ground zero the radiation level was approx. 5,000 R/hr, measured one hour after the test, with levels of 1,000 R/hr extending up to 1,200 yards from the burst point.

Hazardous levels of more than 100 R/hr of radiation extended past the 5,000 yard markers, in some areas.

Editors note: It is currently impossible to accurately determine the amount of ionizing radiation particles that may have been inhaled or ingested by those Veterans who participated in the "**Buster-Jangle**" test series, and it is equally difficult to determine the ill effects of their being exposed to radiation from nuclear testing so many years in the past. The fate of those Veterans of these weapons tests are in the hands of a group of Scientists and Medical Doctors who cannot accurately determine the true answers to these life and death issues.

" ABOUT THE MARSHALL ISLANDS "

The greater number of nuclear weapons test operations performed from 1946 to 1962 were in and around the Marshall Islands, located in the Western Pacific Ocean. The Marshall Islands Archipelago comprise 34 low-lying atolls and single islands scattered over 500,000 square miles in the Southwestern Central Pacific.

The atolls are arranged roughly in two parallel rows running from the northwest to the southeast. The westernmost chain is called the Ralik (Sunset) Chain, and Enewetak is the most northerly of the Ralik Chain atolls.

Bikini, in turn, is the northernmost atoll in the Ratak (Sunrise) Chain, the eastern atoll group. There are nearly 1,225 individual islands and islets in the Marshall chain, comprising a total of only 70 square miles. Twenty-five of the 34 atolls are inhabited.

Enewetak is located at latitude 11.21.00N and longitude 162.20.00E while Bikini lies 165 miles almost directly to the east, at latitude 11.35.00N and longitude 165.20.00E. Approx. 47 small islands comprise Enewetak atoll, which is about 20 miles wide and 30 miles long.

The chain of coral islands ringing the 388 square mile lagoon are broken in two locations by deepwater passages from the surrounding ocean into the lagoon. The total land area of all the Enewetak islets was originally only about two and a half square miles.

THE MARSHALL ISLANDS - cont.

The average depth of the enclosed lagoon is about 160 feet, and the highest point of land is only 13 feet above sea level.

The largest island at Enewetak is only 2 1/2 miles long and 1,500 feet wide. Enewetak island, at the southeastern edge of the lagoon, had been the location of a World War II U.S. Army long range bomber base.

About 22 miles to the north, at the northern edge of Enewetak lagoon, lies Engebi island, about 4,500 feet long; Engebi featured a 2,475-foot airstrip first occupied by Japanese and later by U.S. forces.

Directly northeast of Enewetak is Parry island, which was used as the site of a base for U.S. Navy Seaplanes, and was also a major supply depot, during World War II.

TRIDENT MISSILE SYSTEMS " CTMB " - 2006



Trident C-4 Missile

Washington, D. C. 03-09-06 Conventional Missile System to Provide Diverse, Rapid Capabilities

By: Sgt. Sara Wood, US Army
American Forces Press

The conventional "Trident" (non-nuclear) missile program that the Pentagon will ask Congress to fund is part of a larger strategy, designed to better address diverse threats facing the United States and will further the country's defense goals, a Dept. of Defense (DoD) spokesman said here

today. Thus, the new *Conventional Trident Modification Program*, (**CTMP**), which will cost approx. \$503 million, was developed based on a 2001 comprehensive review of America's deterrence policy, said the spokesman, who was speaking on background only.

The study, he said, recognized that a deterrence strategy that relies primarily on nuclear weapons does not address the current diverse threats facing the United States, and therefore; the U.S. must have a balance of nuclear forces, conventional strike capabilities and non-kinetic capabilities, which include information, operations and rapidly deployed non-lethal weapons.

The goal of this new strategy is to produce a force capable of assuring allies, dissuading competitors, deterring adversaries, and, if necessary, defeating enemies, the spokesman also said. The conventional missile program will help achieve this goal by providing the capability to defeat threats on short notice without crossing the nuclear threshold, he said.

The advantages of the **CTMP** over other strike capabilities, are its ability to provide a prompt response to threats around the globe. Therefore; the new program will allow national leadership to act in a crisis without a lengthy military buildup. Additional benefits of the **CTMP** are that it will require no forward deployed or visible presence, it has few if any requirements for allied over flight permission, and it gives the enemy little or no warning before a strike.

To ensure other countries don't mistake a conventional missile launch for a nuclear missile attack, the **DoD** is developing confidence building measures, such as advance notification and shared early warnings. Also, the **DoD** can borrow notification procedures from its long history of test launches of dual-purpose weapons systems.

The **CTMP** will give the United States a long-range strike option against targets beyond the range of current systems or that may be heavily defended. In addition, the deployment of the program will send a message to adversaries that the United States is prepared to defend its national interests.

If needed in the war on terrorism, the **CTMP** can help deter State actors from sponsoring terrorism by imposing the threat of a prompt, severe and devastating conventional attack.

Editor's note:

Trident (Nuclear) Missile Background Data

Submarine Launched Ballistic Missiles (**SLBMs**) have been an integral part of the strategic deterrent for six generations, starting in 1956 with the U.S. Navy Fleet Ballistic Missile (**FBM**) **Polaris A-1** program. Since then, the **SLBM** has evolved through the **Polaris A-2**, the **Polaris A-3**, the **Poseidon C-3** and today's inventory of the **Trident-I C-4** and the **Trident II D-5** submarine launched ballistic missiles.

Each succeeding generation of Sub-Launched **MIRV's** has been continuously deployed at sea as a survivable retaliatory force and has been routinely operationally tested and evaluated to maintain confidence and credibility in the their deterrent capabilities. The **Trident I C-4** was first deployed in 1979 and is planned to be deployed until eventually phased out in the early 2000s.

The **Trident II D-5** was first deployed in 1990 and is planned to be deployed past 2020. The **Trident II D-5** missile is also provided to the United Kingdom which equips the missile with **UK** warheads and deploys the missile on **Vanguard Class UK** submarines.

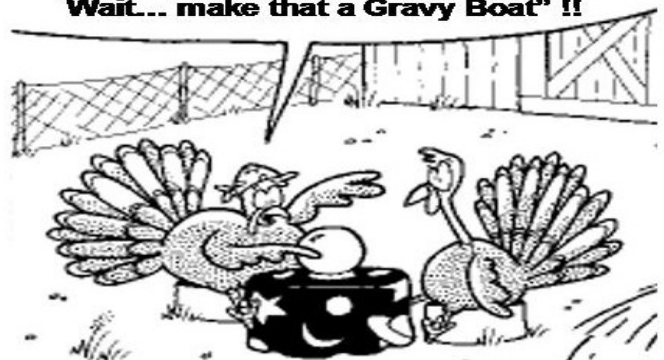
H.R. 2962 " ATOMIC VETERAN'S RELIEF ACT "

This legislation would include within the definition of a "radiation-risk activity" for purposes of eligibility for disability compensation the exposure to ionizing radiation due to residual contamination resulting from participation in a nuclear detonation. It would also direct **VA** to include in regulations pertaining to service connection additional provisions to ensure, in the case of a claim by a radiation-exposed veteran for service connection of a non-presumptive disability, that the procedures for establishment of whether the disability is service-connected do not require imputation to the veteran, through a process known as "dose reconstruction", of any particular level of exposure to ionizing radiation.

Editor's note: Currently, the House Bill sponsors are waiting for an overwhelming majority of Congressional backing so as to pass on the first floor vote.

Also under consideration, is the awarding of a medal, or equivalent recognition (similar to the Purple Heart,) to all Veterans who may have been exposed to Atomic, Bacteriological or Chemical (**ABC**) warfare agents, including Agent Orange, or Ionizing Radiation, including those who may have served on nuclear waste clean-up details, such as that at Enewetak, Atoll.

" I see you in the Navy ! Yes, That's you next to a Navy boat... Wait... make that a Gravy Boat" !!



" W-54 " ROCKET PROPELLED NUKE - 1961

One of the smallest nuclear weapons ever fielded, the **W-54 Davy Crockett** was developed in the late 1950s for use in a tactical confrontation with Soviet troops in West Germany. Small teams of the *Atomic Battle Group* (charged with operating the device) would be stationed every few kilometers to guard against a Soviet attack, using the power of their nuclear artillery shells to kill or incapacitate advancing troop formations and to also irradiate the area so that it would be uninhabitable long enough to adequately mobilize **NATO** forces.

The **Davy Crockett** nuclear warhead consisted of an **XM-388** plutonium (**PU-239**) fission core packaged into a steel projectile casing that included stabilizing fins. The weapon was 30 inches long, measured 11 inches in diameter (at its widest point,) and weighted from 51 lbs. to 71 lbs., depending upon the size and purpose of the launching platform. The **Davy Crockett** was the smallest and lightest fission core (implosion type) bomb ever deployed by the United States. Its explosive yield, varied from a minimum of 20,000 lbs. (10 tons) to a maximum of 2 million lbs. (1 kiloton) of dynamite.



The W-54 Davy Crockett 155mm RPN shown with 3 man gun crew & Instructor

There were three distinct models of the basic **W-54** design used, each with different yield, but the same basic design. These were; the **Mk-54** (Davey Crockett) - 10 or 20 ton yield, Davy Crockett (nuclear device) artillery warhead; the **Mk-54 (SADM)** - variable yield 10 ton to 1 kiloton, *Special Atomic Demolition Munition* device; and the **W-54** - 250 ton yield, warhead for **AIM-26 Falcon** air to air missile.

Early known versions of the **W-54** could destroy a two block area, with an estimated yield comparable to approximate 10 tons of TNT. These small size nuclear devices were first intended for use by U. S. Army ground soldiers in battle, and were in theory small enough to be delivered by a bazooka style firing mechanism.

Larger versions were later developed with a selectable yield of between 10 and 250 tons. Though small compared to most other nuclear weapons, whose yields are usually measured in the thousands of tons of TNT, (or kilotons), in human terms they are still extremely large.

By comparison, the 10 ton version of the **W-54** is two to four times as powerful as nitrate bomb used to destroy the **Alfred P. Murrah** Federal building in Oklahoma City, on April 19, 1995. The earliest identified nuclear tests of devices corresponding to the **W-54** characteristics were the "**Pascal-A**" and "**Pascal-B**" test detonations in the 1957 "**Plumbob**" nuclear test series. These were both intended to be very low in destructive yield, but overshot to higher yields (tens and hundreds of tons). These were also followed by tests of the **XW-51** design which evolved into the **XW-54** in the Hardtack "**Quince**" and "**Fig**" tests in 1958, that were also described as fizzes, or test failures.



Davy Crockett 155mm recoilless rifle being set up for field training purposes.

Atomic Demolition Munition) or so called "**Backpack Nuke**." The **W-54** was tested for use in a U.S. Navy **SEAL's** project that was demonstrated as feasible in the mid-to-late 1960s, designed to attack a harbor or other strategic location that could be accessed from the sea.

The **SEAL's** version would be delivered into water by parachute along with a two man team, then floated to the target, set in place and armed by hand. The U. S. Air Force, in concert with Hughes Electronics, incorporated the **W-54** technology into the **AIM-26 Falcon** air-to-air missile. This was a larger, more powerful version of the **AIM-4 Falcon** air-to-air missile. It is notable for being the only U.S. guided air-to-air weapon with a nuclear warhead.



Nuclear weapons scientific development team examining a W-54 warhead.



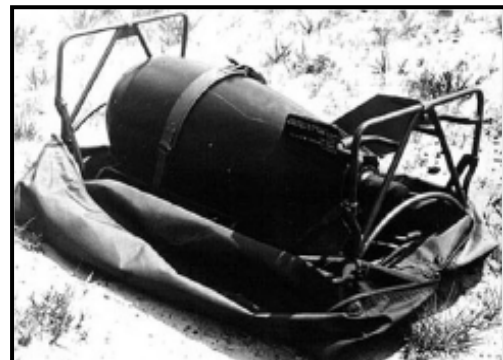
W-54 missile crew setting up 120mm version of the recoilless rifle for field test exercise.

A number of **XW-51** & **XW-54** tests followed in the 1958 Hardtack II test series, that included shots "**Otero**", "**Bernalillo**", "**Luna**", "**Mora**", "**Colfax**", "**Lea**", "**Hamilton**", "**Dona Ana**", "**San Juan**", "**Socorro**", "**Catron**", "**De Baca**", "**Chavez**", "**Humboldt**" and "**Santa Fe**".

By this time, the **XW-51** / **XW-54** design had been test fired more times than any preceding U.S. nuclear weapon prior to its successful introduction in service, indicating the difficulty of successfully making this small and low yield design work reliably and safely. Further testing slowed in the 1961 with the "**Nougat**" test series, that included shots "**Shrew**", "**Boomer**", "**Ringtail**" and possibly others.

The **W-54** design was performing consistently as expected at low yields, below the 1 kiloton range. Several variations of the **W-54** are known to exist and they were used in weapons projects by every branch of the U.S. armed forces. The **W-54**, in

theory, is small enough to be deployed as a **SADM** (*Special*



Davy Crockett warhead shown in the field-portable military issue backpack

" W-54 " Davy Crockett – cont:

The **W-54** warhead was test fired at the Nevada Test Site on July 7, 1962 during Operation "Little Feller II." Since this was the first detonation of a nuclear warhead, that would later be fired from a 155mm recoilless field gun, it was suspended three feet above ground zero, and detonated from a safe distance, so as to measure the weapon's ground effects. It detonated with an approximate yield of 44,000 lbs. of TNT (22 tons.) Given the success of this test, on July 17, 1962 a live **W-54** warhead was launched as part of **Operation Ivy Flats**, shot " Little Feller I," a simulated military environment battle field test.

The warhead detonated 1.7 miles downrange of the launch point, with a yield of 36,000 lbs. (18 tons) of TNT. The test was witnessed by then *Attorney General Robert F. Kennedy* and *Presidential Advisor Gen. Maxwell D. Taylor*. This test would be the last atmospheric nuclear weapon detonation at the Nevada Test Site.

Footage of Operation "**IVY FLATS**" was declassified by the United States Department of Energy on December 22, 1997. Limited operational details of early **SADM** projects were published prior to this declassification.



Infantry personnel of the 101st Airborne Division preparing to test fire a W-54 (dummy) warhead during training exercises at Fort Campbell, Kentucky



W-54 RPN 155mm Launcher mounted on a tracked vehicle for use in West Germany

The **Davy-Crockett** was deployed with U.S. Armed forces from 1961 to 1971. There were approx. 2,100 (**W-54**) **RPN** launch platforms manufactured for these purposes.

The best estimates assume that there were 41,000 **W-54** nuke warheads manufactured and it is believed that they are currently in the U.S. nuclear arsenal inventory.

The total estimated production costs (excluding the warhead) was approx. \$540 million (in constant 1996 dollars.) The weapon's non-nuclear components were manufactured at the Rock Island Arsenal in Rock Island, Illinois.

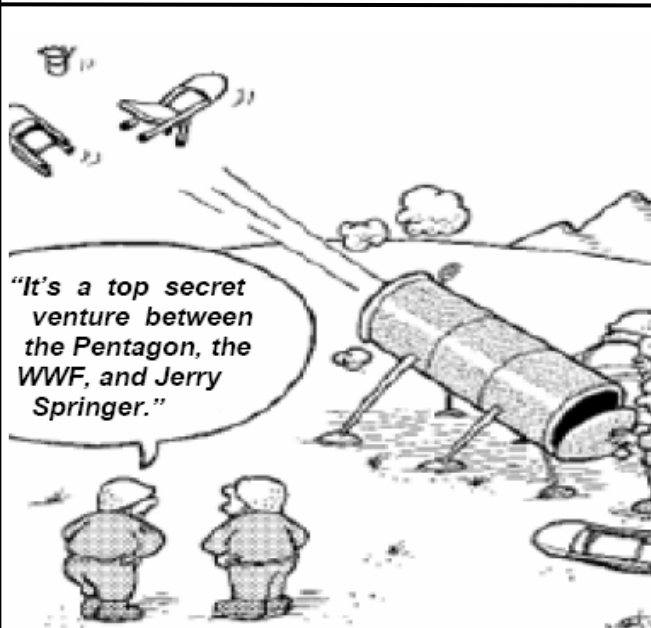
The **W-54** warhead was designed at the Los Alamos Scientific Laboratory (now the Los Alamos National Lab-oratory) and built by the Atomic Energy Commission.

Other U.S. nuclear warheads that were developed from the original early **W-54** technology include:

- W-25** - Small yield warhead used in **AIR-2 "Genie"** air-to-air missile
- W-53** - The warhead used on the **Titan II "ICBM"**
- W-61** - The basis for most U.S. small to medium weapons today
- W-80** - Warhead which armed U.S. nuclear "**Cruise Missiles**"
- W-81** - Development of the W61 for the Navy's "**Standard Missile**"
- W-84** - Similar development for the Air Force's aborted "**GLCM Missile**"
- W-85** - Similar development for the Army's "**Pershing II Missile**"
- W-88** - Warhead which arms the current "**Trident Missile**"



Operation " IVY FLATS," (W-54 RPN live launch detonation) was the last U.S. atmospheric nuclear weapon test.



VA Med Center Volunteers and Reps

From: Dick Conant (Past Nat. Commander)

NAAV Medical Database Co-ordinator

When **VAMC** volunteers and reps. Become known to the veteran's seeking medical assistance, " they spread the word about the **NAAV** cause."

They also become known to **VAMC** personnel, **NSO's / VSO's** and others who are interested in helping America's veterans, including Atomic Vets. This has happened to Dale Howard and I, for many years.

Some of the Committees we serve on include **VARO** personnel and field reps. from the offices of the U.S. House and Senate, which is handy for discussing issues that are important to Atomic / Nuclear Veterans.

Volunteer activities in these areas are just as important (and effective) as lobbying Congress, and offers a ready path through the " back door." Most **VAMC's** have Rep. Programs through their **VAVS** (Volunteer Services) Office.

Those of us who have free time can do a great service to our membership by spending a few hours / week at the local **VAMC**.

" RANGER " - 1951

Operation "Ranger", was the first series of atmospheric nuclear weapons tests conducted by the Atomic Energy Commission at the Nevada Proving Ground, and consisted of five nuclear detonations, all of which were airdrops. The operation also included one non-nuclear high-explosive test detonated two days before the first nuclear weapons test event.

The "RANGER" series began on January 25, 1951 and ended on February 6, 1951. These tests involved approximately 770 Department of Defense (DoD) participants in air support services, scientific projects, weather support, communications security, and observer activities. The series was intended to provide data for use in determining design criteria for nuclear devices scheduled for detonation at Operation "Greenhouse", to be conducted at the Pacific Proving Grounds from April 7, 1951 to May 24, 1951.

Since "Ranger" was only a 13-day operation, the same units and participants performed the repetitive duties throughout the series. The majority of DoD personnel at Operation "Ranger" took part in the air support services provided by the Test Group Air Support Section.

Air Force personnel from the Special Weapons Command (SWC), and Headquarters, United States Air Force, conducted most of these activities.

At each test event, air support activities included the airdrop of the nuclear device, cloud sampling, cloud tracking, aerial surveys of the terrain, and courier service.

Air Force personnel also provided meteorological services and communications security and monitored worldwide radio-activity from the "Ranger" tests for the Atomic Energy Detection System.

Air Force participation involved personnel from:

- Headquarters, U.S. Air Force
- Air Research and Development Command
- Air Training Command / Strategic Air Command
- Air Force Security Service / Air Weather Service
- Air Force Cambridge Research Laboratory
- 4901st (Atomic) Support Wing (SWC)
- 4925th Special Weapons Group (SWC)
- 374th Reconnaissance (Long Range) Weather Squadron
- 1009th Special Weapons Squadron.

The primary U.S. Army participation came from the 82nd Reconnaissance Battalion from Fort Hood, Texas, which provided all security at the test site.

The Scientific Tests Section of the Test Group administered projects at each nuclear detonation. DoD personnel were involved in eight projects at each shot except "Baker", where they took part in seven experiments.



Ranger "Able"

Of the 12 known DoD participants, six were from the Army Participation Group, an organization representing the Chief, Armed Forces Special Weapons Project. The other six were officers from the Army, Navy, and Air Force.

Participants in these scientific experiments placed film badges, fabrics, and other materials and instruments in or around military fortifications constructed in the ground zero area.

They retrieved the equipment after the detonation, when radiation levels had decreased and limited access into the shot area was permitted.

The number of observers at "Ranger" has been documented as 156, but only three of these are believed to have been military personnel.

The five "Ranger" test shots were of the same type, were detonated at Frenchman's Flat, NV, and involved similar activities. Shot "Fox", the last, was the largest shot and the only event not detonated on schedule.

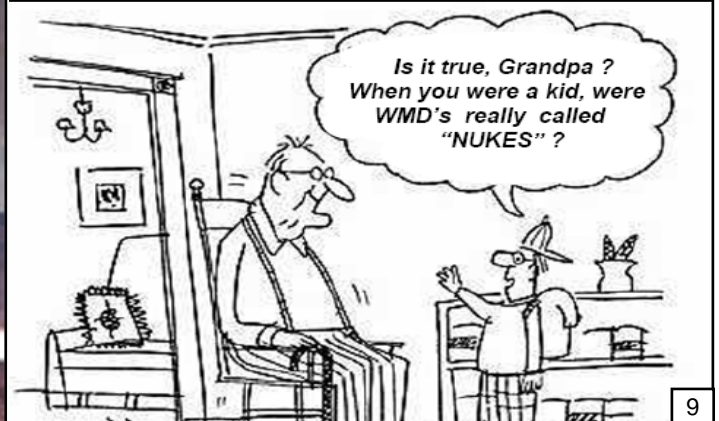
A one-day postponement was caused by an oil leak in the B-50 aircraft which was designated to drop the bombs. After the first test detonation, the initial radiation survey, conducted about one hour after the detonation, showed a maximum gamma intensity of 15.5 R/h (roentgens per hour) at ground zero and 8.0 R/h about 200 meters from ground zero. At 900 meters, the radiation level decreased to 0.25 R/h.



RANGER "FOX"

In the sequence of test order, the Ranger series was as follows:

- Ranger "Able" (01-27-51) with a yield of 1 kt
- Ranger "Baker" (01-28-51) with a yield of 8 kt.
- Ranger "Easy" (02-01-52) with a yield of 1 kt.
- Ranger "Baker-2" (02-02-51) with a yield of 8 kt.
- Ranger "Fox" (02-06-51) with a yield of 22 kt.



Please complete and mail to: **NAAV** 11214 Sageland - Houston, Texas 77089 - Ph: 281-481-1357
 Include your personal check or money order for membership dues and / or Q-stores (for sale) items

First Name	Initial	Last Name	Spouse			Phone	Date of Birth
Address		City	St.	Zip 5	Zip 4	E-mail address	
Branch of Service	Ship (or) Unit (or) Squadron		Name of Operation or Test			Year	Location

Describe your radiation exposure event: (Atomic test, or Post test assignments, or Depleted Uranium exposure, etc., etc.)

- Notes:**
1. Please include, on the back of this application, any other radiation exposure events you may have experienced while in the military, or any illnesses suffered by you, your children, or your grandchildren, if any, and the correct name and address of anyone who might be filling this application for an Atomic Veteran.
 2. Spouses & children of Atomic Veterans, or Veterans who may have been exposed to radiation from Depleted Uranium munitions or armor plate during the Gulf War or any middle east conflict are qualified to be a member of NAAV, Inc.

Date:	Signature	NAAV has my (our) permission to publish this information:	Yes	No
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NAAV " Q-STORES " ITEMS FOR SALE

Item #	Description	Qty.	\$ ea.	Total \$\$
01-C	4" Round " ATOMIC VETERAN " Auto Decal	_____	5.00	_____
02-C	4" x 5" Rectangle " ATOMIC VETERAN " Auto Decal	_____	6.00	_____
04-S	Four Color " ATOMIC VETERAN " (Inside) Windshield Sticker	_____	5.00	_____
05-C	Four Color " NUCLEAR VETERAN " License Plate	_____	10.00	_____
06-C	4" Round NAAV " ATOMIC VETERAN " Shoulder Patch	_____	10.00	_____
07-C	4" Round NAAV " NUCLEAR VETERAN " Shoulder Patch	_____	10.00	_____
08-C	2" Round NAAV Atomic Bomb Patch (for caps, etc.)	_____	5.00	_____
09-C	Navy Blue " ATOMIC BOMB VETERAN " Baseball Cap	_____	14.00	_____
10-C	1" Red - Blue - Gold NAAV Lapel (Tie) Pin	_____	10.00	_____
12-C	8" x 11" Color " ATOMIC BOMB VETERAN " Certificate *	_____	10.00	_____
13-N	8" x 11" Color " NUCLEAR VETERAN " Certificate *	_____	10.00	_____
14-P	8" x 11" Color " ATOMIC BOMB TEST " Photo **	_____	10.00	_____
15-T	Navy Blue " ATOMIC VETERAN " T-shirt *** Size: _____	_____	14.00	_____
16-J	Navy Blue " ATOMIC VETERAN " Jacket *** Size: _____	_____	40.00	_____

(with 10" NAAV embroidered logo on back)
 " All prices include postage fees. "

Total Stores Purchase: \$ _____

Dues: \$ _____

* Furnish full name, branch of service, ship or unit or squad. Info., and test or operation name (& date) for certificate accuracy. (Tax-exempt) Donation: \$ _____

** Furnish Operation or test name for Atomic Test color photo. We will attempt to match your request. **Total Funds Included with Order:** \$ _____

*** Be sure to add correct sizes for T-shirt or Jacket orders (M - L - XL or XXL) Note: XXXL is no longer available.

ANNUAL membership dues are \$20.00 ---- or ---- LIFE membership dues are \$200.00

Note: LIFE dues can be paid in \$25.00 monthly installments within a 12 month period.



Please send money orders or personal checks (only) to:

NAAV 11214 Sageland Houston, Tx. 77089



Also, our web site (www.naav.com) will accept credit cards for dues payments and Q-stores orders.

“ Meet with us in St. Louis “

The next NAAV annual Convention will be held at the **Clarion Motel**, 4545 N. Lindberg Blvd., (St. Louis Airport, North) St. Louis, MO. 63044, on September 24, 25, 26, 2006. A block of rooms will be held for pre-registration attendees. You must call the Clarion Motel (314-731-2100) on / or before 15:30 on August 24, 2006, so as to be assured a room at the special NAAV rate of **\$79.00** per night, plus applicable taxes.

Registration will begin on the evening of Sunday Sept. 24th. Checkout will be on the morning of Wednesday Sept. 27th.

The registration fee for the Convention only, will be **\$40.00** per person. The Banquet fee will also be **\$40.00** per person.

If you are planning to attend the 2006 Convention, please fill in the information data sheet below and mail as directed. Please indicate the meal selection you will require. If your register more than one person for the banquet, please indicate the choice of meals for each. You can do this with an attached note, if required. It is important for us to know, in advance, the number of attendees so as to properly plan our schedules accordingly.



NAAV 2006 (St. Louis, MO.) Convention Registration Information Form

Member name: _____ Atomic Test Operation: _____

Address: _____ City: _____

State: _____ Zip: _____ Telephone: _____ Cell: _____

I will be registering _____ persons for:

Convention only: _____ Convention & Banquet: _____ Banquet only: _____

Convention Banquet Meal Selection: Qty: _____ Fish Qty: _____ Fowl Qty: _____ Meat

I (we) will be arriving on: _____ I (we) will depart on: _____

Advanced Registration fees:

Convention only \$ 40.00 / person

Convention + Banquet: \$ 80.00 / person

Banquet only: \$ 40.00 / per person

Total mount enclosed with my registration application: \$ _____

Please mail your registration form and check to: **N A A V** 2439 E. 47TH STREET TULSA, OK. 74105-5173

What you need to know about " Dioxins & Microwaves "

Johns Hopkins sent this out in its newsletters, and it is also being circulated at Walter Reed Army Medical Center.

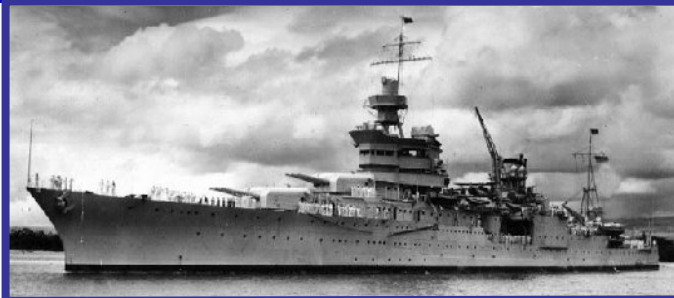
"Dioxin chemicals causes cancer, especially breast cancer."

Dioxins are highly poisonous to the cells of our bodies. Don't freeze your plastic bottles with water in them as this releases dioxins from the plastic. Recently, Dr. Edward Fujimoto, (Wellness Program Manager at Castle Hospital), was on a TV program to explain this health hazard. He talked about dioxins and how bad they are for our bodies. He also said that we should not be heating our food in the microwave, either wrapped or covered with plastic containers. This applies especially to foods that contain fat.

He also said that the combination of fat, high heat, and plastics releases dioxins into the food and ultimately into the cells of the body. Instead, he recommends using glass, Corning Ware or ceramic containers, for heating food. You get the same results, only without the release of dioxins. So such things as TV dinners, instant ramen and soups, etc., should be removed from the container and heated in something else. Paper isn't bad but you don't know what is in the paper. It's just safer to use tempered glass, such as Corning Ware, etc.

He also reminded us that a while ago some of the fast food restaurants moved away from the foam containers in favor of paper containers. The dioxin problem is one of the reasons they chose to do this. In addition, he pointed out that Saran wrap is just as dangerous when placed over foods to be cooked in the microwave. As the food is nuked, the high heat causes poisonous toxins to actually melt out of the plastic wrap and drip into the food. His advice was to cover food with a paper towel instead of using plastics.

Editors note: Perhaps Dr. Fujimoto's advise is worth noting !!!



U.S.S INDIANAPOLIS (CA-35)



The **USS Indianapolis**, was a 9,800-ton *Portland* class heavy cruiser, built at Camden, New Jersey, and commissioned in November 1932. She operated in the Atlantic and Pacific during the peacetime years. During the 1930s, she hosted President Franklin D. Roosevelt on several occasions, among them a voyage to South America in November and December 1936.

Following the U.S. entry into World War II, **Indianapolis** operated with carrier task forces in the southwestern Pacific until Spring 1942, when she took up station in the Alaska area. She served there for over a year, sinking a Japanese transport in February 1943. Later in 1943, **Indianapolis** became the flagship of the Fifth Fleet. In that role, and into mid-1944, she took part in operations to capture the Gilbert, Marshall and Marianas Islands chains, and severely damaged several Japanese positions elsewhere in the central & western Pacific theater.

She also participated in the invasion of Peleliu in September 1944. In February and March 1945, **Indianapolis**, again flagship of the Fifth Fleet, joined in the attacks on the island of **Iwo Jima**, and the Japanese Ryukus home islands. During the latter operation, on 31 March 1945, she was damaged by a Japanese Kamikaze aircraft. In late July, following repairs, **Indianapolis** made a (secret) high speed transit from California to Tinian to deliver the two atomic bombs that would be dropped on Japan in August, 1945. The world's first Atomic Bomb was detonated at Trinity Site in the New Mexico desert on July 16, 1945. The two bombs delivered to Tinian were on "standby" for use against the Japanese Homeland, given the success of the Trinity test.

After delivering the A-bombs to the 509 Atomic Bombardment Squadron (based on the Island of Tinian,) **Indianapolis** then sailed for the Philippines. Shortly after midnight on July 30, 1945 she was torpedoed by the Japanese submarine (**I-58**). Badly damaged, the ship capsized and sank in twelve minutes. Due to communications problems and other errors, her loss went unnoticed by CINCPAC (Commander-in-chief Pacific Fleet).

Survivors were eventually spotted by a patrol aircraft on August 2, 1945. All air and surface units capable of rescue operations were then quickly dispatched by CINCPAC, and the surrounding waters were thoroughly searched for survivors. Upon completion of the day & night search on August 8, 1945 only 316 survivors were rescued out of the total ship's compliment of 1,199 officers and crew members.

And so in this issue of the NAAV newsletter, we proudly offer our admiration and respect to the survivors of the **U.S.S. Indianapolis** and to the memory of their shipmates, who still lie in the depths the Pacific Ocean, all of whom proudly served their country with great courage and honor.

A Newsletter for America's Atomic Veterans

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11214 Sageland Houston, Texas 77089

