

When we think in terms of national defense these are not names that spring immediately to mind. But the work they have done and the things they have accomplished over the past four decades were essential to the United States winning the Cold War.

These are the men and women who helped design and construct the submarines that kept our Nation safe and free. Today they are designing and constructing a new generation of submarines that will help America win the war on terrorism.

These individuals have truly earned the title Distinguished Shipbuilder. Over the decades, Electric Boat has rightly won a reputation for constructing the best submarines in the world. For the men and women who design and build these incredibly complex ships, unsolvable problems have proven to be nothing more than tremendous opportunities to use their knowledge and skill.

Today Electric Boat continues to provide the United States Navy with the best ships ever to go to sea. They are an integral part of America's national security strategy. As the crews of our submarines protect America's freedom and security around the globe the men and women of Electric Boat can take great satisfaction in knowing that they are essential members of our national security team.

Those who expect to enjoy the blessings of freedom must engage in the hard work of defending it. In synchronization with the men and women in the Navy, the men and women at Electric Boat engage in that demanding work—and we in this chamber and everyone all across America benefit from their labor. When it comes to Electric Boat and the business of designing and constructing submarines, price is what you pay; value is what you get.

I am proud that Electric Boat is in my district—the Second District of Connecticut—and I am proud to share the names of these tireless and dedicated workers with you. They have provided the United States Navy with the most advanced, the most stealthy, the safest and the most lethal vessels ever to go to sea. I ask you to join me in recognizing their contributions to America.

HONORING MAJOR GENERAL PAUL  
D. MONROE, JR.

**HON. GRACE F. NAPOLITANO**

OF CALIFORNIA

IN THE HOUSE OF REPRESENTATIVES

*Wednesday, October 29, 2003*

Mrs. NAPOLITANO. Mr. Speaker, it is with tremendous pride that I rise today to honor Major General Paul D. Monroe, Jr., the Adjutant General of the California National Guard for his 46 years of military service. He is a credit to his country and the National Guard. General Monroe's leadership and vision have brought the Guard into the 21st century and made the 22,000 soldiers and airmen under his command better prepared than ever before.

Since September 11, General Monroe has mobilized nearly 10,000 soldiers and airmen to fight in the war on terrorism, both at home and abroad. He has deployed soldiers and airmen to serve in Operation Enduring Freedom as well as in missions to secure our borders, bridges and airports.

General Monroe has also helped the Guard reconnect with the communities in California. During his tenure, the Guard has partnered with numerous agencies and organizations to provide successful anti-drug programs and youth education initiatives. The General truly understands the need to give back to the community, and he, along with the extraordinary men and women who serve under him, have made invaluable contributions to cities and towns throughout California.

Recognizing the hard work and dedication of his soldiers and airmen, General Monroe had made "member care" a top priority, working tirelessly to provide high quality services for his troops. He has also established the California National Guard as an exemplary model for diversity and equal opportunity for guard members.

General Monroe began his military career as an enlisted soldier in the U.S. Army in 1957 and joined the California Army National Guard in 1961. He has served in Infantry, Signal, and Military Police Commands, and every level of command from platoon through brigade. He has been honored with over one dozen awards for his service with our Armed Forces.

Mr. Speaker, I ask my colleagues to join me in honoring a true American hero, Major General Paul D. Monroe, Jr. I extend my best wishes to the General, his wife Laura, their two children and their three grandchildren.

#### PERSONAL EXPLANATION

**HON. HAROLD E. FORD, JR.**

OF TENNESSEE

IN THE HOUSE OF REPRESENTATIVES

*Wednesday, October 29, 2003*

Mr. FORD. Mr. Speaker, regrettably, I was not present for rollcall vote Nos. 569–573 because of a previously scheduled commitment to serve as co-chair and co-host of the National Civil Rights Museum's annual Freedom Awards Banquet in my district in Memphis. The Freedom Awards Banquet was specifically scheduled to occur weeks after the target adjournment date.

Had I been present, I would have voted "yea" on rollcall vote Nos. 569, 571, 572, 573 and "nay" on rollcall vote 570.

FIFTY-FIRST ANNIVERSARY OF  
DETONATION OF THE WORLD'S  
FIRST THERMONUCLEAR DEVICE  
AT ENEWETAK ATOLL IN THE  
MARSHALL ISLANDS

**HON. ED CASE**

OF HAWAII

IN THE HOUSE OF REPRESENTATIVES

*Wednesday, October 29, 2003*

Mr. CASE. Mr. Speaker, this week we recognize the 51st anniversary of the detonation by our country of the world's first thermonuclear device at Enewetak Atoll in today's Republic of the Marshall Islands. And as we pause to remember that event, it is also an opportune time for us to recall both the contributions of the people of Enewetak and other atolls of the Marshalls to the security of our country and world, and the difficult legacy which that and subsequent tests have left to their residents and so many others.

This story was told so well last year in an article in the Honolulu Weekly by Honolulu journalist Bev Keever entitled "Fallout: Enewetak Atoll, 50 Years Ago This Week." Subsequently recognized by the Society of Professional Journalists (Hawaii Chapter) for this work, Ms. Keever reminds us about the human impact of "Mike," as the device was known, and counsels us to remember this legacy as we address crucial foreign policy challenges today and the future.

The text of Ms. Keever's article follows:

FALLOUT: ENEWETAK ATOLL, 50 YEARS AGO  
THIS WEEK

(By Bev Keever)

[From the Honolulu Weekly, Oct. 30, 2002]

National and media anniversaries of signal events like Sept. 11 help to form the collective memory that, over time and across generations, shapes what a society remembers—or what it forgets.

An anniversary that serves as a news peg for journalists re-ignites powerful emotional connections for those who lived through the event, communication scholar Jill Edy writes, and may be even more influential for those who did not live through the event because it "creates a world they never experienced." Even more important, Edy notes, anniversary journalism "impacts whether we remember our past at all."

An un-remembered part of the U.S. past occurred 50 years ago on Enewetak atoll in the Marshall Islands, some 3,000 miles west of Honolulu. On Nov. 1, 1952, at 7:15 a.m., the U.S. government detonated the world's first thermonuclear device, code-named "Mike," the most powerful man-made explosion in history up to that time. In layperson's terms, it was the prototype for the "hydrogen bomb."

Mike unleashed a yield of 10.4 megatons, an explosive force 693 times more powerful than the atomic bomb that had annihilated Hiroshima in 1945 and the fourth most powerful "shot" of the 1,054 acknowledged nuclear tests in U.S. history. Ushering in the thermonuclear era, the Mike shot raised to a new level the capacity for mass destruction that had been inaugurated by humans with atomic weapons only seven years earlier. Because of this new dimension in the power of nuclear weapons, President Eisenhower observed in 1956, "Humanity has now achieved, for the first time in its history, the power to end its history."

The Mike shot was controversial. Debate raged within the scientific community over detonating the so-called super bomb. One camp warned that the atmospheric chain-reaction from the thermonuclear explosion would immolate the entire planet, University of Hawaii's environmental coordinator John Harrison reports. Calling such fears farfetched, those in the second camp, led by influential physicist Edward Teller, prevailed. The public was not told in advance about the shot for fear that it would influence the presidential election held just three days before. Sixteen days after the Mike shot, U.S. officials announced a thermonuclear experiment, but provided no details.

Mike was a proto-bomb; in fact, it was more like a building, Harrison explains as he studies a sepia-toned photograph of the cylindrical Mike device, about 20 feet in height and 8 to 10 feet in diameter. Weighing 82 tons and standing vertically like the shiny innards of a giant thermos bottle, the cylinder dwarfs a scrawny, shirtless man sitting in a chair, elbows cocked on his knees and staring at the ground on Elugelab island, Enewetak atoll. The cylinder is attached to large tubes to keep its contents of hydrogen fuel, liquid deuteride, refrigerated below its

boiling point of minus 417.37 degrees Fahrenheit.

More than 11,000 civilians and servicemen worked on or near Enewetak to prepare for the blast. They left Enewetak by ship before the Mike device was remotely detonated from 30 miles away. The energy from the splitting of atoms with heavy nuclei like plutonium produced temperatures on the order of those at the core of the sun that were necessary to kick-start the fusion of the liquid deuteride with other lightweight hydrogen nuclei. This fusion produced even greater energy, so much that, as physicist Kosta Tsipis writes, "An exploding nuclear weapon is a miniature, instantaneous sun."

The Mike test vaporized the island of Elugelab. Researcher Leona Marshall Libby wrote at the time that Mike's detonation created a fireball that swooshed outward and upward for three miles in diameter and turned millions of gallons of lagoon water to steam. It left behind a 1.2-mile-wide crater and a deeply fractured reef platform. Harrison notes that in the aftermath of a subsequent, adjacent thermonuclear test—the Koa shot in 1958—the weakened seaward wall of the reef next to the Mike crater cleaved away and plummeted into the ocean depths.

#### EPIPHANY OF A "NUCLEAR HOLOCAUST"

Harrison, who lived at Enewetak for five years beginning in 1978 while serving as a UH administrator and senior research scientist there, says the destructiveness of the Mike shot defies human comprehension. He recalls the scores of times he guided his outboard motorboat across segments of the choppy aquamarine waters of Enewetak's 388-acre lagoon encircled by the 42 coral islands so pristine and lovely "they are God's gift to the entire world." His boat would slice into the shallower turquoise waters that overlay the close-in reefs and "then all of a sudden into the deeper, more cloudy waters that delineated or that filled this enormous, enormous round circle that was the Mike crater."

Each time Harrison made that journey, he says, "it changed my life." He would struggle to understand the cataclysm of that instant that had transformed an island into a massive hole in the reef. "Then and now and to the day I die," he says, "I could not, I cannot and I will never wrap my mind around the significance of that."

"There is no way that the mind can grasp that amount of force," he elaborates. "We have nothing to compare it with." Even so, once in the middle of the Mike crater, he sensed that he had experienced "the ultimate epiphany of what a nuclear holocaust is all about."

A rare snapshot of the havoc caused by the Mike shot is provided by a survey made of Enewetak by a scientific research team from the University of Washington and written up in a report archived by Harrison. The greatest radioactivity in fish was found to be concentrated in the digestive tract, followed by the liver and muscle; in rats and some birds radioactivity was concentrated in bones. Even algae that had been scrubbed with a brush and detergent retained "specks" of fallout, the report says, indicating most of the "radioactivity is actually present within the alga." Lastly, spotlighting the significance of color in absorbing the heat of the fireball, the team notes, "Birds with dark-colored feathers were burned more severely than were the white fairy terns."

A 1978 study of 476 Enewetak rats by environmental scientists from Bowling Green State University, M. Temme and W. B. Jackson, noted possible genetic effects caused by radiation. They hypothesized that radiation effects may have caused deformations in an important inherited marker of some rats—

the ridge of the roof of the mouth. The scientists described these ridges as exemplifying "expressions of genes affecting development." Since 1978, Jackson told Honolulu Weekly, follow-up studies have supported the notion of possible radiation-induced genetic effects.

#### HIDING 8,580 HIROSHIMA-SIZE BOMBINGS IN 16 YEARS

Most of the atmospheric testing on the U.S. side was conducted in the Pacific, but the full extent of these tests has become clear only in the past decade with the lifting of official secrecy. Only in December 1993 did the U.S. release information about the yield of 44 of the 66 U.S. nuclear weapons tests in the Marshall Islands.

In 1994, the most recent and comprehensive list of all 1,054 U.S. nuclear weapons tests worldwide was made public, allowing scholars to calculate for the first time the full extent of the entire U.S. nuclear testing program that ceased in 1992. These documents show that nearly three-quarters of the yield of all 1,054 U.S. nuclear tests worldwide occurred during only 82 tests conducted in the U.S.-administered Pacific Islands or over Pacific waters during the 16 years of the U.S. Pacific nuclear testing between 1946 to 1962. This prolonged secrecy, even beyond the collapse of the Soviet Union, hid for decades the yield of Pacific tests, which amounted to at least 128,704 kilotons—a destructive force equal to detonations of 8,580 Hiroshima-size bombs.

The atolls of Bikini, Enewetak and Johnston, plus Pacific waters, served as sites for nuclear weapons experiments far too powerful and unpredictable to be conducted on the U.S. Mainland. The yield of what The New York Times described as the mightiest nuclear explosion within the continental United States, which was the explosion of the first hydrogen device in Nevada in 1962, was less than 1 percent of the magnitude of the most powerful Pacific test, later disclosed as the 15-megaton Bravo shot of 1954. In serving as sites for such immense infernos, these Pacific atolls and their people sacrificed enormously for U.S. superpower status. And, they contributed to the global restraint—and the retreat from overt nuclear hostilities during decades of the most dangerous political confrontation in history, the Cold War. Recent revelations regarding the Cuban missile crisis are chillingly reflective of that nuclear brink.

Ten months after the Mike detonation, in August 1953, U.S. officials detected the first Soviet hydrogen explosion and announced the event to the world. The Eisenhower administration then set up a deliberate policy to confuse the public about the escalating order of magnitude between atomic and thermonuclear weapons. Jonathan Weisgall writes in his pathbreaking book, *Operation Crossroads: The Atomic Tests at Bikini Atoll* (U.S. Naval Institute; 1994). "Keep them confused," Eisenhower told the Atomic Energy Commission. "Leave 'thermonuclear' out of press releases and speeches. Also 'fusion' and 'hydrogen.'" The agency complied. Only decades later, in 1979, did the public learn of this obfuscation.

Six months after the Soviet H-bomb, on March 1, 1954, U.S. bomb-makers caught up by unleashing from Bikini atoll the country's first deliverable hydrogen weapon, code-named Bravo. Its 15 megatonnage made it nearly one-and-a-half times the yield of the Mike shot. Bravo was the most powerful U.S. bomb ever detonated, equivalent to 1,000 Hiroshima-sized bombs, according to U.S. government documents released in 1994. Weisgall observes, "Hiroshima paled in comparison to Bravo, which represented as revolutionary an advance in explosive power over

the atomic bomb as the atomic bomb had over the conventional weapons of World War II."

#### NUCLEAR VICTIMIZATION OF "OUR OWN PEOPLE"

Bravo also introduced the word fallout to everyday language worldwide when snow-like radioactive particles dusted 236 residents of nearby Rongelap island, 28 U.S. servicemen and 23 crewmen on a Japanese fishing trawler. In fact, the thermonuclear era produced radioactive components and fallout that encircled the globe, settling silently from the heavens. Beginning particularly with the Mike shot, "the chemical signature of our bones changed," Harrison told Honolulu Weekly. The atmospheric weapons tests that proliferated in scale with the Mike shot dispersed radioactive forms of iodine, cesium, strontium and other elements. As a result, Harrison notes, all organisms, including humans, carry the watermark of the nuclear era woven into their tissues.

The Mike shot marked an acceleration of the man-made proliferation and escalation of weapons of mass destruction. The ensuing nuclear age transformed the planet and its inhabitants. As award-winning journalist Eileen Welsome writes in her book, *The Plutonium Files: America's Secret Medical Experiments in the Cold War* (Dial Press; 1999): "The radioactive debris found its way into starfish, shellfish and seaweed. It covered alfalfa fields in upstate New York, wheat fields in North Dakota, corn in Iowa. It seeped into the bodies of honeybees and birds, human fetuses and growing children. The atom had split the world into 'preatomic' and 'postatomic' species."

Moreover, the "postatomic" species must live with the effects of the nuclear age for generations and centuries to come. Environmental radioactivity derived from some nuclear weapons components like plutonium will persist for up to 500,000 years and may be hazardous to humans for at least half that time.

Fallout and other residual radioactivity from atmospheric nuclear testing conducted by all nations have caused or will cause through infinity an estimated 3 million cancer fatalities, researchers Arjun Makhijani and Stephen I. Schwartz wrote in the monumental study, *Atomic Audit* (Brookings Institution; 1998). That number of casualties is nearly five times the 617,389 U.S. servicemen killed in World War I and II, the Korean War, the Vietnam War and the Gulf War combined.

In 1980, a congressional oversight committee report titled "The Forgotten Guinea Pigs" concluded, "The greatest irony of our atmospheric nuclear testing program is that the only victims of U.S. nuclear arms since World War II have been our own people." The House report included in its conclusion—but only in an obscure footnote—mention of Pacific Islanders, whose ancestral homelands had sustained the most U.S. nuclear firepower.

#### A 33-YEAR EXILE

U.S. Pacific nuclear testing that began in July 1946 required U.S. officials to evacuate 170 Bikinians and 142 Enewetakese, thus transforming them into so-called "nuclear nomads," which the Bikinians remain today.

The Enewetakese, when evacuated from their homeland in December 1947, were told by a senior official, Capt. John P.W. Vest, that they would be able to return to their atoll within three to five years. Instead, for the next 33 years they were exiled on the smaller, desolate Ujelang atoll, 150 miles to the southwest.

Other official U.S. commitments made then are contained in documents once classified as top secret that Honolulu attorney Davor Pevec now uses in representing the islanders. The Enewetakese "will be accorded

all rights which are the normal constitutional rights of the citizens under the Constitution, but will be dealt with as wards of the United States for whom this country has special responsibilities," according to a memorandum from the Atomic Energy Commission attached to President Truman's Directive of Nov. 25, 1947, to the Secretary of Defense.

The 142 Enewetakese (and their descendants) on Ujelang suffered greatly because of logistical problems, inclement weather, bureaucratic negligence and the island's desolation. Even the Department of Interior, in a letter dated Jan. 13, 1978, acknowledged that during their 33-year exile on Ujelang the Enewetakese "have suffered grave deprivations, including periods of near starvation."

An anthropologist who lived among them on Ujelang and spoke Marshallese, Laurence M. Carucci, wrote that the stories of this period told to him over and over by elders focused on famine and hunger, near starvation and death from illness, poor fishing conditions, epidemics of polio and measles and rat infestation.

One Enewetak woman in her 40s told Carucci in 1978 about these difficult days. She described the stomachs of children as being "stuck out like they were bloated and you would never think they were hungry," but in fact they were. Then, she continued: "They would get hot fevers, then cold chills; hot fevers, then cold and sweaty. And then, in just a moment, they would be gone. Dead, they would never move again. Their life was gone. And, in those days, the wailing across the village was constant."

Their hardship was so severe that in 1969 they commandeered a supply ship and demanded they be returned home. Their ancestral atoll was too contaminated with radioactivity for their return, but the U.S. government did begin an extensive cleanup and rehabilitation so that on Oct. 1, 1980, some islanders returned home.

Upon their return, they found a far different atoll, a far different Enewetak. The Mike shot and 42 other detonations had devastated Enewetak so severely that more than half of the land and pockets of the lagoon today remain contaminated by radiation. The islanders who do reside there cannot live off of much of their land and must rely on imported food.

#### MOONSCAPING ENEWETAK

The Mike shot was the eighth of 43 nuclear weapons tests at Enewetak that transformed a placid atoll into a moonscape. The Enewetak people, now numbering 1,500, are still pleading with the U.S. government for \$386 million in land and hardship damages and other compensation awarded to them by an official tribunal established by the U.S. and Marshallese governments. This panel ruled in April 2000 that after serving as Ground Zero for 43 weapons tests and receiving fallout from other shots, the Enewetak atoll: Was uninhabitable on 49 percent of its original land mass, or 949.8 acres of 1,919.49 acres; was habitable on only 43 percent of its land area, or 815.33 acres; was vaporized by 8 percent, or 154.36 acres.

The lingering effects of U.S. Pacific nuclear tests are visible today in the numerous kinds of cancers and other diseases and the degraded homelands that are determined by an official panel established by the U.S. and Marshallese governments to result from the U.S. experiments of decades ago. Compensation for these damages is paid for from a \$150 million trust fund that is now too depleted to pay fully current personal and property claims. Since 1946, researchers write in Atomic Audit, the U.S. government has paid at least \$759 million in nuclear-related compensation to the Marshallese. But medical,

cleanup and resettlement costs continue to mount, and Marshallese want more U.S. funding.

The Marshallese prospects for immediate help from U.S. officials in Washington seem dim, congressional sources in Washington, D.C., told the Weekly. Enewetak's \$386 million in land claims is not included in the budget Congress is considering for the fiscal year that began this Oct. 1. Nor are funds for a medical program that in 2001 ceased to address Marshallese health needs that have been urgent enough to warrant sending a six-person delegation to Washington last month to plead with congressional leaders and staff.

Provisions of the Compact of Free Association set to expire next year are being negotiated with the Bush administration, but any agreement must then be acted on by Congress, which is soon to adjourn. Arguing that U.S. assistance provided in past agreements is "manifestly inadequate," Marshallese officials in September 2000 petitioned Congress for increased U.S. medical and other assistance to meet the mounting costs of damages to persons and property presumed to be caused by U.S. nuclear testing. That petition is still being studied by the Bush administration, and no congressional measure on it is pending.

#### FROM CRATER TO CRYPT

Much of the plutonium-contaminated soil removed in the operation to clean up Enewetak was dumped into one of the atoll's smaller craters on Runit island. This crater was created May 5, 1958, during the 18-kiloton test shot code-named Cactus. The crater, 30 feet deep and 350 feet wide, was filled with about 111,000 cubic yards of radioactive soil and other materials and then entombed beneath a dome of 358 concrete panels, each 18 inches thick. Researchers in "Atomic Audit" report that the unprecedented job, completed in 1980, took three years and about \$239 million.

Soon afterward, a delegation from the National Academy of Sciences inspected the dome and John Harrison recalls, issued a report noting the inadequacies of the dome, specifically that the predicted longevity of the containment structure was at best 300 years. Yet, the plutonium-laced debris encased in the dome will remain radioactive for 500,000 years and hazardous to humans for at least half that time.

The Runit island entombment is of special interest because a nuclear-waste crypt is now being finished 800 miles from Honolulu to bury plutonium-laced materials under a cap of coral soil at Johnston Island, where four failed nuclear-tipped missile shots in 1962 showered the atoll and waters with radioactive debris.

From test site to dump site, the Runit island crypt eerily symbolizes the legacy of the thermonuclear age that has caused the Marshallese to suffer disproportionately in adverse health, environmental and cultural conditions.

The 50th anniversary of the Mike shot and its aftermath begs for reflection from a nation so riveted on a purported nuclear threat in the Middle East and North Korea that it ignores the era of mass destruction introduced by the United States on Enewetak with the world's first thermonuclear explosion.

## INTRODUCTION OF NEW PARTNERSHIP FOR HAITI ACT OF 2003

### HON. BARBARA LEE

OF CALIFORNIA

IN THE HOUSE OF REPRESENTATIVES

Wednesday, October 29, 2003

Ms. LEE. Mr. Speaker, today I am introducing H.R. 3386, The New Partnership for Haiti Act of 2003, which will help Haitians overcome the many social, economic, and physical challenges currently facing the country.

Today in Haiti only 45% of Haitians have access to safe water and 28% have access to sanitation. Seventy-six percent of Haiti's children under the age of five are underweight, or suffer from stunted growth and 63% of Haitians are undernourished. Eighty percent of the population lives in abject poverty and the unemployment rate is estimated to be around 60%.

My longstanding interest in ending the AIDS pandemic has brought focus on Haiti, with 90% of all HIV/AIDS cases in the Caribbean. As we combat global HIV/AIDS, malaria and tuberculosis, maternal and child mortality, and many other life threatening diseases, we must address the long-term effect of dilapidated physical and health infrastructure and abject poverty throughout the world, including in Haiti.

My bill, the New Partnership for Haiti Act of 2003 offers a comprehensive plan for future engagement between the U.S. and Haitian Government. This legislation partners Haitians and Americans together to execute an environmentally sound approach to rebuilding Haiti. Its major provisions are aimed at developing basic sanitation, water, and other health infrastructures in Haiti.

The New Partnership for Haiti Act would bring the U.S. Army Corp of Engineers to train and educate Haitians on how to rebuild, pave, and maintain roads to provide access to rural and urban areas and to health clinics. It will commission environmental impact studies for these projects, focusing on long term, environmentally sound solutions—not short term remedies.

Haiti needs assistance in addressing its long-term health infrastructure development. The most basic of these needed development challenges is water. How can Haiti begin to combat its enormous health problems without basic clean and safe water?

Haiti's water quality is life-threatening. In a study released in May of 2003, Haiti ranked last in the world for water quality. The New Partnership for Haiti Act will provide funds and expertise through USAID to partner with Haiti on rebuilding of sanitation, water purification projects, and education for Haitians on how to maintain these systems themselves in the future. This bill will help Haitians build and maintain safer, quality sewage systems and safe water delivery for both urban and rural communities.

The New Partnership for Haiti Act will start a pilot program for American Health Professionals and also Engineers who are interested in going to Haiti and helping with the development process.

It is my hope that a transfer of knowledge from U.S. professionals in the fields of health and engineering to Haitians will ensure long term development and guarantee the success