



BY RONEN ZILBERMAN, Star-Bulletin

An Army lab at Hickam is on a mission: Recovering and identifying the remains of U.S. service members

BY GREGG K. KAKESAKO Star-Bulletin

A single, lower left molar, unblemished, without any cavities. The memories of a 75-year-old South Pacific

islander. DNA material from a dead World War II B-24 bomber crew member.

A bag of 1,444 dog tags purchased in Hue City, Vietnam, in 1994 by a military nurse. All parts of a puzzle.

Most turned out to be keys that led the U.S. Army Central Identification Laboratory to identify the long-unidentified remains of service members killed in World War II, the Korean War and the Vietnam War, bringing badly

needed closure to their families. Still, more than 2,100 individuals remain unaccounted for from the Vietnam War; more than 8,000 from the Korean War; and nearly 78,000 from World War II. Working out of an undistinguished building

at Hickam Air Force Base, the Central Identification Lab remains committed to resolving the fate of those nearly 90,000 individuals who never made it back home. Since it opened in 1973, the lab and its staff

of 177 have been able to identify the remains of 933 service members: 658 from Southeast Asian battles; 20 from the Korean War; 240 from WWII; and 15 from the Cold War. At Hickam, experts are currently trying to resolve more than 400 cases pending from the Korean and Southeast Asian conflicts.

Divided into three sections — search and recovery, casualty data analysis and laboratory - the 21st Century sleuths sift through bone fragments, aircraft wreckage, personal clothing and other artifacts, medical and dental records, witness interviews and maps to account for the missing. Johnie Webb, a Vietnam veteran who has been with the lab from the beginning, said the goal has been "to try and provide a family with answers to let them know what happened and, if possible, to bring them back so they would have a grave to visit."

Thirteen recovery teams — each staffed with five military members and one civilian scientist — have toiled through the steamy rain forests of South America, the deserts of the Middle East, the glaciers of Tibet, the tropical jungles of New Guinea, the remote terrains of North Korea and, finally, the battlefields of Vietnam, Laos and Cambodia. Their job: to recover remains, wreckage and artifacts belonging to missing service members. Each year, teams spend more than 220 days in some of the harshest climates of the world. The Army will add a 14th team this vear

Helen Dockall, an anthropologist who recently returned from a 35-day expedition into southern Laos excavating the crash site of an A-6 Intruder, found mosquitoes to be especially bothersome

Once remains are brought to Hickam, 21 forensic anthropologists and odontologists (dentists) begin analyzing the "casualty data." Also involved are mortuary specialists, historians, anthropologists and specialized scientists, who attempt to establish identities using state-of-the-art computers, microscopes and radiological equipment. Although the latest technology employs mitochondria DNA research, comparison of dental records continues to be the mainstay.

Throughout the identification process, assistance may be sought from federal and private agencies, including the U.S. Army's Pacific region medical center, the Armed Forces Institute of Pathology, the Federal Bureau of Investigation, the Armed Forces DNA Identification Laboratory in Rockville, Md., and the Smithsonian Institution. Simultaneously, but independently, the dif-

ferent forensic anthropologists develop a biological profile of an individual based on the skeletal remains. Once a biological profile is completed, they

compare it with the known, recorded features of a missing individual. Researchers also pore over records and mil-

itary historical data to determine whether the remains match information in files from battlefield and crash reports, previous excavations and other available data.

Working like a medical examiner, Thomas Holland, the lab's scientific director, and his staff combine the scientific findings with background information from the casualty data section. Using the results of other investigations, such as wreckage surveys, they sometimes are able to confirm the identity of the remains. If that happens, their findings are then forwarded to the Casualty and Memorial Operations Center, which then will refer them to the military service to which the deceased was assigned.

If a family disagrees with the findings, final determination will rest with the Armed Forces Identification Review Board, consisting of senior military officers from each of the services.

Not all evidence bears fruit.

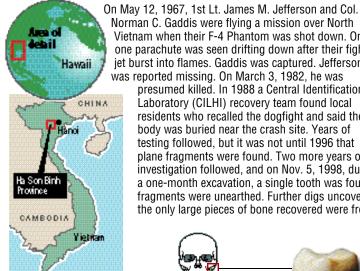
In the case of the 1,444 dog tags, Army investigators determined that none belonged to a service member who was reported missing or unaccounted for. This, after the nurse paid "quite a sum of money" for the tags.



'A nation that forgets its defenders will be itself forgotten'

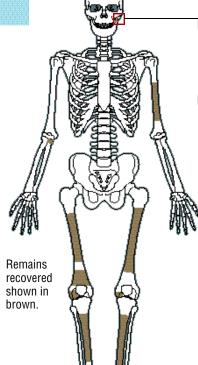
PIECING TOGETHER THE CLUES ***

Vietnam War: Case of the lone tooth



Norman C. Gaddis were flying a mission over North Vietnam when their F-4 Phantom was shot down. Only one parachute was seen drifting down after their fighter jet burst into flames. Gaddis was captured. Jefferson was reported missing. On March 3, 1982, he was presumed killed. In 1988 a Central Identification Laboratory (CILHI) recovery team found local residents who recalled the dogfight and said the body was buried near the crash site. Years of testing followed, but it was not until 1996 that plane fragments were found. Two more years of investigation followed, and on Nov. 5, 1998, during

a one-month excavation, a single tooth was found. Six months later, a few bone fragments were unearthed. Further digs uncovered more plane wreckage, but the only large pieces of bone recovered were from his legs.





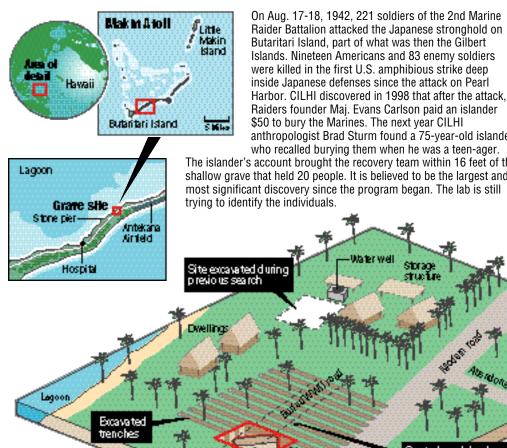
Special to the Star-Bulletin Patty Foxx displays a missing-in-action bracelet honoring her brother, James Jefferson, at his funeral in Florida last month.



By Spc. Christopher Licking, Cilhi

Unlike a typical excavation site, the hot, sandy beaches of Makin Atoll preserved the Marines' skeletons so well that some of the Marines' skulls still had on their helmets.

World War II: Case of the lost grave



On Aug. 17-18, 1942, 221 soldiers of the 2nd Marine Raider Battalion attacked the Japanese stronghold on Butaritari Island, part of what was then the Gilbert Islands. Nineteen Americans and 83 enemy soldiers were killed in the first U.S. amphibious strike deep inside Japanese defenses since the attack on Pearl Harbor. CILHI discovered in 1998 that after the attack, Raiders founder Mai. Evans Carlson paid an islander \$50 to bury the Marines. The next year CILHI anthropologist Brad Sturm found a 75-year-old islander who recalled burying them when he was a teen-ager. The islander's account brought the recovery team within 16 feet of the shallow grave that held 20 people. It is believed to be the largest and

Spotwhere Islander

remembered burying Marine Raiders in 194

Anthropologists dug a series of trenches around the suspected grave site. One of the first trenches unearthed the remains of an islander. The next trench uncovered a helmet. Two days later, the team found the remains of the Marines. The 19 Marines and the islander were buried on top of each other, three deep.

Mass grave

Fulfilling the promise to account for those killed is the mission of these scientists who travel the world

By Gregg K. Kakesako Star-Bulletin

nearly a year, behind a glass wall in a nondescript concrete building at Hickam Air Force Base, 19 work tables have held the skeletal remains of 19 Marines, including one believed to be the first enlisted Marine to be awarded the Medal of Honor in World War II.

The bones are the focal point of almost six decades of mystery. Now, the U.S. Army Central Identification Laboratory, the country's premiere forensic facility, is close to confirming that the remains are those of 19 members of the 2nd Marine Raider Battalion, who were killed in action on Aug. 17 and 18, 1942, during a raid on Makin Atoll, then part of the Gilbert Islands. Now known as Butaritari, the atoll today

is part of the Republic of Kiribati. The bones — plus remains believed to be those of a South Pacific islander were found during an extensive recovery effort that began in 1998. It was the largest and the most significant recovery project undertaken by the Army lab since it was created in 1973.

The first Butaritari recovery mission was launched in August, 1998, and was followed by two others in November and December, 1999. The shallow mass grave was discovered on the northern shore of the island under a crushed coral road.

The Japanese had occupied the atoll's main island in December, 1941, after attacking Pearl Harbor. Butaritari Island is its most dominant land mass - only about eight-tenths of a mile at its widest section and 18 miles long.

In August, 1942, two companies of Marine Raiders, led by founder, Maj. Evans Carlson, were dispatched by rubber boats from the sub-

Brad Sturm

Learned an is

lander had been

19 Marines on a

marines Nautilus and Argonaut, which they had boarded at Pearl Harbor. In the predawn raid, 221 Marines attacked the Japanese garrison, destroying two seaplanes and killing 83 enemy soldiers. In a firefight, Sgt. Clyde Thomason was

awarded the Medal ANTHROPOLOGIST of Honor after drawing the attention of Japanese soldiers in order to direct the paid \$50 to bury fire of his platoon. The attack was the *Pacific island*.

first U.S. amphibious strike after Pearl Harbor in a location deep inside Japanese defenses, and it boosted morale on

the homefront. However, it may have forced the Japanese to worry about the potential threat on its rear-area installations, further fortifying islands such as Tarawa. Members of Makin Raiders had prac-

ticed amphibious landings in rubber boats off Oahu's Barbers Point, but the calm surf there was nothing like that they eventually experienced at Butaritari Island.

Brad Sturm, Central Identification Lab anthropologist, said Carlson paid an islander \$50 to bury the 19 Marines, thinking that the rest of his unit had John Byrd been evacuated to the submarines.

However, military records show that 12 other Marines did not make the beach rendezvous and were left behind. Three were captured a day later, on Aug. 19, 1942. It is not known if they were taken as prisoners or executed. The other nine were captured two weeks later and taken to Kwajalein, where they were executed.

Hindering previous recovery efforts was the fact that the landscape of the

said.

on the island during including one right the grave.

any modern-day technology, but the recollections of a 75ember of the Decemn, happened to inter-

ath running near it to ilding," Sturm said.

Sturm's team was led to within 16 feet of the mass grave, near a small village 300 vards from the end of the island's runway. A series of trenches, 3 feet by 40 to 50 feet, were dug around the site. One of the first trenches revealed the remains of a native islander, Sturm said. 'The next trench hit a helmet, but we were not able to determine if it was

American or Japanese. After two days of digging, more human remains were discovered. Work then shifted to trowels and small whisk brooms. Sand and gravel

were collected in buckets and sifted through filter screens. Slowly revealed: bodies placed atop each other, three deep. Eventually, 20

6.83

William

Carmichael

Iefferson.

ARMY DENTIST

Dental records

proved the single

tooth belonged to

sets of remains were uncovered. some with gear hanging from their skeleton, and removed intact. At one point, ordnance specialists had to be called in to remove 55 live U.S. hand grenades. Also found were a rustv M-1 rifle, walkie

talkies and dog tags. On. Dec. 17, 1999. after more than 57 years in an unmarked grave, the remains of 19 Americans were escorted by a Marine color guard and put aboard a KC-130 Hercules aircraft and

flown to Hickam Air Force Base. As the remains were placed on the aircraft, Bureimo is said to have broken out in a chorus of the "Marine Corps Hvmn.

Still unresolved is the final resting place of the nine Marines who were executed on Kwajalein. The Army hopes to return to that Pacific island sometime early next year to find out.



The son of a career Army officer, James Milton Jefferson always considered the military as a career, said his older brother, retired Maj. Gen. Wayne Jefferson

James Jefferson graduated from the Air Force Academy at Colorado Springs in 1964.

"We both always had a interest in flying," Wavne Jefferson recalled. "We always went to air shows. Going into the military was a good thing. Since we both wanted to fly, the Air Force was the only way to go. On May 12, 1967, 1st Lt. James Jeffer-

son and Col. Norman C. Gaddis were part of a four-aircraft strike mission near Hoa Loc Airfield in Ha Son Binh Province near Hanoi in North Vietnam Although trained as a pilot. Jefferson. then 25, was a back-seater, serving as a weapons system operator with Gaddis piloting their Phantom jet. "He was flying out of Da Nang," his

brother recalled. "His F-4 Phantom had been configured as an air combat aircraft. His mission

was to fight MIGs." Lt. Jefferson had been in South Vietnam for seven months and had flown close to 100

missions. "When you reach your 100th mission, they send vou home." his brother said. "He already had orders for Albuquerque and a

fighter test unit."

As the jets neared the target area, they ran into MIG-17 fighters and enemy missiles. Gaddis radioed that he was

having problems with his jet's left afterburner. His plane fell out of formation with two MIGS tailing it. Moments later, the Phantom burst into flames.

Both Gaddis and Jefferson were believed to have ejected from the plane. but only one parachute was seen. Gaddis was immediately captured by the Vietnamese, the first Air Force colonel taken prisoner in North Vietnam. Jefferson was reported missing in action.

Gaddis was debriefed in 1973 after he returned home during "Operation Homecoming." He said that, within a few hours of being captured, he was shown a name tag and other items belonging to Jefferson, whom he did not see bailing out.

Jefferson's status from missing in action to presumed killed in action was recorded on March 3, 1982. He posthumously had been promoted to lieutenant colonel while listed as missing in action. In 1988, the first of seven site and ex-

cavation expeditions to the Ha Son Binh Province began. Local informants told investigators of a U.S.-Soviet Republic of Vietnam investigative team that they observed an U.S.

plane being pursued by a Vietnamese fighter, with the American jet bursting

1. SEARCH





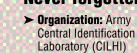


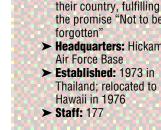
> Mission: The fullest

possible accounting of

killed in the defense of

all service members









"into flames before crashing." They recalled one crewman being captured after ejecting and remembered that the body of another was found near the crash site alongside a tangled parachute. His body was buried that night or early the next morning near the wreckage.

American and North Vietnamese offisonal effects were found.

LAB MANAGER Comparing data on bone structure, he ruled out who Jefferson couldn't be.

e island had changed 'revious attempts in

) was that the military

What finally led to

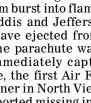
the grave was not old man. Sturm, who imo, who said he had

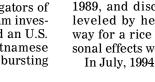
of the ocean and that

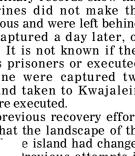
d man's memories.

e graves had been un-

Iarines when he was father owned a well







STEPS TO IDENTIFYING THE REMAINS

The Central Identification Laboratory (CILHI) at Hickam Air Force Base has records

By RONEN ZILBERMAN, Star-Bulleti

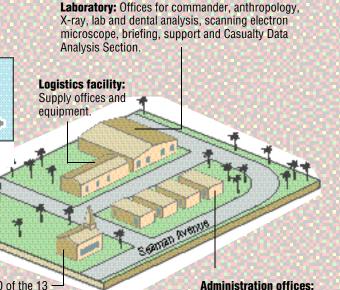
Sample replica bones are matched up against excavated remains at the forensic laboratory. Behind glass in the main lobby, scientists work on remains pieced together on tables.





The Casualty Data Analysis Section houses records of all American service personnel missing in action. Analyst Rachel A. Phillips scans the files.

The facility



Personnel offices

LOST AND FOUND

POST-WORLD WAR II: An administrative flight crashed in September 1945, in the mountains of Irian Jaya, Indonesia, killing five passengers and three crew members. In 1996 a recovery team found many personal belongings, such as the compass, razor and baseball mitt shown, but the owners of the items could not be letermined. Excavation took place at an altitude of 13,000 feet, and fog prevented the team from descending the mountain at night. The team split into two parts and took turns working and sleeping on the cliff.

2. RECOVERY

CILHI policy prevents photographs of remains from being published. All bones and teeth photographed are replicas.

recovery teams from visiting the site.

cials returned to the site in January. 1989, and discovered that it had been leveled by heavy equipment to make way for a rice crop. No remains or per-In July, 1994, flooded roads prevented

Other unsuccessful attempts followed in October that year. In November, 1996, small fragments of aircraft wreckage were uncovered. Following interviews with Vietnamese in November, 1997, and September, 1998, U.S. and North Vietnamese recovery teams returned to the crash site on Nov. 5, 1998. There, during a one-month excava-

tion, a single tooth was uncovered. It was sent to the Central Identification Lab at Hickam on Jan. 15, 1999. Another excavation expedition was held from Feb. 23 to March 21, 1999, but

no other remains were uncovered. Then, on May 14, 1999, a recovery team working about 33 feet north of where North Vietnamese claimed to have found human remains several months earlier, revealed bone fragments. Those bones, plus those recovered by North Vietnamese in March, 1999, were sent to Hickam.

in January. The team found possible human remains and personal belongings.

An Army dentist, Lt. Col. William Carmichael, was able to match Jefferson's dental records to the one left molar that was recovered. "There is no question it was his tooth," he said. Carmichael said his efforts were

made a lot easier, since he had dental X-rays of that exact molar. "I suspect the individual X-ray may have been taken back then because someone had

planned to take it out," he said. After the burial site was marked, Robert Mann, the Army's senior lab manager at Hickam, said recovery team members used screens and other archaeological techniques to pore through the soil for bone fragments and other personal effects.

Recovery teams venture from the top of Tibetan glaciers to deep underwater. Most of their work is done in dense jungles with highly acidic

soil that eats away at artifacts. Shifting sand dunes change the topography of the land and render decades-old directions difficult to follow,

and the occasional monsoon blows through, flooding the excavation area. At each site, anthropologists work systematically through an

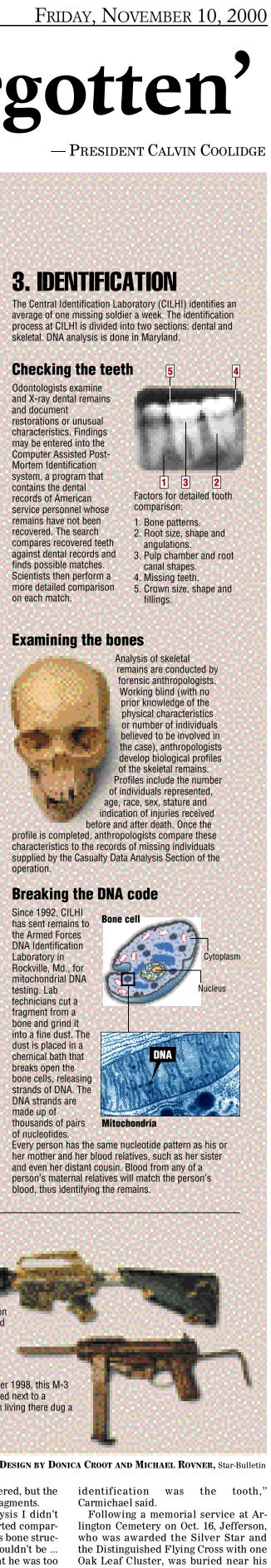
area, digging a series of trenches. Once bone, a tooth or artifacts are discovered, work shifts to shovels, trowels and whisk brooms. Sand

and gravel are collected in buckets and sifted through filter screens. It took 90 days to excavate the 21-foot crater at the above site in Laos

Lab manager John Byrd, who did the anthropological part of the investigation, said large fragments of upper and

Odontologists examine and document restorations or unusual may be entered into the Mortem Identification system, a program that contains the dental records of American remains have not been recovered. The search

finds possible matches. on each match.



VIETNAM WAR: An early version Colt Armalite-15 rifle was found in the Quang Nam-Da Nang region in Vietnam, near the remains of U.S. servicemen.

KOREAN WAR: Found in October 1998, this M-3 submachine oun was discovered next to a farmer's house when a woman living there dug a pit to store her kim chee.

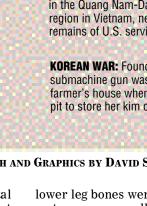
RESEARCH AND GRAPHICS BY DAVID SWANN • DESIGN BY DONICA CROOT AND MICHAEL ROVNER, Star-Bulletin

lower leg bones were recovered, but the rest were very small bone fragments. "When I started my analysis I didn't know who he was. I just started comparing information based on his bone structure to determine who he couldn't be ... It was easy to determine that he was too large to be a Vietnamese person," Byrd said The bones matched someone who was

Because no personal effects were ever recovered, "the cornerstone of the

6 feet tall. Other information indicated

there had been no other American loss-



es in the area.

BY SGT. SHANE BOUCHER, CILHI

father and mother in Gainesville, Fla. "It is now apparent Jim died on that day in May 1967," the family said in a written statement. "We are extremely grateful and relieved that his fate is now known for certain and that he has been returned home to the country that he loved and died for."