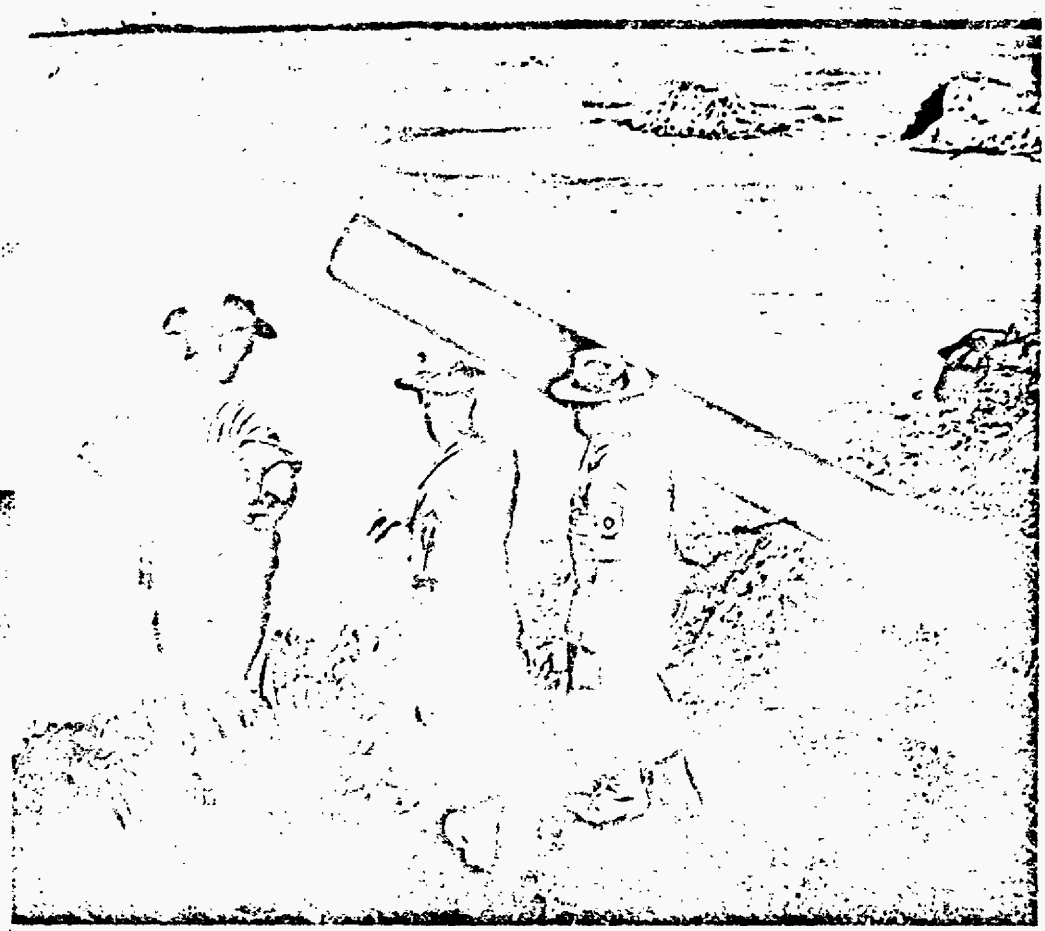
ON A REMOTE ATOLL IN THE MARSHALL ISLANDS.

70

0044678

SOME 80 AIRMEN ARE PLAYING A PART IN . . .

71



very end of the earth. Even now "the best part of an assignment here is going home," said TSgt. Dana B. Hutchens, a tanned Air Force member who has spent much of his time hacking through the atoll's overgrowth in search of radioactive debris.

But to some 450 gentle Marshallese, Enewetak Atoll is their home. Moved because of the tests to smaller Ujelang Atoll, 125 miles to the southwest, the people of Enewetak (or dri Enewetak as they prefer to be called) have waited patiently for 30 years to return to their ancestral home.

It is to that end that a DNA Joint Task Group of Army, Navy, and Air Force personnel, supported by the Departments of Energy and Interior, are working. It's not an easy job.

Hundreds of tons of debris are scattered like confetti over many of the northern islands, and traces of radioactive fallout from the past billowing nuclear clouds can still be detected in much of the soil. Aground on lagoon beaches are the decaying hulks of countless landing craft like those that first carried American troops ashore here in 1944 during a surprise attack on the Japanese. But these were used much later by the AEC to move men and equipment between islands. And on the atoll's southern rim stand rusting metal ghost towns, once alive with nearly 10,000 scientists and technicians during the heyday of nuclear weapons development at Enewetak.

Jerry Pate, now a civilian artist assigned to the Air Force Command Post at the Pentagon, remembers that time. It was a time of pioneers and progress. "You were working on something that had never been done before. Every morning you got up and didn't have to worry about redoing yesterday," recalled Pate.

Then an Air Force staff sergeant and illustrator, he worked closely with the scientific community on Medren (then Parry) Island. And he was there on November 1, 1952, when "Ivy/Mike," the world's first hydrogen bomb, put America a giant stride ahead, if only temporarily, in the nuclear arms race.

"I'd never seen anything like it," recalled the veteran of countless previous atomic tests. Even now he remembers the blinding flash, the blast of heat, and the shock wave sweeping toward him with a force powerful enough to upend an unprepared spectator.

His mind's eye can still see the gigantic rising fireball, hot as the center of the sun. "You saw forms and colors. You were fascinated, awed, and maybe even a little scared," he related. Blues, reds, oranges, and greens seethed and

**"You were working on something that had never been done before. Every morning you got up and didn't have to worry about redoing yesterday."**

turned, as if in slow motion, inside the fireball. It seemed to last forever.

"The first tinge of fear came when you began to realize just how much bigger it was than anything you had ever seen before. It was miles wide," Pate said, "and you wondered if it would ever stop building and growing." By the time it did, its mushroom cloud towered nearly 25 miles above the atoll and, beneath it, Euklab Island was gone—forever.

"There was shouting, handshaking and clasping of shoulders," remembers Pate. "We were happy it had worked, yet mindful of its sobering significance. And I thought 'Whoever has this is king of the hill.'

Now all is silent there. Gnarled vines entangle the collapsing and collapsed skeletons of Medren's weapons fabricaton complex where many bombs like "Big Mike" were born. A rickety guard shack, complete with telephone, marks an entr

**Checking soil samples for radiation contamination, gathering World War II ordnance for later disposal, and hacking through the jungles searching for radioactive debris are all in a day's work. But there are pleasurable activities, too, including sailing.**

point to the once highly secured compound where Pate had worked. On a blackboard in the ghost of an office, the faint code names of other blasts—"Butternut," "Holly," "Olive"—can still be read. Order forms blown from their cubbyholes by the Northeast Trades litter the floor of yet another building. And in the remnants of some workshop, on a shelf is a 1950 vintage Dixie Cup, with an ashtray at its side. In it lays the cold butt of a cigar.

Little by little, all over the atoll, mute monuments to the early days of nuclear testing are falling to the dozer blades of the Army's 84th Engineering Battalion.

Yet, Enewetak remains a frontier. A whole new family of radiation detection instruments—modern day Geiger counters of sorts—are being used there, some for the first time. They include everything from hand-held devices to huge self-contained computerized vans that can analyze large areas of soil in minutes. And in the words of one particpant, "we are learning to clean up a proving ground, and hoping we never have to use what we learn to clean up a battleground."

The master plan, a two-inch-thick, three-pound volume, before amendments, basically calls for the 84th, with its trucks, tractors, and cranes, to scrape much of the radioactive and other hazardous debris and soil from the atoll.

The radioactivity can't all be eliminated because it contaminates everything, from the land to the wildlife, Department of Energy officials have pointed out. But they are confident that parts of the atoll can be made safe once again.

Radioactive earth and debris are shipped to Runit Island, there to be mixed with cement and dumped into a large, water-filled, moon-like crater called "Cactus" on the island's northern tip. At the finish of the project, the crater tomb—named for the May 1958 blast that created it—will be sealed with an 18-inch lid of concrete. Even so, Runit, site of 18 of the 43 nuclear tests, could be uninhabitable for at least the next 125,000 years, according to Department of Energy experts.

While 84th engineers are saddled with most of the actual cleanup, the vital life support services are being provided by the Air Force, according to Army Col. Edgar J. Mixan, Joint Task Group Commander.

On the main base camp island of Enewetak—a ghost town revived—blue-suiters are operating an airfield and a communicatons center, the atoll's only expedient links with the outside world. They are also provid-

ing medical care, operating a post office, manning a fuel depot, and working as technicians in an Energy Department radiation laboratory.

But probably the Air Force's most visible job is "ensuring the radiation safety of everyone involved in the cleanup," explained SMSgt. Bobby G. Baird, NCOIC of the Field Radiation Support Team (FRST).

Early in the project, squads of FRST members—resembling characters from "Star Wars" in their cumbersome, bright yellow anticontamination suits—scoured each island with their sensitive instruments to make sure the area was safe enough for cleanup work to begin.

Simultaneously they began locating and classifying rubble for disposal by its degree of contamination.

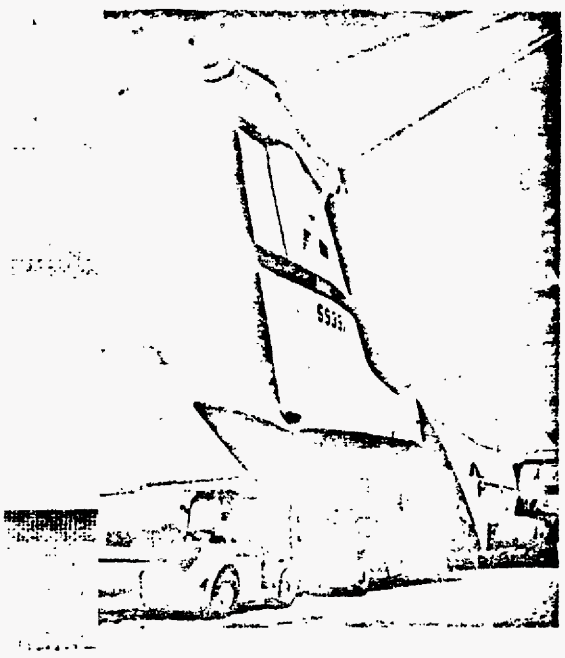
"We usually crawled [and cut] through the outergrowth to find the debris, taking readings all the time with our instruments," explained TSgt. Hutchens, chief of a three-man FRST unit. During his six-month tour on the atoll he led many a machete and chain saw assault on the resistant vines and shrubbery that had completely overtaken most of the islands since the end of the test era.

Hutchens' squad spent a month hacking its way across the tiny island of Lujor, just one of many to be cleared. It was a long, hot, tedious process. The teams were shuttled in daily from base camps by Navy landing craft or Boston whaler.

Searchers were aided by maps compiled in the early 1970s during a survey by AEC. But they gave only approximate locations for large pieces of debris and Hutchens admitted that in the thick overgrowth, finding the contaminated material was something of a hit and miss proposition. However, even now, safety conscious FRST squads accompany the cleanup crews continually, monitoring for previously undetected signs of radiation.

The real villains here are dust-sized, long-lived particles of plutonium from the blasts that have mixed with the soil. A man-made metallic element that emits invisible alpha radiation, plutonium can damage sensitive body tissue if inhaled or swallowed. So, when the engineers rumble in with their earth-moving equipment, lines that separate dangerous from safe areas are drawn and anticontamination suits and respirators are donned for protection.

In the no-man's-land beyond the lines, puttering six-horsepower engines drive air samplers that sniff for traces of airborne plutonium, and pumps spray salt water from the lagoon onto the work area to minimize dust. Always there is the FRST with



**"I like the work here because I get to work in all of my AFSC instead of just a portion of it."**

its instruments.

Unquestionably, safety measures are strict. They have to be. "We can't tell the troops that there's no hazard, because there is that potential," admitted Col. Mixan. But the slight, soft-spoken commander can say with pride that in nearly a year on the atoll, no one has received radiation in excess of allowable limits. And those limits are 10 times more rigid than for individuals working with radioactive materials back in the States.

"There has been a lot of field work done," said Army Maj. Charles Day, a radiation safety officer with the task group, "but so far the troops have been exposed to basically zero radiation" because of the stringent protective measures.

But there are still other problems. Under the stifling tropical sun, the temperatures inside the anticontamination suits can reach 185 degrees. "The humidity feels like it's 90 percent most of the time," remarked one worker as he stripped out of the suit, rivulets of perspiration running down his face. "At first we had guys passing out within 20 minutes," recalled SMSgt. Baird. Now, teams are working up to two hours at a time in the hot sun. "It takes a while, but you get acclimated," said Maj. Day.

Just being on Enewetak requires some acclimation. It's a shoulder-to-shoulder existence. With about half the work force on Enewetak Island and half on smaller Lojwa Island, elbow room is at a premium. The northern base camp on Lojwa is a city of open-air, open-bay metal huts and outdoor showers. On Enewetak, though, most have it better. Living in a multistoried, air-conditioned, concrete dorm, few complain about the four-man rooms.

For all, the work is demanding and the hours long—12 or more a day, six days a week. But for the Air Force people who spend six months to a year on the atoll, it is somehow bearable, if not enjoyable.

TSgt. James Parrott, who heads a Military Airlift Command airfield team, finds the work rewarding. "We have five people here doing everything that a whole aerial port squadron would do at Travis," explained the sergeant, noting, though, that the Travis workload is much heavier. In six months he and his crew moved more than 2,000 workers and visitors and about 900,000 pounds of cargo and mail through "Enewetak International Airport," as the sign reads atop the palm frond-covered reception area.

"I like the work here because I get to work in all of my AFSC instead of just a portion of it," he said. And he must. TSgt. Parrott recently extended his six-month tour.

So did SSgt. Michael P. Lyss, a communications center specialist who stayed on to get credit for a remote tour. He also enjoys working in areas that he wouldn't if he were Stateside, and finds the work more challenging.

But it's not all work. The tropical waters hold a myriad of unusual fish and rare coral, underwater delights that have enticed many to pursue snorkeling and scuba diving. There are also sailboats, fishing trips, shell collecting expeditions, sports events, and a number of other recreational opportunities on the atoll.

For World War II buffs, Enewetak is a museum of rusting war relics—lifeless reminders of that time in early 1944 when an American task force sailed into the lagoon, guns ablaze, during Operation Catchpole, part of a strike at the heart of the Japanese-held Marshall Islands.

On February 18 of that year the first of more than 8,000 invading soldiers and marines scrambled from landing craft similar to those now being used in the cleanup onto the lagoon beach at the northern island of Enjebi. Within a week, the entire atoll was secured, with most of its 3,400 defenders dead.

A weathered, wooden post inscribed in Japanese now stands as a simple memorial to 700 of those dead who are buried nearby on Enewetak Island.

Corroded aircraft parts—engines, propellers, landing gear, wings—antiaircraft guns and other treasures litter island shorelines. A few feet off the beach at Medren, a tank, its hatch covers flung open as if in a gesture of surrender, is slowly being consumed by the reef. On Enjebi, weeds are pushing through cracks in a concrete Japanese runway, and nearby are the rusted remains of some unknown soldier's helmet.

But mostly there is ordnance of all kinds. "I've never experienced anything like this before," said A1C William J. Craig, Jr., an explosive ordnance disposal specialist who is working with the Navy to detonate unexploded World War II ammunition. "I came here for experience and I'm getting plenty of it."

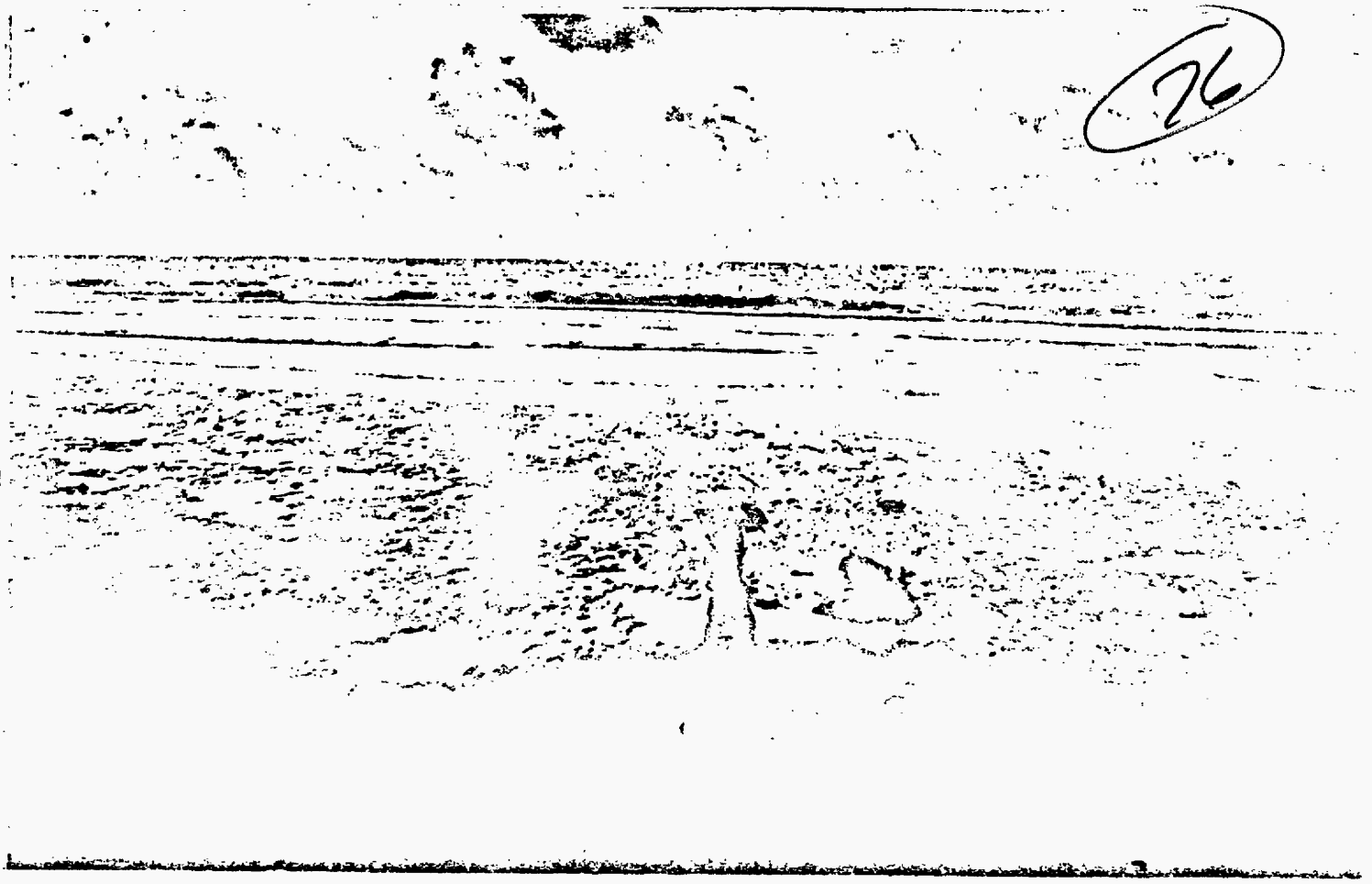
An arsenal clustered for detonation along the Enjebi beach included everything from small arms to 105-mm projectiles, mines, grenades, mortars, and a 250-pound bomb. Most were badly deteriorated, but Craig has discovered some brass fuses that were nearly as bright as the day they were abandoned more than 30 years before. "In fact, you could still read the Japanese writing on some of them," he said.

Craig is excited about his job and about the project. "Sure it's a worthwhile operation," he insisted. "These people want their land back, and they need it."

Justification for the cleanup goes much deeper, however—to America's agreement as Trust Territory administering authority to protect the rights Enewetak against loss of their land and resources, and to a commitment to return the atoll when it was no longer needed.

The people of Enewetak are glad to be going home. The first group of 50 returned to Japtan Island, on the atoll's southern rim, in March 1977. For many—like their 84-year-old leader, Chief Johannes Peter, it was a bittersweet moment. "It is very sad to see what has happened to our islands," the gravel-voiced chief, whose silver hair and hollow cheeks accentuate his years, told reporters through an interpreter. "But we are home now and we are happy."

Although anthropologists dis-



Scouring the beaches for seashells is an early morning activity. Collecting shark's teeth is another pastime. Occasionally there's a friendly visit from 84-year-old Johannes Peter, Chief of the dri Enewetak.

agree, the chief and his people believe they have lived on the sandy atoll since the beginning of time. As the chief told a Congressional subcommittee in 1972, "it is the only place which God has set aside for us and no other people. For us to live elsewhere would make us squatters and vagabonds."

Once, coconut, pandanus, and breadfruit grew in abundance on Enewetak. And coconut crabs, a Marshall Islands delicacy, were plentiful. But now, even on Japtan, an island relatively undisturbed by the years of American occupation, there are few coconut palms and fewer crabs.

In the year since their return the people have survived mainly on fish they catch in the lagoon and staples delivered by ship. They spend their time clearing brush and nursing a few frail pandanus and breadfruit seedlings, which will not bear fruit for another five or six years.

Eventually, the Department of Interior will build homes on Japtan, Medren, and Enewetak and replant other islands with more breadfruit, pandanus, coconut, and other crops. But it will be years, if ever, before life on Enewetak will be as it once was.

It was and is an austere life, without electricity or indoor plumbing. And by the people's choice, it will remain that way. "We try to let them live their own lives," said Col. Mixan. "They are a gentle people. They capture your heart, and you want to do something. The trouble is, you can do too much for them. When we leave, they will have to be self-sufficient."

The dri Enewetak have already acquired a taste for soft drinks and chewing gum. During a visit to Japtan the colonel was impressed by how quietly the children sat in church, and he complimented the chief on their deportment. The chief grinned. "We give them gum afterwards," he chuckled.

Yet despite their proximity, social visits by the American workers are rare and special occasions, for which the chief dresses in a short-sleeved shirt, red- and silver-striped tie, and an Air Force officer's flight cap resplendent with three stars.

Usually, he stands waiting on the wooden pier that stretches into the lagoon like a welcome mat to greet visitors with a hearty handshake, a grin, and a throaty chuckle. And almost always there are gifts of hand-made shell necklaces—tokens of friendship from a people who endured three decades in exile to the people who put them there, and are now working to bring them home.