USAG-KA COMMANDER COL JAMES DEORE, LEFT, AND CAPT CRAIG BEHLER CUT THE CAKE JUNE 14 TO COMMEMORATE THE ARMY'S 243rd BIRTHDAY.

VOLUME 59 NUMBER 24

IOT NIKKI MAXWELL



AUSSIE AMBASSADUR Talks diplomagy with hourglass - p 3

U.S. ARMY

JUNE 16, 2018

AJALEIN HOURGLAS

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USAG-KA Town Halls with COL James DeOre and the Command Team



Kwajalein RMI Workforce - Thursday, June 21 at 1 p.m. in the Island Memorial Chapel Kwajalein Residents - Thursday, June 21 at 6:30 p.m. in the Multi-Purpose Room Roi-Namur RMI Workforce – Friday, June 22 at 2:30 p.m. in the Roi Tradewinds Theater Roi-Namur Residents – Friday, June 22 at 1 p.m. in the Roi Tradewinds Theater

The entire USAG-KA community is encouraged to attend

Can't attend? No problem. Send your questions for the commander to USAG-KA Public Affairs Officer: <u>nikki.l.maxwell.civ@mail.mil</u> or call 5-4848.

U.S. AIR FORCE PARACHUTE TRAINING ON USAG-KA JUNE 19-21

The U.S. Air Force Special Operations Command is conducting parachute training on Kwajalein Island, June 19-21. The jumpers will be landing on the Kwajalein airfield Tuesday, Wednesday and Thursday. Spectators are invited to observe from the designated viewing area near the golf course. The area will be identified with cones, and security will help direct you for safety. In honor of this special occasion, the garrison commander is granting a temporary exception to policy (ETP) allowing photos and video to be taken toward the air field. Check the Official USAG-KA Facebook page (www.facebook.com/ USArmyKwajaleinAtoll) for specific jump times and other details.

The Kwajalein Hourglass is named for the insignia of the U.S. Army 7th Infantry Division, which liberated the island from the forces of Imperial Japan on Feb. 4, 1944.The Kwajalein Hourglass is an authorized publication for military personnel, federal employees, contractor workers and their families assigned to U.S. Army Garrison-Kwajalein Atoll. Contents of the Hourglass are not necessarily official views of, or endorsed by, the U.S. Government, Department of Defense, Department of the Army or USAG-KA. It is published Saturdays in accordance with Army Regulation 360-1 Phone: Defense Switching Network 254-3539 Local phone: 53539 Printed circulation: 900

THE KWAJALEIN HOURGLASS

Garrison Commander	Col. James DeOre Jr.
Garrison CSM	. Sgt. Maj. Todd Shirley
Public Affairs Officer	Nikki Maxwell
Communications Manager	Jordan Vinson
Communications Specialist	Jessica Dambruch



Australian Ambassador to the Federated States of Micronesia, the Republic of the Marshall Islands and the Republic of Palau, George Fraser, takes a few minutes out of his visit to USAG-KA to chat with the Hourglass.

🖸 U.S. Army photo by Nikki Maxwell

AUSTRALIAN AMBASSADOR TO THE MARSHALL ISLANDS TALKS AUSSIE-RMI RELATIONSHIP

NIKKI MAXWELL, USAG-KA PUBLIC AFFAIRS

Australian Ambassador to the Federated States of Micronesia, the Republic of the Marshall Islands and the Republic of Palau, George Fraser, visited Kwajalein recently to check on the progress of a water and sanitation project on nearby Ebeye Island. Fraser said the project stemmed from his government wanting to increase the supply and quality of fresh water for Ebeye residents. He explained that according to a past study, at least 10 percent of the people there had serious gastrointestinal issues stemming from impure water, and his country stepped in to change that.

"We and the RMI government combined efforts in 2017 to provide a state of the art reverse osmosis system. The water is provided from new deep salt water wells, producing approximately 50,000 gallons an hour," Fraser said. "At the moment it's great because there is more water than is needed by the population."

He said the place they call 'The Oasis' is near where the fresh water production is done. Residents can go there and get free water anytime. In the past, people would line up overnight to get a couple of buckets of water. But that is no longer necessary.

"It's wonderful to go there now and see almost nobody there, the taps are available and anyone can go and get as much water as they want," Fraser said. "Development assistance is one of our highest priorities."

The Australian government is also upgrading the electricity system providing continuous power for the unit, and also power through a specialized truck to clean out the sewer pipes, which flood during heavy rain, and filter them before being channeled into the lagoon. He said the system is unique because it is monitored from Adelaide, Australia through telemetry, but Marshallese operators have been trained to operate the system locally.

"It gives me a great feeling to know that this is happening," Fraser said.

RMI and Australia are both members of the Pacific Island Fo-

rum, making them partners in the Pacific. "It's a relationship that is very strong and continuing to grow, particularly in the interdiction of transnational crime," Fraser said. "We have a close cooperation with local police forces and the Australian federal police."

Fraser said that Pacific nations are in the process of re-establishing a multi-national transnational crime unit in Pohnpei and expanding that into the RMI. He also mentioned the patrol boats provided by Australia that are stationed in Ebeye and other atolls. Three or four multinational crime exercises each year, and most of them involve the RMI. Australia is donating new boats to replace their 20 year old patrol boats currently in use which each cost \$1M to operate per year. The Australian Navy manages the program, and a maritime and technical advisor in each country maintains the boats.

Fraser has visited USAG-KA four times, with two trips so far this year with other Australian delegates including Foreign Minister Julie Bishop and Shadow Minister for Foreign Affairs Penny Wong. Fraser described Kwajalein Island as a unique and wonderful community.

I see a community that works well together, a terrific team. I think the people posted here are very fortunate," he said. "It seems like a good environment for individuals and families to live and work. It's a spectacular testament and demonstrates the commitment of the United States to the security of this area (the Pacific)."

Fraser said the goal Australia has for the RMI is similar to the goal the U.S. has demonstrated in Kwajalein Atoll. "The security, the stability and the prosperity of the countries we work in are very important to us."

He explained some of the equality and human rights efforts made in the RMI to help protect victims and prevent domestic violence.

"It's a matter of changing the system, and looking at rule of law to protect the rights of all citizens," Fraser said. "But there's more to gender equity than just protecting people from being hurt. It's equity in terms of economic empowerment, political empowerment and providing normal access to services for all people, particularly if they have a disability and need special assistance."

Fraser says helping youth through education programs and society in general is something very close to the hearts of the Australian people, and he is grateful to do his part.

"It's a great honor to represent your country at any level, but particularly as a head of mission." I am a migrant to Australia, and hugely grateful for the opportunities Australia has given me. I enjoy very much sharing with others what Australia is like and what our values are. I get a wonderful sense of achievement working in this area."

Fraser served as high commissioner (ambassador) in Nauru for three years and high commissioner (ambassador) in Tarawa for three years, before accepting his current position a few years ago.

"We live in an area that is strikingly beautiful and pristine," Fraser said. "We must work together and find solutions to our common problems."

The ambassador said that while some of the programs and assistance provided by Australia to the RMI may not be seen daily by most people, there are moments when it all becomes clear.

"When people see our patrol boats being involved in search and rescue operations, sometimes in coordination with the aircraft from New Zealand, that's real life that's being saved," Fraser said. And that's what this is all about."

SMDC TECH CENTER CHIEF DISCUSSES EXCITING FUTURE ON THE RANGE

BY JORDAN VINSON

In a brief address and question-andanswer session last month, U.S. Army Space and Missile Defense Command/ Army Forces Strategic Command's Technical Center director highlighted a host of recent Reagan Test Site mission achievements and forecasted busier missions to come.

Director Thomas Webber hosted the special town hall May 16 at the Kwajalein High School Multi Purpose Room for the Soldiers, Department of the Army civilians and contractors who operate RTS and guests.

The latest major range operation, the Air Force Global Strike Command Glory Trip (GT) 224 Minuteman III launch and re-entry, was representative of Kwajalein Atoll's position at the tip of the spear in ensuring the strategic deterrence of the United States, he said.

"For these GT missions, we're testing our strategic offensive capabilities to deliver intercontinental ballistic missiles," said Webber. "That is the strategic deterrent that brought down the wall."

The planned upgrades of the nation's fleet of more than 400 nuclear-tipped ICBMs likely means a frenetic mission future for RTS personnel and instrumentation, he added.

The Air Force is "going to be improving and modernizing them and going to the next generation," he said. "What's going to happen is there's going to be increased up-tempo at some point to be able to test those systems." There is more to the Technical Center than GT missions. An Army laboratory designated by the government to execute leading edge science and technology, scientists, engineers and technicians at the Technical Center work on an array of advanced projects, sometimes in conjunction with other government labs like Sandia National Laboratories.

Asked by USAG-KA Commander Col. James DeOre to explain what else the center works on, Webber summed up the organization's focus in three particular areas: directed energy, hypersonic weapons and low earth orbit satellite development for tactical communications on the battlefield.

Laser and microwaves weapons are now a reality, Webber said. Recognizing the low cost-per-kill quality of highpowered lasers in the battle space, the Pentagon has poured considerable research and development into using directed energy as an alternative to expensive kinetic kill vehicles.

Small, low earth orbit satellite development is another of the laboratory's focal points. The Army has leaned on the Technical Center to develop and produce low cost, pint-sized imaging and communications satellite platforms that may be employed as alternatives to traditional large military communications satellites that live in geostationary orbit.

The research and development initiative that might be of most interest to Kwajalein Atoll is hypersonic weaponry. Coming in two forms—cruise missiles or missile-launched, maneuverable re-



SMDC Technical Center Director Thomas Webber addresses members of the Kwajalein community last month at the MP Room.

entry vehicles—"hypersonics" can fly at speeds of Mach 5 and above, along a non-ballistic trajectory, making them extremely difficult to intercept with current anti-ballistic missile defenses like America's Ground-based Midcourse Defense system. China and Russia are each testing their own versions of hypersonic weapons. In the meantime, American progress in the field continues at the Technical Center and in other national laboratories as interest at the Pentagon revs up, Webber said.

"We [the Technical Center] did the first U.S. successful execution of a hypersonic weapon," Webber told the crowd. "So we're very involved in helping the Navy execute for a program of record to actually field hypersonics. The Army is now getting much more involved. We have an undersecretary of the Army now, a vice chief of staff of the Army, very interested in hypersonics."

Because of Kwajalein Atoll's traditional geographic advantages, future tests of American hypersonic prototypes may likely occur, in some manner, at the RTS range, Webber said.

"There's not a lot of places that the nation has to test hypersonics," he said. "Kwajalein's the place because of the long fly outs, the fast, long flying trajectories." It is this quality, of course, that made Kwajalein Atoll, beginning in the early 1960s as part of the "Western Range," the premiere test bed for full scale testing of the United States' developing ICBM programs like Atlas, Polaris and later the Minuteman and the Peacekeeper.

While future flight testing of upgraded Minuteman IIIs and first generation hypersonic weapons may occupy RTS in the years to come, there is still plenty of work to do in the near term, Webber said. He pointed to a PowerPoint slide densely populated with many different mission types throughout 2018. From the Jan. 31 test of the Navy's Aegis Ashore interceptor at Kauai, Hawaii, to NASA's springtime launches of experiment sounding rockets, to two back-toback Global Strike GT re-entries, range customers have put RTS through its paces, Webber said.

Being able to maintain a frenetic range operation schedule in the lead up to, during and after a major garrison logistics and support contract changeover is impressive, he said, acknowledging the challenges in adjusting to the new contract arrangement on the atoll.

"It makes executing this very difficult," Webber said. "And that's why it's critical that all of you, and everybody across the community here, continues to play the vital role that they play and be a participant. And making sure that we're finding ways to execute the mission. I know it's challenging.

"I wanted to make sure that you all understood how critically important you are to executing this mission," he added. "There's a vital role in the garrison place, and there's a vital role on the range side. But those don't work by themselves. Those only work if you're in unison and helping each other accomplish that and be successful. ... All of you are critical in being able to make that mission happen, whether you're on the range side or you're on the garrison side of the house. It's going to take all of you, and it's going to take teamwork and collaboration and support across all echelons to make sure that we're maintaining that capability."

In no other type of mission setting could this be more accurate than in range operations conducted by the Missile Defense Agency, which will always be a part of RTS, Webber said. These are missions involving many land, sea and space-based sensors; many target missiles of all classes; personnel dispersed through a wide geographic area; and several interceptors.

Tests of systems like the Army's high profile, truck-mounted Terminal High Altitude Aerial Defense and MDA's growing Ground-based Midcourse Defense system, are good examples. Just last year, the FTG-15 test of the GMD system proved both the capability of the system and the expertise and work ethic of the RTS and garrison workforce, he said. Missions like this in the future will again rely on the full support of the garrison and range communities.

"That was the first-ever ICBM launch from Kwajalein Atoll," Webber said. "It was launched off of Meck Island. So that was a major undertaking, to demonstrate that our Ground-based Midcourse Defense System could work against an incoming ICBM. ... It was a highly successful test. That test—while the interceptor came out of Vandenberg—would not have happened if it weren't for the Reagan Test Site and the Kwajalein Atoll. You can't do those kinds of engagements anywhere else in the world. This is a national strategic asset out here. So, those test missions are ex-



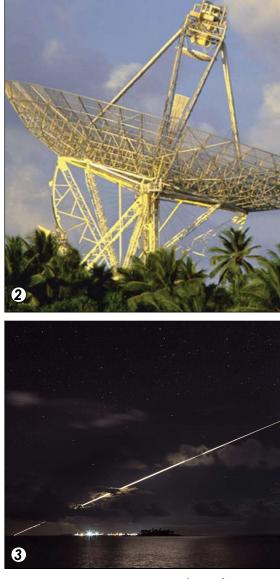
tremely important."

While high profile intercept tests, flight tests and ICBM re-entries garner a lot of attention, Webber reminded the crowd of the vitally important national security missions that occur every day from the control rooms of the Kiernan Re-entry Measurement Site radars on Roi-Namur. The size, quality and power of the radars on RTS, paired with Kwajalein Atoll's geographic location, allow for easy recognition, identification and tracking of missile and rocket flights that launch from rocket pads over the horizon in the Asia Pacific region.

When an Asia-Pacific adversary launches a rocket into space and deploys, for instance, a new military imaging satellite into orbit, the Pentagon, U.S. Strategic Command and the intelligence agencies often want radar images of the satellite and data on its orbital period. KREMS can do that, as well as search for and help identify random junk in orbit as part of the radars' support role in the Air Force Space Surveillance Network.

"We're keeping tabs on a lot of stuff that's flying around in space right now," Webber concluded. "And we do that to keep catalogs updated so that we know where stuff is [in orbit] to help support conjunction analysis to make sure that things don't run into our critical assets that are in space. That it doesn't run into manned space missions that flying up; that it doesn't run into when you're doing an interceptor missions. You've got to make sure that you don't have issues with hitting debris and other things. Keeping track of that is very important. Our radars help contribute to and support that mission."

A former Kwajalein resident, Webber spent five years working on the range, managing range flight safety from control rooms on land and on the U.S.A.V. Worthy ship. Every trip back to sunny Kwajalein Atoll is a joy, he said.



1) Last summer's FTG-15 ICBM-class missile launch by Orbital ATK at Meck. 2) Roi-Namur's ALTAIR stands at the ready for deep-space tracking. 3) A 2016 Glory Trip re-entry at Kwajalein Atoll.

Photos by MDA, Lincoln Laboratory, Jordan Vinson

ON THE ISLAND OF "THE FORGOTTEN," ARPA PLANTED A SEED CALLED TRADEX

BY JORDAN VINSON

The roots to Roi-Namur's critical role in American military radar applications lie with TRADEX. Here's the story.

In the late 1950s, the Navy was ready to begin mothballing the naval base at Kwajalein. The last round of nuclear weapons testing in the Marshall Islands, Hardtack I, had drawn to a close, and negotiations with the Soviet Union in the early 1960s would, indirectly, prohibit further atomic testing in the archipelago. With the island's critical logistics role in supporting the nuclear campaigns in the northern atolls closing, the Navy slated Kwajalein for abandonment the next year.

Then Nike Zeus came to the rescue.

The base got a new lease on life when personnel with the Army Rocket and Guided Missile Agency, Bell Telephone Laboratories and Western Electric Co. poured over maps, looking for the ideal place to build and test America's first ABM system: Nike Zeus.

Kwajalein, was ideal, planners agreed, because of its modern infrastructure: An airport and pier, new housing and recreational facilities and more already existed on the island. But more importantly, it lay far enough from Vandenberg Air Force Base, California to allow the Air Force to test launch intercontinental ballistic missiles at full range. On the receiving end, the Nike Zeus missile and radar suite could be built up on the island for full-scale intercept testing of ICBM-class targets.

But what about Roi?

In response to the Soviet Union's launch of Sputnik and the R7 Semyorka ICBM-class missile, Eisenhower's secretary of defense Neil McElroy established the Advanced Research Projects Agency (ARPA, now known as DARPA) in 1958, the same year the Navy was planning to shutter Kwajalein. ARPA was assembled with the purpose of coordinating America's missile programs and rally them against Soviet advances in rocketry and satellite development.

One of the top concerns at ARPA was how little American scientists and the DOD knew about the physics and phenomenology of ballistic missiles as they re-enter the planet's atmosphere. To gather this data, the organization established a re-entry measurements projects called Project PRESS—the acronym meaning Pacific Range Electromagnetic Signature Studies—and put Massachusetts Institute of Technology's Lincoln Laboratory, itself only seven years old, in charge.

But where could these scientists and engineers set up an outpost to study ICBM warhead re-entries at full range? Kwajalein, of course.

Because the Air Force was planning frequent Atlas shots to Kwajalein Atoll as part of Nike Zeus testing, ARPA and Lincoln Lab could count on plenty of targets of opportunity to gather the data they were looking for. To gather this re-entry data, the PRESS team would be able to use the Nike-Zeus Discrimination Radar and Target Track Radars on Kwajalein.

But there was the need for a separate radar dedicated solely to the Project PRESS focus on phenomenology studies. That radar would eventually take the name of Target Resolution and Discrimination Experiment (TRADEX). Interestingly, a bit of a fight sprung up between Team ARPA/Lincoln Lab and Team AR-GMA/Bell Labs about where to put this new sensor. ARPA and Lincoln Laboratory had chosen the North end of Kwajalein, but Bell Labs—the technical director for Nike Zeus—was concerned about TRADEX's radio frequency interfering with the Nike Zeus radars. ARPA's and Lincoln Lab's attempts to prove there would be no such interference fell on deaf ears.

Forced to take TRADEX elsewhere, ARPA and Lincoln Lab's attention soon drifted northward, to the conjoined islets of Roi and Namur, where the Japanese had built an airstrip and piers and docks for servicing submarines during WWII. At 419 acres in size, it was big enough for the Project Press mission, and it was far enough away at 43 miles distance to alleviate any concerns Bell Labs might have about radio interference. Roi-Namur, was the solution.

There were, of course, a few logistical downsides to choosing Roi-Namur. The infrastructure on the island had been left to rot since 1946, turning Roi-Namur into a jungle ghost town in the passing years. All of the Japanese facilities were, of course, destroyed, and no airplanes could land on an air strip swallowed in overgrowth. To get there, PRESS planners and Army Corps of Engineers staff were forced to make the trips up to the islet in tugboats. Still, the teams would make progress.

The Corps, which had already been hard at work Kwajalein on the Nike Zeus project, sent equipment and men to Roi to perform vibration and seismic tests on soil around the island to pinpoint the best location for TRADEX. A few months later, the jungle overgrowth on the airstrip was cleared away, and one of the Navy's Grumman HU16D Albatrosses landed on the airstrip. Lt. Col. Ken Cooper of ARPA joined Lincoln Laboratory's Glen Pippert, Leo Sullivan and Bill Ward on a final preconstruction tour of the island. They confirmed the location of TRADEX to be the north point of Namur.

By the start of 1961, Corps crews were on Roi-Namur to begin construction. They and employees of RCA—the subcontractor to Lincoln Laboratory on the TRADEX build—lived aboard a rehabilitated barracks ship, APL-24, which was moored near the long-since-demolished Jackaroo Club (just southwest of the terminal).

Interestingly, while the TRADEX technical facilities and office spaces were under construction, onsite PRESS staff had no choice but to adapt and use what they could find. The two-story Japanese bunker near the intersection of Copra Road and TRA-DEX Road was renovated, becoming the first Project Press office.

Despite the logistical and environmental challenges on the remote, overgrown jungle island, the Army Corps of Engineers, RCA, ARPA and Lincoln Laboratory banded together and had a world-class research radar ready to track ICBMs in a little over a year.

During the spring of 1962, the radar powered on. And on June



SEE "TRADEX," PAGE 7



LEFT: TRADEX under construction in the 1961-1962 time frame. RIGHT: Modern configuration of TRADEX today.





U.S. Fish and Wildlife Service photos by Chris Jordan

Albatross parents on Midway mistakenly feed their chicks more than four metric tons of plastics from the ocean every year. Pictured at left is the unaltered stomach contents of a dead albatross chick photographed on Midway.

MONT

EXTERNAL REPORT

Department of the Interior

June is National Ocean Month, making it a great time to spotlight the importance of oceans and what we can do to protect them.

Covering more than 70 percent of the planet, oceans connect us all, and unfortunately plastic pollution is becoming a big problem in our oceans. Bottle caps, cigarette lighters, bags and plastic packaging that we discard on land find their way into rivers and streams and are carried out to sea. The trash mixes with abandoned boats, fishing nets and shipping refuse to make up swirling masses of marine debris that can form large, floating garbage patches. The larger plastics can also break down into tiny beads or fibers, creating microplastics that are hard to clean up.

Tiny Midway Atoll National Wildlife Refuge has become a poster child for marine debris awareness. This picturesque tropical island sits close to the gyre, a Pacific Ocean current that pulls ocean debris into a widespread mass known as the Great Pacific Garbage Patch. More than 21 metric tons of debris accumulate on Midway Atoll each year.

That trash is impacting the wildlife on Midway. Adult seabirds ingest plastic debris and fishing line and then feed the debris to their chicks, while endangered Hawaiian Monk Seals and Green sea turtles get entangled and trapped in abandoned netting on the reefs and beaches.

Working with Hawaii and the National Oceanic and Atmospheric Administration, U.S. Fish and Wildlife Service employees and volunteers scour the beaches for trash, dive along the reefs to remove snagged fishing line, and rescue wildlife that've become trapped and entangled. Last year, they removed nearly 100,000 pounds of marine debris from Midway Atoll, Kure Atoll State Wildlife Sanctuary and the rest of Papahānaumokuākea Marine National Monument. Since 2006, the partnership has removed over 350 metric tons of trash from Papahānaumokuākea. As part of an innovative program, the marine trash is then used to produce electricity for Honolulu homes.

eas of the Pacific Ocean. It affects ocean waters, beaches and marine life worldwide. Parks, wildlife refuges and other public lands along the coast are working to clean up plastic items, including tires, straws and balloons that harm wildlife and impact visitors' public land experiences.

You can be a good steward of Earth's oceans by:

- Collecting all your belongings and properly disposing of trash or recycling after a trip to the beach.
- Not releasing balloons.
- Reburying any holes you dig in the sand.
- Picking up your pet's waste helps protect the ocean and other waterways from harmful bacteria and excess nutrients that could lead to toxic algal blooms.
- Safely disposing of fishing line to ensure the success of future anglers and wildlife alike.
- Volunteering at many of the clean up days in your area -- contact your local park or wildlife refuge for more information.

Trash isn't just a problem in remote ar-

"TRADEX," FROM PAGE 6 -

26, 1962, TRADEX successfully acquired and tracked the first ICBM launched at Kwajalein Atoll, picking it up in the vicinity of Hawaii with its large antenna and high power. In the series of Nike Zeus intercept tests revving up at Kwajalein and Vandenberg, TRADEX would play a major role in helping ARPA and Lincoln Laboratory understand the physics of ICBM re-entry. In subsequent programs, it would be crucial in helping the organizations understand and improve radar discrimination—picking out re-entering warheads from decoys and other threat cloud clutter.

More than 55 years after that first intercept tracking success,

TRADEX remains a regular workhorse at the Kiernan Reentry Measurements Site, and Lincoln Laboratory still has a strong presence at the sensor. Upgraded in several stages throughout the years, TRADEX still performs its classic ICBM re-entry acquisition and tracking role. But outside of re-entry test windows, you can see the radar busy with other tasks like acquiring and tracking new foreign launches and satellite orbit transfers and deep-space object tracking as part of U.S. Air Force Space Surveillance Network activities.

Sources: "Project History." ABM Research and Development at Bell Labs; "History of Lincoln Laboratory at the Reagan Test Site." John Nelson and Kenneth Roth, Lincoln Laboratory Journal; "The History of the Kiernan Re-entry Measurements Site." Michael Holtcamp, Kwajalein Missile Range Directorate, Ballistic Missile Defense Systems Command, Huntsville, Alabama.

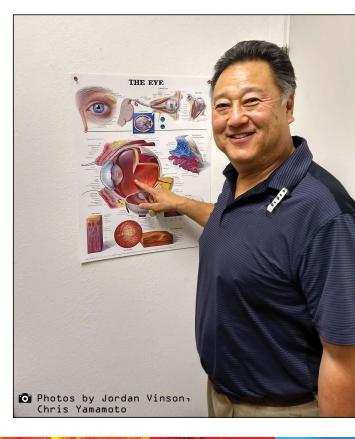




LEFT, RIGHT: Kwajalein's youngsters kick off the summer at FMWR's School's Out Pool's In pool party last week at the Family Pool.



LEFT: A Kwaj resident with apparent super-human vision gets his eyes checked at Dr. Chris Yamamoto's eye clinic last week. RIGHT: Yamamoto, a long-time visiting eye doctor to Kwajalein, smiles for the camera during a long day of seeing patients from Roi and Kwaj.





USAG-KA FMWR EVENTS IS ON FACEBOOK

Follow U.S. Army Garrison-Kwajalein Atoll FMWR on Facebook to receive the latest updates on class schedules, community athletics, rentals, registration, events and fun activities. www.facebook.com/usagkafmwr

Keeping with tradition, U.S. Army Garrison Kwajalein Atoll Commander Col. James DeOre (the oldest active duty Soldier on the garrison) and Capt. Craig Behler (the youngest active duty Soldier on the garrison) cut a special birthday cake together in celebration of the Army's 243rd birthday. Army personnel gathered for the occasion in the command conference room, June 14, 2018.





A bright morning moon is seen off the port side of a catamaran on the way to Meck Island last month.

MUNITY CLASSIF

HELP WANTED

To research and apply for government employment opportunities on U.S. Army Garrison-Kwajalein Atoll and worldwide, visit www. usajobs.gov.

KFS, LLC has an opening for a Staff Environmental Technician (Remediation) on USAG-KA. Please forward email or resume to vrabelc@kfs-llc.com.

FMWR is hiring Umpires, Referees, Scorekeepers and Timekeepers. All interested candidates may send their resumes to frankie.bradshaw@dyn-intl.com.

FMWR is hiring Lifeguards. All lifeguard applicants should send their resumes to Clifford.prvor@ dyn-intl.com.

COMMUNITY NOTICE

Kwajalein Residents, FMWR and DPW will be making some improvements to the Tennis Courts from 19 - 27 June 18. The current carpet will be removed and replaced with a new surface. We apologize for the inconvenience.

Facility Manager Evacuation Coordinator Training convenes the first and third Wednesday of each month at 10 am. in Fire Station Training Room, Bldg. 904. Classes are limited to 15 people. Call 5-3364 to sign up for class.

Kwajalein Bowling Center hours of operation are Saturdays and Sundays, 1-9 p.m., and Monday

from noon to 9 p.m.

E-wareness: Petroleum Product Storage Tank Management. Each department owner of petroleum product storage tanks is required to:

- Designate trained storage tank custodians.
- Conduct weekly storage tank inspections.
- Conduct annual storage tank inspections.
- Document storage tank inspection deficiencies and perform associated corrective actions or contact the Service Desk (5-3550) for support

Owner eo ilo department eo an petroleum product storage tank ko ej aikuj:

- Kolaajrake rijerbal ro ekkar nan tank ko remaron jerbal ie
- Etale storage tank ko aolep week.
- Komman ien nan jeek e storage tank ko aolep yio.
- Jeiki aolep jorren im likjab ko rar walok im pikwot kilen jerbale jorren ko. Ne ejab, kir lok Service Desk ilo

New Residential Internet users must sign-up and pick-up a modem at Building 702. Please call the DynCorp Help Desk with questions at 5-9000.

Championship Swimmers in Training! Kwajalein's champion team swimmers will use the adult pool for workouts a few days per week in preparation for

the Oceania Championships June 23 under supervision by trained FINA coaches. Workout times are: Tuesdays and Thursdays, 7-8:30 p.m.; Saturdays, 6-7:30 p.m.: and Mondays, 7:30-9 a.m. Adults are encouraged to swim at their regular time.

Amnesty Boxes. Anyone in possession of ammunition or pyrotechnics, please deposit into one of the designated amnesty boxes located on Kwajalein or Roi at the Kwaj Small Boat Marina, Kwaj Air Terminal (Bldg. 902) and Roi Air Terminal. If items are too large in size/quantity or if you have any safety concerns notify EOD at 5-1433/1550 to arrange for collection. Do not leave items outside of box. These boxes are not UXO collection points. For UXO, notify EOD... DO NOT TOUCH!

Shoreline cleanup operations on south end of Kwajalein will impact pet cemetery area in the coming weeks. Resi-dents with pet monument markers are encouraged to retrieve those items at this time.

KWAJALEIN MOVIES

Date: Saturday, 16 June 2018 Time: 1930 Location: Yuk Theater Movie: Pacific Rim: Uprising Rating: PG-13

Date: Sunday, 17 June 2018 Time: 1930 Location: Yuk Theater Movie: Super Troopers 2 Rating: R

Date: Monday, 18 June 2018 Time: 1930 Location: Yuk Theater Movie: 7 Days in Entebbe Rating: PG-13

ROI NAMUR MOVIES

Date: Saturday, 16 June 2018 Time: 1930 Location: Tradewinds Theater Movie: Tomb Raider Rating: PG-13

Date: Sunday, 17 June 2018 Time: 1930 Location: Tradewinds Theater Movie: Thoroughbreds Rating: R

Remember the 3 Rs: Recognize an item as possible Unexploded Ordnance (UXO); Retreat from the area of the UXO Report suspected UXO immediately by notifying EOD (5-1433) or CPS (5-4445). Provide the following information: Location (building #, GPS, landmarks.). Size (compared to common items - football, scuba cylinder) Treat UXO like you would treat dangerous sea creatures. Look but do not touch.

DRONES BANNED N USAG-KA

DOD has updated its directives related to Unmanned Aerial Systems (aka UAS, UAVs, and drones). Effective immediately, use of commercially and privately purchased UAS is prohibited on government installations whether for official, unofficial, or hobbyist use. Please direct questions to 5-2140.

LUNCH

Sunday **BBQ** chicken Roast pork loin Rice pilaf

DINNER

Sunday Pork adobo Hamburger yakisoba Brown rice

Monday Yankee pot roast Lemon baked fish Corn O'Brien

Braised beef cubes

Baked chicken

Basmati rice

Tuesday Orange chicken Beef & broccoli Veggie lo mein

Tuesday Oven glow potatoes

Chinese 5 spice chicken Shrimp alfredo

Wednesday Fried catfish Mac & cheese Collard greens

Captain Louis S. Zamperini Cafeteria

Wednesday Chicken broccoli alfredo Red beans and rice Corn bread

Thursday Roasted pork Lemon baked salmon Brown rice

Thursday Salsbury steak Pork adobo Mongolian Bar

Friday Chicken fajitas Refried beans Spanish rice

Friday Cantonese spare ribs Baked trout Calico cabbage

June 23 Herbed cornish hens

***MENU CURRENT AS OF JUNE 15**

Swedish meatballs Mixed veggies

June 23 Grilled ribeye steaks Fried shrimp Assorted breads

Saturday, June 16, 2018 / Volume 59 Number 24

Monday

The Kwajalein Hourglass

NEEKLY WEATHER LOOKOUT RTS WEATHER STATION STAFF

WEATHER DISCUSSION: The Inter Tropical Convergence Zone will be stretched across our region for much of this upcoming week. Expecting cloudiness and periods of shower activities. Winds will generally be moderate from 7-12 knots. Localized wind gusts from storm outflow and some lightning are possible this upcoming week. Expecting above average precipitation for this forecast period (again).

The 3-month precipitation forecast for June, July, and August is continuation of above average precipitation amounts. We are currently 278% above normal since the start of the year. The Climate Prediction Center has issued an El Nino Watch for the Pacific Basin. If you haven't notice more exposure of the reef, sea levels are down about 9" in the past 60 days. This is related to changing from La Nina to El Nino conditions. Kwaj is typically wet going into an El Nino (like now), but then in springtime we tend to have below average rainfall. El Nino is also when we have best chances of seeing tropical storm activity in our area during the months of September, October, and November.

SATURDAY/SUNDAY/MONDAY FORECAST: Scattered showers Saturday and Sunday, widely scattered showers Monday. Winds ENE-ESE at 7-13 kts. For more details at specific times, please call the duty forecaster at 5-3347.

				O E
	SUNRISE SUNSET	MOONRISE MOONSET	HIGH TIDE	LOW TIDE
SUNDAY	6:31 a.m.	9:43 a.m.	6:30 a.m. 4.8'	12:06 a.m0.4
	7:09 p.m.	10:34 p.m.	7:03 p.m. 3.4'	1:02 p.m0.5'
terreterreter g	6:31 a.m.	10:43 a.m.	7:17 a.m. 4.4	12:52 a.m0.0
	7:09 p.m.	11:28 p.m.	7:57 p.m. 3.1'	1:53 p.m0.2'
TUESDAY	6:31 a.m.	11:40 a.m.	8:10 a.m. 3.9'	1:45 a.m. 0.4'
	7:09 p.m.		9:00 p.m. 2.9'	2:49 p.m. 0.2'
WEDNESDAY	6:32 a.m.	12:34 p.m.	9:12 a.m. 3.5'	2:48 a.m. 0.8'
	7:10 p.m.	12:17 a.m.	10:17 p.m. 2.8'	3:55 p.m. 0.4'
THURSDAY	6:32 a.m.	1:26 p.m.	10:27 a.m. 3,1'	4:11 a.m. 1.0'
	7:10 p.m.	1:04 a.m.	11:41 p.m. 2.9'	5:08 p.m. 0.6'
	6:32 a.m.	2:16 p.m.	11:51 a.m. 2.9'	5:47 a.m. 1.1'
	7:10 p.m.	1:48 a.m.		6:18 p.m. 0.6'
JUNE 23	6:32 a m	3:04 p.m.	12:53 a.m. 3.2'	7-09 a.m. 0.9'
		2:32 a.m.	1:04 p.m. 2.9'	7:16 p.m. 0.5'

Effective June 18, 2018, United Airlines will implement several new policies and customer requirements for pet air transportation to improve the safety of the travel experience. Pet owners can find the new pet standards that will become effective 18 June 2018 at this site: https://www.united.com/ual/en/ us/fly/travel/animals/petsafe.html#petsafetable.

Until this date, United Airlines has granted our area (Kwajalein) an Exception to Policy. Animals may have to be accompanied by their owners. For details, contact Terrance Dominique, General Manager, United Airlines (Kwajalein office) by email: terrance.dominique@united.com.

PLEASE NOTE:

* There will be NO exception to policy allowing Contract personnel to travel on military ATI flights with pets. Commercial flight arrangements must be made.

* United Airlines will NOT accept reservations for the listed brachycephalic (short- or snub-nosed) dogs and cats and strong-jawed dog breeds, out of concern for higher adverse health risks.

* United Airlines will accept pre-reservations between 30 days in advance (maximum) and five (5) days (minimum) prior to travel for customers traveling with their pets and/or for pets traveling alone

* United Airlines will require the customer to provide PetSafe with several pieces of information (e.g. documents, photos, crate information, etc.) before any reservation is confirmed.

* United will not accept crates taller than 30 inches, including the 700 series crates

U.S. Army Garrison Kwajalein Atoll understands that all pets are valued members of the family. Please plan accordingly and take responsibility for your animals to avoid any unfortunate situations. For additional travel options, pet owners are encouraged to check with other locally operating commercial airlines including Air Marshall Islands and Nauru Airlines.

LUNCH

Sunday Roast turkey Mashed potatoes Corn bread

DINNER

Sunday Pizza Sweet & sour pork Brown rice

Monday Swiss steak jardinere Potatoes au gratin Seasoned cauliflower

Monday

Cream of mushroom soup Taco Tuesday Yankee pot roast Lasagna

Tuesday Orange chicken Pork chops

Spinach

Tuesday

Parmesan baked fish

Yellow squash

Minestrone soup **BBQ** chicken Lyonnaise potatoes

Wednesday

Wednesday

Steak Niaht Chicken gumbo soup Corn bread

Café Roi

Thursday
French onion soup
Hamburger steak
Steamed broccoli

Friday Chicken fajitas Spanish corn Chicken tortilla soup

Thursday Fried Chicken Night Pork adobo Collard areens

Friday

Wing Bar

Meatloaf

Steamed spinach

June 23 Swedish meatballs Steamed rie Sweet peas

***MENU CURRENT AS OF JUNE 15**

June 23 Hamburger Bar Shrimp curry Yellow squash

The Kwajalein Hourglass

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THE ARMY VISION

The United States Army is the most lethal and capable ground combat force in history. It has proven this in multiple conflicts, across a broad spectrum of operations, in various locations around the world, defending the Nation and serving the American people well for over 240 years. The key to this success has been the skill and grit of the American Soldier, the quality of its Leaders, the superiority of its equipment, and the ability of the Army - Regular, National Guard, and Reserve - to adapt to and dominate a complex and continuously changing environment as a member of the Joint Force.

As we look ahead, near-peer competitors such as China and Russia will increasingly challenge the United States and our allies in Europe, the Middle East, and the Indo-Pacific region. At the same time, we should expect these countries' arms, equipmont, and tactics to be used against us by others, including threats such as North Korea and Iran, failed states, and terrorist groups. Our adversaries' ambitions and the accelerating pace of technological change will create challenges and opportunities for the Army's battlefield superiority.

leanwhile, the many demands on the Nation's resources will put downward pressure on the defense budget in the future, forcing the Army to continue making difficult choices about how it spends scarce dollars to meet national objectives and compelling us to become ever more efficient. A continued commitment to strengthening our alliances and building partnerships will help offset these challenges.

The Army Mission—our purpose—remains constant: To deploy, fight, and win our Nation's wars by providing ready, prompt, and sustained land dominance by Army forces across the full spectrum of conflict as part of the Joint Force. The Army mission is vital to the Nation because we are a Service capable of defeating enemy ground forces and indefinitely seizing and controlling those things an adversary prizes most - its land, its resources, and its population.

Given the threats and challenges ahead, it is imperative the Army have a clear and coherent vision of where we want to be in the coming years so that we retain our overmatch against all potential adversaries and remain capable of accomplishing our Mission in the future. As such, the Army Vision-our future end state-ls as follows:

The Army of 2028 will be ready to deploy, fight, and win decisively against any adversary, anytime and anywhere, in a joint, multi-domain, high-intoneity conflict, while simultaneously deterring others and maintaining its ability to conduct irregular warfare. The Army will do this through the employment of modern manned and unmanned ground combat vehicles, aircraft, sustainment systems, and weapons, coupled with robust combined arms formations and tactics based on a modern warfighting doctrine and centered on exceptional Leaders and Soldiers of unmatched lethality.

To achieve our Vision, the Army must meet the following objectives in the coming years:

Man. Grow the Regular Army above 500,000 Soldiers, with associated growth in the National Guard and Army Reserve, by recruiting and retaining high quality, physically fit, mentally tough Soldiers who can deploy, fight, and win decisively on any future battlefield.

Organize. Ensure warfighting formations have sufficient infantry, armor, engineer, artillery, and air defense assets. Units from brigade through corps must also have the ability to conduct sustained ground and air Intelligence, Surveillance, and Reconnaissance; Electronic Warfare; and cyber operations to shape the battlefield across all domains. Aviation, additional combat support, and robust logistical support must be readily available to units.

 <u>Train.</u> Focus training on high-intensity conflict, with emphasis on operating in dense urban terrain, electronically degraded environments, and under constant surveillance. Training must be tough, realistic, iterative, and dynamic. Continuous movement, battlefield innovation, and leverage of combined arms maneuver with the Joint Force, allies, and partners must be its hallmarks. This training will require rapid expansion of our synthetic training environments and deeper distribution of simulations capabilities down to the company level to significantly enhance Soldier and team ethality.

Equip. Modernize the force by first reforming the current acquisition system and unifying the modernization enterprise under a single command to focus the Army's efforts on delivering the weapons, combat vehicles, sustainment systems, and equipment that Soldiers need when they need This modernization includes experimenting with and developing autonomous systems, artificial intelligence, and robotics to make our Soldiers more effective and our units less logistically dependent.

Lead. Develop smart, thoughtful, and innovative leaders of character who are comfortable with complexity and capable of operating from the tactical to the strategic level. We will build a new talent management-based personnel system that leverages the knowledge, skills, behaviors, and preferences of its officers and noncommissioned officers. This system, when coupled with more flexible career models, will enable the Army to better attract, identify, develop, and place these leaders to optimize outcomes for all.

To achieve and sustain these objectives given the uncertainty of future budgets, the Army must continually assess everything we do, identifying lower value activities to discontinue and ways to improve what we must do, in order to free up time, money, and manpower for our top priorities. Trusting and empowering subordinate leaders will facilitate both reform and greater performance.

In all these efforts, we will ensure that our Soldiers, civilian workforce, and their Families enjoy the professional opportunities and quality of life they deserve. From the top down we must also remain committed to the Army Values. The Army is at its best when we work and fight as one team, and our Army Values, coupled with our Warrior Ethos, will guide and serve us well as we face the challenges ahead.

Since 1775, the United States Army has proven itself absolutely vital to protecting the American people, safeguarding the Nation, and advancing our interests abroad. This fact remains true today. Our ability to do so will be even more critical in the future as threats continue to emerge and evolve, becoming ever more dangerous and more complex. To remain ready to accomplish our Mission of fighting and winning the Nation's wars, the Army must fulfill the future Army Vision outlined herein. We are confident that with the right leadership, the proper focus, sufficient resources, and sustained effort the U.S. Army will achieve our Vision, remain the world's premier fighting force, and serve the Nation well for decades to come.

Mark A. Millev General, United States Army Chief of Staff

Mark T. Esper Secretary of the Army



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U.S.ARMY



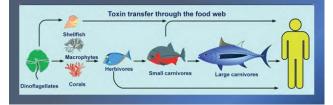
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Environmental Public Announcement: Ciguatera

Dredging and Filling Operations will commence at Emon Beach to remove exposed bedrock on June 21.

Shoreline construction activity can increase the potential for Ciguatera poisoning in fish, and residents are advised to avoid consuming fish from this area.

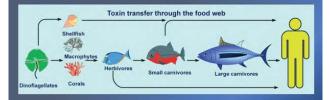
Questions? Call 5-1134.



Environmental Public Announcement: Ciguatera

Kojjela nan Aolep: Enaan in kakkol nan aolep rijerbal im ro rej jokwe ion Kwajalein in bwe enaj wor Dredging im Filling Operation ko rej komane ilo Emon Beach enaj jino jen June 21 raan

Jerbal in construction in emaron komane bwe naninmei in Ciguatera ilo eek ko ren maron baijin, im jej karon jukijuk in bed in bwe emaron wor eek ko jeramon kadrok jeni ilo area in. Call e 5-1134 non melele ko releplak.



The Kwajalein Hourglass