



U.S. Army Garrison-Kwajalein Atoll Commander Col. James DeOre, right, and Command Sgt. Maj. Kenyatta Gaskins, left, pose for a photo with the Outstanding Volunteer of the Year, Kwajalein Girl Scout Troop 801, at the USAG-KA Volunteer Appreciation Ceremony May 30 at the Corlett Recreation Center.

USAG-KA THANKS VOLUNTEERS

NEWS /JESSICA DAMBRUCH

Small deeds and acts of service add up in a big way on U.S. Army Garrison-Kwajalein Atoll. The USAG-KA command team, Col. James DeOre and Command Sgt. Maj. Kenyatta Gaskins, expressed the garrison's appreciation for Kwajalein's spirit of volunteerism at the second annual USAG-KA Volunteer Appreciation Ceremony May 30 at the Corlett Recreation Center.

Sponsored by Family and Morale, Welfare and Recreation, the event celebrated the more than 125 volunteers in garrison private organizations who have registered with the island's volunteer program.

During his presentation, DeOre made special recognition for the most outstanding volunteer of 2019: Kwajalein Girl Scout Troop 801. He thanked them for their many hours of labor and enthusiasm to help others.

"My wife and I were talking about the

Girl Scouts and all of their activities over the year," said DeOre in his address. "I cannot recall an event that has happened of any importance on the island where we didn't see our scouts there."

Throughout the year, the scouts have attended and assisted at garrison command functions and other private organization events as island science communicators. During the annual Kwajalein Scuba Club safety meetings and the Kwajalein Art Guild Spring Arts and Crafts Fair they presented information on reefsafe sunscreen to the community.

"They have communicated the importance of changing the chemicals we use for sunscreens," said DeOre. "It is very easy to switch to a different type of mineral-based sunscreen that is just as effective and has no effect on coral—and they are communicating that to our community."

DeOre and troop registrar Carrie Aljure presented the scouts with certifi-

cates of appreciation before joining the volunteers at reception of appetizers and dessert.

The sheer number of volunteers and hours of service provided to the garrison even impacted the event coordinators in a big way.

"To be able to see firsthand how many people in the community volunteer, and how much of their time they give, is heartwarming," said Samuel Whitley, MWR installation management specialist. "We appreciate all of those volunteers who worked with us through the changes of tracking volunteers' hours. Thank you again to everyone who gave of their time to make Kwajalein Atoll a better place."

Volunteering on Kwajalein is a rewarding way to give back to the community. Are you interested in teaming up with the biggest group of helpers on island? Contact Charity Zimmerman at 5-3400 with questions and to pick up a garrison volunteer registration form.

THE KWAJALEIN HOURGLASS

The Kwajalein Hourglass is named for the insignia of the U.S. Army's 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.

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1) Matt Gerber delivers his keynote address at the 2019 Baccalaureate Ceremony. 2) Love Diaz, left, performs with the Ukulelerz. 3) Command Sgt. Maj. Kenyatta Gaskins, left, gives Angeline Kelley a chaplain's coin.

BLESSINGS FOR GRADS AT BACCALAUREATE

BY JESSICA DAMBRUCH

The Kwajalein High School Class of 2019 received island-style blessings at the Baccalaureate Ceremony June 2 at the Island Memorial Chapel.

The annual faith-based ceremony occurs a week before the academic graduation ceremony at Kwajalein High School. It is an opportunity for family members and graduates to reflect in a meaningful way on the path the students will leave behind in favor of horizons ahead.

Over the years Kwajalein's baccalaureate has grown into a truly unique event that interweaves traditional celebratory and faith-based elements with homegrown traditions.

Chaplain Brian Conner presented the invocation to a standing-room only chapel packed with family members and friends. One by one, as underclassmen read the graduates' personal statements aloud, the 14 members of the Class of 2019 marched down the center aisle upon a specially woven palm mat runner laced with fresh leaves and flowers. The late '90s tune of "Bittersweet Symphony played in the background: "Well, it's a bittersweet symphony, that's life. Try to make ends meet, try to find somebody, then you die."

The class joined together onstage together in matching aloha shirts and gowns, some wearing leis and Marshallese *wuuts*, or crowns made of flowers for a ceremony of music, prayer and inspirational speaking. Much like a traditional church service, the congregation sang a praise and worship song together. They were treated with music by the Ebeye Ukulelerz and a slow, cer-

emonial hula performed by Pania Alfred, Graeson Cossey and Rickiana Andrew.

Speaking from a faith-based perspective, the keynote speakers, Matt Gerber and Alex Coleman, described the rewards and challenges of a future far from the comforts of home using familiar symbols of boats, water and storms—the things the Apostle Peter encountered as Jesus called him out of his boat to walk on water.

"You might have a teacher who doesn't know you," said Gerber. "You might fail a test or struggle with a class. There's going to be struggles. But when Peter steps out onto the water, Jesus doesn't immediately calm the waters. He just expects Peter to keep looking at Him, trusting Him and carrying on. He never promises smooth sailing. But what he does promise is to be with him every step of the way and to not let you sink if you put your faith hope and identity in Him."

Coleman directly referenced the students' trepidation in his remarks.

"'Kwaj is the only spot I know," he said. "'It's what I'm comfortable with.' You guys are all about to leave the boat. You're going to have to leave the boat. ... Staying in the boat will not change you. Do you know who else was in the boat with Peter? Neither do I. No one knows their story. Because Peter was the only one who had the courage to get out of the boat. And now Peter has a story to tell."

Coleman ended his address with a prayer authored by English navigator Sir Francis Drake entitled, "Disturb Us, Lord:"

Disturb us, Lord, to dare more boldly, To venture on wider seas

Where storms will show Your mastery;

Where losing sight of land, We shall find the stars. We ask You to push back The horizons of our hopes; And to push into the future In strength, courage, hope, and love.

For the graduates and their families, the challenges ahead were all the more cause for celebration before the graduation next

The students accepted chaplain coins from USAG-KA Command Sgt. Maj. Kenyatta Gaskins. As the Ukulelerz played a last island tune, Carlon Zackhras grabbed his senior jersey from the back of his seat and led the way as the seniors marched back down the aisle into the night. The congregation met them all in a receiving line, and personally wished them well before everyone—family members, teachers, graduates, friends and coworkers—enjoyed dinner together under the stars, knowing it might be many months before they could all share a meal together again.

It is indeed bittersweet and beautiful. It's Kwajalein.





The Class of 2032 sings a song to thank family members and teachers at the 2019 Pre-K Graduation Ceremony at the Kwajalein Jr.-Sr. High School Multi-purpose Room May 31.

BY JESSICA DAMBRUCH

For parents and teachers attending graduation at the Kwajalein Jr.-Sr. High School Multi-Purpose Room May 31, the scene was familiar. Family members snapped pictures as their students marched past in cap and gown regalia to seats of honor at the front of the room.

For the graduates, the Class of 2032, this ceremony marked a major milestone and the first, big step into public education.

Child Development Center Director Chelsea Weber and center staff welcomed everyone gathered at the pre-K ceremony. She thanked the parents, teachers and families who helped nurture and raise each of the children.

"We are excited to see what the future holds for them," said Weber.

Like all graduates, the Class of 2032 fidgeted through the ceremony, itching for the future that was nearly within their grasp—or it might have been for one of the colorful hot air balloon decorations poised for liftoff all around the room.

Following Weber's opening remarks, the graduates walked across the stage to much applause and accepted certificates from Weber and Lead Child Youth Program Assistant Jacklyn Crowder before watching a retrospective slideshow of photos documenting their progress through classes and learning experiences throughout the year. The presentation drew tears and laughs from the audience. In one segment, each child posed for a photo with a sign indicating their future career choice. Signs read: ballerina, cashier, policeman and sanitation worker.

While their parents marveled at how much they'd grown in just one year, the graduates shrieked with laughter at the photo-evidence of their younger selves.

Together, the young students took the stage a second time to sing a song thanking everyone who had helped them, as they continued on their way through public school. Next, they marched offstage to a round of hugs, high-fives and cheers.

Following the ceremony, family members and graduates took photos at hot air balloon-themed photo booth areas and enjoyed cotton candy, cake and punch.

"When we were trying to decorate or make up a theme or ideas, we thought that kids would love things that are fun, bright and colorful," said Crowder. "Throughout the year, kids are such an inspiration for us. They show us how to be kids again, to enjoy and have fun every single day we are together. We think hot air balloons are a good representation of these kids."

One parent reflected on how nice it was to watch the video and to see how far the children had come as a young child tugged at her arm, asking where the cotton candy was.

Weber spoke of how she enjoys her work with the island's children. "It's awesome," she said. "I've been here for almost two years and so I saw many of these kids when they were really little. It's so fun to see them get bigger and become more of themselves. They're willing to dance down the aisle and scream into the microphone."

Crowder agreed. "The most meaningful part for me is seeing how they grow into young individuals and seeing their different character as they grow."



Jacklyn Crowder, left, and Chelsea Weber pose for a photo at a hot air balloon photobooth at the Pre-K Graduation Ceremony May 31.

SURFWAY SURVEY HELPS SHOPPERS

NEWS /JESSICA DAMBRUCH

The results of a second customer grocery survey are in, as the U.S. Army Garrison-Kwajalein Atoll Directorate of Logistics continues to address customer needs at Kwajalein's Surfway grocery store.

USAG-KA Food Service Officer Chief Warrant Officer 2 Jarell Smith and Surfway Manager Phillip Kenley met with customers at the store May 24 to discuss top shopping items and to answer questions about stocking and ordering.

"The second survey went very well," Smith says. "We met with 14 customers who listed items ranging from pita bread to eggnog. The majority of the comments were positive, and participants were quite satisfied with the progress that has been made since the last survey was conducted on 22 March."

Smith would like the garrison community to know that its needs are recognized, and its feedback is appreciated.

Surfway customers are encouraged to meet with Kenley to share ideas and questions, and to continue depositing lists of items for regular and seasonal cooking with the store via the customer comments box found in the Surfway checkout area.

"The goal is to provide the best quality service to our island community," says Smith.



Karen Read, left, and Grant Day share shopping lists and comments with Chief Warrant Officer 2 Jarell Smith at Surfway May 24.





U.S. Army Garrison-Kwajalein Atoll Attorney Benjamin Clancy joins George Seitz Elementary School students for an afternoon of discussion about geopolitics and the Asia-Pacific Center for Security Studies May 25.

USAG-KA LEGAL VISITS ELEMENTARY SCHOOL

NEWS / JESSICA DAMBRICI

Students at George Seitz Elementary School participated in a May 25 question and answer session with U.S. Army Garrison-Kwajalein Atoll Attorney Benjamin Clancy about his time spent as a fellow at the Asia-Pacific Center for Security Studies on a visit to Misti French's fifth grade class.

Clancy shared stories, photos, artifacts and memorobilia about the lasting friendships he had at the Center while serving his more than 28 years of service in the U.S. Navy Judge Advocate

General Corps. He described the center and its missions to foster friendly, inclusive problem-solving dialogue between fellows from the U.S. and the Asia-Pacific region.

"Whenever I travel, I get together with fellows I met at the center," said Clancy. "We still talk over how we can find solutions."

The students, who will continue to study issues related to immigration and transnational identity in a geopolitical context posed Clancy tough questions that spanned world politics dating back four decades.

"How do we help nations overcome conflicts, like between the U.S. and Vietnam?" asked one student.

"What do you do at the Center to overcome language barriers?"

"How do you handle working with people from countries with human rights violations?" asked another.

"I really enjoy talking with you folks and I am impressed by your questions," said Clancy, who fielded them all. He said he will be sure to visit as the class continues its indepenent and group research projects for the duration of the spring semester.

INCINERATOR OVERHAUL CONTINUES

RY IFSSICA DAMBRIICI

The shell of the island incinerator sits in a quiet, cleared lot at Kwajalein's industrial west end surrounded by sorted heaps of metal, scrap and trash.

Blackened by soot after years of use, the structure is undergoing renovations that, for project manager Jeffrey Satterfield, mark the beginning of a new era for how U.S. Army Garrison-Kwajalein Atoll handles thousands of pounds of nonrecyclable trash and household waste.

"This project shows physical movement to an end result," said Satterfield. "When it's done, the garrison will see better stability. The incinerator won't come down for maintenance like it has in the past. With proper maintenance procedures set from the start, the incinerator can give the garrison a system and work location for waste management that will be here for a long time."

After years of maintenance, patching and occasional breakdowns signaled a need for an upgrade, the overhaul began April 9.

"The project has a lot of 'moving parts' and a tight timeline," said LOG-CAP Environmental Services Program Director Frank Best. "It is now well underway with the demolition of the old unit and the new chambers ready to lift into place."

Satterfield, a logistics and transportation subject matter expert, joined the project to oversee the construction process and coordination of multiple departments to get the job done. It's not Satterfield's first big job. In the past he has worked on special construction projects in Afghanistan, where he spent the last five years as the director of logistics and transportation.

In designing the renovation and demolition of the incinerator, Satterfield first made his assessment using photos before arriving on Kwajalein to assume charge of construction operations.

"It appeared very unsound," Satter-field said of the structure in the photos. What he could not determine from the photos was just exactly how much the thick-walled chambers, designed to contain and withstand hot temperatures, weighed individually. It was likely that years of patching and maintenance made the entire structure heavier than it appeared. Satterfield determined the chambers would be removed in piec-

es, wall by wall, by two rough terrain crane operators. The short-body vehi-

cles would operate independently and take down the incinerator in sections. To do that sort of heavy lifting requires constant and safe communication.

Satterfield and the operators use a standardized sign language

for heavy equipment while they lifted and maneuvered the old masonry.

"It's just communication," said Satterfield. "It's like getting people to under-

stand sign language, with each hand signing to a different operator."

Careful lifting was nothing the experienced team couldn't handle. The surprise came in numbers. In terms of weight alone,

the incinerator would prove to be one of Satterfield's heaviest jobs.



"It's like getting people to understand sign language, with each hand signing to a

-Jeffrey Satterfield

different operator.

Courtesy of Jeffrey Satterfield

Two cranes lift a new incinerator chamber into place at Kwajalein Solid Waste Management in early May as part of a Department of Public Works overhaul construction project.





Photos courtesy of Jeffrey Satterfield

1-2) A crane lifts a incinerator chamber May 3 at Kwajalein Solid Waste Management.

"The average car weighs about a ton," said Satterfield. "Each chamber wall we installed weighs about 35 tons, or about 35 cars. The ones we took apart had years of repairs in extra steel plating and concrete. They weighed anywhere from 52 to 53 tons." Altogether, the team has reoriented 450 tons of material.

In the past weeks, the incinerator site has been a hub of activity as members of multiple teams from around the island such as plumbing, the metal shop, masonry, heavy equipment and solid waste management have come to the site to lend a hand. Satterfield says working with the employees is an enjoyable experience.

"We're getting a great, fluid synergy from multiple departments," said Satterfield. "Also, most of the crewmates are Marshallese employees. Critical lifting like this is something many have not done before. They are all receptive to the training and material we bring to them and are being cautious and safe in their work place. They are doing great.

"At the end of the day, my primary goal is that everyone goes home in one piece."

Best agrees: "The Solid Waste crew is doing an excellent job of maintaining a temporary landfill to hold our never-ending trash stream until our new system is fully operational," says Best of the team operation.

The SWM team is on site to manage materials earmarked for the incinerator. They are discarded at a heap affectionately named "Mount Trash." That heap is growing. Solid Waste Management Supervisor Tom Hutchinson encourages the community to continue mindful recycling.

"We want to thank those who do recycle," Hutchinson said. "It makes a big difference when residents in the community segregate their recyclable waste before taking out the trash. The accumulated waste is increased by people who are mixing recyclable materials like aluminum and glass in with their household waste."

Check out last week's Kwajalein Hourglass for more news about upcoming construction projects around U.S. Army Garrison-Kwajalein Atoll.



Friendly Reminders for Recycling

Separate Your Solids. The Solid Waste Management Team asks that island residents segregate household trash and hazardous items from recyclable items, such as aluminum and glass. Please discard trash in the recycling and trash bins located around the island. For more information on where you can discard batteries and other specialized items, please contact DI Environmental at 5-1134. Doing your part keeps our island clean and keeps the SWM team safe on the job. Thank you!





1) Okeanos Captain Elme Juonran, left, and Carlon Zackhras discuss traditional Marshallese navigation at the beginning of the journey. 2) International Organization for Migration representative Sonia Tagoilelagi presents Kwajalein High School teacher Matt Gerber with a box of complimentary school supplies for his students.

OKEANOS VISITS MARSHALLS

BY JESSICA DAMBRUCH

Kwajalein High School student winners of the El Niño STEM Competition enjoyed a recent morning sail on the Okeanos Marshall Islands, a nine-ton sustainable energy canoe.

Their trip was a reward earned for their first-place tie in the competition, sponsored by the International Organization for Migration, an organization that promotes sustainable energy and climate change awareness initiatives around the globe

After taking an early ferry to Ebeye, science teachers Matt Gerber, Dan Laverty, and the students from Kwajalein boarded the Okeanos and prepared for a sail to Bigej. Many marveled at the construction of the 50-foot, environmentally friendly canoe, also called a vaka motu, built mainly out of natural materials and resembling 18th century renderings of traditional Pacific watercraft.

The Okeanos is also equipped with a water desalination kit and contains an engine powered by biofuel like coconut oil, and solar energy.

During the journey, engineering students checked out the manual navigation system and large solar panel mounted in the stern that draws solar energy used for powering electronics.

The craft is staffed by many residents of Ailinglaplap who have also trained with the team at Waan Aelõñ in Majel, or Canoes of the Marshall Islands, a sailing school based out of Majuro. One of them is Captain Elmi Juonran, who has worked

with the program for more than a year and a half.

"I'm happy to be the captain," said Juonran. "I hope students continue to come aboard to study and learn."

Peter Lanej, the watch captain, said he wouldn't trade a life at sea. He enjoys sailing and assisting students with learning, and most enjoys delivering food to various atolls as part of the vessel's extended humanitarian mission.

"The most fun is when we get to travel around and bring food to the Marshall Islands," he said.

During the three-hour trip, the Okeanos rounded Bigei long enough for the students to take a dip in the ocean before heading back to Ebeye. Along the way they asked questions about the ship, enjoyed the waves and experienced first-hand the power of travel by sustainable energy.

While the trip was fun, it was not without its teachable moments. During the journey, Juonran gave the students a crash course in Marshallese cultural navigation principals related to stick charts, or rebbilibs, and discussed the ship's mission to connect modern-day students with the cultures of the Pacific region.

Laverty, an avid sailor, examined the rigging and navigation gear.

"It's great that these opportunities are here for the kids to experience Pacific culture," he said. "And it's cool just to be on this awesome sailboat." He pointed out the Okeanos' second boom, lashed to a railing, and pulled engineering student Garrett Day aside. "What do you think those are for," he asked, pointing out two large levers embedded in the deck.

Day moved closer to examine the mechanism, part of a double skag, before reporting back.

Upon returning to the pier, IOM Senior Project Assistant Sonia Tagoilelagi presented Gerber with school supplies and gifts for the students. She hopes that understanding climate change will better equip the students for the future.

"With climate change happening, I'm hoping that the kids have learned a lot and can make a difference," said Tagoilelagi. "They are the future. It is best to share and teach our kids about what climate change is." She also hopes the contest will continue to foster partnerships and collaboration between young leaders to solve global environmental issues.

Gerber is pleased and hopes to continue a dialogue about relevant environmental issues with next year's students.

"As a science teacher it's really exciting to be able to put opportunities like this in front of our students," he said. "They're learning a lot about traditional sailing methods, developing such an appreciation for the ocean as well as how we can utilize it best."

Gerber appreciated the kids' enthusiasm for the boat and chance to learn about Marshallese culture.

"It's neat to see the kids walk around this boat, thinking about how people used to use the oceans and how they might be able to make a difference going forward" he said.













1) Okeanos Marshall Islands crewmates, Matt Gerber and Kwajalein High School marine science and engineering students pose for a photo. 2) Okeanos Captain Elme Juonran. 3-4) Manufactured in New Zealand, the Okeanos is decorated in tribal wood carvings. 5) Gerber and the students enjoy the view as the Okeanos sails near Big Bustard. 6) A crewmate works the heavy wooden ship's rudder.













U·S· Army photos by Jessica Dambruch

1) Now that's a mega mahi: Nick Yarnes, left, and Andrew Mack hold up a more than 40-pound whopper of a mahi-mahi caught this past weekend. 2) Kaya Sylvester makes her way to the receiving line after the 2019 Baccalaureate Ceremony June 2. 3) Island style: Palm fronds and graduation photos decorate the walls of the Religious Education Building at the baccalaureate reception. 4) The Ukulelerz pose for a photo. 5-6) The USO Performance Troupe performs at Emon Beach May 29.









PTSD AND HOPE FOR HEALING

PUBLIC NOTICE

Posttraumatic stress disorder is a mental health problem that some people develop after experiencing or witnessing a life-threatening event, like combat, a natural disaster, a car accident or sexual assault.

It's normal to have upsetting memories, feel on edge or have trouble sleeping after this type of event. At first, it may be hard to do normal daily activities, like going to work, school or spending time with people you care about, but most people start to feel better after a few weeks or months. If it's been longer than a few months and you're still having symptoms, you may have PTSD. For some people, PTSD symptoms may start later on, or they may come and go over time.

There are four types of PTSD symptoms, but they may not be exactly the same for everyone. Each person experiences symptoms in their own way.

- Reliving the event: Unwelcome memories about the trauma can come up at any time. They can feel very real and scary, as if the event is happening again. This is called a flashback. You may also have nightmares.
- Avoiding things that remind you of the event: You may try to avoid certain people or situations that remind you of the event. For example, someone who was assaulted on the bus might avoid taking public transportation. A combat Veteran may avoid crowded places like shopping malls because it feels dangerous to be around so many people.
- Having more negative thoughts and feelings than before: You may feel more negative than you did before the trauma. You might

be sad or numb and lose interest in things you used to enjoy, like spending time with friends. You may feel that the world is dangerous and you can't trust anyone. It may be hard for you to feel or express happiness, or other positive emotions.

Feeling on edge: It's common to feel jittery or "keyed up" — like it's hard to relax. This is called hyperarousal. You might have trouble sleeping or concentrating, or feel like you're always on the lookout for danger. You may suddenly get angry and irritable — and if someone surprises you, you might startle easily. You may also act in unhealthy ways, like smoking, abusing drugs and alcohol or driving aggressively.

It's common to think that PTSD symptoms will go away over time. This is

very unlikely, especially if the symptoms last longer than a year. Even if you feel like you can handle your symptoms now, they may get worse over time. Getting treatment can help keep PTSD from causing problems in your relationships, careers or education — so you can live the way you want to.

If you suspect you or someone you love may suffer from PTSD, take a free health questionnaire found at https://www.grnspace.com/print/pcl-5.pdf. Add up the totals and if you score between 33 - 80, please consider speaking with a physician or counselor to begin identifying options and receiving treatment for a healthier and more positive quality of life. The questionairre is not a dignostic tool. Only a licensed provider can identify PTSD.

For questions about PTSD or to speak with a healthcare practitioner at the Kwajalein Hospital, call 5-2223/2224.









Check out the official USAG-KA Facebook page for community updates and information. Remember, OPSEC is everyone's business. Visit https://www.facebook.com/USArmyKwajaleinAtoll/

NASA MISSION TO STUDY EARTH'S ATMOSPHERE BY FORMING ARTIFICIAL NIGHT-TIME CLOUDS OVER RMI

EXTERNAL REPORT

By Keith Kohler NASA Wallops Flight Facility

A NASA rocket mission to study disturbances in the upper atmosphere, which interfere with communication and technology systems, will form night-time white artificial clouds visible by residents of the Republic of the Marshall Islands during two rocket flights to occur between June 9 – 21, 2019.

This the second flight of the Waves and Instabilities from a Neutral Dynamo, or WINDY, mission. The mission this time is referred to as Too-WINDY—it's catchier than WINDY 2.

Too-WINDY will study a phenomenon that occurs in the ionosphere—a layer of charged particles in the upper atmosphere. Known as equatorial spread F, or ESF, these disturbances occur after sunset at latitudes near the equator in part of the ionosphere known as the F region. The disturbances can interfere with radio communication, navigation and imaging systems and pose a hazard to technology and society that depends on it.

The Too-WINDY mission consists of two NASA suborbital sounding rockets that will be launched five minutes apart in a window between 8 p.m. and 3.a.m. local time (4 a.m. and 1 p.m. EDT) June 9 - 21 from Roi-Namur. The Kwajalein Atoll in the Marshall Islands is near the magnetic equator, where post-sunset ionosphere storms are more intense, making the site an ideal location for these studies.

The first rocket launched, a two-stage 47-foot long Black Brant IX rocket, will carry and release both tri-methyl aluminum and lithium. The release of the lithium vapors is not visible to the naked-eye but can be viewed with the special cameras.

The TMA will form white artificial clouds that glow in the night sky. Scientists on the ground and from a NASA Langley Research Center aircraft will photograph the movement of these clouds to measure the winds and energetic particles that are in motion in the upper atmosphere. The clouds are expected to be visible for about 30 minutes.

The TMA is deployed between 50 and 112 miles altitude, while the lithium is deployed between 155 and 210 miles

altitude. Both substances, which are harmless after release from the experiment, move with the atmospheric winds and can therefore be used to determine the wind speeds and direction over the area where these ionosphere storms are occurring.

TMA reacts spontaneously on contact with oxygen to produce a pale white glow visible from the ground. For the Too-WINDY mission, sunlight reflected by the moon, will illuminate lithium producing an emission that can be detected with cameras equipped with narrow-band filters. Using moonlight allows the launches to occur later in the evening when the critical ESF conditions occur.

The second rocket, also a Black Brant IX, will be launched five minutes after the first rocket. The second rocket carries instruments to measure ionosphere densities and electric and magnetic fields present in these storms.

During WINDY, launched in September 2017, the second rocket payload did not obtain useful data. Improvements have been made to the payload's instruments to correct for the anomaly during the WINDY mission.

The ionosphere is defined as the layer of Earth's atmosphere that is ionized by solar and cosmic radiation. Ionization occurs when incoming energetic radiation strips electrons from atoms and molecules, creating temporarily charged particles. The nighttime ionosphere has two layers: E and F. Disturbances in the F layer, the layer studied by Too-WINDY, degrade radio and radar signals at magnetic latitudes. Predicting these disturbances ahead of time, could help improve the reliability of spaceborne and ground-based communication systems.

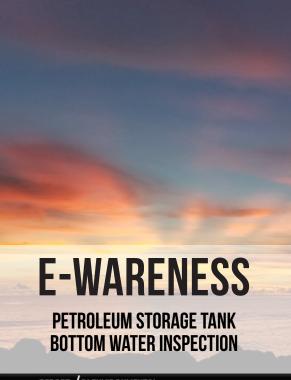
Too-WINDY attempts to answer questions about the origin of ESF by measuring how horizontal thermosphere winds influence the formation of ESF, as well as taking direct measurements of ionosphere densities and electric and magnetic fields inside these storms.

Data from sensors located on Kwajalein Atoll will play a role in the mission. ALTAIR is used to monitor the state of Too-WINDY and is supported by researchers from Cornell University, in Ithaca, New York; Clemson University in Clemson, South Carolina; and Boston College in Chestnut Hill, Massachusetts.



One of the two Too-WINDY payloads is prepared for vibration testing at NASA's Wallops Flight Facility prior to shipment to the Marshall Islands.

NASA photo by Berit Bland



REPORT / DI ENVIRONMENTAL

Each department must inspect tanks annually for the presence of water using a gauge stick and water finding paste. Bottom water facts include:

- Bottom water degrades fuel, results in poor engine performance, fosters microbial growth, and accelerates corrosion.
- Removal of lead from gas and sulfur from diesel fuel has had the side effect of allowing microbial growth and corrosion to occur more rapidly.
- Accumulation of water is a common inspection "finding" at USAKA.

Department ko kajojo rej aikuj etale nien dren ko aolep yio im lale ewor ke gauge stick im watr finding paste ko. Enaan ko remmol ikijen tulal in nien dren ko:

- Dren eo itulal ej kakure fuel im injin ko, bareinwot karrek kij im komman elejo/corrosion.
- Am kojenolok lead ko jen kiaj (gas) ko im sulfer ko jen diesel ko ekomman menin an eddrek kin ko im laplok an komman elejo/corrosion.
- Juon wawein eo ekka an walok ion USKAKA ej jonan an walok dren ie.

E-Wareness is a weekly product of DI Environmental. If you have questions, please call DI Environmental at 5-1134. Elane elon am kajjitok, jouj im kurlok DI Environmental ilo 5-1134.

WHAT YOU NEED TO KNOW ABOUT THE KWAJALEIN HOURGLASS AND AFN ROLLER

PUBLIC NOTICE

Need to get a message out to the community? You have options! Read on for tips about sending announcements to *The Kwajalein Hourglass* and AFN roller channel.

The Kwajalein Hourglass

kwajaleinhourglass@dyn-intl.com *The Kwajalein Hourglass* is a digital publication distributed each week via the USAG-KA Facebook page. Announcements and event ads may be published in the Community Classifieds section. All content is reviewed by the USAG-KA public affairs officer. Submit content for publication by Wednesdays.

Hourglass Guidelines

The Kwajalein Hourglass runs quarter and half-page ads for on-island events. Please send your information as .jpg, .png or .ppt files (please, no .pdf files). Modest adjustments to style and spacing may be made to ads. If you need an ad adjusted (for example, there is a change in time or venue), please send a revised ad to kwajaleinhourglass@dyn-intl.com.

The AFN Roller Channel

Submissions for announcements, events, activities and PSAs to the televised AFN roller channel are welcome. The roller is updated at least twice per week, usually on Tuesday-Wednesdays and Saturdays. Priority messages appear on the roller on a more immediate basis. For more information on the roller please contact Jordan Vinson at 5-2114 or at kwajafnroller@dyn-intl.com

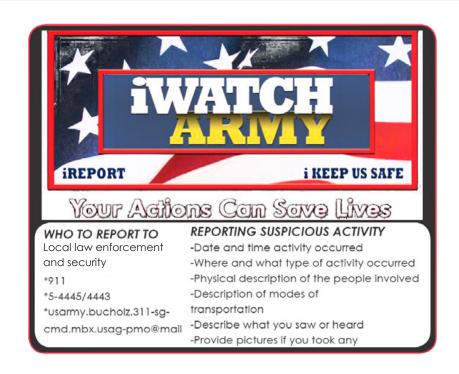
Formatting Tips for AFN Roller PowerPoint Messages

Slides should include a point of contact, relevant dates and a timeframe for the announcement. The following guidelines are recommended:

- •Use font size 24 or higher
- •Format the slide as a square
- •Keep your message simple
- •Simple graphics are welcome

Know the Army Reg?

AFN is unable to publish notices promoting for-profit activities or fundraising events without clearance from USAG-KA Command. For more information, please contact USAG-KA Public Affairs Officer Mike Brantley at 5-4848.





KWAJALEIN MOVIES

7:30 p.m. at the Yuk Theater

Saturday, June 8 A Quiet Place (PG-13) Rating: PG-13 91 min.

Sunday, June 9 Happy Death Day (PG-13) 104 min.

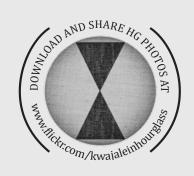
Monday, June 10 Happy Death Day 2U (PG-13) 100 min.

ROI-NAMUR MOVIES

7:30 p.m. at Tradewinds Theater

> Saturday, June 8 Greta (R) 98 min.

Sunday, June 9 Escape Room (PG-13) 99 min.



COMMUNITY CLASSIFIEDS

HELP WANTED

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

RGNext, LLC seeks qualified candidates to fill several open positions on Kwaj and Roi in engineering, technical and other areas. For more information and to apply, go to: www.rgnext.com.

DynCorp International (DI) is looking for qualified candidates to fill various positions. Current DI open positions on USAG-KA include education services, aviation and airfield operations, marine operations and public works among others. For more information and to apply, go to: www.dilogcap.com or contact your local HR representative.

COMMUNITY NOTICES

Alcoholics Anonymous. AA meets weekly on Tuesdays from 6:30-7:30 p.m. upstairs in the REB (Rm. 213). Contact Steve for more information (907-350-1193 or millea@alaskan.com).

Ongoing Smoking and Tobacco Cessation offered. Please call EAP at 5-5362 or make an appointment with a physician.

Payments for monthly telephone fees are accepted in Bldg. 702 on Kwajalein (Tue. - Sat., 1-5 p.m.), and the Finance Office at the Air Terminal on Roi-Namur during normal business hours. Payments are due the first of every month. For billing questions, please call 5-0843.

The Kwajalein Post Office hours of operation are: Monday: 12:30 to 5 p.m.; Tuesday and Thursday: Noon to 6 p.m.; Wednesday and Friday: 11 a.m. to 6 p.m. Please remember to display your badge at the window prior to package pick-up.

Keystone, Torch Club and the Pacific Teen Panel members are partnering to bring needed supplies to the hospital on Ebeye. Supplies can be dropped off at boxes located at the Namo Weto Youth Center, George Seitz Elementary School and Kwajalein Post Office. Supplies are by donation only and must

be ordered from off-island. For questions and a supply list, contact AJ Rawls at andrew.rawls@dyn-intl.com.

The last children's church meeting for the school year will be June 9 during the 11 a.m. Interdenomina-tional service on Kwajalein. Children's church will take a break for the summer and will resume in the fall.

Veterinary Services will visit Roi on June 11. At this time annual examinations, vaccinations, and all other routine services will be provided. Please call 5-2017 to schedule an appointment. The Kwajalein Vet Clinic will be closed June 11.

Chapel services will be held on Roi-Namur June 14 and 28. Catholic Mass will be held at 4:45 p.m. and the Interdenominational Service will be held at 6:30 p.m.

Fathers' Day Laser Tag. Sunday, June 16 from 1-4 p.m. at the Kwajalein Jr.-Sr. High School Multi-Purpose Room for ages K-12. This event is free!

Daily Mass at the Island Memorial Chapel is held Tuesday through Friday at 5:15 p.m. in the chapel of-fice.

Prayer quilt ministry meets every Tuesday at 1 p.m. in the REB. We could use your help designing and sewing quilts for those in need. You can come whenever it works for your schedule. For questions, contact Mary Ruiz (5-1195).

Facility Manager Evacuation Coordinator Training meets the on the first and third Wednesday of each month at 10 a.m. in Bldg. 904 in the Fire Station Training Room. Call 5-3364 to sign up for a class. There is a 15-person cap on classes.

The MIC Shop is looking for ladies and gentlemen to work one two-hour shift per month selling beautiful, one-of-a-kind handicrafts. Please contact Joanna Battise at joanna_correll@yahoo.com or 5-4122 for more info! Hours are Monday 12-2 p.m., Tuesday and Thursday 5-7 p.m., and Wednesday and Friday 9-11 a.m.



SCHOOL IS NEARLY OUT.

ARE YOU LOOKING OUT FOR EACH OTHER?

With the school year nearly over, more bike commuter traffic will occur during daytime hours. Let's enjoy the summer safely.

Please be extra vigilant of young bike riders and obey all roadsigns and speedlimits if you are the driver of a US-AG-KA rental vehicle or island construction vehicle.

If you are a biker, please do your part to obey all stop signs and to watch for moving vehicles in your neighborhood.



CLICK THE LOGO TO CATCH THE LATEST EPISODE OF THE KWAJ CURRENT ON CHANNEL 29-1.

WEATHER WATCH

L'EGAN I

RTS WEATHER STATION STAFF

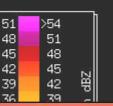
WEATHER DISCUSSION: A low-level circulation is located west of Pohnpei with a boundary between the easterly trade winds and southerly winds extending to the east of the circulation. The Intertropical Convergence Zone is not too active. Quick moving showers remain embedded in the trade winds bringing brief periods of rain.

Over next seven days, there will be little variation. The circulation west of Pohnpei is not expected to develop but should fade away. Trade winds will remain moderate around 15 knots, or possibly strengthen to 15-20 knots for Monday and Tuesday. Shower coverage will persist around 20 percent coverage resulting in near normal precipitation for the next week.

SATURDAY: Partly sunny with widely scattered showers (20 percent coverage). Winds ENE-E at 13-16 knots.

SUNDAY: Partly sunny with widely scattered showers (20 percent coverage). Winds ENE-E at 13-16 knots.

MONDAY: Partly sunny with isolated showers (10 percent coverage). Winds ENE-E at 15-18 knots.







8:23 a.m. 0.3'

8:24 p.m. -0.0'

9:10 a.m. -0.1'

9:03 p.m. -0.2'

N-MOON: SUNRISE MOONRISE HIGH TIDE LOW TIDE SUNSET MOONSET SUNDAY 6:30 a.m. 11:51 a.m. 8:20 a.m. 3.8' 1:50 a.m. 0.5' 7:07 p.m. 9:17 p.m. 2.7' 3:07 p.m. 0.3' 6:30 a.m. MONDAY 12:47 p.m. 9:32 a.m. 3.5' 3:02 a.m. 0.9' 7:07 p.m. 12:33 a.m. 10:46 p.m. 2.8' 4:23 p.m. 0.5' TUESDAY 6:30 a.m. 4:37 a.m. 1.0' 1:41 p.m. 10:58 a.m. 3.3' 7:07 p.m. 1:22 a.m. 5:41 p.m. 0.5' 6:30 a.m. 6:13 a.m. 0.9' WEDNESDAY 2:34 p.m. 12:10 a.m. 3.1' 2:08 a.m. 7:08 p.m. 12:20 p.m. 3.2' 6:47 p.m. 0.3' 6:30 a.m. 3:27 p.m. THURSDAY 1:15 a.m. 3.5' 7:27 a.m. 0.6' 7:08 p.m. 1:27 p.m. 3.3' 7:40 p.m. 0.1' 2:54 a.m.

4:19 p.m.

3:40 a.m.

5:13 p.m.

4:27 a.m.

2:05 a.m. 3.9'

2:21 p.m. 3.4'

2:48 a.m. 4.2'

3:06 p.m. 3.5'



FRIDAY

JUNE 15

6:30 a.m.

7:08 p.m.

6:31 a.m. 7:08 p.m.



Sexual Harassment/Assault Response and Prevention (SHARP) Contact Information

CW2 Jarell Smith
SHARP Victim Advocate

Work: 805 355 2139 Home: 805 355 2036

USAG-KA SHARP Pager:

805 355 3243/3242/3241/0100 USAG-KA SHARP VA

Local Help Line:

805 355 2758 DOD SAFE Helpline: 877 995 5247





UNITED CHECK-IN TIMES

Monday, United 155—3:30-4:45 p.m. Tuesday, United 154—11-11:30 a.m. Wednesday, United 155—2:30-3:45 p.m. Thursday, United 154—11:30 a.m.-Noon. Friday, United 155—3:30-4:45 p.m. Saturday, United 154—11-11:30 a.m.

ATI CHECK-IN TIMES

Early departures—7:45-8:15 a.m.; All other departures—8-8:30 a.m. *Check with your ATI flight representative to confirm check-in and flight departure times.

SHUTTLE BUS SERVICE

To set up a pick-up time for the shuttle please call: 5-3341 or 5-8294. If a representative cannot be reached, please leave a detailed message and your phone call will be returned as soon as possible. Shuttle services start one hour prior to check-in times for United flights and 0700 for the ATI.