

VOLUME 58 NUMBER 1

JANUARY 7, 2017

THE KWAJALEIN HOURGLASS



Residents enjoy evening strolls by North Point under a starry sky Wednesday.

 Jordan Vinson

THIS WEEK

HELICOPTER PILOTS

SPOT MISSING FISHING CREW - P 4

INVASIVE SPECIES

SLIPS ABOARD SHIP - P 2

ANDROMEDA GALAXY

IS PRIME TARGET IN NIGHT SKY - P 3

UNEXPECTED VISITOR ARRIVES IN SHIPMENT

HOURLASS REPORT

A dangerous stowaway apprehended by Kwajalein Pest Control technicians Dec. 29 would have posed a serious threat to life in the atoll, says Pest Control supervisor Billy Abston.

The stowaway, a large female cane toad, was discovered in the course of a routine cargo inspection by crewmembers of the barge supply ship Papa Mau. Eugene Laginbelik, certified technician, and trainee Alenso Tanaka responded to the crew's alert and removed the toad from the ship's hold. The toad has been detained until further notice and was not available for comment.

The toad's port of origin is unclear. Before arriving at Kwajalein, the Papa Mau made stops at Majuro, Kosrae and Guam, Transportation staff on Kwaj said. The cane toad, *Rhinella marina*, is nonnative to the Pacific but is abundant in South America and southern Texas. It played a key role in the 1930s insect management of sugar cane fields in Hawaii and Florida. Laboratories, zoos and animal importers have introduced the toads to new environments, according to the U.S. Department of Agriculture's National Invasive Species Information Center. Their proliferation means an ecological disruption, especially in Australia where they enjoy few natural enemies.

On Kwaj, a new toad nation would create an environmental

disturbance, to say the least.

Abston understands this. One toad might not seem like a big deal, but cane toads also ride animal watch lists as a species harmful to humans; like most toads, they secrete toxins. It is advised that humans avoid retrieving cane toads.

"It's really invasive. It's poisonous," Abston said Dec. 31. "It's a voracious insect eater. It would be competing [with] our birds, the insect eaters, plovers. If a dog should eat one, it would kill the dog."

The cane toad is not Pest Control's first unwelcome visitor. Nonnative ants, a brown tree snake, and in the 1990s, even a large iguana made its way to Kwajalein.

"The iguana got away," regrets Abston.

The tree snake, however, remains a fixture in the pest control office as a reminder of the ecological price that transpacific shipping might exact on the other side of the world.



U.S. Army photos by Jordan Vinson

Eugene Laginbelik, right, helped remove the palm-sized cane toad, pictured left, Dec. 29, from the hold of the shipping vessel Papa Mau that had been at port on Kwajalein.

THE KWAJALEIN HOURLASS

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.

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YOUR NIGHT SKY IN THE RMI



BY JORDAN VINSON

Did you know you can see another galaxy with the naked eye from the Marshall Islands during this time of the year? It's the Andromeda Galaxy, aka M31. At 2.5 million light years away it's the most distant object visible to the unaided eye, especially during times of little or no moonlight.

It lives in the constellation Andromeda, which sits high in the night sky at 8 p.m. this time of year. Look directly north (or more toward the west if it's a later time during the night) for the easy-to-spot constellation Cassiopeia, which looks like a semi-flattened "m." You can't miss Cassiopeia. Look further "upward" above Cassiopeia, and you'll find Andromeda. Its principal structure consists (mostly) of one long arc of five bright stars (and some dimmer ones) stretching east to west overtop Cassiopeia. The length of the constellation is about double that of Cassiopeia. At this time of night, it connects into the bottom right of a large square-shaped constellation called Pegasus.

Now that Andromeda's arching line of stars is located, look back down to Cassiopeia. The left "M" of Cassiopeia forms a triangle that points almost directly up to one of those bright stars in the arch of Andromeda. That's Mirach. The Andromeda Galaxy is located "down and to the left" a few degrees from Mirach. You can actually follow a trail of two stars shooting downward and leftward from Mirach, taking you directly to M31.

It's not going to look like much to the naked eye, but if you avert your eyes away from the galaxy's location you'll be able to use your eye's more sensitive rod cells to suck up more light than by looking directly at the target. You should see a small smudge of light.

It's highly recommended you bring out a pair of binoculars. With even bargain optics, M31 will look much more impressive, with a more defined, light emitting core and a considerably long halo. That halo comprises the arms of the spiral structure surrounding it. **Binoculars bonus:** Scoot your binoculars a little further "downward" from M31, and you'll see an even smaller smudge of light. That's M32, a dwarf elliptical satellite galaxy orbiting M31. It's nothing compared to the Andromeda Galaxy, with a length of approximately 220,000 light years and one trillion stars—or roughly double the size and mass of the Milky Way.

Fun fact: M31 is coming right for us. Astronomers predict the Andromeda Galaxy will slam into the Milky Way in about 4.5 billion years, forever changing the structures of each galaxy.

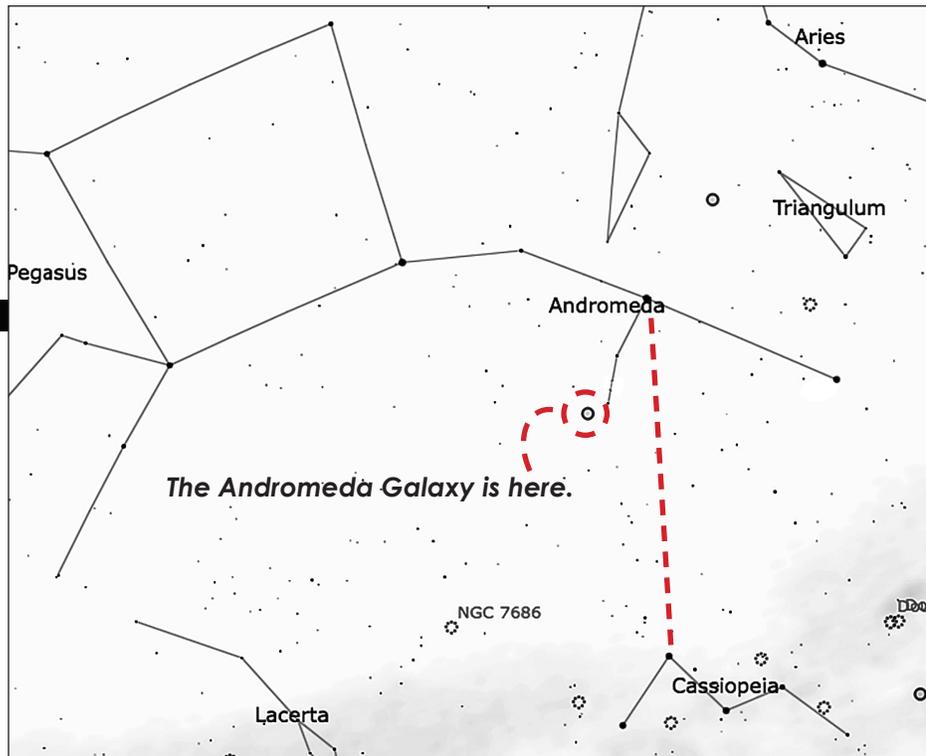
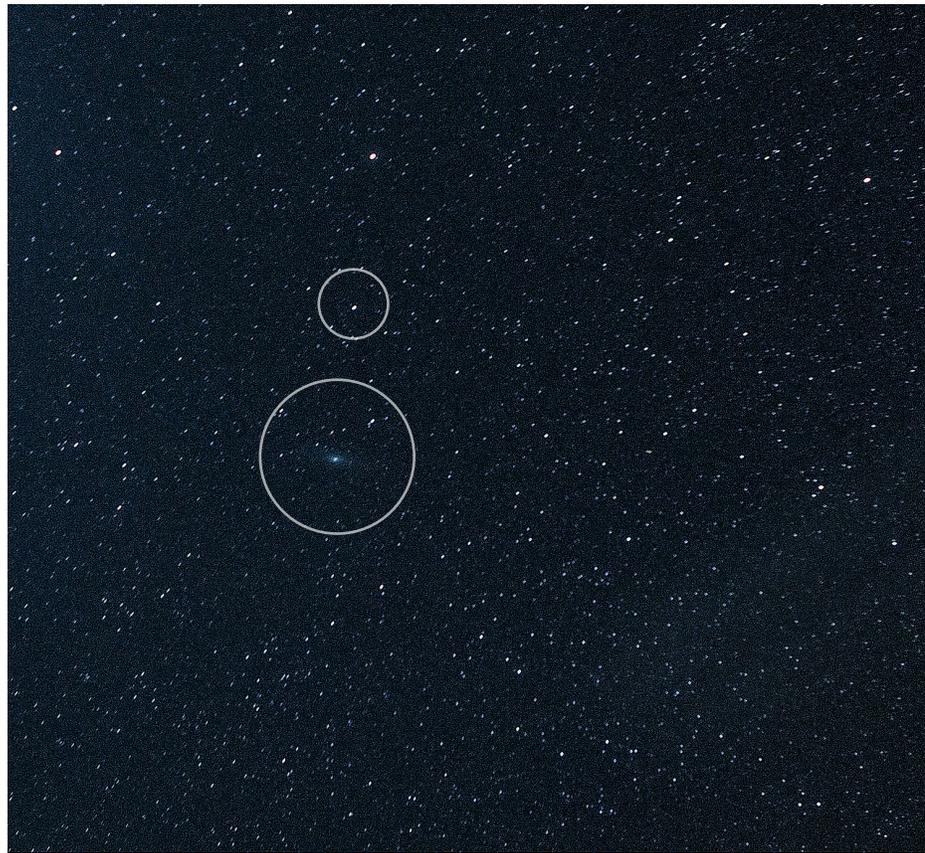


Illustration by Jordan Vinson, using Stellarium

Use the left half of the "M" that is Cassiopeia to guide you to Mirach in Andromeda. Look below Mirach and to the left to find the Andromeda Galaxy, also called M31.



U.S. Army photo by Jordan Vinson

The Andromeda Galaxy is seen in a photo exposed for 20 seconds Wednesday, Jan. 4, shot from North Point on Kwaj. The galaxy lies within the larger white circle, and Mirach lies in the smaller circle.

HEROES OF THE WEEK



Courtesy of Misti French



U.S. Army photo by Jordan Vinson

From left: Steve Simpson, lead pilot on the Jan. 1 search mission, and Ray Arsenault, co-pilot and main spotter on the mission.

BY JORDAN VINSON

Berry Aviation Pilots Steve Simpson and Ray Arsenault put their holiday weekend on pause and took to the air to locate five missing fisherman Jan. 1.

Simpson and Arsenault began the search by flying a number of passes in the Torruji area, in what Arsenault described as a parallel creeping line search pattern, allowing the pilots to scan as much of the ocean's surface as possible in the limited flight time available. During one of the southerly flights west of the reef, Simpson changed the plan and suggested heading farther south. On a southern tack, the pilots passed the islands of Geh, Ninni and Gea, scanning half-mile tracks of surface area as they moved. Then something caught Arsenault's eye.

Near Carlson (Enubuj) and Carlos (Ennylabegan), he began eyeing something in the distance that didn't seem to ebb and flow, appear and disappear like the thousands of whitecaps popping out of the ocean under the helicopter. The pilots had been looking for something more stationary and permanent than its surroundings, something like a small white blob on the surface that wouldn't go away. It appeared they had found their prize.

"Eleven o'clock at about two miles," Arsenault said he relayed to Simpson. "Steve says, 'You got something?' I said, 'Yeah. Just turn a little bit left, and come on in.' And sure enough, we passed them, and I could see the vessel had overturned."

Simpson took the Army Lakota helicopter in for a couple of

close passes, and Arsenault was able to see there were survivors, counting five before radioing back to base that all men were accounted for. They were spotted hugging the bow of the boat, all wearing their life jackets, and one waved back.

"Army One-Zero-One," Arsenault radioed back. "We've got your survivors. The boat's capsized."

Relaying the boat's coordinates, the pilots began a series of long orbits around the fishermen, guided two rescue vessels to the scene and watched while crewmen on the boats threw out lines and hauled the exhausted men aboard.

Looking down at the overturned boat, the pilots commended the fishermen's decisions to remain with the vessel and wait it out.

"They all stuck with it, which was very smart on their [part] to sit together and hang there and not get crazy," Arsenault said. "They were a good distance offshore. And they're being dragged that way. ... This must have been incredibly unnerving for those guys."

Now that the five residents are safe and sound, Simpson and Arsenault have had time to celebrate the victory.

"This is a big deal. It's a find," Arsenault said. "Five guys came home alive. And it's like [a] touchdown. ... This is awesome, and I'm very humbled by the experience."

Simpson is a retired Army pilot, and Arsenault is an Army vet and remains a volunteer U.S. Coast Guard pilot, with which he's done similar search and rescue missions over the past 10 years.

MANIT MOMENT

COMMUNITY CONNECTION BY THE MARSHALLESE CULTURAL SOCIETY

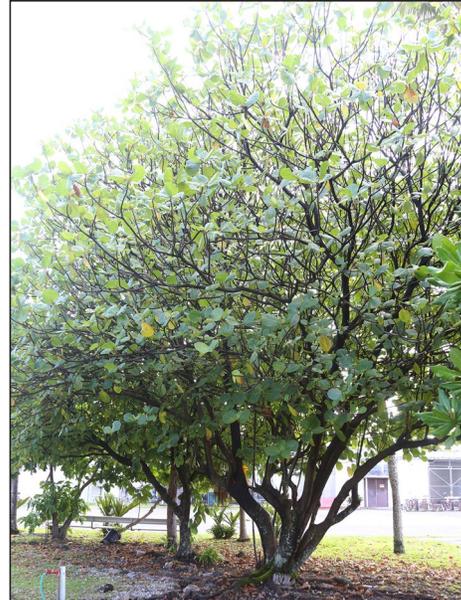
Nearly everyone agrees that the place name “Kwajalein” is a European derivation of the Marshallese words “ri-ruk-jan-leen,” meaning the people who gather or harvest the fruits or blossoms.

The mythical flower tree itself has sometimes been called Kwajalein. The tree was a never-ending source for gathering blossoms used in making flower wreaths and perfume. There was always an abundance of flowers, no matter how many and how often they were gathered. The bounty of the tree was also associated with schools of flying fish (“jojo”) that were concentrated in the nearby ocean. The fish were countless in number and always available for fishing. Legend also says that the flying fish would sometimes fly out of the water to form a great circle, as if there was a floating “wit” (a wreath of flowers) on the ocean’s surface. The Kwajalein “jojo” fish represented the wonderful harvest of the ocean and the “utilomar” blossoms of the reliable fruit of the land.

In Marshallese tradition, Kwajalein is thus a place of abundance and generosity. The present day telling of the story adds that Kwajalein continues to offer sustenance, work and things of beauty to Marshallese from many different atolls, as well as the many people who will come from all over the world to harvest the fruits of Kwajalein.

Marshallese proverbs concerning the “utilomar.”

1. “Komarok tok ut e paali jarka; ididiki bwin ruki.” Wear the flower wreath that belongs to the people of Kwajalein; shake the tree so that I can pick its flowers.
2. “Ebbol ut pali jarka; ididiki bwin rukinear.” The tree that belongs to the (Kwajalein) people blossoms with flowers; shake it so I can pick its flowers.



U.S. Army photo by Jordan Vinson

An utilomar tree at the Marshallese Cultural Center.



POWER PLANT OPERATORS REACH MILESTONE

COMMUNITY CONNECTION BY KRISTI HARRINGTON



FROM LEFT: Andreas Wiehe, Eric Corder, instructor Russ Harvey, Binh Vu and Seabee CE2 Mike Dawson.

Congratulations are in order for four individuals here on Kwajalein. Three Kwajalein Power Plant operators and one Navy Seabee recently completed a course in power plant electrical fundamentals. The course was taught onsite, and it covered everything from atomic structure and voltage production, to basic DC circuit analysis, to the construction and theory of operation of generators, transformers and electric motors.

Hats off to Andreas Wiehe, Eric Corder, Binh Vu and Mike Dawson. These men demonstrated not only a strong desire to learn, but a natural aptitude for the subject matter. They have worked since the summer to complete the course work.



www.army.mil/kwajalein

Check out USAG-KA’s website for garrison and community news, links to each directorate and other helpful information. Have thoughts or suggestions? Send them to the USAG-KA Public Affairs Office at Nikki.l.maxwell.civ@mail.mil.



Kwajalein Range Services wants your feedback on how the garrison’s Community Services programs are going. Take part in ongoing surveys to voice your opinion on everything from the Kwajalein Hourglass and Mongolian Night at Café Roi, to the golf courses and the Self Help shops. Click on the “We Want Your Feedback” icon on the USAG-KA-Web Intranet home page and type away.

WHAT'S ON YOUR KWAJALEIN ATOLL BUCKET LIST FOR 2017?

BY JESSICA DAMBRUCH

The Kwajalein Bucket List would not be a good name for a rock band, but it can be the start of a year of fun and new friends for residents who joined the community in 2016. Grab a pen and use this handy list of New Year's suggestions and resolutions as a checklist for when the doldrums hit.



OUTDOORS

Sunrise and Sunset. There are few things more glorious than watching the sun come up over the ocean after a thunderstorm. Except the sunset over the lagoon, of course. Go to bed early, and hike out early enough to enjoy the morning's solar action on the atoll.

Chill out at Emon Beach. Venture to Emon Beach. (It's pronounced emon)—and enjoy the beautiful water.

Learn to Scuba Dive. Contact the Kwajalein Scuba Club and find a teacher. New classes start up often. If your family has young divers, know that there are instructors who specialize in teaching young people so that your entire family can enjoy the underwater sights the atoll has to offer.

Hit the Tide Pools. Man of the Japanese and American tide pools teem with fish, undersea life and other colorful critters. Not all of these are friendly; caution should be exercised at all times. Check the garrison phone book for safety information regarding snorkeling in the tide pools before scheduling your next excursion.

Play Sports. Registration for youth sports, basketball and bowling are now in progress. Get outside your comfort

zone and try a new group sport. If you're more of a lone wolf, check out the Ivey Gym, or grab a buddy to go swim laps at one of our two local swimming pools.

Witness a Mission. Mission night is not a night to stay home. Grab a lawn chair and a camera, and head outside to see the best display of manmade fireworks this side of the equator.



ARTS AND CULTURE

Roi and Kwajalein History Tours. In February, Kwajalein Atoll celebrates Liberation Day. Learn the names and faces associated with local WWII battlefields. Pamphlets are available at the Roi Air Terminal for a tour of WWII battlefield sights on Roi-Namur. On Kwajalein, historical directory plaques located near bunkers and the Memorial Gardens can help you appreciate our landscape in a different way.

Visit the Marshallese Cultural Center and the Alele Museum. Historical information and cultural artifacts on the history of the Marshall Islands are available in both Kwajalein's Marshallese Cultural Center and Majuro's Alele Museum. The MCC contains collections on loan from the Kabua family, historical photographs and a selection of the fishing gear used

to hunt in the atoll many years ago.

Put Yourself in Motion. Learn to be creative when you move. There are opportunities to learn everything from traditional hula, to ballroom, to fitness step Zumba on Kwaj. Plus, dancing with a buddy is always more fun. If you're shy and have two left feet, bring a friend along.

DO-IT-YOURSELF

Learn to Make Cool Stuff. The staff of the Community Activities Hobby Shop enjoy teaching new tricks and techniques to novice crafters in wood, clay and ceramics.

The Joy of Cooking (Without Cheese). It's called grilling. Few things, even bacon-smoked cheddar or 100-year-old smoked salmon, taste better than yellowfin tuna and pineapple hot off the grill. Also, few things don't taste better grilled, so grab your buddies and go stake out a grill at Emon Beach or one of the other common grilling areas. If you don't know how to grill, this is your chance to learn—just don't overcook that fish.



GOVERNMENT PROPERTY SALE

The following list of excess government property will be sold at the DCCB Jan. 11 (open to Ebeye residents only) and Jan. 12 (open to everyone). Sale hours: 8-11 a.m. and 12:30-2:30 p.m. Closed toe shoes required. All sales are permanent; no returns or exchanges are permitted. The items are sold as is with no guarantees or warranties, express or implied. The buyer is responsible for removing purchased items within 30 days; ownership of any items not removed will revert to the government without refund. Questions? Call Trish Naputi at 51076.

ITEM	# AVAILABLE	ORIGINAL PRICE	SALE PRICE
DRYER	18	\$332.67	\$20
DVD W/VCR COMBO	4	\$125.00	\$6
END TABLE W/GLASS TOP	2	\$60.00	\$3
END TABLE W/O GLASS TOP	10	\$60.00	\$3
END TABLE, WOODEN	14	\$60.00	\$3
ENTERTAINMENT STAND,	1	\$592.00	\$30
ETAGERE (SHELF, LRG, WOODEN)	17	\$410.00	\$21
FREEZER	1	\$490.00	\$28
LAMP, STANDING	5	\$100.00	\$5
LAMP, TABLE	12	\$33.66	\$2
LOVESEAT	23	\$262.00	\$13
MIRROR	8	\$33.66	\$2
NIGHTSTAND	9	\$95.00	\$5
RANGE	1	\$396.00	\$19
RECLINER	7	\$319.93	\$16
SHELF, BROWN, WOODEN	1	\$300	\$15
SHELF, SMALL, WOODEN	1	\$50.00	\$3
SOFA, WOODEN, 3 SEAT	16	\$378	\$19
TABLE, COFFEE	12	\$61.25	\$3
TABLE W/4 CHAIRS, DINING	2	\$250.00	\$37
TABLE, FOOSBALL	1	\$549.00	\$27
TABLE, AIR HOCKEY	1	\$795.00	\$40
TABLE, METAL, WOODTOP	3	\$150.00	\$8
TELEVISION W/VCR COMBO, 20"	4	\$230.50	\$11
TELEVISION W/VCR COMBO, 25"	2	\$438.50	\$22
TELEVISION, 13", COLOR	5	\$236.40	\$11
TELEVISION, 19", COLOR	1	\$486.00	\$24
TELEVISION, 20", COLOR	4	\$229.00	\$12
TELEVISION, 42", COLOR	1	\$329.00	\$16
TELEVISION, 27", COLOR	6	\$327.33	\$17
TENT W/POLES, 20X20	1	\$600.00	\$30
THEATER ROW SEATING, 7 SEAT	1	\$1,000	\$50
THEATER ROW SEATING, 8 SEAT	11	\$1,000	\$50
TOPPER, WOODEN, DESK	27	\$137.00	\$7
WALL UNIT	89	\$400.00	\$20
WASHER	13	\$380.85	\$21



DIVE SAFETY TIPS!

Always dive with a buddy. Never dive alone.

Wait at least 12 hours before flying after doing a single dive.

Wait 18-24 hours after doing multiple dives.

Divers Alert Network (DAN) recommends refraining from strenuous work at least 24 hours before AND after diving.

Keep your gear up-to-date and serviced regularly. DAN recommends that regulators get overhauled at least once a year.

Each diver should have their own computer.

On any given dive, both divers in the buddy pair should follow the most conservative computer.

Do not ascend greater than 60 feet per minute.

Even if not required, always make a safety stop at 15 feet for at least three minutes.

Start the dive day with the deepest dive first.

Avoid making multiple deep dives on the same day.



Check out daily news and community updates on the official U.S. Army Garrison-Kwajalein Atoll Facebook page.

www.facebook.com/usarmykwajaleinatoll

For command information questions, please contact Public Affairs at 54848.

ARMY RESEARCHERS DEMONSTRATE 3-D PRINTED DRONES



The 3-D printed On-Demand Small Unmanned Aircraft System, or ODSUAS, flies at speeds of up to 55 miles per hour. Although the lightweight shell and propeller arms are printed using additive manufacturing, the motors and propellers will be assembled using off-the-shelf equipment.

EXTERNAL REPORT

By David McNally, ARL Public Affairs

Soldiers witnessed the innovation of Army researchers recently during flight testing of 3-D printed unmanned aircraft systems that were created on-demand for specific missions.

The U.S. Army Training and Doctrine Command invited engineers from the Army Research Laboratory to Fort Benning, Georgia Dec. 1-3, to showcase new technology at the Army Expeditionary Warrior Experiments, or AEWE.

"We've created a process for converting Soldier mission needs into a 3-D printed On-Demand Small Unmanned Aircraft System, or ODSUAS, as we've been calling it," said Eric Spero, team leader and project manager.

With this concept, once a patrol requires UAV support, Soldiers input all their requirements into mission planning software. The system then knows the optimal configuration for the aerial vehicle and it's printed and delivered within 24-hours. We thought they're not going to think that's fast enough, but, actually it was the opposite," Spero said. "The timeline of 24 hours to receive a mission-custom UAS fits right in line with the way they plan and execute their missions."

Researchers said they felt the combination of 3-D printing and UAVs was a natural technology solution.

"Drones or quadcopters are really getting big right now, I mean in particular just the commercial and hobby markets have shown what can be done with a small amount of money," said John Gerdes, an engineer on the project. "Additive manufacturing or 3-D printing has become huge and everybody knows all the great things that can be done with 3-D printers. So we figured let's assemble these two new technologies and provide a solution to Soldiers that need something right now and don't want to wait for it."

The team spent many hours flight testing and verifying the designs and to make sure everything was going to work the way they expected.

"It was good that we didn't have any mistakes on game day," said fellow engineer Nathan Beals. "The day before we did some test flights and worked out some kinks. I think we had the quad up to 55 miles per hour."

Spero said based on feedback from Army leaders, his team hopes to work on low noise, long standoff distance, heavier payload capacity and better agility.

I'm very optimistic that most of those are achievable. I think the hardest one that's going to be achievable is the heavy payload.

Soldiers at AEWE also became fascinated with 3-D printing technologies, Spero said.

"Before we even started the briefing, we set up the 3-D printer in the conference room and started a print job," Spero said.

The researchers printed a Picatinny Rail, which is a bracket used to mount accessories on a small arms weapon, such as an M4 carbine. In about two and a half hours, they had a rail that fit the Soldiers' weapons perfectly.

They asked the group what other kinds of 3-D printed items they could use. In a matter of hours, the team presented a variety of functional printed parts that impressed the Soldiers.

This isn't just about UASs," Spero said. "It's about forward-deployed, 3-D printing to help the Soldier."

The Army engineers continue to collaborate with partners at the Georgia Tech's Aerospace Systems Design Lab as they continue to refine technologies for future Soldiers.

IN MEMORIAM: ALVIN AJEN



Automotive Department employee and Ebeye resident Alvin Ajen passed away Dec. 20, 2016. Ajen had been a member of the automotive team since 2003, where he worked as a production control clerk and, most recently, a fuel station attendee.

Ajen always had a friendly smile and always remained calm, even when things did not go as planned. He took his job seriously and made himself personally accountable to make sure things went smoothly in his area. Ajen could always be counted on to step in to help out his fellow coworkers. His easy-going demeanor made him a perfect mentor for newer employees in the Automotive Department. He enjoyed teaching the younger people and was eager to help them learn and grow.

Ajen loved to read and write songs. He frequently sang for his fellow employees during luncheons and department parties.

Ajen was a devoted family man and is survived by his wife, two daughters and several grandchildren and great-grandchildren.

DARPA PROVIDES GROUNDBREAKING BIONIC ARMS TO WALTER REED

EXTERNAL REPORT

By Cheryl Pellerin
DoD News, Defense Media Activity

The Defense Advanced Research Projects Agency is making available to military amputees the first production versions of a groundbreaking upper-limb prosthesis, according to a DARPA press release.

Dr. Justin Sanchez, director of DARPA's Biological Technologies Office, delivered the first two advanced "LUKE" arms from a new production line during a ceremony yesterday -- evidence that the fast-track DARPA research effort has completed its transition into a commercial enterprise, DARPA officials said.

The ceremony took place at Walter Reed National Military Medical Center in Bethesda, Maryland.

"The commercial production and availability of these remarkable arms for patients marks a major milestone in the [DARPA] Revolutionizing Prosthetics program and most importantly an opportunity for our wounded warriors to enjoy a major enhancement in their quality of life," Sanchez said, "and we are not stopping here."

The RP program is supporting initial production of the bionic arms and is making progress restoring upper-arm control, he added.

"Ultimately we envision these limbs providing even greater dexterity and highly refined sensory experiences by connecting them directly to users' peripheral and central nervous systems," Sanchez said.

Arms for Service Members

As part of the production transition process, DARPA is collaborating with Walter Reed to make the bionic arms available to service members and veterans who are rehabilitating after suffering upper-limb loss, DARPA says.

LUKE stands for "life under kinetic evolution" but is also a

passing reference to the limb that Luke Skywalker wore in Star Wars: Episode V, The Empire Strikes Back.

The limbs are being manufactured by Mobius Bionics LLC, of Manchester, New Hampshire, a company created to market the technology developed by DEKA Integrated Solutions Corp., also of Manchester, under DARPA's Revolutionizing Prosthetics program.

The prosthetic system allows very dexterous arm and hand movement with grip force feedback through a simple intuitive control system, DARPA says.

The modular battery-powered limb is near-natural size and weight. Its hand has six user-chosen grips and an arm that allows for simultaneous control of multiple joints using inputs that include wireless signals generated by innovative sensors worn on a user's feet.

Revolutionizing Prosthetics

The technology that powers prosthetic legs has advanced steadily over the past two decades but prosthetic arms and hands are a tougher challenge, in part because of the need for greater degrees of dexterity, DARPA says.

When the LUKE arm first went into development, people who had lost upper limbs had to use a relatively primitive split-hook device that hadn't changed much since it was introduced in 1912.

DARPA launched the Revolutionizing Prosthetics program with a goal of getting U.S. Food and Drug Administration approval for an advanced electromechanical prosthetic upper limb with near-natural control that enhances independence and improves quality of life for amputees. LUKE received FDA approval less than eight years after the effort began, DARPA says.

Under a recently finalized agreement between DARPA and Walter Reed, DARPA will transfer LUKE arms from an initial production run to the medical center for prescription to patients. Mobius Bionics will train the Walter Reed staff to fit, service and support the arms.



Dr. Justin Sanchez, director of the Defense Advanced Research Projects Agency's Biological Technologies Office, fist-bumps with one of the first two advanced "LUKE" arms to be delivered from a new production line during a ceremony at Walter Reed National Military Medical Center in Bethesda, Md.

WEEKLY WEATHER OUTLOOK

RTS WEATHER STATION STAFF

WEATHER TRENDS: 2016 was a year where weather patterns were heavily influenced by a strong El Nino at the start. Kwajalein experienced uncommonly strong periods of west winds at the beginning of the year. A 'drier' dry season setup, consistent with a strong El Nino. At the close of September Kwajalein's rainfall accumulations were 19.44" below normal with drought conditions. But equatorial sea surface temperatures started cooling this past summer and a weak La Nina event was in place by late fall, supporting a 'wetter' wet season. By the end of 2016 we had made up over 1/2 of our rainfall deficit in 3 months, ending 2016 just 7.22" below the yearly average.

For our forecast, we are expecting isolated showers with moderate trade winds at 10-15 knots thru Saturday. An increase of shower coverage and intensity starting Sunday with the wave passage. In the wake of the next wave, expecting trade wind speeds to increase to 13-18 knots and widely scattered showers into next week.

KWAJALEIN RANGE SERVICES Ask & Answer



Q. Are there plans to upgrade the condition of the B-boats?
A. We have been informed by the Command that additional new B-boats have been purchased. Further information will be provided as it becomes available. The SBM staff routinely checks the boats every day and performs maintenance on an as-needed basis. In addition, the SBM Lead takes boats out each week to ensure their operability. As a reminder, B-boat captains are responsible to notify SBM staff of needed repairs when they return boats to the SBM.

Q. Why are some people able to check out their groceries at Surfway without providing their K-badge number or presenting the badge itself?
A. Store policy requires all shoppers to visually present their badge at the time of check-out. If you observe this policy not being enforced, please notify Surfway management.

Q. Can an audio sample of the siren warnings be made available to residents so we can identify the type of siren it is?
A. Thanks for the suggestion. We are looking into the best method to accomplish this.

SURFWAY HOURS CHANGE

Surfway hours of operation will be modified to accommodate new reach-in freezer installation. Surfways business hours on the date noted will be:

Wednesday, Jan. 18, 9 a.m.-3 p.m.
 Thursday, Jan. 19 CLOSED
 Friday, Jan. 20, 9 a.m.-3 p.m.
 Saturday, Jan. 21, 9 a.m.-3 p.m.



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

Capt. David Rice
 SHARP Victim Advocate

Work: 805 355 2139 • Home: 805 355 3565
 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

SUN-MOON-TIDES

	SUNRISE SUNSET	MOONRISE MOONSET	HIGH TIDE	LOW TIDE
SUNDAY	7:06 a.m. 6:45 p.m.	2:39 p.m. 2:25 a.m.	12:59 p.m. 3.5' -----	6:19 a.m. 0.5' 7:28 p.m. 0.6'
MONDAY	7:07 a.m. 6:46 p.m.	3:34 p.m. 3:23 a.m.	1:26 a.m. 3.0' 2:03 p.m. 4.0'	7:30 a.m. 0.3' 8:33 p.m. 0.1'
TUESDAY	7:07 a.m. 6:46 p.m.	4:31 p.m. 4:23 a.m.	2:30 a.m. 3.2' 2:54 p.m. 4.5'	8:27 a.m. -0.1' 9:23 p.m. -0.4'
WEDNESDAY	7:07 a.m. 6:47 p.m.	5:31 p.m. 5:25 a.m.	3:22 a.m. 3.5' 3:39 p.m. 4.8'	9:16 a.m. -0.4' 10:08 p.m. -0.7'
THURSDAY	7:08 a.m. 6:47 p.m.	6:32 p.m. 6:25 a.m.	4:06 a.m. 3.7' 4:21 p.m. 5.0'	9:59 a.m. -0.6' 10:48 p.m. -0.9'
FRIDAY	7:08 a.m. 6:48 p.m.	7:32 p.m. 7:24 a.m.	4:47 a.m. 3.9' 5:00 p.m. 5.1'	10:40 a.m. -0.7' 11:26 p.m. -0.9'
JANUARY 14	7:08 a.m. 6:48 p.m.	8:29 p.m. 8:19 a.m.	5:26 a.m. 3.9' 5:38 p.m. 5.0'	11:18 a.m. -0.6' -----

Captain Louis S. Zamperini Dining Facility

*MENU CURRENT AS OF JAN. 5

LUNCH	Monday	Tuesday	Wednesday	Thursday	Friday	January 14
Sunday						
Beef pasticio	Grilled turkey reubens	Grilled chicken breast	Sausage and peppers	Tacos	Malibu chicken	Chicken alfredo
Vegetable frittata	Beef short ribs	Mac and cheese	Grilled cheese	Black beans	Fish du jour	Cheese tortellini
Scalloped potatoes	Oven roasted potatoes	Chef's choice	Chef's choice	Mexican rice	Rice pilaf	Pasta aglio e olio
DINNER	Monday	Tuesday	Wednesday	Thursday	Friday	January 14
Sunday						
Fish du jour	Fried chicken	Pancake Supper	Steak Night	Pork pot roast	Hamburger Bonanza	Beef pad thai
Boiled potatoes	Meatloaf	Ham steak	Roast chicken	Chicken stir-fry	Chicken marsala	General Tso's chicken
Pot roast	Mashed potatoes	Brown rice	Baked potatoes	Roasted potatoes	Onion rings	Chef's choice

COMMUNITY CLASSIFIEDS

HELP WANTED

Visit USAJOBS.GOV to search and apply for USAG-KA vacancies and other federal positions.

KRS and Chugach listings for on-Island jobs are posted at: Kwajalein, Roi-Namur and Ebeye Dock Security Checkpoint locations; outside the United Travel Office; in the Roi Terminal/Post Office; at Human Resources in Bldg 700 and on the "Kwaj-web" site under Contractor Information>KRS>Human Resources>Job Opportunities. Listings for off-island contract positions are available at www.krsjv.com.

FOR SALE

Osprey, 21 foot catamaran sailboat. \$7000. Includes 5hp motor, solar power, VHF radio, stereo, shower, mast (new as of May, 2013), all extras (misc supplies and tools). Needs some repairs (starboard center beam and trailer). Call DJ on Roi: 5-6313 daytime, 5-6056 evening.

COMMUNITY NOTICES

The Christian Women's Fellowship monthly luncheon will be held on Sunday, Jan. 8, at 12:30 in the REB (Building 671).

PCS Party for the Galbraith Family. Sunday, Jan. 8, at around 6 p.m., at Emon Beach big pavilion. Please bring food/snacks to share and bring your own (adult) drinks. Some soda, napkins, utensils, and plates will be provided.

Swim Team begins Monday, Jan. 9 at the family pool. Senior Squad meets at 8:15 a.m. Junior Squad meets at 9:30 a.m. Sophomore

Squad meets at 10:30 a.m. All swimmers require a signed permission slip/liability waiver to enter the pool. Bring a parent with you if you have not filled one out at the parent meeting that was held on Friday. Questions? Call Amy at 52681.

Kwajalein Running Club's sixth Monthly Fun Run for the 2016/17 season. 5:30 p.m., Monday, Jan. 9, begging at the bowling alley. The public, visitors, kids and walkers are welcome. Distance options for Monday are 0.5 mile, 2 miles and 4 miles. Questions? Call Bob and Jane H 51815 or Ben and Linn H 51990.

Kwajalein Hospital Diabetes Clinic. Jan. 19, 12:30-4:30 p.m., at the Kwajalein Hospital lobby. Those wishing to participate will need to have fasting labs drawn Jan. 3-13, excluding any holidays or weekends, 7-11:30 a.m. and 12:30-4 p.m.

The mandatory Kwajalein Scuba Club Safety Meeting makeup, will be held Wednesday January 25, 7 p.m. at the High School MP Room. Last chance to pay your yearly dues.

Want to learn how to dance? Come join us Wednesdays CRC Room 6 and Saturdays at CRC room 1 both times at 7:30-9 p.m. We will be teaching swing, blues, Latin, and everything ballroom. Beginners always welcome. For questions contact Josh H 52423.

E-Talk: In response to new RMI Law and concerns raised at Town Hall events, USAG-KA is eliminating the import and use of Styrofoam/plastic cups, plates, and shopping bags. Do not purchase these items online. Read this week's E-talk for more info.]

E-Talk: USAKA's Environmental Standards define protected animal species and habitats. Purchasing, harvesting, collecting, or transporting protected species or their parts can result in heavy fines. Contact Environmental (5-1134) for more information

Safely Speaking: Gloves are the most common form of Personal Protective Equipment (PPE). We have a variety of gloves available and each type is designed for a specific task or application. It is important to select the right glove for the work you will be doing.

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THUMBS UP

I'd like to give a "Thumbs Up" on behalf of BQ folks to Sabrina Mumma for once again hosting the Annual Stray Dog Party. She went above and beyond in organizing this party to make BQ occupants feel like family when so many of us are far from home and our own families on Christmas Day. Her efforts are very much appreciated.

— Karen Hunt

Want to thank an awesome community member here? Send an email to the Hourglass at usarmy.bucholz.311-sig-cmd.mbx.hourglass@mail.mil

K7TY says:



classified documents must be destroyed in the proper manner

From Sept. 22, 1962 Kwajalein Hourglass

Café Roi

*MENU CURRENT AS OF JAN. 5

LUNCH

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	January 14
Peking chicken	Pepper steak	Spaghetti	Beef stir-fry	Tacos	Hot turkey sandwich	Shoyu chicken
Indonesian pork	Glazed pork loin	Sausage/peppers sub	Chicken and broccoli	Enchilada casserole	Chicken adobo	Hawaiian steak
Eggs benedict	Cheese quiche	Garlic bread	Ginger rice pilaf	Pinto beans	Collard greens	Spicy Asian noodles

DINNER

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	January 14
Hamburger steak	Chicken and dumplings	Coconut fried chicken	Roast beef	Fried chicken	Night in Paris	Sauerkraut
Au gratin potatoes	Beef pot roast	Pineapple salsa	Chick. w/ mustard sauce	Meatball subs	French braised beef	Chili
Cheese tortellini	Mashed potatoes	Korean steak	Baked potato	Stir-fried vegetables	Fish du jour	Meatloaf



AROUND TOWN

HOUSE COMMITTEE ARRIVES TODAY

ARRIVING ON KWAJALEIN TODAY ARE MEMBERS OF THE HOUSE COMMITTEE ON INTERIOR AND INSULAR AFFAIRS WHO WILL VISIT THE TRUST TERRITORIES THROUGH JAN. 26. THE PURPOSE OF THE VISIT IS TO RECEIVE BRIEFINGS BY TRUST TERRITORY PERSONNEL AND VISIT VARIOUS TRUST TERRITORY LOCATIONS IN CONNECTION WITH PENDING LEGISLATION ON THE FUTURE POLITICAL AND ECONOMIC STATUS OF THE TERRITORIES.

SOME OF THE AREAS THE COMMITTEE PLANS TO VISIT INCLUDE MAJURO, TRUK, PALAU, SAIPAN, MARIANAS AND GUAM. THEY WILL VISIT EBEYE DURING THE TWO DAYS THE COMMITTEE PLANS TO SPEND ON KWAJALEIN.

COMMITTEE MEMBERS

HUGH L. CAREY IS CHAIRMAN OF THE TERRITORIES SUBCOMMITTEE WITHIN THE HOUSE INTERIOR AND INSULAR AFFAIRS COMMITTEE.



HE WAS BORN IN BROOKLYN, NEW YORK, AND STILL MAKES HIS HOME THERE. HE GRADUATED FROM ST. AUGUSTINE'S ELEMENTARY AND HIGH SCHOOLS AND ATTENDED ST. JOHN'S COLLEGE WHERE HE EARNED AN LL.B. DEGREE

MR. CAREY WAS ELECTED TO THE 87TH CONGRESS IN 1960 AND HAS BEEN RE-ELECTED TO EACH CONGRESS SINCE. HE REPRESENTS NEW YORK'S FIFTEENTH DISTRICT WHICH IS PART OF BROOKLYN

Hugh L. Carey of Brooklyn (15th Dist) Democrat—14th term

HE ALSO SERVES ON THE EDUCATION AND LABOR COMMITTEE AND IS A MEMBER OF THE BOARD OF VISITORS TO THE MERCHANT MARINE ACADEMY.

From Jan. 6, 1995

HOURLASS

MONDAY 4 JANUARY 1965

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KWAJ ALL-STARS

sports SECTION

**UPI NAMES UNITAS
PLAYER-OF-THE-YEAR**

NEW YORK, JAN. 4 (UPI)--

QUARTERBACK JOHNNY UNITAS OF THE BALTIMORE COLTS HAS BEEN SELECTED THE 1964 PLAYER-OF-THE-YEAR IN THE NATIONAL FOOTBALL LEAGUE BY UNITED PRESS INTERNATIONAL FOR HIS PART IN DIRECTING THE COLTS TO THE WESTERN CONFERENCE CHAMPIONSHIP.

THE NINE-YEAR PRO VETERAN WAS A LANDSLIDE CHOICE OF THE UPI PANEL OF 42 WRITERS (THREE FROM EACH LEAGUE CITY) WHO COVERED THE SEASON REGULARLY. UNITAS RECEIVED 29 VOTES TO FIVE FOR RUNNERUP LENNY MOORE, HIS BACKFIELD MATE WITH THE COLTS. FULLBACK JIMMY BROWN OF THE LEAGUE CHAMPION CLEVELAND BROWNS AND FLANKER JOHNNY MORRIS OF THE CHICAGO BEARS SPLIT THE REMAINING EIGHT BALLOTS.

UNITAS MASTERMINDED THE LEAGUE'S MOST EXPLOSIVE OFFENSE WHICH WAS NO. 1 IN POINTS SCORED (331), TOUCHDOWNS (41) AND TOTAL YARDAGE GAINED (3,535).

HE RANKS FOURTH AMONG THE LEAGUE'S PASSERS EVEN THOUGH HE THREW LESS IN '64 THAN IN ANY OF HIS FIVE PREVIOUS SEASONS. HE HAD THE LOWEST TOTAL OF INTERCEPTIONS (5) IN HIS NINE-YEAR-



THE KWAJALEIN LITTLE LEAGUE ALL-STAR MEMBERS ARE: COACHES J.S. SWAJKOSKI LEFT AND S. A. FERRAIOLI RIGHT. FIRST ROW FROM LEFT CHARLES BRASSWELL, JIM RHEA, BOB AGE, H.G. KEELING, ROD NORTON, CURT STIMPSON, JOHN SWAJKOSKI, KEN FARRELL JR., KEN FARRELL, SR. GIANTS SKIPPER. SECOND ROW FROM LEFT RICKY BEACH, MIKE MEANS, RON EVANS, LINDEN CRAIG, BRANDT SCHMERSAHL, TIMMY KEELING, DENNIS EVANS



This AM-PRO/Kwajalein Fire Department water rescue team got an early start on the New Year. They were called out in the wee hours of Jan. 1 to search for an overdue Boston whaler carrying four divers. Left to right in the AM-PRO boat at Guardian II are team members Bob Bradley, boat driver, Gerald Huff, fire chief, Ragnar Opiniano, assistant chief, Daryl Myhre, engineman, and Michael Massingale, driver-operator.

From Jan. 4, 1965



SAFETY SIMPLY



HOURLASS REPORT

Safety In the Line of Fire. Have you ever held a nail for someone brandishing a hammer? Or used your hands instead of a push stick on a table saw?

These are just two examples of how laborers may put themselves in harm's way. Even when we perform simple labor, we are at risk. But we should remember that it is complacency that puts us in the greatest danger. Complacency can lead to injury and the death of yourself and your coworkers. So what can we do to protect ourselves?

Look for hazards before starting work. At its most basic level, the line of fire is the path of a moving object that could potentially injure you or the potential path of an object that may move. Ask yourself: What can hurt me while I'm doing this task? If you're unsure, ask a coworker or supervisor. It's always good to have a second set of eyes review what you're planning to do.

Eliminate the hazard when possible. Once line-of-fire hazards

are identified, take steps to eliminate or control them. The best-case scenario is to remove the hazards completely.

If you can't eliminate them, then control them. If it's not possible to remove the hazards, neutralize them. For example, use a fume hood and proper personal protective equipment to avoid exposure. Consider the following questions: Where is my body located in relation to the hazard? What is the worst-case scenario of my task? How can I protect myself from the hazard?

Use best practices for minimizing hazards. There are many easy and effective methods to eliminate and control line-of-fire hazards. For example, organize the shop area to provide unobstructed and easy access to equipment, use signs and stickers for clear labeling of chemical or electrical hazards, keep pathways clear and slip-free, eliminate possible pinch-points on doors or hand tools, and always use the correct tools for the job at hand.

Safety also has a video available on the EH&S webpage that will provide more information on "In Line of Fire" hand safety.