



Short Skip

Volume 69 Issue 2

February 2020

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REPEATERS

Freq	Location
147.000	Merrillville
147.240	St. John
442.075	Merrillville

All Lake County ARC Repeaters are open to all amateurs. All repeaters must have a PL of 131.8 set in order to access.

FROM THE PARADE STAND

by Tim, N9CA, LCARC President



Next Club Meeting: Friday February 14th at 7:30. Tyler's Tender Restaurant North. US Rt.30 northside in plaza between Austin Ave and Cline Ave Schererville Indiana. Plenty of easy parking with food and refreshments available for purchase.

Technician Class: 19 registered for the class sessions

LCARC VE Testing Session: Wednesday February 26th at 6:00pm. Tri-Town Safety Village, 1350 Eagle Ridge Dr. Schererville Indiana. (near Showplace 12 movie theater, Schererville BMW, and Schererville Menards). Testing is \$15.00. All license levels.

FREE WEATHER SPOTTER TRAINING As I write this in January, I have complete faith that Spring is coming, bringing it's uncertain weather.

It is important for all of us to be thinking ahead. Yes sure, disconnect your equipment and unplug it to prevent lightning strike damage.

But, what if... if you had the knowledge and training to give someone a few minutes – maybe even just a few seconds – to seek shelter in time? Wouldn't you want to do that?

Free NOAA and SkyWarn Weather Spotter training courses in our vicinity

Tuesday, March 3 - 6:30pm – 8:30pm Spotter Training - Valparaiso, IN (Porter Co.) 3100 Ivy Tech Dr, Valparaiso, IN 46383 Main entrance door > then down the hall to auditorium

Tuesday, May 5, 2020

6:00pm – 8:00pm Spotter Training - Merrillville, IN (Lake Co., IN) Merrillville Branch, Lake County Public Library, 1919 81st Ave, Merrillville, IN (South side of US Rt 30) Go left from the main entrance. Head downstairs

Do I need to preregister for these sessions? No! All you need to do is arrive at the proper time and location.

About how long do the sessions last? Approximately 2 hours.

Do I have to live / be a spotter in the county that I take the training session? No. The training sessions are identical.

Is there a fee to attend? There is no fee to attend.

On-Line Spotter Course: The online course is a great introduction to storm spotting and can also be used as a refresher to reinforce what you have learned in a previous in-person class.

click this link for info: https://www.meted.ucar.edu/training_course.php?id=23:

SKYWARN NETS: There are 2 local nets in Porter County. Thursday nights @ 8:00 N9IAA repeater system 146.685 pl 173.8 and Monday night at 8:30.

The N9IAA repeater system links with the WALDOFAR Club repeaters in Illinois. You can check into WALDOFAR NET on any one of three frequencies or repeaters:

1) Can log into WALDOFAR Nets linked through N9IAA on 2 meters at 146.685 with a pl tone of 173.8 or

2) Directly to WALDOFAR in Homewood Illinois at 442.375 using a pl 114.8

3) Or WALDOFAR's other repeater in Grant Park Illinois on 441.300 pl 114.8.

73, Tim/N9CA

MEETING MINUTES

January 10, 2020

Russ, KB9HO

Tim talked about the club goals and activities
Introductions were made with 19 attending.

The Wednesday night net at 8:00PM. Tim has said the club will send out E-mails to remind everyone about the net

Hamfest on January 19 at the Kane County Fairgrounds.

Mark K9MQ has a video about the balloon launch he helped with the Illiana Christian School.

Bill had a show and tell about NanoVNA which is the handheld Vector Network Analyzer

Amateur Radio of "So Now What" has been canceled. In its place is now "On The Air Magazine" which is online with QST magazine. Also, will be an on the air blog which will highlight people in Amateur radio and the new technology in Amateur Radio.

The FCC has a proposal to eliminate access for Amateur Radio from the 10cm band. This has a lot to do with the new 5G technology. Amateur radio has always had secondary privileges. The FCC is also making changes to the 2.4G band to do V2X or for self-driving cars and to make vehicles communications to other vehicles, networks, or other devices.

January 15 will be the start of the new technician classes at Tri-Town Safety Village. Tim will have 6 classes and following all of the classes he will have a VE test which will also be open for anyone to upgrade or get a new license.

Tim has asked for program requests. Storm spotter presentation has been a suggestion for upcoming meetings. Next meeting is February 14.

SIGNAL IDENTIFICATION GUIDE

Ever hear a signal on the radio and you don't know what it is? Check out this website for audio files of over 377 different digital signals, both amateur and commercial. Most interesting.

https://www.sigidwiki.com/wiki/Signal_Identification_Guide

NEED HELP? CALL ON THESE ELMERS

- Tim N9CA
- Bill N4GIX
- Bill Young N9QLS
- Russ KB9HO
- Andy W9FXT.
- Mark K9MQ is an ARRL Tech Specialist and can also be called on.

FCC PROPOSES TO MAKE ALL UNIVERSAL LICENSING SYSTEM FILINGS ELECTRONIC

By K5KVN, on the scene — <https://hamhijinks.com/>

SHINNSTOWN, WISCONSIN — A local amateur radio operator says he's ready to introduce his girlfriend of eight months to his radios.

"Ever since the day we met, we've spent almost every waking hour together," Mike Brown said of his girlfriend. "We're at that point in our relationship; it's time for her to meet my radios."

He says he's confident his girlfriend will "really like" his radios. He plans to grill some burgers and have his girlfriend over to his shack this weekend.

HAM RADIO TRIVIA!

Which agency issued amateur licenses prior to the FCC?

A: The Department of Commerce.

B: The FLB

C: The FRC

D: The RCC

JANUARY TRIVIA ANSWER: In what year did the FCC mandate the 1500 Watt PEP limit for amateur radio station power output?

The Correct answer was: 1987

Check the LCARC webpage at www.w9lj.org **AFTER** you pick your answer for the correct answer. Look under MORE, then TRIVIA

NEW NET DAY AND TIME

LCARC Information Net has a new day and a new time! The net will meet on WEDNESDAY evenings at 8:00pm local time.

Check in on the club's VHF repeater 147.000MHz pl 131.8 or on the UHF repeater 442.075Mhz pl 131.8

FEBRUARY PROGRAM



Scan this code to go directly to our web page w9lj.org

THE LATEST TROUBLE AT THE BORDER: VULTURES ARE POOPING ALL OVER A CBP RADIO TOWER

I think this came from the Washington Post



Border Protection has a problem with vultures — specifically, roughly 300 of them that are defecating and urinating all over a radio tower that the agency needs to communicate.

The excretion is coating the entire 320-foot tower in southern Texas, including the interior part that workers need to touch, accord-

ing to a request for information that the agency sent to vendors. The government is seeking a “Vulture Deterrence Netting System” to be installed in August before the birds’ roosting season.

The migratory birds have been making themselves comfortable on the tower in Kingsville — about 45 miles southwest of Corpus Christi — for more than six years, a CBP spokesperson told Quartz, which first reported on the vultures. CBP did not answer questions from The Washington Post on Friday.

“They will often defecate and vomit from their roost onto buildings below that house employees and equipment,” said the spokesperson, whom Quartz did not name. “There are anecdotes about birds dropping prey from a height of 300 feet, creating a terrifying and dangerous situation for those concerned.”

Beyond the risk of vomit and prey falling from the sky, vultures have sharp nails and beaks that can cause deep scratches. The birds also “regurgitate a reeking and corrosive vomit” that kills bacteria on their legs but also slowly destroys metal, according to the U.S. Department of Agriculture.

As acidic excretion piles up on a radio tower, the structure becomes more dangerous for the maintenance workers who have to climb it, reported AGL Media Group, a telecommunications trade publication. The birds also cough up the undigested fur and bones of their prey, and the remnants sometimes pile up on the ground, AGL reported.

Customs and Border Protection plans to clean the contaminated radio tower, remove the rust and repaint the structure before installing the netting that it hopes will deter future vultures from setting up shop. The agency’s radio towers are critical to enabling officers to quickly exchange information related to border security.

Other ways of dispelling the widely disliked birds are more creative. Hanging an effigy of a vulture or a lifelike replica is often effective because birds avoid congregating near where another bird has been hurt or killed, according to AGL. Effigies should be hung head-down to appear as if they are struggling or dead.

The city of Lake Alfred, Fla., spent more than \$25,000 to try to get rid of vultures on its water tower before an effigy finally drove them away, AGL reported. An energy tower and a cell tower experienced the same result.

Propane cannons and pyrotechnics can effectively dispel vultures at night, but Customs and Border Protection wrote that the deterrent it uses should involve minimal noise and visual impacts to the nearby rural area.

“In some situations, selective, lethal removal of birds may be needed to resolve damage effectively,” the Agriculture Department says of vulture removal.

Killing the birds, however, is usually not an option because the Migratory Bird Treaty Act of 1918 makes it illegal. An attorney was hit with a \$75,000 fine, probation and a hunting ban in 2016 for killing a protected species, AGL reported. Fines can reach up to \$100,000 for individuals or \$200,000 for organizations.

The Customs and Border Protection spokesperson told Quartz that the agency wants to keep the birds away while also protecting them. And for good reason: Vultures help clean up deteriorating carcasses on the ground and quell the spread of diseases and bacteria.

“CBP’s Office of Information Technology has been working closely with several agencies ... to determine a good path toward a solution that will deter the vultures from roosting atop our towers while ensuring no harm to the birds,” the spokesperson said. “Research has shown that netting has proven to be a viable deterrent by restricting the birds from being able to initiate roost.”

The vultures did not respond to a request for comment

HAM RADIO Q & A

from Ham Radio Hijinks — Ham Hijinks

Sometimes we get some questions on the web page and I did some research to find the answers. TNX Ham Radio Hijinks. - ed.

“What’s the best frequency to operate on 40 meters? Sincerely, New Op”

Dear New Op, probably a couple times a week! 73!

“I want to erect a dipole with two 82 foot legs on my 100 foot lot. Any suggestions? Sincerely, Land Locked”

Dear Land Locked, buy a vertical! 73!

FOR SALE: Got some radio gear for sale? Looking for some radio gear to purchase? Check out the new FOR SALE page on the club’s website — <https://lcarc.weebly.com/> -sale. Scroll down to see the most current items or click on the ARCHIVE section to see items for sale in previous months. If you have something that has been sold, be sure to contact John, W9WY for information to have your listing removed. There is no charge for club members to list their items. This is a service for members.

US AIR FORCE SPACE FENCE NEARING OPERATIONAL ACCEPTANCE

from ARRL Web Site



Space Fence is located on Kwajalein Atoll in the Marshall Islands. [US Army photo]

According to NASA's most recent Orbital Debris Quarterly News, the space agency calculates about 17.6 million pounds of objects are in earth orbit, a number that will grow as launches proliferate -- including thousands of small satellites -- presenting a huge problem. The US Air Force Space Fence -- a second-generation space surveillance system now nearing completion -- is expected to play a crucial role.

Space Fence is located on Kwajalein Atoll in the Marshall Islands. [US Army photo]

Using advanced solid-state S-band radar technology, Space Fence is located on Kwajalein Atoll in the Marshall Islands. Such

critical space-based technologies as weather forecasting, banking, global communications, and GPS navigation are under threat from space junk orbiting Earth. Collisions already are frequent, and defunct satellites and rocket boosters have increased the amount of space debris.

The Air Force Space Surveillance Network tracks about 25,000 objects. When Space Fence comes online, the catalog will expand considerably, and when fully operational, it will be the world's largest and most advanced radar system, offering unprecedented space situational awareness. Beyond cataloging objects, Space Fence will detect closely spaced objects, breakups, maneuvers, launches, and more.

Contractor Lockheed Martin reported last spring that Space Fence was able to detect debris from a microsatellite destroyed by India as part of an anti-satellite test. It then was able to determine the orbit of the remnants and predict when the space junk would pass through the fence again.

Space Fence is expected to become fully operational this year. -- Thanks to AMSAT News Service via Milsat Magazine; Lockheed Martin

VALENTINE'S GIFT A 'BIG HIT' FOR RADIO OPERATOR

By WBØRUR, on the scene



NACODOCHES, West Virginia — Mr. Harold “Butch” Crutchfield of Upper Combover County is nursing a gunshot wound to the upper thigh, after presenting his wife with an outstanding Valentine’s Day present: an Alpha 9500

amplifier!

“She’d been hinting around that she wanted something really special this year,” says the 63-year-old civil engineer. “So I thought about it for a while... and chose the amp. It’s a great piece of equipment!”

Crutchfield, a ham radio operator since 1988, ordered the amplifier online. It was delivered just days before the traditional “love-bird” holiday.

“I didn’t even have a chance to gift wrap it before she ripped into the packaging. We’ve been married for 32 years,” says Crutchfield. “And I’ve got to be honest. I’m about out of creative gift-giving ideas.”

According to a spokesman for the local ham radio club, Marti Jane Crutchfield (the ham’s wife) was so excited upon un-boxing the amp that she retrieved her husband’s shotgun to fire celebratory gunshots into the air.

Apparently one of the blasts caught Butch in the upper thigh.

“I’ll be alright eventually,” he says philosophically. “But I won’t be climbing my tower anytime soon, that’s for sure.”

A year ago, Mr. Crutchfield presented his wife with an RG -58 coax bouquet, complete with silver and gold Teflon connectors, which he says “shimmered like my wife’s eyes.”

Local hams may recall the freak accident last year, when the coax bouquet twisted around Crutchfield’s left forearm and broke his fall from the 2nd story balcony.

WEBSITES OF INTEREST

Click on the highlighted links to go to the website

Check out the West Mountain Radio Website at <http://www.westmountainradio.com/pdf/Quarter-2-2019.pdf>. Lots of good information not just on their products but ham radio topics as well.

Interested in DX? Join (FREE) the NWI DX Club and/or read the monthly newsletter. See them on the web at: <http://nwidx-club.weebly.com/>



Want to buy or sell “stuff”. Checkout the club’s website for great deals. <https://lcarc.weebly.com/for-sale> Right now there are some GREAT deals on Motorola Mobile and Portable (HTs) DMR radios and accessories.

SPACE FORCE OFFERS FIRST PEEK AT CAMOUFLAGE UNIFORM

from [Military.com](#) By Hope Hodge Seck

The United States Space Force has only one member so far, but it appears the service utility uniform is already well under development.

The official Twitter account of the month-old military service posted a teaser photograph Friday night appearing to show a variant of the Operational Camouflage Pattern used by the Army and Air Force.

Above the left breast pocket in Navy embroidery reads: U.S. Space Force.

"The first #SpaceForce utility uniform nametapes have touched down in the Pentagon," the tweet read.

The uniform depicts four-star rank, indicating that the uniform belongs to Gen. John "Jay" Raymond, the first commander of U.S. Space Force. It also has the Command Space Operations badge embroidered above the service nametape.

On the left sleeve of the uniform is the United States Space Command patch, denoting the military's newest combatant command, formed shortly before Space Force itself activated Dec. 20. And above that patch is a full-color American flag patch -- a departure

from the flags that soldiers and airmen typically wear on their right shoulders in OCP uniform.

Many questions remain. Space Force has yet to announce a rank structure, a full system of uniforms or even what to call members of the new service. In a Thursday briefing, Pentagon spokesman Jonathan Hoffman said Raymond was developing a plan regarding every detail.

"We've got some steps to go through," he said. "General Raymond's team has a -- a massive, incredibly well thought out and planned implementation process for ... uniforms, pay, songs, that they need to go through to get a Space Force ... I don't know the timeline on it but we can probably get you guys an update on some Space Force-related issues in the near future."

-- Hope Hodge Seck can be reached at hope.seck@military.com. Follow her on Twitter at @HopeSeck.

You would think they would have called the branch "The United Federation of Planets (or the Federation for short). Then again why would they need a typical camo pattern for space?— ed

U.S. MILITARY REPORTEDLY SCAMMED BY ANTENNA DEAL

For Amateur Radio Newline I'm Kent Peterson
KC0DGY

If you've ever bought a piece of radio equipment that turned out NOT to be quite what you'd ordered, you're in good company with some folks at the Pentagon. Kent Peterson KC0DGY has that story.

The United States Navy's Special Warfare Command thought it was buying 450 VHF/UHF ultra-light wearable body antennas for use by its elite Navy SEAL teams. Instead it got scammed by a delivery of cheap knockoff antennas, according to federal officials quoted in a recent report on the website Quartz.

The Navy had been shopping last year specifically for antennas made by the New York-based company, Mastodon Design. The antennas were to be delivered by a small business authorized to be a dealer or reseller of Mastodon products. The winning bid was submitted by California-based Vizocom which -- according to the Navy's account of the deal -- instead delivered lower-cost substitutes that had been provided with fake spec sheets and serial numbers identifying them as Mastodon products.

It cost the Pentagon \$165,000 but according to investigators' review of the company's purchase order, Vizocom paid little more than \$12,000 for the antennas. Details in a government search warrant of Vizocom's premises in December said that when the special operations force received the antennas, their poor quality was evident and they looked different from previous Mastodon products used by the SEALs.

According to Quartz, the investigation is still under way. No official charges have been filed.

Vizocom has done more than \$30 million in recent business with the U.S. government, much of it with the military.

YEAR-LONG EVENT CELEBRATES THE DAWN OF SDR

For Amateur Radio Newline I'm Ed Durrant DD5LP
KC0DGY

For most of 2020 hams will be marking the anniversary of a groundbreaking development more than 3 decades ago. Ed Durrant DD5LP has the details.

What began in a lecture given in 1985 by Ulrich L. Rohde, DJ2LR / N1UL, has since transformed much of the amateur radio landscape. His talk came at the dawn of digital signal processing via Software Defined Radio, or SDR. SDR is now considered the standard when it comes to generating or decoding radio signals - and Ulrich Rohde is considered a pioneer. In 1982 he was part of a team working at RCA under a U.S. Department of Defense Contract which led to the first software-defined radio's development.

Special event station DL35SDR, which began activity this month, is marking the 35 years since he delivered his lecture in London at a conference on HF communications. The special event station will be on the air throughout much of the year operating from the greater Munich area where Ulrich's family business, the test-equipment company Rohde and Schwartz, is based.

