

April meeting venue

BIARC will meet at 2 p.m.
Saturday, April 13, at Puna
Covenant Church, just up Old
Volcano Road from Keaau
Community Center, near the
Volcano Highway intersection.

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Big Island Amateur Radio Club

April 2019 Newsletter

Emergency comms, bylaws & constitution discussed

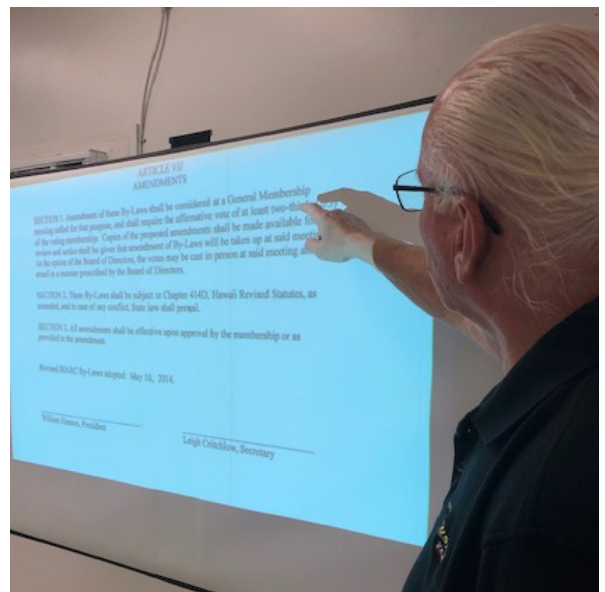


**President Pascal Nelson conducts March
BIARC meeting at Keaau Community Center.**

Among the topics of discussion at the March meeting:

~ EMCOMMS: The crux of the issue -- How we are effective, who we serve and to whom do we provide info. "How do we play a useful role" in responding in a time of need, asked President Pascal Nelson, continuing the prevailing and far-ranging discussion amongst Big Isle hams.

~ BIARC Field Day: If we as a club



**Secretary Les Hittner presents draft
changes to club bylaws and
constitution during question-and-
answer session.**

***Photos by Paul Ducasse,
WH7BR***

plan to stage one in June, we need someone to volunteer to coordinate the event.

~ Governing documents: Secretary Les Hittner, chair of a committee reviewing club constitution and bylaws, presented draft changes and facilitated a question-and-answer session with members.

BIARC meeting minutes March 9, 2019

The meeting was called to order by President Pascal Nelson, AC7N, at 1400. Welcome to Ken Brown (N6KB), Joe Rosenbaum (WH6FZH), Richard Turner (WH6FLH), and Roy Kunishige (WH6FYK). Welcome back to John Bush (KH6DLK/V63JB).

Announcements:

~ Pascal:

- The April meeting will be held at the Puna Covenant Church. Vice-President William Polhemus (NH6ET) will preside. The program discussing the DMR build-out on Hawai'i Island will be presented by Blake Stene (KH7MS).
- Reminder: Dues are due.
- The club needs someone to step forward to organize the club's Field Day effort (There were no volunteers.)
- We also need a website manager (BIARC.net). Contact Pascal for further information.
- Jim Tatar (WH6EMW), who is working with the Hilo Medical Center's emergency response efforts, asked the club for permission to use the club call sign (KH6EJ) when participating in the Hawai'i Statewide Health Net from the Medical Center's amateur radio position. The request was referred to the station trustee.
- The Hilo Marathon is being supported by the Puna Emergency Radio Club (PERC). Please contact Sean Fendt (KH6SF) if you are interested in helping.
- John Bush (KH6DLK/V63JB)

With bylaws, constitution up for revision, members encouraged to participate on April 13

Members are encouraged to attend the April 13 meeting, as proposed changes to the BIARC Bylaws and Constitution will be on the agenda.

"The expectation is that a motion to adopt will be made at the April meeting and that a vote on this motion will be taken at the May meeting," said BIARC Secretary Les Hittner, who is chairing the committee which has been reviewing the matter. (Draft revisions were presented and discussed at the March meeting, with opportunity for dialogue continuing.)

"In accordance with the current set of bylaws, votes on this motion will be accepted via email or USPS. The rules for approved votes on this motion will be clarified at the April meeting," said Les.

gave a brief summary of his ham activities ("A Tale of Two Islands") in Micronesia during his most recent trip.

Treasurer's Report: Tony Kitchen (WH6DVI) reported that 7 new members joined at this meeting and that there was \$2,975.06 in the club treasury.

In a discussion related to the Repeater Fund, Tony noted the following donations: \$932.75 in 2016, \$273 in 2017, and \$285 in 2018.

He will continue to track deposits and withdrawals from the Repeater Fund. This year, Tony will take excess repeater spending out of the Repeater Fund. Until the annual budgeted amount (\$500) has been spent, all repeater expenses will come out of the General Fund.

The current balance in the repeater Fund is \$255.25.

Committee Reports: Constitution and Bylaws Discussion:

Leslie Hittner (K0BAD) discussed the proposed Constitution and Bylaws which were to be referred back from committee at this meeting. He went over the high points of the two documents and explained the reasoning for the changes being proposed. After answering many questions, it was decided to continue the discussion on the BIARC email listserve. Several people asked to be added to the listserve as a result.

Leslie stated that if the listserve discussions lead to changes or modifications to the documents, he would include those changes in a complete set of documents to be emailed with the club Newsletter. The expectation is that a motion to adopt will be made at the April meeting

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The president's paragraphs

Hello BIARC,

This will be shorter than usual.

The April BIARC meeting will be on Saturday,

April 13, 2:00 pm at the Puna Covenant Church, Kea'au.

The program will be about the Hawaii DMR network and will



be presented by Blake Stene, KH7MS, from Ocean View. DMR is an interesting and fun aspect of ham radio that has a lot going on right now, both in Hawaii, and worldwide.

Debbie and I are on the road for a few weeks and unable to attend this meeting. William Polhemus NH6ET, our vice president, will chair the meeting. Give him your best encouragement and support.

One more time: If you want the BIARC club to have summer Field Day activities, one of our members will need to step forward immediately to begin the preparations. Let William know if you want to step up to bat.

Also, we discussed having club build-it projects. Anyone wanting to start this, please let one of us know. And, we are still very much open to discussing our club's interest in and involvement with emergency communications activities and services. Let's keep the conversation going, on the BIARC email reflector (talk to Les K0BAD) and on the BigIslandRADIO@groups.io discussion group.

Have a great meeting, and keep being radioactive.

**Aloha,
Pascal AC7N**

Minutes: continued

and that a vote on this motion will be taken at the May meeting. In accordance with current bylaws, votes on this motion will be accepted via email or USPS. Rules for approved votes on this motion will be clarified at the April meeting.

EMCOMM discussion led by Pascal (Assistant SCM for Hawai'i):

After a short break for pupus, Pascal began a discussion on emergency communications.

Highlights:

- This is a persistent discussion on Hawai'i Island.
- EMMCOMM is one of the reasons the Amateur Radio Service exists.
- o ARES
- o Salvation Army
- o Mormon Church
- o International Red Cross
- o HCCD
- How are we effective?
- Who do we serve?
- How do we play a useful role in our isolated island environments?
- o Think ahead
- o Plan
- o Recognize our capabilities and level of preparedness
- County and state "welcome" has been pushed aside since 9/11 by increases in paid professional emergency response personnel.
- There are 3 (not mutually exclusive) response roles amateur radio can play:

ARES, ACS & standup

- As an ARRL affiliated club, BIARC has an obligation to look seriously at ARES participation.

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- ARES: ARRL is moving to "ARES-2" in its national effort.
- ACS: These are direct reports made to HCCD via radio, telephone, or internet.

Amateurs in the ACS network provide reports verbally using ACS message formats.

- Standup Response: Those who have equipment and experience use existing nets, etc., to pass information, primarily to other amateurs, and seek official sources for responses and return messages. There is evidence that Standup Response activities can be effective and, in fact, can be the only EMMCOMM resources available – especially during emergencies that have been unanticipated by served agencies.

- There are new EMMCOMM communications possibilities:
 - o Winlink (HF & VHF)
 - o Digital networks (HF & VHF)

The most important thing we must do is to build positive relationships with the leaders and members of served agencies and to remember that all emergencies are local.

William Polhemus (NH6ET) added that if we want served agencies to listen, then we must go to them in advance to build such relationships. If we wait to approach them when they are in the midst of an emergency, we will be seen as "in the way" and "intrusive" to ongoing operations. We will actually harm the relationship we wish to build.

This discussion will continue...

The meeting was adjourned at 1633.

Respectfully submitted,
Leslie D. Hittner, Secretary



Waimea Ham Fest a big hit



Darrell Asuka, KH6RDO, shares these photos he snapped at the Saturday, Feb. 2, "Original Big Island of Hawaii International Swap meet/Ham Fest" in Waimea. The annual event draws hams from all over for a day of networking, education and support of amateur radio.



Hawaii ham discovers comet now named for her

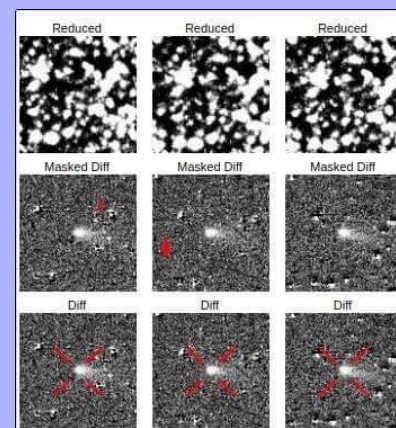
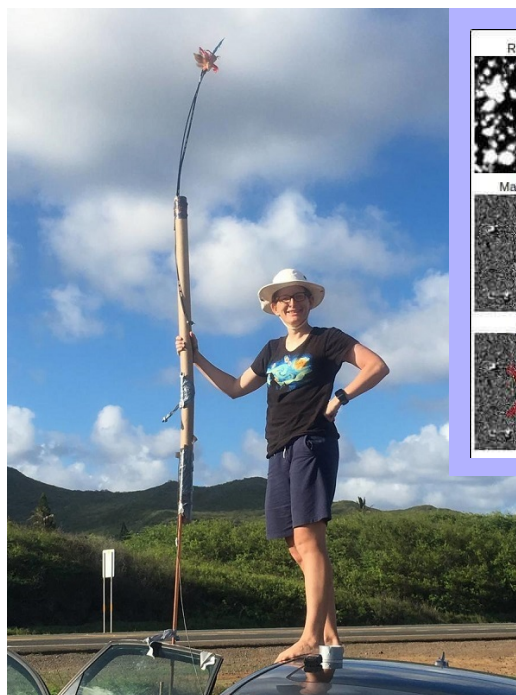
By Stacy (Darren) Holbrook,
KH6OWL

WH6FTQ, Dr. Heather A. Flewelling, works for the Institute for Astronomy, which is part of the University of Hawaii. Dr. Flewelling has a PhD in physics from the University of Michigan.

She is currently working on ATLAS, Asteroid Terrestrial-impact Last Alert System, ATLAS is an asteroid impact early warning system being developed by the University of Hawaii and funded by NASA. It consists of two telescopes, 100 miles apart, which automatically scan the whole sky several times every night looking for moving objects. Heather has a very cool job title: "Planetary Defense Researcher."

ATLAS, <http://fallingstar.com>, is a set of 0.5 meter telescopes, one on Haleakala, Maui, one on Maunaloa, Hawaii. Atlas has discovered 283 Near-Earth Asteroids, 31 Potentially hazardous asteroids, 16 comets and 3082 supernovas.

Heather was at work on the morning of discovery. "Each morning, we look through the previous night's data to search for and report new asteroids. Occasionally we find comets and artificial satellites." Dr. Flewelling stated "to report the comet, I noted that it had a tail, measured it (the size, brightness, and position), compared it to nearby stars,



Dr. Heather Flewelling, WH6FTQ, has a very cool job title: "Planetary Defense Researcher."

and submitted the observations to the Minor Planet Center with a message that I detected cometary activity. Once submitted, it was listed on the Potential Comet Confirmation Page, and other astronomers did follow up observations to confirm."

Another really cool thing she was a huge part of that happened this year was releasing the world's largest astronomical database: <https://www.forbes.com/sites/bridaine-parnell/2019/01/29/want-to-see-the-universe-in-a-box-anyone-can-access-this-massive-data-drop-of-astronomical-info/#502184071441>.

This database, called Pan-STARRS DR2, has been referred to the size of taking 2 billion selfies or 15 times of the volume of the Library of Congress.

Heather is very active in

Hawaii in amateur radio; she is a NCS for a nightly net, involved in simplex nets as well as hiking and activating mountaintops for SOTA. She has been an NCS for Skywarn several times, starting with Hurricane Lane in 2018.

She got her license on May 8, 2018 and upgraded to Extra on Field Day 2018.

The International Astronomical Union Minor Planet Center named the comet on 21 March 2019. The comet was named "Comet Flewelling", (Comet 2019 D1).

This webpage shows the details of the comet discovery. <https://www.minorplanetcenter.net/mpec/K19/K19F53.html>

Heather said she enjoys everything about

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ham radio. Especially anything with simplex, hiking, or trying to make long distance contacts.

When asked why she got an amateur radio license? Heather replied "I got an SDR radio as an impulse item last year. These are the ones you can get for about \$10, plug into your computer, and pick up FM radio stations. I discovered the ham bands and a few other bands. It was fascinating, and I couldn't stop exploring the bands.

"Once I found out the ham bands were quite active in Honolulu, I got my license as fast as possible. I assumed I would immediately jump into HF. It turns out it was quite out of my budget as well as somewhat difficult to do in a condo. Instead, I discovered how much fun VHF/UHF is! I particularly like simplex and summits on the air (SOTA), but I also really like how welcoming and friendly the ham community is. Ham radio is something I should have gotten into a long time ago. I'm trying to make up for lost time now!"

You can visit Heather's QRZ page at <https://www.qrz.com/db/wh6ftq> (<https://hamradiohawaii.wordpress.com/2019/03/23/hawaii-ham-discovers-a-comet-and-it-gets-named-after-her/>)



David Robbins, K1TTT, above, in a special shack selfie, and, at right, in photo by Pascal Nelson, AC7N.



Meet a BIARC member from Massachusetts

Meet David Robbins, K1TTT, an award-winning member of the far-flung BIARC ohana. In 2017 he was inducted into the CQ DX Hall of Fame.

"Dave has been a member of BIARC for quite a few years now as well as a member of the Yankee Clipper Club in Massachusetts," said proud mother Barbara Darling. "Richard and I are very proud of what he has done for the ham radio community."

At last count, K1TTT had six operating stations, and participates in many contests from his location in Peru, Mass., outside of Pittsfield in the northwest section of the state. Pascal and Debbie Nelson visited Dave at his QTH last year.

The CQ DX Hall of Fame was established in 1967 to recognize radio amateurs who have made major contributions to DXing and DXpeditioning. CQ DX Editor Bob Schenck presented Hall of Fame plaques at an induction ceremony held at

that year's annual Dayton DX dinner.

The magazine's story noted that K1TTT, builder and owner of a contest superstation, wrote a book on the experience soon after assembling his first contest station.

In the introduction to "Building a Superstation," he wrote: "I realized I was not a 48 hour iron pants operator and decided to start doing multi-ops from here..." For more than 30 years, Robbins has hosted legions of operators at his multi-multi station, some veterans, some newcomers, and willingly shared his knowledge and experiences, both in his building book and his annual "Contest Cookbooks" distributed to members of the Yankee Clipper Contest Club (YCCC), of which he is past president.

"If anyone would be interested in reading his books, I would be willing to lend them out," said Barbara.

New ARRL EmComm program addresses HI as an island state

Aloha,

The ARRL has restructured its EmComm program to address the practical aspects of radio communications as well as the skills needed to better serve local communities in emergencies. Many of you have seen the announcement of the ARRL Education Department's revised EC-001 course.

This is the first ARRL training program using "Canvas", an Internet-based tool used by many educational organizations nationwide.

The new EC-001 course addresses Hawaii's situation as an island state. Students will be assigned mentors in Hawaii who are knowledgeable in relationships with our local served agencies. Course mentors will be assigned in the same county as the student whenever possible.

Class size will be kept low to maximize the opportunity for students to learn about Hawaii's EmComm organizations and activities. The syllabus is available at <http://www.arrl.org/files/file/Education/EC-001-Syllabus-2019.pdf>

The first class scheduled for Hawaii will begin in June. Then, the program will be rolled out throughout the Pacific Section as quickly as additional local mentors become available. The model used for rolling out the EC-001 course will be similar to the one used successfully for the Hawaii CW Ops Internet training program run from Maui by Alan Maenchen (AD6E).

Pacific Section Emergency Coordinator (SEC), Clem Jung (KH7HO), will handle student registration for the EC-001 course and coordinate scheduling with the ARRL Education department. This course is being offered free of charge by the ARRL to all Amateur Radio operators.

To register send an email to Clem Jung (KH7HO) at kh7ho@arrl.net.

Joseph Speroni, AH0A
ARRL Pacific Section
Section Manager
ah0a@arrl.org

From Russia with love

Oleg Borodin sends greetings to isle hams from his home in Russia. He visited Hilo circa 2010 and has kept in touch with Barbara and Richard Darling ever since.

"He would like to come back some day again," reports Barbara.

Oleg asked her to "Send my warmest ALOHA for all BIARC members from me with my wife Olga please. 72! Oleg "Mr. 72" RX3G/KH6OB (ex RV3GM)."

Tips on Japanese call signs

Online, there's a good guide to understanding Japanese call signs.

Check out:

<http://motobayashi.net/callsign/enigma/index.html>

Tech License course schedule

Doug Wilson's free Technician License course schedule is underway. The six-week classes include five training sessions, with licensing exams given on the final week.

Upcoming starting dates are at 6:30 p.m. April 19 at Discovery Harbor in Ka'u; on May 23 in Waimea (location TBA), and on Oct. 17 at the Keaau Community Center.

The classes are free, with the normal \$15 testing fee to ARRL, whose volunteer VEs (volunteer examiners) conduct the testing for the Federal Communications Commission. As always, current licensees wanting to upgrade also may take tests for advanced licenses at that time. To register for the Tech training classes, or for more info, contact Doug, KH7DQ, at douscelle@aol.com.

10-10 Int. Aloha Chapter

Local hams active on 10-meters encourage amateur radio licensees at all levels to join in the fun.

[More info on the world of Ten-Ten is available on Facebook and at <https://www.ten-ten.org>]



FCC invites comments on ARRL Tech enhancement proposal

The FCC has invited public comments on ARRL's 2018 Petition for Rule Making, now designated as RM-11828, which asks the FCC to expand HF privileges for Technician licensees to include limited phone privileges on 75, 40, and 15 meters, plus RTTY and digital mode privileges on 80, 40, 15, and 10 meters. The Technician enhancement proposals stemmed from the recommendations of the ARRL Board of Directors' Entry-Level License Committee, which explored various initiatives and gauged member opinions in 2016 and 2017.

"This action will enhance the available license operating privileges in what has become the principal entry-level license class in the Amateur Service," ARRL said in its Petition. "It will attract more newcomers to Amateur Radio, it will result in increased retention of licensees who hold Technician Class licenses, and it will provide an improved incentive for entry-level licensees to increase technical self-training and pursue higher license class achievement and development of communications skills."



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ZDNet offers a procedure for cleaning up the mess from a leaking battery.

Biz tech news site offers tips on how to clean up a battery leak

Many hams have had the unfortunate experience of old batteries leaking in a piece of gear or a flashlight, creating a mess. Business technology news site ZDNet recently offered its procedure for cleaning it up. The brief online presentation recommends taking some precautions about coming in contact with the white discharge -- specifically potassium hydroxide in the case of alkaline cells, a caustic irritant. An old toothbrush or something similar can start the project, along with a small scraper, and cotton swabs dipped in water. Start by removing and properly disposing of the bad cells and then brushing out the worst of the material -- preferably outdoors or over a container to catch the remnants.

The article advises against using any acid such as vinegar or lemon juice, lest it cause corrosion of its own. It suggests a fiberglass scratch brush for cleaning battery compartment contacts, although other tools may work as well. Deoxit D5 or similar contact cleaner comes in handy, with a tiny dab of dielectric grease or silicone paste to inhibit future corrosion if a leak occurs. Other tips to head off problems down the road: Stick to name-brand batteries; avoid mixing old and new batteries; remove batteries from devices not in use; avoid exposing batteries to extreme heat or cold, and mind battery expiration dates.

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Specifically, ARRL proposes to provide present and future Technician licensees:

Phone privileges at 3.900 to 4.000 MHz, 7.225 to 7.300 MHz, and 21.350 to 21.450 Mhz

RTTY and digital privileges in current Technician allocations on 80, 40, 15, and 10 meters.

Under the ARRL plan, the maximum HF power level for Technician operators would remain at 200 W PEP. ARRL's petition points to the need for compelling incentives not only to become a radio amateur in the first place, but then to upgrade and further develop skills.

ARRL stressed in its petition the urgency of making the license more attractive to newcomers, in part to improve upon science, technology, engineering, and mathematics (STEM) education.

The ARRL Board's ad hoc Entry-Level License Committee, which recommended the proposals, received significant input from ARRL members via more than 8,000 survey responses.

Now numbering some 384,500 licensees, Technicians comprise more than half of the US Amateur Radio population. ARRL stressed in its petition the urgency of making the license more attractive to newcomers, in part to improve upon science, technology, engineering, and mathematics (STEM) education, "that inescapably accompanies a healthy, growing Amateur Radio Service."

ARRL said its proposal is critical to develop improved operating skills, increasing emergency preparedness participation, improving technical self-training, and boosting overall growth in the Amateur Service, which has remained nearly inert at about 1% per year.

"Tyro" license proposal also open for comment

The same day that the FCC put ARRL's Technician Enhancement petition on public notice, it also invited comments on "***an entirely unrelated***" proposal, designated RM-11829, asking the FCC to create a "Tyro" license class that would require a minimal online examination and require mentoring by an Amateur Radio licensee of Technician class or higher.

A "tyro" is a novice or a beginner. The petition was filed in August of 2017 by Gary A. Hampton, AD0WU, of Longmont, Colorado. Tyro licensees would earn operating privileges on 99 channels in a 70-centimeter "TyroSubBand." Applicants would have to be at least 11 years old.

Hampton said in his petition that one goal would be "reliable, nationwide 70-centimeter interoperability" in the exclusive 430 - 440 MHz segment of the band.

"The Tyro license is exceptionally important to FEMA's CERT program," Hampton's petition asserts. "It allows ARES to solve CERT's communication problems. The TyroSubBand technical specifications easily double the capacity of typical 70-centimeter repeaters..."

Hampton maintained in his petition that Amateur Radio also "should be used to further scientific research that is published and quickly placed in the public domain."

Hampton expressed the belief that institution of the Tyro license would spawn growth within Amateur Radio, making entry into the hobby nearly as simple as obtaining a General Mobile Radio Service (GMRS) license.

Colorado ARES volunteers muster for "Bomb Cyclone" storm

Amateur Radio Emergency Service® (ARES®) volunteers in Colorado stepped up as a mid-month "bomb cyclone" winter storm struck the state in March, with heavy rain shifting to heavy snowfall. The storm affected several states and led to significant flooding in Nebraska. Parts of Colorado recorded winds of nearly 100 MPH and record-low barometric pressure readings. ARES teams in Colorado began preparations a day ahead of the so-called "bombogenesis" weather event.

Pikes Peak ARES alerted its personnel via email and a regularly scheduled Tuesday net and coordinated with the Special Communications Unit (SCU), a special cadre of radio amateurs in the Pikes Peak Regional Office of Emergency Management (OEM). Most SCU members also belong to ARES, but when called up by the OEM, they wear their SCU hats. The SCU planned to deploy to the Emergency Coordination Center (ECC) on March 12 and be ready to operate first thing in the morning.

At the time, the Red Cross did not anticipate needing Pikes Peak ARES support, so the ARES district planned to undertake weather spotting for the National Weather Service (NWS) office in Pueblo and relay status information to the ECC. By the morning of March 13, however, the storm's timing had changed, and the Red Cross requested ARES operators in four shelters, creating a problem with recruiting and deploying sufficient volunteers in time.



Bakelite patent awarded 100 years ago

Radio amateurs of a certain age are more familiar than most newcomers with the trade name Bakelite, which derives its name from its inventor Leo Baekeland, who developed Bakelite phenolic resin, the first thermosetting plastic, in 1907.

His process patent for making insoluble products of phenol and formaldehyde -- the components of Bakelite -- was filed that year, and Baekeland was awarded a patent a century ago come this December. Bakelite found a place in numerous technologies, including early ham gear and radios, widely employed as an insulating material.

Once a Bakelite product is formed, it will not change shape or melt under heat. In compression molding, the resin is generally combined with fillers such as wood or asbestos before it's pressed into the ultimate product shape. Tube sockets often were constructed using Bakelite. It later found its way into such products as jewelry. In February 1909, Baekeland officially announced his achievement at a meeting of the New York section of the American Chemical Society.



Swimming pool noodles protect halyards at the Delaware Valley Radio Association's club station W2ZQ.
[Photo courtesy of Gary Wilson, W2GW]

Using your noodle for halyard protection

Sailors know that a line rubbing against a fixed object such as a dock can soon fray and part. To protect lines and halyards in those situations, they often wrap the line with fabric "chafing gear" to reduce wear on the line.

The Delaware Valley Radio Association's club station W2ZQ had two antenna halyards that were rubbing against the shack's roofline. To prevent their parting and, thus, dropping the wire antennas were supporting, the club needed to do something.

The solution appeared in a neighbor's trash, where two swimming pool "noodles" had been discarded. Such foam toys often have a hollow center, so slicing them lengthwise allows them to be easily slipped around the halyards. These then were placed near the contact point and secured with short pieces of string (cable ties would work too) to keep them from sliding out of position.

"Eighteen months later, the antenna halyards are still in good shape!" reports Gary Wilson, K2GW. A variation on this theme would be to use pre-slit foam pipe insulation. -- **Thanks to Gary Wilson, K2GW**



Carole Perry, WB2MGP

Award honors Carole Perry

ARRL congratulates amateur radio educator Carole Perry, WB2MGP, for being the first recipient of the new Carole Perry Educator of the Year Award, presented on Feb. 9 by Orlando HamCation®. The award, to be given annually in her name, recognizes outstanding dedication in educating and advancing today's youth.

A fellow and director of the Radio Club of America (RCA), Perry is a past Dayton Hamvention® Amateur of the Year and a recipient of the ARRL Instructor of the Year Award. She sits on the RCA Scholarship Committee and chairs the RCA Youth Activities Committee, which she established in 2007.

Perry has moderated the Hamvention Youth Forum for 31 years. The 2019 Orlando HamCation was the ARRL Southeastern Division Convention.