President Pascal Nelson, AC7N, above, and Mark Richardson, WA7ZK, from Kona, at left, led a presentation about receiving-loop antennas at our February meeting. Mark demonstrated one of the Broad Band Receiving Loops that he has built, and Pascal discussed and demonstrated a commercial loop.

-- Photos by Peggy Gentle

Broadband receiving antennas good for reducing noise

A bane of radioactive life called RFI (short for Radio Frequency Interference), it makes life miserable in Ham World.

Our special guest at the February meeting was Mark Richardson, WA7ZK, who made a special trek over from Kona to join Pascal in talking about how to use broadband receiving antennas to reduce noise.

Pascal demonstrated one of the commercially available magnetic loop antennas, and Mark (wearing a T-shirt with the message: “Real Radios Glow in the Dark”) discussed and showed us a loop he built at home.

Noting that “everything makes noise,” Mark used an old transistor radio to illustrate how noise is generated by various household plugins.

And he showed how use of a receiving loop lets operators hear signals otherwise buried way down in the weeds.

NH7FY offers update on KH7E

Longtime BIARC stalwart Wilbur Carlson, KH7E, is now residing in a care home in Hawaiian Paradise Park.

If you would like to send him a card, please mail it to the following address: Wilbur Carlson, c/o Daniel Pierson, HC3 Box 11028, Keaau, HI 96749 (Coco will get the card to him).

Wilbur has been a member of BIARC for many years. His wife, Doris, was also a ham (KH6ER) but she is a SK. Their daughter, Joyce, (WH6BIR) was president of the club at one time. She is also a SK.

I'm sure that Wilbur would appreciate getting some mail.

73, Barbara, NH7FY

President's message

Even though Solar Flux Index is in the dumps, we continue to have fun with ham radio

President Pascal Nelson invited Mark Richardson, WA7ZK, from Kona to come and help us with our presentation about receiving loop antennas.

The days are getting longer - but HF propagation is still in the dumps. The SFI (Solar Flux Index) has been down to 67, just about the lowest possible value, for the last several days. Yet we continue to have fun with ham radio. Many of us are still "talking" to other stations around the world, although the QSO is more likely to involve an FT8 digital exchange. We do what we can with what we have - and we certainly have a lot more tools and options this time around the solar cycle than we've ever had before.

We hams have many interests, and diverse ways to engage in our amateur radio hobby. For some of us it is HF DXing. For others it is local VHF FM nets, or perhaps easygoing conversations with our on-air friends. Some of us work up projects annd build things. Others enjoy a shack stocked with beautiful and amazing rigs made by Icom or Yaesu or Kenwood or some other well-regarded manufacturer. Some hams are motivated to learn how to serve the community during times of emergency, and dedicate a lot of their energies to preparedness and training.

Whatever it is that gives us enjoyment or fulfillment in our hobby is a good thing. Our BIARC meetings should be a place to share, discuss, and engage each of these aspects of our ham selves. All things in turn.

I'd like to encourage us to be more intentional in identifying and advocating for the types of things that bring interest, excitement, and challenge to us as hams in this community and place. I want to bring up some questions during the activity time of our meeting.

Let's identify some ideas and topics which we are interested in learning more about, or doing as activities:

- Elmering - new hams need someone to encourage and guide them - an ELMER.
- CW operation - some of us have never stopped loving it; others may like to learn.
- SSB operation - microphones and processors are topics for discussion.
- Amplifiers (turn up the heat!) Glowing tubes, or LDMOS FETs - new choices.
- Conversational digital modes such as FSQ/Thor/Olivia with the FLDIGI modes.
- EmComm (Emergency Communications) with FLDIGI modes. Forms and files.
- FT8 (JT65) grid square collection.
- Antennas - wires, loops, yagis, mag loops, and many, many more. Always a fertile topic for conversation - and learning.
- UHF and Microwaves - sub-GHz and up! Mesh Networking (AREDN, HamWan), telemetry, EME (moonbounce), more
- ARES - Amateur Radio Emergency Service
- Building equipment - kits and modules
- What's your interest?

Also, this month we will hear from one of our newer members, John Bonewitz KI7FUT. John is a teacher at Kea'au High School. He is using ham radio to capture the imaginations of his students, and begin to teach them some science and engineering, from radio to satellites. He's really enthusiastic about how this is working out, and he is eager to tell us more about it.

Aloha,
Pascal, AC7N

Hams are assigned to positions along the 26.2-mile course which extends into Keaukaha and up the North Hilo coastline from the start/finish line near the canoe hale on the Hilo Bayfront.

In search of ham trivia

At the February meeting, Dwight Huffman introduced us to "Funkerlied," the anthem of the German signal troops, complete with Morse Code. This song of the German radio operators can be viewed on youtube at https://www.youtube.com/watch?v=Be8u-ZoBG_w Mar 6, 2017.

Hams invited to help with logistics support for March 18 Hilo Marathon

As it has done for the past several years, the Puna Emergency Radio Club will provide logistics support during the Big Island International Marathon. This year's event takes place on Sunday, March 18, in Hilo and begins at 0600 HST. All licensed amateur radio operators are invited to volunteer their time for this event and receive updated information during the weekly PERC nets at 7 p.m. Wednesdays on frequency 147.120MHz, +100Hz.

Hams are assigned to positions along the 26.2-mile course which extends into Keaukaha and up the North Hilo coastline from the start/finish line near the canoe hale on the Hilo Bayfront.

With net control station at Onekahakaha Park, the radio volunteers ensure coordination between aid stations and race officials, and assist with health and safety when needed.

Hams wanting to help out also may contact WH6EXS at 1-443-492-9272 or send a message to the PERC Facebook page: @KH6PRC.

PERC coordinators noted: “As we are dedicated to community resiliency and coordinated communications, this event will utilize the Incident Command System (ICS) where applicable.”

“Take part in an event which promotes health and fitness in Hawaii to a global audience. While we need a number of experienced volunteers, any amateur with a desire to learn and contribute is encouraged to experience this international event from a unique perspective.”

Everyone invited to HPP Radio Day on April 28

Everyone is invited to HPP Radio Day from 9 a.m. to 4 p.m. April 28 at the Hawaiian Paradise Park community center at 17th and Makuu.

"We want to let everyone know that the event is open to all hams, especially the newest ham operators," said coordinator Mike Stratton, KH6PAC.

"Our plan is to have several different radios set up," said Mike. There will be lots of activities and demonstrations.

Among the participants thus far: the HPP Community Emergency Response Team (CERT), the HPP Emergency Radio Team, folks from ARES, the Amateur Radio Emergency Service, and the Puna Emergency Radio Club, and various others.

"K0BAD has stated he will do a digital radio setup, KH6SF will do packet, WH6LU will do DX," said Mike. "We will also have a 2-meter set up, and are hoping to have someone doing CW and HF."

Set-up will start at 8 a.m., with tear-down scheduled around 4 p.m. All are welcome. For more details, email Mike at jefffan@hotmail.com.

Don't forget to sign up for the QTH.NET Email Listserve

The Big Island Amateur Radio Club continues to build and streamline its email listserve.

"The main advantage of using such a listserve is that you do not have to individually maintain a list of club-member email addresses in order to enter into important conversations related to club operations," explains coordinator Les Hittner.

"The listserve can be set up to maintain two independent lists; a general one and an administrative one. The advantages follow:

• Members do not have to maintain their own list of BIARC email addresses.

• Messages sent via the listserve can be archived. This is particularly important for the administrative listserve where club business might be discussed.

• The listserve provides a secure means of sending club email.

• Listserve emails are easily identified by their unique Subject Line headings.

• Access to the Listserve can be placed on the club's website.

Additional information can be found at: http://mailman.qth.net/

In order to become a member of the BIARC Listserve, simply send me an email:

lhittner@hbci.com

and let me know that you want to be placed on the listserve. I will enroll you and then send you an information email about its use.

Mahalo,

Leslie Hittner, K0BAD

All invited to BIARC luncheon Fridays at Nani Mau Gardens

The BIARC luncheon is held every Friday at Nani Mau Gardens on Makalika Street off of Railroad Avenue, or Route 11. Members arrive anywhere from 11 a.m. to 11:15 a.m.

It is a buffet luncheon at a cost of $15, paid in the gift shop. This cost includes walking in the garden also.

We have one table in use at the present time, but can always add another if attendance increases. Hope to see some of you there.

73,

Barbara Darling, NH7FY

Join new EmComm list

For anyone interested in Hawaii County EmComm discussion, please join the other 25 members on this new list dedicated to emergency radio on the Big Island.

To sign up: Hicoares+subscribe@groups.io

New series of Technician License prep classes now under way around island

Free Tech Classes

Hilo - Aupuni Conference Room:
- February 15, 2018
- February 22, 2018
- March 1, 2018
- March 8, 2018
- March 15, 2018
- March 22, 2018 (Exam)

Kona – West Hawaii Civic Center:

- March 22, 2018
- March 29, 2018
- April 5, 2018
- April 12, 2018
- April 19, 2018
- April 26, 2018 (Exam)

Ocean View – Hove Community Center

- May 3, 2018
- May 10, 2018
- May 17, 2018
- May 24, 2018
- May 31, 2018
- June 7, 2018 (Exam)

Kea'au – Kea'au Community Center

- November 1, 2018
- November 8, 2018
- November 15, 2018
- November 29, 2018
- December 6, 2018

December 13, 2018 (Exam)

Contact Doug Wilson (KH7DQ) at douscelle@aol.com or Ph. 985-9362

Note: Test fee of $15 (in exact cash) due at time of each exam.

~~ Free classified ads ~~

Heavy Duty Spiderbeam

I have a 20 - 10 meter (5 band) Heavy Duty Spiderbeam for sale. It was purchased about a year ago, recently assembled and taken down....just wouldn't fit properly at our QTH. It's not too big, the QTH is too small, hi hi. Asking $200 (pick up in Waimea).

The new price would be $469 + shipping. The only items that need to be replaced are the nylon support ropes (would be less than $100 to purchase, if you don't have something in the shack already).

So, rather than packing it away and "maybe" using later, I thought it might make a local ham happy. It's a very good antenna and doesn't need to go too high.
https://www.eham.net/reviews/detail/3688
Mahalo es 73,

Bill
AH6FC
ah6fc@startmail.com

Drake amplifier with PS

1.) Drake L4B amplifier w/PS. Excellent working condition with a beautiful front panel.

All Harbach PS components and a Peter Dahl transformer. 1100+ watts out. Manual. $850, plus any shipping cost. No trades.

2.) Amp Supply LK-550 HF Amp. Peter Dahl transformer, three 3-500z tubes for easy legal limit output. 160-10 + WARC bands. I'm the original owner, Excellent condition. Manual. $1,100, plus any shipping cost. No trades.

Lloyd Cabral, KH6LC
808-966-7782

To submit a ham-related ad, please email it to lcritchlow@mac.com by the 20th of the month for publication in the following month's newsletter. Mahalo.

February BIARC meeting minutes

Big Island Amateur Radio Club BIARC

Meeting Minutes

Saturday, February 10, 2018

The meeting was called to order by President, Pascal Nelson, AC7N, at 1400.

Pascal reminded everyone present that there was no meeting in January because of the scheduling of the Waimea Hamfest on the meeting day.

Members and guests present introduced themselves.

Treasurer's Report (End of month – January 2018):

Bank: $1867.04

Membership: 30-40 members registered. Additional members registering at this meeting.

Announcements:

Pascal announced that Gary Schwiter, WH6EPS, has taken on the role as Club Repeater Coordinator.

Bob Schneider announced that Ernie Luiz, KH6BEV, passed away on February 2, 2018.

Barbara Darling announced that Wilbur Carlson, KH7E, is now in a care home.

Reports:

Repeater Coordinator: Gary noted that the Kulani repeater (146.16/76 tone 100 Hz) has been the focus of the Repeater Committee during January and February.

1. A new Yaseu DR-2X repeater was installed. It is running in auto-receive and Analog FM transmit. That means the repeater will receive both digital and analog FM signals and will convert, if necessary to transmit always in analog FM. The repeater is set with a 100 Hz tone squelch and will transmit a 100 Hz tone when transmitting analog FM. When the repeater is set to fully automatic, the 100 Hz tone will not be transmitted with digital. This will allow analog-only users to avoid hearing the digital hash when fully digital communications are taking place.
2. An S-Com 7330 controller has been ordered. When installed the UHF repeater linking system will be re-established.
3. Parts found to be in excess will be used to restore the Mauna Loa site.
4. A new commercial antenna has been donated to the club and will be installed properly at the Kulani site using an approved mounting structure at an authorized height and location on the tower. The old antenna was damaged and literally taped to a tower leg pending this new installation. The old hardline cable – pending a detailed inspection – is likely to remain in service.
5. Improved UHF linking system may require the procurement of a UHF duplexer and a second UHF antenna. The UHF link antenna will likely be located below the VHF antenna on the same tower leg.
6. The next repeater to get the committee's attention will be the Yaseu DR-1 repeater at Pepeekeo and some maintenance on the equipment located at the Girl Scout camp.

BIARC Website: Pascal has captured newsletters from 2004 on and is working on a new updated website. Whether the domain name will change or not is still being decided. He is working with Leslie Hittner to ensure that the BIARC email listserve can be integrated into the new site. Les volunteered to scan old paper documents into an electronic database. The ultimate fate of these old paper documents remains unresolved.

PERC Big Island Marathon (Sunday, March 18) project: Gary Schwiter announced that PERC is looking for an additional 15 volunteers for this project.

There being no further business, Pascal adjourned the meeting adjourned at 1446.

Following a brief break for pupus, a program on receiving loop antennas was presented by Pascal and Mark, WA7ZK.

Respectfully Submitted,

Leslie D. Hittner

Leslie D. Hittner, Secretary

Gary Schwiter, John Buck and Paul Ducasse at the February BIARC meeting.

ARRL The national association for AMATEUR RADIO™

The ARRL Letter

ARRL says FCC may need to intervene to ensure effective antenna rights

Commenting in response to an FCC Public Notice (DA 17-1180) released in January, ARRL addressed the extent of Amateur Radio's response to recent hurricane disasters and efforts needed to expand the use of Amateur Radio services when it comes to planning, testing, and providing emergency communication. Amateur Radio not only has been "far more than a hobby;" it is a ubiquitous, infrastructure-independent communication resource that's always ready to deploy effectively whenever and wherever needed, the comments assert.

ARRL raised three areas where action by the FCC could ensure and enhance the ability of radio amateurs to provide emergency communication, including the current Amateur Radio Parity Act of 2017 (S. 1534), now in the US Senate.

"HOAs can preclude amateur antennas in common areas. HOAs can enact reasonable written rules governing height, location, size, and aesthetic impact of, and installation requirements for, outdoor antennas and support structures for amateur communications, but the effective outdoor antenna requirement is paramount," ARRL noted in its comments.

"The bill is currently before the Senate Commerce Committee. If, however, Congress is unable, as has been rumored, to pass any telecommunications legislation this term, it will be incumbent on the Commission to take the action on its own initiative that would be called for by this legislation. The future of Amateur Radio emergency communications is dependent on it."

ARRL asserted that it "is critical to have stations located at one's residence in order to regularly participate in disaster preparedness training exercises and drills."

Symbol Rate Petition

Another "noteworthy and urgent need" that might call for some regulatory involvement by the FCC, ARRL said, "relates to an outdated regulation that limits data rates in HF amateur communications, precluding certain digital emissions that have recently proven extremely important in Amateur Radio hurricane relief efforts."

ARRL noted that the FCC has yet to act on the League's Petition for Rule Making (RM-11708), filed in November of 2013, proposing to amend the Amateur Service rules to eliminate the symbol rate limit relative to data emissions in allocations below 29.7 MHz.

That petition also called for establishing a 2.8 kHz maximum occupied bandwidth for data emissions in those bands.

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ARRL has argued that this deregulatory action is necessary to allow the use of PACTOR 4, a digital mode valuable in disaster-relief efforts. In July 2016, the Commission released a Notice of Proposed Rule Making in WT Docket 16-239, proposing only to remove limitations on the symbol rate applicable to data emissions.

"Equipment dispatched with the 'Force of 50' [volunteers] to Puerto Rico included data transmission equipment capable of PACTOR 4 operation, but it could not be legally used in the Hurricane Maria disaster relief effort," ARRL noted.

The League prevailed upon the FCC to grant a temporary waiver to permit use of PACTOR 4. "However, it should not have been necessary to wait more than 4 years for the underlying rulemaking proceeding to have been resolved, and it should not have been necessary to ask for a temporary waiver of a hopelessly outdated rule that limits data speeds for no useful reason," ARRL added.

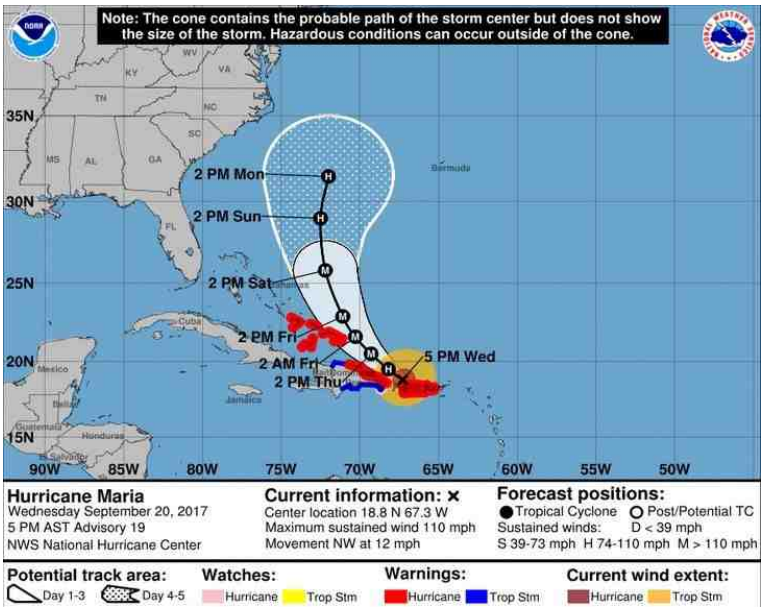
5 MHz Band Petition

The League also called on the FCC to "take the action requested in ARRL's January 2017 Petition for Rule Making (RM-11785), proposing to allocate the band 5351.5 to 5366.5 kHz to the Amateur Radio Service on a secondary basis.

Dominica post-disaster needs assessment cites amateur radio's role after Maria

A post-hurricane disaster needs assessment published this past fall by the Government of Dominica points up the significance of amateur radio's role in the relief and recovery effort on the tiny Caribbean island nation in the wake of Hurricane Maria last September. It also calls for expanding the pool of radio amateurs on the island who could help in future disasters.

The report, Commonwealth of Dominica Post-Disaster Needs Assessment -- Hurricane Maria, September 18, 2017, noted that all telecommunication services on Dominica except for Amateur Radio were disabled from September 19 to 21. Some 30 cellular sites



were destroyed or severely damaged, and the fiber-optic backbone was severed in several locations, leading to a nationwide loss of connectivity, the report said. In addition to the private telecommunications networks, "an emergency communications network consisting of Amateur Radio operators is supposed to exist within the purview of the Emergency Operations Center (EOC)," the report pointed out.

The Post-Disaster Needs Assessment concluded that Hurricane Maria caused nearly $931 million in damage, plus losses of more than $380 million -- which, according to the report, amounts to 226% of Dominica's 2016 gross domestic product (GDP).

"The interruption of telecommunication services had a significant negative human impact as Dominica was almost cut off from the outside world for 3 days. Communities within Dominica were isolated from one another," said the report, which was published last November 15.

The needs assessment said that "a sparse Amateur Radio network" suffering from a lack of trained operators and back-up power, plus "a few satellite phones" delivered information "required for critical relief and rescue activities."

"The Government should rehabilitate the ECN (Emergency Communications Network) by offering training to persons interested in becoming Amateur Radio operators nationwide, with the goal of having a licensed Amateur Radio operator in every community with an

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emergency shelter," the report recommended.

Dominica is still in the recovery phase in the wake of Hurricane Maria.

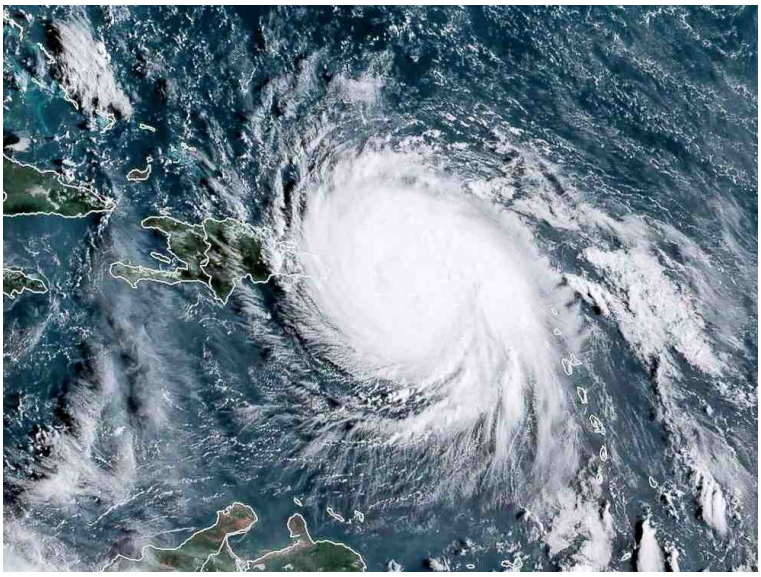
The report also proposed that emergency shelters and the EOC be equipped with Amateur Radio and/or a satellite phone, "so that contact may be quickly established during or after a storm." The report also recommended that the government of Dominica "develop a plan for the operation and maintenance of the network long term, including replacement of equipment, training of operators and activation procedures for the network in case of an emergency."

In the short term, the Post-Disaster Needs Assessment advised, rehabilitation of the existing National Emergency Communications Network should include the purchase of Amateur Radio equipment, including repeaters, as well as satellite phones and "other technology required for the network."

The Yasme Foundation, Yaesu USA, the Foundation for Amateur International Radio Service (FAIRS), and individual GoFundMe donors joined forces last fall to restore country-wide Amateur Radio communication on Dominica in the aftermath of Hurricane Maria.

Private pilots Brian Machesney, K1LI, and Dave Bridgham, N1AHF, transported a planeload of Amateur Radio gear, relief equipment, and supplies as part of an effort to better prepare the small Caribbean island nation for future disasters.

-- Thanks to Brian Machesney, K1LI



A post-hurricane disaster needs assessment published this past fall by the Government of Dominica points up the significance of amateur radio's role in the relief and recovery effort on the tiny Caribbean island nation in the wake of Hurricane Maria last September.

USA ARDF Championships set for June 13-17 in California

The 18th USA Championships of Amateur Radio Direction Finding (ARDF) will take place June 13-17 near Truckee, California, some 30 miles southwest of Reno, Nevada. The competition sites are at about 6,300 feet elevation near Donner Summit.

An optional training day will be held on Wednesday, June 13. Thursday will be devoted to foxoring, a combination of radio direction finding and classic orienteering. Friday morning will be the sprint event, followed by a model event for equipment testing and a competitor briefing.

Classic 2-meter and 80-meter competitions will take place Saturday and Sunday, respectively.

There will be an awards banquet on Saturday evening for presentation of medals for foxoring, sprint, and 2-meter classic events. Awards for the 80-meter classic will be presented Sunday afternoon following the competition.

These sites have not been used for any ARDF competitions in the past. Course designer is Bob Cooley, KF6VSE, and Meet Director is Jay Hennigan, WB6RDV. Both have been medalists in past USA ARDF Championships.

The Event Information Page includes technical details, lodging information, site embargoes, tourism, weather and much more. Information about the sport of ARDF, including equipment and techniques. Registration will open soon.

More details as they become available will be posted on the Homing In website of ARRL ARDF Coordinator Joe Moell, K0OV.

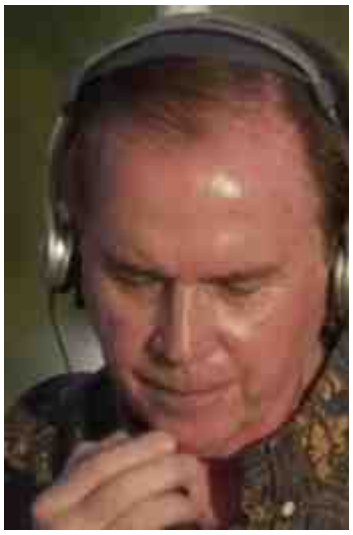
Hawaii ham execs Speroni and Bogan featured on NBC News

A recent NBC News Left Field report asserted that hams "could save our lives" in a disaster. A team from NBC News' nascent digital news unit Left Field was in Hawaii to visit with some radio amateurs to produce a report when the false nuclear missile alert happened on January 13.

Left Field's report points out how much we rely on cell phones and 21st century technology...and what we would do if these suddenly were no longer available. Amateur Radio operators "are standing at the ready and may save us all," NBC Left Field said in the tease to its YouTube version of its report. Accessible directly from NBC News, the report, with Left Field's Jacob Soboroff, runs 7:22 minutes.

"Ham radio is one of the ways you'd be able to hear what's happening," when conventional telecommunications systems fail, Soboroff told his viewers. Among those interviewed in the piece are ARRL Section Manager Joe Speroni, AH0A, and Assistant Section Manager Kevin Bogan, AH6QO.

NBC News says its Left Field unit "is a new internationally minded video troupe that makes short, creative documentaries and features specially designed for social media and set-top boxes."



ARRL Section Manager Joe Speroni, AH0A, at right, and Assistant SM Kevin Bogan, AH6QO, above.

"Improving Hurricane Preparedness" is National Hurricane Conference Theme

The theme for the annual National Hurricane Conference, set for March 26 - 29, in Orlando, Florida, will be "Improving Hurricane Preparedness." The conference will include an Amateur Radio forum. Registration is now open. Some 1,500 attendees are expected.

The Amateur Radio session will take place on Tuesday, March 27, at 1:30 PM. Presenters will address various aspects of the Amateur Radio response to hurricanes Harvey, Irma, and Maria. ARRL Emergency Preparedness Manager Mike Corey, KI1U, will discuss ARRL's unprecedented mission to Puerto Rico to support the American Red Cross in the wake of hurricane Maria, considered to be the worst natural disaster of all time for Dominica and Puerto Rico.

A National Hurricane Center representative will discuss the importance of Amateur Radio surface reports to the hurricane forecasting process.

Other presentation topics will cover the operations of several groups during the 2017 hurricane season, including WX4NHC, the National Hurricane Center Amateur Radio station; the Hurricane Watch Net; the VoIP Hurricane Net; the Canadian Hurricane Centre; the Salvation Army Team Emergency Radio Network (SATERN), and best practices in SKYWARN activations.

The Amateur Radio session is typically open to hams free of charge. ***-- Thanks to The ARES E-Letter***

Hawaii mistake cited in testimony to Congress on Parity Act

ARRL Hudson Division Director Mike Lisenco, N2YBB, testified on January 25 before a session of the Senate Committee on Commerce, Science, and Transportation regarding Amateur Radio's readiness to respond in an emergency.

The session, "This is not a Drill: An Examination of Emergency Alert Systems," was called in the wake of an incoming missile warning erroneously released in Hawaii in January. Lisenco said Amateur Radio

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Mike Lisenco, N2YBB, testifies before Congress.

played a role not only in responding to the warning but in disseminating word that the missile alert had been issued by mistake.

Lisenco said the Hawaii Radio Amateur Civil Emergency Service (RACES) activated on UHF and via a VHF inter-island repeater network, and amateur stations monitored the alert and cancellation activity, which came less than 1 day after RACES had completed an Amateur Radio communication exercise at the State Emergency Operations Center (EOC). In his written testimony, Lisenco recounted that the situation after the missile warning in Hawaii was chaotic.

"The phone lines into the State EOC were soon overwhelmed and congested, and the website was overwhelmed with public inquiries," he said. Lisenco said that in such situations, Amateur Radio volunteers are typically present at state or county EOCs and at the State Warning Point, the Hawaii Emergency Management Agency. He pointed out that the cancellation of the false warning circulated on various information outlets 13 minutes after the missile warning went out.

"That was picked up and relayed through the Amateur Radio networks," he told the Committee in written testimony. "The cell phone alert system could not be used for the cancellation notice until prior FEMA approval was obtained. Once that was obtained, the cancellation alert went out to the cell phone network after 38 minutes from the initial alert."

"Many people had received the warning first on their cell phones through the Wireless Emergency Alert (WEA) system, but a cancellation on that same system was substantially delayed," Lisenco said. "The result was that Amateur Radio networks disseminated validated cancellation information long before the cellular networks were able to do so."

Lisenco took the opportunity to address how private land-use regulations can preclude Amateur Radio disaster response capabilities.

"There is no substitute for the ready availability of a residential Amateur Radio station in daily operation from a licensee's residence," he said. "The licensee cannot be expected to have the ability to communicate into or from a disaster site unless he or she has a station with an effective outdoor antenna capable of operation on multiple frequency bands at once, which is ready to be pressed into service from the licensee's residence at a moment's notice."

Lisenco reminded the panel members that the Amateur Radio Parity Act of 2017 is now pending before the Committee. "We are in desperate need of this legislation, and without it, the volunteer emergency communications services provided by Amateur Radio will be precluded. We urge the Committee in the strongest terms to please approve and send this legislation forward without delay," Lisenco said.

Mississippi Senator Roger Wicker, a cosponsor with Connecticut Senator Richard Blumenthal, of the Amateur Radio Parity Act, attended the hearing. Responding to a question from Wicker at the hearing,

Lisenco pointed out that an early US Coast Guard warning cancellation notice was relayed to Amateur Radio networks and disseminated quickly, while the State Warning Point waited to obtain FEMA authorization to rescind the warning via cellular phones.

As a result, Amateur Radio networks were able to disseminate validated cancellation information long before the cellular networks could. Wicker issued a statement noting Lisenco's testimony and posted a video clip of his exchange with Lisenco.

More ARRL news on next page

The waterfront campsite of Kent O'Sell, K7CAR, in DM25 in Nevada.

"Awesome" Activity for the 2018 ARRL International Grid Chase

"On-the-air activity for the 2018 ARRL International Grid Chase (IGC) has been awesome!" ARRL Contest Branch Manager Bart Jahnke, W9JJ, says. "The year also began with DXpeditions, as well as several contests at both HF and VHF, to boost numbers. Facebook and social media (Facebook, Twitter #ICG) are abuzz with chatter about the event, the excitement, the grids worked."

Jahnke said the statistics show the highest overall activity on 40 and 20 meters -- not surprising in the winter -- and especially strong digital activity. He expects phone and CW activity levels to perk up, with the ARRL International DX Contest CW weekend February 17-18, and the phone weekend March 3-4. He also anticipated that February's statistics will come on strong as participants re-work January grid squares to boost their February scores. As of the January activity upload deadline of February 10 at 2359 UTC, some 23,300 station sites were active in the IGC.

"The leader board reporting system continues to evolve, with much helpful participant feedback," Jahnke said. That user input is improving how ARRL reports participation.

"From the statistics, it's clear that during this period of low sunspots and low winter E-skip and F2, most of the activity on the mid-to-lower bands is digital modes," Jahnke said. "As we get into the summer E-skip season, we expect to see activity above 15 meters begin its ascent in the totals."

Jahnke said it's apparent that participants are taking advantage of CW (and FT8 and other digital modes) on HF to overcome some of the weakened propagation on the low- to medium-frequency bands, and of FT8, JT65, and FSK144/MSK144 on 6 meters and above to rack up impressive totals. "Not to be outdone, in comparison to overall band totals, phone contacts on 80, 40, 20, and 17 meters are strong, and 2-meter and 70-centimeter contacts were strong in January as well," Jahnke added.

Several contests in January, including the ARRL RTTY Roundup and ARRL January VHF Contest, contributed to these strong phone and digital numbers. During January, IGC-eligible contacts matched in Logbook of The World (LoTW) topped 22,000 on 40 meters and 23,000 on 20 meters -- the two bands with the greatest activity -- with nearly half the contacts being made on digital modes in both bands. On the new 630-meter band, 31 IGC-eligible contacts turned up in LoTW.

ARRL announces Mobile DXCC Operating Award

ARRL recently announced a Mobile DXCC Operating Award, available to radio amateurs who have contacted at least 100 DXCC entities from a working vehicle, with antennas and power source capable of operating while in motion. ARRL Radiosport Manager Norm Fusaro, W3IZ, advised those pursuing the award to put safety first.

"Distracted driving is a serious concern, so we hope all mobile operators exercise care when operating from a moving vehicle," he said.

Full, official details are on the Mobile DXCC Operating Award page.

The Mobile DXCC is a one-time award and is non-endorsable. Contacts made any time in the past do count toward the award. QSLs are required, but you do not need to submit them.

Mobile stations may use any power that is legal in the entity from which they are operating. This award specifically excludes contacts made by aeronautical or maritime mobile stations.

You do not have to be an ARRL member to qualify for this award.

More ARRL news on next page

Howard Mason at WFA in Little America, at far left, and Mason's historic key.

ARRL receives Byrd Antarctic expedition Morse key, historical materials

ARRL has received from Lynn Burlingame, N7CFO, the donation of a Kilbourne & Clark Morse key that the late Howard Mason (1ID, 7BU, and K7QB) used to let the world know that Rear Admiral Richard Byrd and his crew had overflown the South Pole for the first time during Byrd's 1928 - 1930 Antarctic expedition. Mason and his 80 colleagues were awarded Congressional Gold Medals for their efforts in establishing the Antarctic outpost "Little America," the first of a series of bases bearing that name.

Mason was a lifelong radio amateur from Seattle who was an active ARRL National Traffic System participant and manager. In 1923, he relocated to Connecticut to serve as an editor of the ARRL's journal, QST. Mason's first polar experience was as a radio operator with the Wilkins-Detroit News Arctic expedition that traversed the North Pole by air in 1928. This led to his selection by Byrd to be a radio engineer with his first Antarctic expedition. Mason was co-operator of Little America's base radio station,WFA, used to keep in contact with the rest of the world.

Mason continued to use the key in his ensuing and varied endeavors. Prior to his death in 1996, he gave the key to Burlingame of Bellevue, Wash., a collector and biographer who generously donated it to the ARRL Heritage Museum. The museum plans to display the key as part of an exhibition tentatively scheduled to open on April 15. The exhibition also will include a large wooden key, engraved with "WFA" and bearing the signatures of some expedition members.

Also on display will be a first edition of Admiral Byrd's book "Little America: Aerial Exploration in the Antarctic, the Flight to the South Pole" and an album of contemporary newspaper clippings, both part of the Burlingame donation. A complete narrative will be posted to the Heritage Museum Section of the ARRL website.

The key and the Little America radio operators can be seen in action in an original film available on YouTube, which offers a first look of the towers erected there (at the 15:00 mark).

~~ 2018 BIARC Leadership ~~

BIARC 2018 Leadership:
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radiopeg@gmail.com;
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John Bush,
amsjbush@gmail.com,
and Bob Schneider,
ah6j@arrl.org.

Program Committee co-chairs are John Bush and Les Hittner.

Sisterhood of Amateur Radio supports Girl Scouts in obtaining Radio Wireless Patch

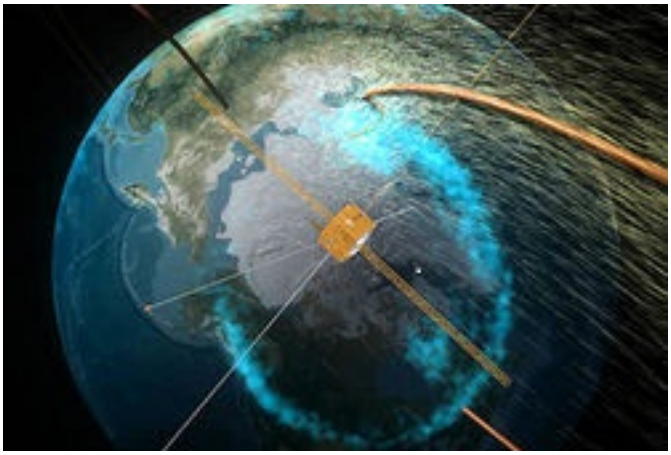
The Sisterhood of Amateur Radio (SOAR), in conjunction with the Girl Scout Council of Southern Nevada, hosted a Radio and Wireless Tech Field Day on February 3 in Las Vegas for more than 60 girls and their adult chaperones.

ARRL began offering its Radio and Wireless Technology Patch Program for Girl Scouts in 2016. The program defines the requirements for Girl Scouts to earn the patch at the Brownie, Junior, Cadette, Senior, and Ambassador levels and provides a platform for participants to learn about wireless technology, including Amateur Radio, and to inspire girls to learn the fundamentals of radio communication and wireless technology. It also prompts participants to take action in their communities to apply their newfound knowledge to connect people, provide safety, and to kindle an interest in science, technology, engineering, and math (STEM) subjects and careers.

In addition to hands-on activities, the Girl Scouts in Las Vegas also learned about emergency and public service communications, and explored ways wireless technology is used in everyday life and in the workplace. The SOAR participants enthusiastically shared what it means to be an Amateur Radio operator and demonstrated how they can communicate around the world.

"As a girl-led and girl-focused organization, Girl Scouts of Southern Nevada understands the importance of providing science and engineering educational programming to girls of all ages," said Linda Bridges, Chief of Communications for Girl Scouts of Southern Nevada. "By partnering with SOAR, we look forward to inspiring all Girl Scouts to pursue a lifelong love of communication and global goodwill."

Highlights of the event were spelling out their name in Morse code and hearing it via a code practice oscillator, learning about antenna directivity and participating in a foxhunt, and actually talking on the radio as well as using Voice over Internet Protocol (VoIP) modes. ***-- Thanks to John Bigley, N7UR, and Nevada Section PIO Cathy Etheredge, N7HVN***



Artist's conception of IMAGE over the North Pole.

Canadian radio amateur finds resurrected NASA satellite

When he's not on ham radio, Scott Tilley, VA7LF, an amateur astronomer, hunts spy satellites. Using an S-band radio from his home in Roberts Creek, British Columbia, Tilley routinely scans the skies for radio signals from classified objects orbiting Earth, according to a recent article on Spaceweather.com. Earlier this month, he saw the signature of IMAGE (Imager for Magnetopause-to-Aurora Global Exploration), a NASA spacecraft believed to have died in December 2005. The discovery has delighted space scientists.

"The long gone and nearly forgotten IMAGE spacecraft has come back to life and been detected by an amateur astronomer," said Mission Manager Richard J. Burley at NASA's Goddard Space Flight Center (GSFC), which confirmed that what Tilley spotted is, indeed, IMAGE. Amateur observer Paul Marsh, M0EYT, in the UK, provided the first independent confirmation of the IMAGE signal.

NASA said on January 29 that observations from five sites were consistent with the RF characteristics expected of IMAGE. But just to make certain beyond a shadow of a doubt, scientists at Johns Hopkins Applied Physics Lab collected telemetry from the satellite that identified the spacecraft as IMAGE. A NASA team has been able to read some basic housekeeping data from the spacecraft and will continue to analyze data from the spacecraft to learn more about its condition. This will require adapting old software and information databases to more modern systems.

Ten Ten International

You have to make contacts to get results!

Irene Kubica, NH7PE, is an avid participant in 10-meter activity and encourages hams at all levels to join in the fun.

Upcoming events

Winter Phone QSO Party
Sat Apr 28, 2018 00:00 - Sun Apr 29, 2018 23:59
Spring Digital QSO Party
Sat May 05, 2018 00:00 - Sun May 06, 2018 23:59
Spring CW QSO Party
Sat May 05, 2018 00:00 - Sun May 06, 2018 23:59
Spring CW QSO Party
Sat Jun 02, 2018 00:00 - Sun Jun 03, 2018 23:59
Open Season QSO Party

The 10-10 Connection

with NH7PE,

10-10 Aloha Chapter

Have a hankering for rag-chewing?

Check into the daily (except Sunday) SSB nets at 8 a.m. HST on 28.380 and 28.800mHz. They are called from Illinois, California, Arizona, Florida, North Carolina and Michigan. Try them out.

Remember: You have to make contacts to get results!

Be sure to check www.ten-ten.org for details

Ten-Ten International QSO Parties

For those who join in the Ten-Ten QSO Parties, remember: You can assign your score to the Aloha Chapter. Logs must be postmarked no later than 15 days after the respective QSO Party.

To see what's open on 10 meters, listen to the beacons from 28.175-28.300 so you will know where DX is coming from.

The Ten-Ten International News has reprinted several antenna articles by L.B. Cebik (SK), W4RNL #41159.

Ten-Ten International pins are available for purchase at $2 each. See www.ten-ten.org for details.

CW news: FISTS Get Your Feet Wet Activity Day! Every third Sunday from 0001 to 2400 UTC on 80 and 40 meters (3.558-7.110 MHz): exchange name, QTH, FIST #, RST.

Revised ham bands

US Amateur Radio Bands

US AMATEUR POWER LIMITS — FCC 97.313 An amateur station must use the minimum transmitter power necessary to carry out the desired communications. (b) No station may transmit with a transmitter power exceeding 1.5 kW PEP.

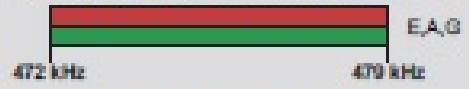
ARRL The national association for AMATEUR RADIO®

Amateurs wishing to operate on either 2,200 or 630 meters must first register with the Utilities Technology Council online at https://utc.org/plc-database-amateur-notification-process/. You need only register once for each band.

2,200 Meters (135 kHz)

630 Meters (472 kHz)

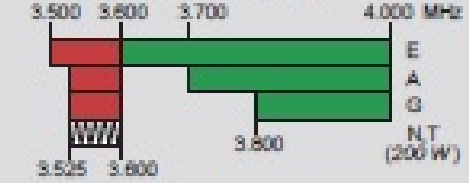
5 W EIRP maximum, except in Alaska within 496 miles of Russia where the power limit is 1 W EIRP.



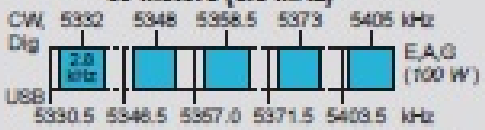
160 Meters (1.8 MHz)

Avoid interference to radiolocation operations from 1.900 to 2.000 MHz.

80 Meters (3.5 MHz)

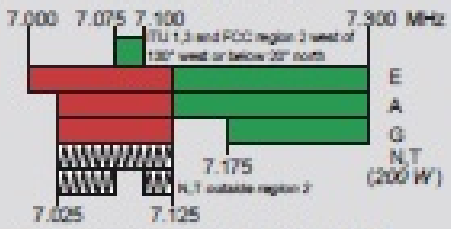


60 Meters (5.3 MHz)



General, Advanced, and Amateur Extra licensees may operate on these five channels on a secondary basis with a maximum effective radiated power (ERP) of 100 W PEP relative to a half-wave dipole. Permitted operating modes include upper sideband voice (USB), CW, RTTY, PSK31 and other digital modes such as PACTOR III. Only one signal at a time is permitted on any channel.

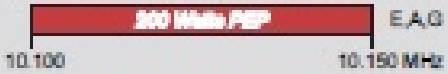
40 Meters (7 MHz)



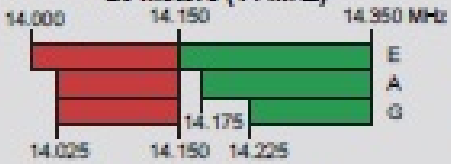
See Sections 97.305(c), 97.307(f)(11) and 97.501(a). These exemptions do not apply to stations in the continental US.

30 Meters (10.1 MHz)

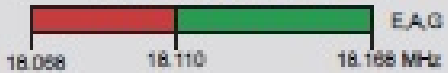
Avoid interference to fixed services outside the US.



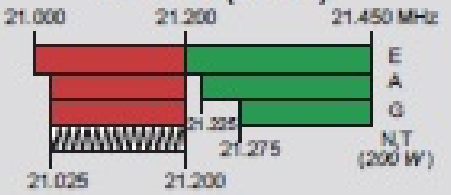
20 Meters (14 MHz)



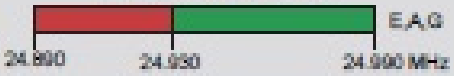
17 Meters (18 MHz)



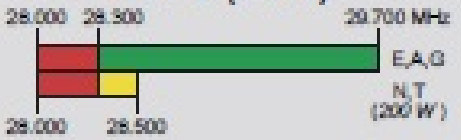
15 Meters (21 MHz)



12 Meters (24 MHz)

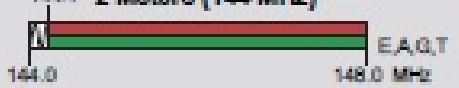


10 Meters (28 MHz)



6 Meters (50 MHz)

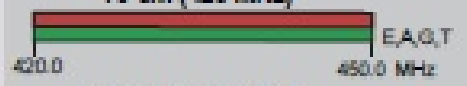
2 Meters (144 MHz)



1.25 Meters (222 MHz)

*Geographical and power restrictions may apply to all bands above 420 MHz. See *The ARRL Operating Manual* for information about your area.

70 cm (420 MHz)*



33 cm (902 MHz)*

23 cm (1240 MHz)*

All licensees except Novices are authorized all modes on the following frequencies:

2300-2310 MHz	10.0-10.5 GHz ‡	122.25-123.0 GHz
2390-2450 MHz	24.0-24.25 GHz	134-141 GHz
3300-3500 MHz	47.0-47.2 GHz	241-250 GHz
5650-5925 MHz	76.0-81.0 GHz	All above 275 GHz

‡ No pulse emissions

KEY

Note:
CW operation is permitted throughout all amateur bands.

MCW is authorized above 50.1 MHz, except for 144.0-144.1 and 219-220 MHz.

Test transmissions are authorized above 51 MHz, except for 219-220 MHz.

- = RTTY and data
- = phone and image
- = CW only
- = SSB phone
- = USB phone, CW, RTTY, and data
- = Fixed digital message forwarding systems only

E = Amateur Extra
A = Advanced
G = General
T = Technician
N = Novice

See *ARRLWeb* at www.arrl.org for detailed band plans.

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