Club enjoys afternoon of ice cream and balloons (of the scientific sort)

Visiting science teacher John Garesche was a guest speaker at the BIARC July meeting. Garesche, of Kingston, New York, discussed his group's upcoming Big Island activities for The Red Balloon project, which is their part of the Global Space Balloon Challenge. (https://www.balloonchallenge.org)

The Global Space Balloon Challenge (GSBC) is the coming together of people around the world to simultaneously fly high altitude balloons from every corner of the globe, celebrating an age where anyone can reach the edge of space for a few hundred dollars and a few weekends of work.

See **RED BALLOON**, next page

Photos by Linda Quarberg, WH6LQ

Photos*: President Pascal Nelson conducts July meeting (top); Bob Schneider demonstrates ice cream skills (at left); visiting science teacher John Garesche (above) discusses Global Space Balloon Challenge activities on the Big Island.*

Although they had to miss it because of a family function, Barbara and Richard Darling hosted the club to an ice cream social at the July meeting to celebrate Richard's 65th anniversary of getting on the air as a ham radio operator. Several tubs of the frozen concoction were augmented by an eclectic potluck array of toppings and other condiments.

A good time was had by all, and many a bowl was hoisted in a toast to Richard: Contratulations, AH7G!

RED BALLOON, from previous page

By providing a specified launch window and central online platform, the GSBC enables teams to showcase their unique cultures while working together to educate the next generation and push the boundaries of what is technologically feasible.

People of all backgrounds, ages, and walks of life participate, many of whom have never touched a high altitude balloon or studied engineering before the GSBC.

The process of flying a high altitude balloon all the way to space and bringing it back not only teaches the basics of science and engineering, but also teaches critical lessons of teamwork and

See **RED BALLOON**, Next page

President's Paragraphs

As I write, I'm on the eve of another birthday, the completion of another trip around this star that we call Sol. It has been an interesting ride, so far. Some of the most unexpected events have certainly been in the last couple of months as we have experienced the current volcanic activity. For all of us who are on this thrill ride on a volcano in the middle of the Pacific Ocean, I'm hoping that we get through it all unbroken, and perhaps better for the journey.

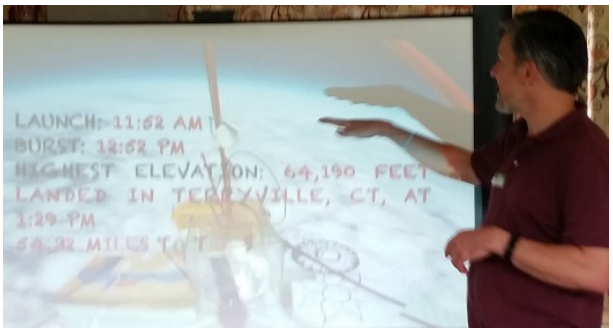
I have had the opportunity lately to get much more familiar with WinLink operation. We'll be talking about that soon. Another new technological tool (toy) I've gotten my hands into is DMR/hotspot operation. You'll hear and see more about that at the August BIARC meeting.

DMR is "Digital Mobile Radio", one of the several digital voice modes being used by hams. There are also digital voice modes being developed and used for the HF bands. Several of us around the Hawaiian Islands have been trying out one of the HF DV modes called FreeDV. You'll also have an opportunity to learn something about this interesting new mode and what we have been learning getting it on the air.

There is no "correct' mode of operation for ham radio. There have always been those who enjoy a single mode of operation, for example CW, or HF SSB, or VHF/UHF FM. Others delve into satellite communications, moonbounce (EME), ATV (video), and digital modes. There is room for all of us from LW to MW - long wave to micro wave. Or, as some of us are fond of saying "From DC to light!"

There's always more to explore and learn.

73 and Aloha,
Pascal AC7N



The Global Space Balloon Challenge includes 554 teams registered in 68 countries.

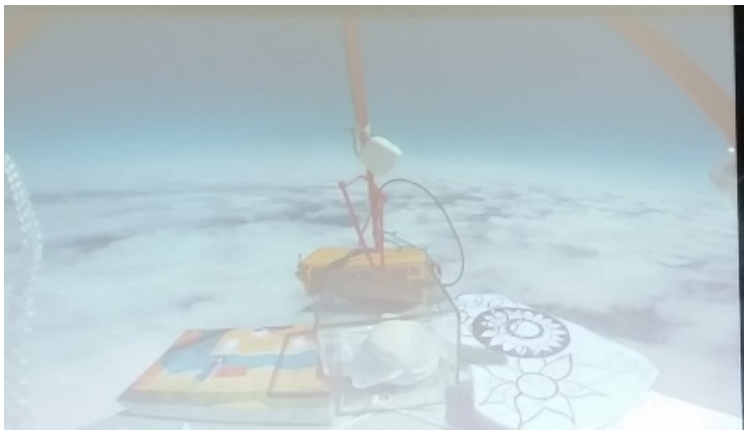
RED BALLOON, from previous page

organization, essential for any career path.

Coordinators work closely with parents, teachers, professors, and other education organizations to help them build high altitude balloons with their students and then fly them safely.

"We aim to make high altitude balloons even more capable platforms for scientific discovery and technological development by bringing existing high altitude ballooning communities together with each other and with new people and ideas," say GSBC officials. "With the support of some of the biggest technology

See **RED BALLOON**, Next page



RED BALLOON,
from previous page

companies, we have developed a series of prizes to motivate teams to push the envelope and solve problems we believe are key to further increasing the usefulness of balloons.

"At the same time, the prizes reward teams that innovate through collaboration, in order to foster a wider community and speed the pace of development."

Puerto Rico ARRL Section Manager Oscar Resto to visit Hawaii

Oscar Resto, KP4RF, the Puerto Rico ARRL Section Manager, will visit Hawaii this month to talk about "Hurricane Maria Amateur Radio Response in Puerto Rico."

BIARC has arranged for him to speak to Hilo-area hams twice at the Orchidland LDS Church on Aug. 28 at 2 p.m. and 6:30 p.m. The presentations will focus on aspects of the devastation caused by Hurricane Maria last year in the Commonwealth and how Amateur Radio responded. Both meetings are open to the general public. Other Big Island clubs are planning presentations on the 29th.

The presentation focuses on a general description of what happened - emergency first responders, government responses, and infrastructure problems. There will be time for questions. (See Russ Roberts' (KH6JRM) post at https://bigislandarrlnews.com/2018/07/24/hurricane-maria-amateur-radio-response-in-puerto-rico. **Please RVSP to Pascal (ac7n@arrl.net) if you are interested in attending so we can have a head count for event planning.**

Hurricane Maria devastated the Commonwealth and affected the normal life of a population of 3.4 million US citizens as it passed through the island as a Category 5 hurricane. Hawaii, as an island state, can learn from Puerto Rico's experiences.

Oscar Resto, KP4RF.

The Orchidland church is at 16-1472 Keaau-Pahoa Rd. (phone 966-6465) Come early, as this area can have traffic congestion.

The campus is non-smoking, non-alcohol and non-coffee. Please respect their wishes.

Oscar Resto was born in San Juan, Puerto Rico. He is a physicist with more than 35 years' experience on experimental physics from vacuum deposition systems and surface science spectroscopy to the innovative Ultra High Transmission Electron Microscopy capable of observing single atoms.

He is a principal investigator of the NASA UPR RockSat-X program, with 12 successful flights to space where micrometeorites were collected in meteor trails to gather organic molecules for DNA, RNA, and Nucleic Acids sequencing.

As an FCC Amateur Extra Class ham radio operator for 30 years, he has interest in contacting foreign stations on HF radio (DXing), competing in radio contests and with experimental radio technology development.

A major radio interest in which he specializes is EMCOMM (Emergency Communications). As the ARRL Section Manager for Puerto Rico he has long experience with training and coordinating hams who volunteer to support their communities when normal means of communications for infrastructure critical organizations is lost. His group of amateurs was called on to provide emergency communications for relief operation in response to the 2017 Hurricane Maria.

BIARC July 14 meeting minutes

President Pascal Nelson convened the regular monthly meeting of the Big Island Amateur Radio Club at 2 p.m. Saturday, July 14, at the Puna Covenant Church in Keaau.

Our ARRL Section Manager, Joe Speroni, has informed Pascal that Oscar Resto, KP4RF, the ARRL Puerto Rico Section Manager, will visit the Big Island in August. Pascal will set up a program, open to the public, where Oscar will talk about living through a hurricane and its aftermath and the role played by the amateur radio community in emergency comms. (Details of two presentations by Oscar on Aug. 28 have been emailed to BIARC members and are outlined in an article elsewhere in this newsletter.)

Gary Schwiter gave an update on his home repeater project.

Treasurer Paul Ducasse reported that our bank balance remains static at $2,095.04.

Pascal introduced New York science teacher John Garesche, who is visiting the Big Island as part of the Global Space Balloon Challenge. He is here with Science Camps of America. Later in the meeting, John showed slides and video coverage relating to his balloon activities with GSBC, "the high altitude balloon event for everyone, everywhere, together."

Bob Schneider said our August BIARC meeting will be at the Keaau Community Center, but that the September venue is still to be determined.

Tony Kitchen of Ainaloa said he has access to a church facility that could be used for meetings. And, he invited BIARC members to use the Ainaloa repeater, which is at 444.950, with a plus offset and a PL tone of 100 on transmit and receive, withAllstar connection to the Hawaii mainland network.

Pascal thanked everyone who made the June BIARC Field Day a big success. He invited comments and observations from those who participated. One thing we need to accomplish before next year's event, he noted, is to hold a workshop on how to correctly fill out the contact logs. Gary pointed out that we also need to have an operators' schedule set up in advance. It's never too early to start planning for next year, Pascal stressed.

Elisabeth Green gave an update on operations at the Pahoa shelter for residents forced to evacuate as lava destroyed their homes, or access to them.

John Bush briefed the club on antenna upgrades in the works for ham communications within the State of Yap in the Federated States of Micronesia and between Yap and Hawaii. John and Richard and Barbara Darling for years have spearheaded nightly ham communications between Yap, Hawaii and the U.S. Mainland. This allows isolated islanders to touch bases with family and friends in Hawaii and on the mainland.

The Darlings had to attend a family wedding in Hilo, but nevertheless treated the club to an ice cream social. Members also brought an inviting array of toppings and condiments to complement bowls filled, and refilled, from several big tubs of the frozen treat provided by Barbara and Richard.

Respectfully submitted,
Leigh Critchlow, secretary pro tem

RadioShack "Express Stores" to open in HobbyTown USA locations

According to a July 13 article in the New York Post, RadioShack is planning to open "express stores" within HobbyTown USA locations. The nearly century-old, twice-bankrupt retailer has signed a deal for a mini RadioShack outlet in some 50 HobbyTown stores across the country that would sell items that might appeal to radio amateurs and experimenters. Those locations will be identified with RadioShack signage. HobbyTown markets remote-controlled cars and boats as well as drones and other hobby-related merchandise.

RadioShack shuttered all of its company-owned retail outlets. Its last unsuccessful effort to bail itself out of debt involved a deal with cellular provider Sprint. HobbyTown USA has 140 retail outlets, and, according to the Postarticle, RadioShack eventually could carve out a presence -- on the order of 500 square feet -- in all of them. Stores in HobbyTown USA's headquarters town of Lincoln, Nebraska, as well as in Parker, Colorado, and Mooresville, North Carolina, will be among the first to host RadioShack express.

"HobbyTown is purchasing the RadioShack merchandise and offering it to its hobbyist customers who need the tools, wires, and other accessories that RadioShack makes," the Post article said.

ARRL The national association for AMATEUR RADIO™

The ARRL Letter

JA operator hits NJ to mark WAS on 6 meters

A radio amateur in Japan has Completed WAS on 6 meters. Tac Hirama, JA7QVI, has fulfilled all requirements for the Worked All States (WAS) award on 6 meters. New Jersey was the last state he needed to work, and he managed a moonbounce (EME) contact as well as a conventional ionospheric contact. It's quite possible that JA7QVI is the first radio amateur to earn WAS on 6 meters from Japan, although that cannot be confirmed. Completing WAS on 6 meters was

Tac Hirama, JA7QVI

a major goal for him, Hirama said, and an Earth-Moon-Earth contact with Andy Blank, N2NT, on June 17 clinched the deal. He'd been working on achieving WAS on 6 meters since 1977. JA7QVI now has accomplished WAS on 10 bands, 160 through 6 meters.

WRTC 2018: Amazing contact totals, scores despite poor conditions

A crack team of contesters from Lithuania won the gold medal in World Radiosport Team Championship 2018 (WRTC 2018), held recently in Germany. Operating as Y81N, Gedas Lucinskas, LY9A, and Mindis Jukna, LY4L, topped the real-time scoreboard for much of the event, which is held as a competition within a contest, in conjunction with the IARU HF Championship. Lucinskas and Jukna had ended up in sixth place during WRTC 2014, held in New England. In WRTC 2018 they

posted a final score of 5,690,685 points, logging 5,139 contacts, with a heavy emphasis on CW. Final results for all competing teams are posted on the WRTC 2018 website.

Despite conditions during the weekend that were no better than mediocre, the 63 competing teams logged a total of 262,746 contacts during the 24-hour competition.

Parity Act options open despite removal from Defense Authorization Act Conference Report

ARRL Hudson Division Director and ad hoc Legislative Advocacy Committee Chair Mike Lisenco, N2YBB, said the recent removal of_Amateur Radio Parity Act_(HR 555) language from the National Defense Authorization Act (NDAA)_Conference Report_was unfortunate, but does not kill the initiative.

The Parity Act would ask the FCC to grant radio amateurs living in deed-restricted communities the right to install effective outdoor antennas. Lisenco said that while the language was removed from the final NDAA_Conference Report, other viable options remain to see the Parity Act succeed.

"We were disappointed the Parity language didn't survive the conference process, but we do have other House-passed legislative vehicles that contain the language, including the Financial Services & General Government Appropriations bill, which funds the FCC," Lisenco said.

"We have always known that getting this legislation across the finish line was going to take a lot of effort," Lisenco said.

FCC Cites Baofeng importer for illegally marketing unauthorized RF devices

The FCC has issued a Citation and Order (Citation) to Amcrest Industries, LLC (formerly Foscam Digital Technologies, LLC), an importer and marketer of popular and inexpensive Baofeng handheld transceivers, alleging that the company violated FCC rules and the Communications Act by illegally marketing unauthorized RF devices. The FCC asserts Amcrest marketed Baofeng model UV-5R-series FM handheld radios capable of transmitting on "restricted frequencies." Baofeng models UV-5R and UV-5R V2+ were granted an FCC equipment authorization in 2012 to operate under Part 90 Private Land Mobile Radio Service rules.

"Under § 2.803 of the Commission's rules, an entity may not market a device that is capable of operating outside the scope of its equipment authorization," the FCC Citation said. "RF devices that have been authorized under Part 90 rules, such as the model as issue, must operate within the technical parameters established in those rules." The FCC also maintained that the UV-5R 2+ is capable of operating at 1 W or 4 W, while the Part 90 Equipment Authorization limits the power output to 1.78 W.

Amcrest conceded that the units were capable of operating on restricted frequencies but told the FCC that, per discussions with the manufacturer, were "only capable of operating at 1 W, the FCC said. The company instructed the manufacturer to fix the problem and later confirmed with the manufacturer that all Amcrest inventory on order and in the future would operate only on 145 - 155 MHz and 400 - 520 MHz.

While the Citation does not mention Amateur Radio, the UV-5R series radios can be programmed in a channelized configuration to function on 2 meters and 70 centimeters. According to the Citation, Amcrest had added a warning in its user manuals and marketing and sales materials implying that the UV-5R V2+ could operate on unauthorized and restricted frequencies, including Part 87 Aviation Services frequencies, Part 80 Maritime Services frequencies, and frequencies reserved for federal government use.

Amcrest told the FCC that it had ceased marketing four models in the Baofeng UV-5R series "a few years ago," but it did not remove them from its website until last February. Numerous online retailers continue selling UV-5R series radios for less than $25, with some ads indicating that these are "ham" equipment.

Ruth Willet, KM4LAO, is 2018 Hiram Percy Maxim Memorial Award recipient

Nineteen-year-old Ruth Willet, KM4LAO, of Cana, Virginia, was named the recipient of the 2018 ARRL Hiram Percy Maxim Memorial Award by the ARRL Board of Directors at its July 20 - 21 meeting. ARRL's top youth honor, the Hiram Percy Maxim Memorial Award is given annually by the Board to a radio amateur under the age of 21 whose accomplishments and contributions to both Amateur Radio and the local community are of an exemplary nature.

Willet, who earned her Technician-class license in June 2015 and upgraded to Amateur Extra in May 2016, was instrumental in re-establishing the Amateur Radio and Electronics Club (K8HPS) at Kettering University in Michigan, where she is a junior pursuing a double major in engineering physics and mechanical engineering while maintaining an A average. She alternates 11-week academic terms with 11-week co-op jobs at Textron Specialized Vehicles in Augusta, Georgia. Willet recently relocated to Virginia from Lawrenceville, Georgia, where she grew up.

Willet is active in recruiting and mentoring new licensees and in community awareness programs, including demonstrations during the Aug. 21, 2017, total solar eclipse. She is on the air daily on HF, using SSB or CW and satellites. In addition to her membership in ARRL, she belongs to AMSAT and CWOps.

ARRL represented at IEEE Symposium

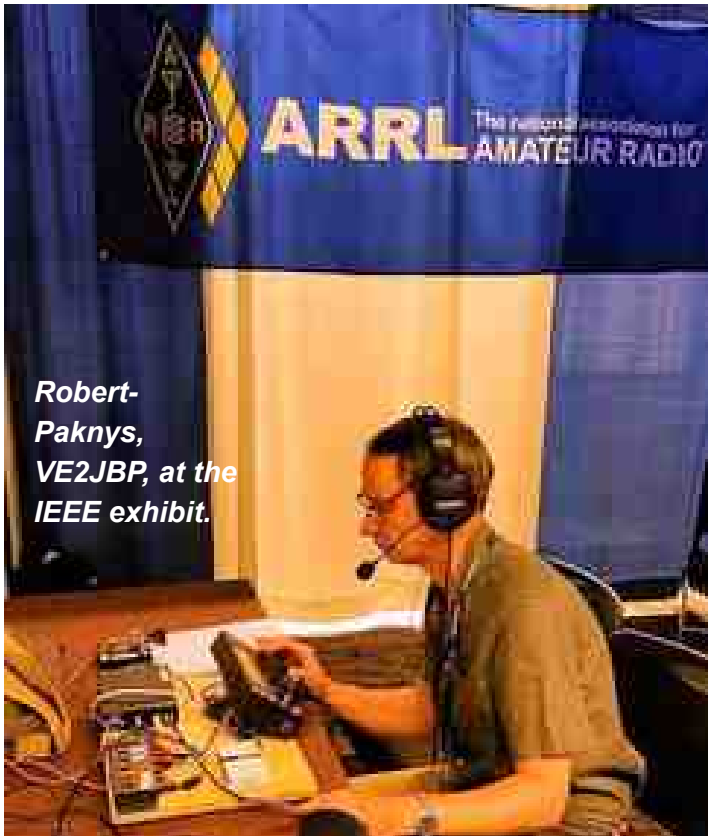
ARRL was on hand in Boston July 8-13 for the Institute of Electrical and Electronics Engineers (IEEE) Antenna and Propagation Society (AP-S) Symposium, held jointly held with the US National Committee of the International Union of Radio Science (URSI). The ARRL exhibit included a special event demonstration station, N1P. More than a dozen volunteers staffed the exhibit.

"We had a very attractive booth in a great location," said ARRL Eastern Massachusetts Assistant Section Manager Phil Temples, K9HI. "Engineers in the antenna and propagation fields in industry and science attending from all over the world stopped by the ARRL table to see and learn about Amateur Radio."

Temples said ARRL Headquarters provided supplies for the booth as well as display copies of publications, "which doubled as door prizes for drawings," he added. Complementing volunteers from the ARRL Eastern Massachusetts Section were radio amateurs attending the conference who donated their time between talks and seminars to assist with the booth and greet fellow attendees.

"It was clear to me that our presence at the symposium meant a great deal to the IEEE AP-S/URSI leadership," Temples said. "It's difficult to have a 'live' Amateur Radio station in an exhibit area of a major hotel, so we were indeed fortunate to have access to one of the premiere contesting stations in New England through a remote internet HF setup, courtesy of Yankee Clipper Contest Club member Greg Cronin, W1KM."

"The IEEE AP-S/URSI hams who will organize next year's event hope to secure the call sign N4P and recruit local volunteers when the symposium moves to Atlanta, Georgia, in 2019," Temples said. He expressed gratitude to Dave Michelson, VA7DM, an Associate Professor of Electrical and Computer Engineering at the University of British Columbia and who chairs the IEEE's AP-S/URSI Joint Meetings Committee, for his help in coordinating the Amateur Radio display. "Thanks also go to San Diego SM Dave Kaltenborn, N8KBC, and Michelle Thompson, W5NYV, who advised us following the 2017 ham radio effort."



Robert-Paknys, VE2JBP, at the IEEE exhibit.

More ARRL contest award certificates now online

The ARRL Contest Branch says more contest award certificates are now available from the ARRL website in PDF and JPEG formats. Just enter the call sign used. Downloadable certificates now are available for these additional events: the 2017 ARRL 10 GHz and Up Contest, the 2017 November Sweepstakes, the 2017 ARRL 10 Meter Contest, the 2017 160 Meter Contest, the 2018 RTTY Roundup, and the 2018 January VHF Contest. 2018 ARRL International DX Contest certificates will be available soon.

Already available are downloadable certificates for the 2017 IARU HF Championship, the 2017 ARRL 222 MHz and Up Distance Contest, and the 2017 ARRL September VHF Contest. The new online certificates will offer enhanced content over what has been previously available on ARRL certificates. New recognitions have been added for Top 10 participants in a broader number of geographical (country, Division, Section) or categorical entries.

New event certificates will be announced as they are released. For those who never received a certificate or need to replace one, certificates for contests going back a decade or so are available for everything but the old UHF Contest and EME Contest.

BIRDS-2 Constellation CubeSats transported to ISS for August deployment

The second generation of CubeSats in the BIRDS constellation now is on board the International Space Station (ISS) and set for deployment in early August using the Japan Aerospace Exploration Agency (JAXA) module's remote manipulator arm.

The June 29 SpaceX Falcon 9 launch carried the BIRDS-2 CubeSats -- MAYA-1, BHUTAN-1, and UiTMSAT-1, built by students from Malaysia, Bhutan, and the Philippines at the hosting Kyushu Institute of Technology in Japan. All CubeSats have identical designs and utilize the same frequencies. While independently made, operation and control of the three CubeSats will be shared by three teams after the spacecraft are released into space. All three CubeSats will transmit a CW beacon on 437.375 MHz. They will be operational for 6 months.

"The three will form a constellation, orbiting the Earth from different places. This will provide the countries more opportunities to make measurements and run experiments than just with using one CubeSat," explained Joel Joseph Marciano, Jr., manager of the PHL-Microsat program in the Philippines. The primary mission of BIRDS-2 CubeSat constellation is to provide digital message relay service to the Amateur Radio community by means of an onboard APRS digipeater on a frequency of 145.825 MHz.

Another mission of the BIRDS-2 CubeSat constellation is to demonstrate a store-and-forward system, investigating technical challenges through experiments on appropriate data format, multiple access scheme, and file-handling protocol while complying with limited operational time and power constraints.

The BIRDS-2 CubeSat store-and-forward system will collect data from remote ground sensors, store it on board, and download it to the BIRDS-2 ground station network, begun last year during the BIRDS-1 CubeSat constellation project.

The CubeSats will carry two identical cameras with different lenses to capture images with varying resolution. The cameras will also be used to capture a minimum-resolution video from space for experimental purpose.

The CubeSats will also carry magnetic field sensors to measure the magnetic field in space and compare it with that measured on ground.

Additional experiments will use the BIRDS-2 CubeSat constellation to enhance research and experiment in single latch-up event detection, magnetic field measurements, and flight testing of a newly designed GPS chip to demonstrate its low-power operation capabilities in space. Students will also explore a passive attitude stabilization mechanism. All measurements and image data will be made available on the BIRDS-2 project website. ***-- Thanks to AMSAT News Service***

US ARDF Champions prepare for International Competition in Korea

Results of the 18th USA National Championships of Amateur Radio Direction Finding (ARDF) are now in the record books. Some of those who took part in that event now are hoping to win positions on ARDF Team USA, which will travel to Sokcho, Korea, in early September for the 19th ARDF World Championships. IARU rules limit national teams to three persons per age/gender category.

This year's USA National Championships took place near the ski resort town of Truckee, California. Events included foxoring, a combination of ARDF and classic orienteering on 80 meters; 80-meter sprint, and classic 2-meter and 80-meter ARDF competitions. Fourteen US-eligible competitors in the four events took home first-place awards.

Veteran ARDFer Bob Cooley, KF6VSE, set the competitive courses at Little Truckee Summit, a well-mapped area in the mountains north of Truckee at 6,300 feet of elevation. Meet Director Jay Hennigan, WB6RDV, was responsible for starting-line operations, medals, and many other details.

The International Amateur Radio Union (IARU) establishes ARDF championship rules. For scoring and awards, participants are divided into 11 age/gender categories.

Most categories for males over age 40 and females over age 60 already have a full slate of Team

USA candidates for the world competition in Korea, although uncontested openings exist for females and younger males, so it is possible for inexperienced radio-orienteers in these ranges to join the US team, ARRL ARDF Coordinator Joe Moell, K0OV, explained. Contact Moell, if interested -- do not contact the Korean organizers directly.

The Homing In website carries the latest information about upcoming ARDF activities. ***-- Thanks to ARRL ARDF Coordinator Joe Moell, K0OV***

Significant changes in store for FT8 and MSK144 with WSJT-X Version 2.0

WSJT-X co-developer Joe Taylor, K1JT, has announced that major changes are coming to the FT8 and MSK144 digital protocols when WSJT-X version 2.0 arrives in a few months. Taylor said version 2.0 should be ready by January.

"Much of the necessary programming is finished," Taylor said in a post to the Packrats reflector. "Many of the new features have been tested on the air, and we find them to work well."

Taylor was quick to point out that the new capabilities are not yet publicly available, not even in beta form. He said that he, Steve Franke, K9AN, and Bill Somerville, G4WJS, have been developing "enhanced versions of the MSK144 and FT8 protocols that extend the message payload to 77 bits."

"Don't rush to download something," he cautioned. "There is more testing and code optimization to do." He said current plans call for a beta-testing period "probably starting in mid-to-late September," with a full release "possible a couple of months later."

Taylor ticked off a few possibilities WSJT-X version 2.0 will bring to the table:

- ARRL Field Day operation with standard Field Day exchanges.
- ARRL RTTY Roundup operation with standard contest exchanges.
- North American VHF contest operation with full support of grid exchanges and rover (/R) call signs.
- European VHF contest operation with the exchange of six-digit grids, QSO serial numbers, and portable (/P) call signs.
- Better and more user-friendly support for compound and nonstandard call signs.A special "telemetry" message format for exchanging arbitrary information up to 71 bits.
- Support for the existing "FT8 DXpedition Mode," with a more powerful DXpedition Mode possible too.

"All of these features work seamlessly and automatically," Taylor said. "No 'contest mode' checkboxes are needed. In most situations, decoding sensitivity will be slightly better than at present for FT8; for MSK144 it will sometimes be about 0.5 dB worse. Occupied bandwidths will be the same as they are now, and false-decode rates will be significantly lower."

Taylor said WSJT-X version 2.0 will be available in time for users to digest the new documentation and to practice using the software before actually using it on the air, but he offered one important caveat. "The new protocols cannot be backward compatible with the existing ones," he said in his post. "We will probably provide some temporary 'bilingual' capability for FT8, but not for MSK144. It will be essential for users to upgrade to version 2.0 in order to use the new features and communicate with others who have made the upgrade."

Taylor promised "plenty of advance notice" about the transition period and a must-upgrade-by date.

CQ World Wide Contest rules updated

CQ has announced that, effective with the 2018 contest season, some modifications to the CQ World Wide Contest rules have been developed and approved by the contest committee. The "busted call/NIL" penalty is reduced from 3× to 2×. Email addresses for log submissions have been removed, and the committee now "strongly prefers" using web uploads to submit logs. Paper logs will still be accepted. The 10× penalty for "rubber clocking" with MS/M2 entries has been eliminated, although the committee "will continue to vigorously pursue time abuses." Also, the observer program has been eliminated. "Given the absence of a reasonable pool of volunteers and supporting funding, the program has proven to be impractical," CQ said.

In addition, the top entry in the "Rookie" category will be awarded on a one-time-only basis. Previous Rookie winners are ineligible for plaques in this category. Submit questions via the CQ WW "Contact Form" page. ***-- Thanks to John Dorr, K1AR, CQ World Wide Contest Director***

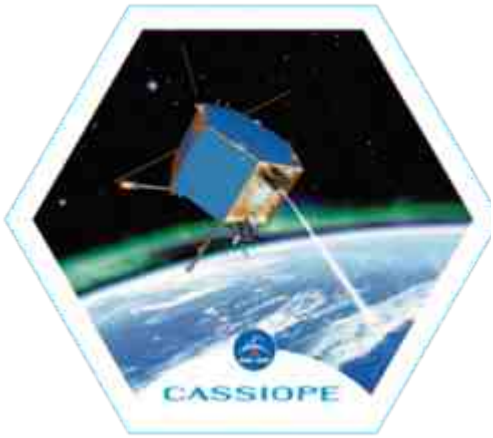
The CASSIOPE spacecraft listens in on ARRL Field Day

The Canadian CASSIOPE (CAScade, SmallSat, and Ionospheric Polar Explorer) spacecraft once again eavesdropped on ARRL Field Day activity. CASSIOPE's Radio Receiver Instrument (RRI) was tuned to 7.005 MHz during six passes over the North American continent during Field Day 2018, although there was no advanced publicity this year. The RRI is a component of the spacecraft's Enhanced Polar Outflow Probe (e-POP), a suite of eight science instruments that study space weather.

"We're really happy with our results this year," remarked Gareth Perry, a physics and astronomy postdoctoral research associate at the University of Calgary in Canada, CASSIOPE's home institution. "RRI recorded plenty of chatter between Field Day participants, especially during our passes over the eastern and central United States on the evening of [June 23]."

CASSIOPE also had turned a close ear to activity during Field Day 2015 and 2017, and its activities last year were heavily promoted.

"It's been tough to sort out the 2017 data, so we decided to use a different tactic this year," Perry said. He and members of the Ham Radio Science Citizen Investigation



(HamSCI) group coordinated with the Nashoba Valley Amateur Radio Club (N1NC) and with the Indianapolis Radio Club (W9JP) -- which operated Field Day as N9NS with the Hoosier DX and Contest Club (N9NS) and a coalition of other Central Indiana radio clubs -- to "direct traffic," asking their members to stick to pre-selected frequencies during the passes, and to record their transmitting logs.

"We figured that it would be easier to assign frequencies ahead of time, so that we [would] know where to look in post-processing, which seems to have paid off," Perry added.

Perry and the HamSCI group have been using ARRL Field Day as an opportunity to study space weather and HF radio wave propagation. He's hoping that CASSIOPE will continue to participate in Field Day. "We're looking forward to next year already!" he said.

Perry is the lead author of the first publication to use data from the ARRL Field Day experiments, Citizen radio science: an analysis of Amateur Radio transmissions with e-POP RRI. The paper, which reports on CASSIOPE's involvement in ARRL Field Day 2015, is set for publication in Radio Science.

World JOTA-JOTI registration now open

Registration is open worldwide for Scouting's Jamboree on the Air (JOTA) and Jamboree on the Internet. JOTA-JOTI take place October 19 - 21 -- always the third weekend of October. JOTA Coordinator Jim Wilson, K5ND, encourages JOTA groups to register as soon as possible.

"The sign-up system this year is much simpler," Wilson told ARRL. "There is no need to first register an account at scout.org before signing in." Wilson said JOTA-JOTI will generate "an explosion of communication across the Amateur Radio airwaves and the internet." He anticipates that more than 1 million Scouts and Guides will take part in more than 150 countries. A JOTA-JOTI Participant's Guide is available.

"JOTA began in 1957 following the World Jamboree that year, when the ham radio operators gathered over coffee and thought about doing the on-the-air part of Jamboree every year," Wilson recounted. This year will mark the 61st JOTA (and the 22nd year of JOTI). "Many JOTA Amateur Radio stations are also starting to use JOTI channels, like ScoutLink, to more readily connect with Scouts around the world," Wilson told ARRL.

"Other channels include Skype, YouTube, and social media."

Wilson said once groups have registered, other locations around the world will know to look for them. "Likewise, you'll be able to see at a glance all the rest of the locations from across town to the other side of the Earth," he added.

Hawaiian Islands Grid Madness

Help get the word out: It's almost time for the fifth annual running of the popular event open to all hams!

"We are happy to announce the Fifth Annual Hawaiian Islands Grid Madness. This event has grown from twelve participants in 2014 to fifty-seven stations last year," says event manager Stan Froseth, AH6KO. "Our islands, mountains, valleys and the ocean make it a challenging and unique event in the ham radio world!

"This early notice is for leaders in the ham community. If you can, please help to promote this event -- spread the word via radio nets, meetings, newsletters, web sites, or just tell another ham! On the radio, you can provide the URL below, or just say "Google Grid Madness".

Here is the key info, with lots more available from: **gridmadness.blogspot.com**.

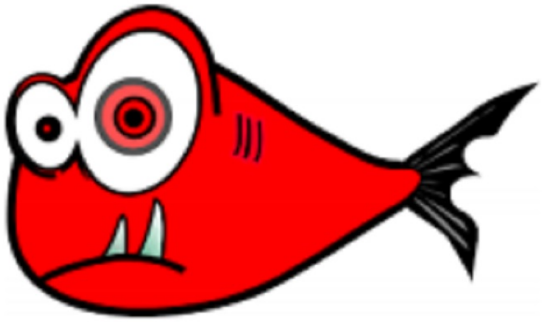
Put Hawaiian Islands Grid Madness 2018 on your calendar!

A VHF/UHF Simplex Event
Sunday, September 16th from 1300 to 1700 HST

Aulani Hui Amateur Repeater Club sponsors Hawaiian Islands Grid Madness, an event for all hams in the State of Hawaii. This event is designed for FUN, and to test your equipment, coverage and operating skills using simplex FM on 2 meters and 70 cm. Contact as many stations as you can in as many Grid Squares as you can, using SIMPLEX ONLY.

ALL Hawaii Radio Amateurs are invited:

* "Get on the air" for new hams
* Emergency communications practice for responder groups
* Fun activity for everyone -- see who you can contact in your area or across the water



New for 2018:

Simplified paper logging -- No need to worry about points, or computing your score.

Or, use the updated Grid Madness Logger with your computer.

No need to enter the exact frequency for each contact, just 2m or 70cm.

Public Info Flier to print and hand out to the curious.

Certificate Endorsements -- challenge yourself!

Log submission -- within two weeks.

Comments and questions to AH6KO@arrl.net

Next Technician exam prep class starts Nov. 1 in Keaau

Free classes for the Technician license will start Nov. 1, with classes to run for five sessions at 6:30 p.m. on Thursdays (skipping Thanksgiving Day) at the Keaau Community Center.

Testing will be at the same time and place on Thursday, Dec. 13. For more info, contact Doug Wilson, KH7DQ, at DOUSCELLE@aol.com or 985-9362.

Ten Ten International

You have to make contacts to get results!

Upcoming Events

Sat Aug 04, 2018 00:00 -
Sun Aug 05, 2018 23:59
Summer Phone QSO party

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Sun Aug 05, 2018 23:59
Summer Phone QSO party

Wed Oct 10, 2018 00:00
10-10 Sprint

Sat Oct 20, 2018 00:00 -
Sun Oct 21, 2018 23:59
Fall CW QSO Party

Sat Nov 10, 2018 00:00 -
Sun Nov 11, 2018 23:59
Fall Digital QSO Party

Tue Jan 01, 2019 00:00
10-10 Anniversary

Tue Jan 01, 2019 00:00
10-10 Meet the Volunteers

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

The 10-10 Connection

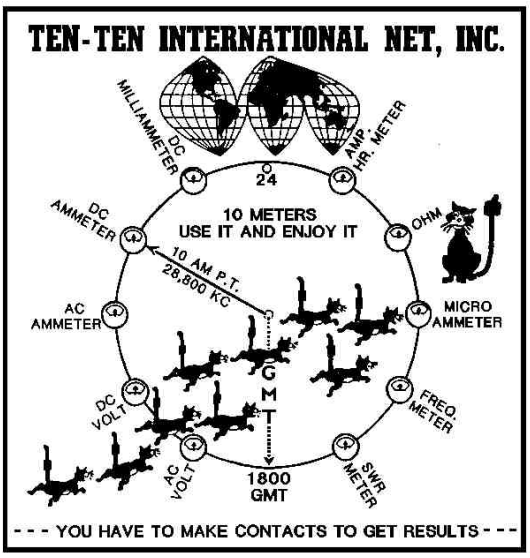
with NH7PE,

10-10 Aloha Chapter

The world of HF radio is open to all licensed amateur radio operators, including Technicians, on the 10-meter amateur radio band. From the website of Ten-Ten International, here are the basic answers to the overriding question:

Just what is the Ten-Ten International Net?

The Ten-Ten International Net, Inc. was formed back in 1962 as the Ten-Ten Net of Southern California. Its purpose was to promote activity and good operating practice on the ten meter amateur band. During the first few years the organization grew slowly, but by 1975 there were 10,000 members, and the word "International" had crept into the name. To date, there have now been more than 75,000 10-10 numbers issued world wide.



https://www.ten-ten.org

Ten-Ten International Net, or 10-10 for short, is an organization of amateur radio operators dedicated to maintaining high levels of amateur radio communications on the 10-meter amateur band (28.0-29.7 MHz).10-10 is a volunteer organization with no paid officers.

Ten-Ten honors long-time volunteer

Ruth Bartholomew, N0KDB, #48715, has been our long-time Silent Key manager for well over 20 years. She recently decided that it was time to step back and pass that position on to some new blood. Ten-Ten International thanks Ruth for over 20 years of volunteer service to the organization. In recognition of those years of service, the Board of Directors presented Ruth with this very nice plaque honoring her for all those years of service.