

Antenna workshop at October meeting

Get connected: Build your own rollup 2-Meter J-Pole; special deals for new members who sign up now

Antennas were the focus of the Sept. 5 BIARC program as John Bush, KH6DLK, and Les Hittner, K0BAD, presented a PowerPoint production to the membership.

Starting the program, Bush focused on HF homebrew antennas and the positive and negative aspects of using them in various circumstances and settings.

In the second part, Les spoke about homemade and commercial 2-meter antennas and the need, especially in view of the storm pattern continuing across the Pacific, for all of the community's hams, new licensees and veterans, to become familiar with how to use a handheld transceiver. It's vital that we learn, and practice, how to get the most out of its potential for playing a key role in emergency communications.

He talked about VHF/UHF antennas he has tested in the talk titled "Amateur



Pepeekeo Repeater work party, from left: Bill Hanson, N0CAN; Paul Ducasse, WH7BR; Paul Agamata, WH6FM; John Bush, KH6DLK; David Johnson, non-ham volunteer; Bob Schneider, AH6J.

TLC for Pepeekeo Repeater

On Saturday, Sept. 12, at 7 a.m. six people met at Civil Defense headquarters as a work party to replace the Pepeekeo Repeater and do upkeep work around the site.

They were Bill Hanson, N0CAN; Paul Ducasse, WH7BR; Paul Agamata, WH6FM; John Bush, KH6DLK; David Johnson, a non-ham volunteer, and Bob Schneider, AH6J.

While Paul A. and Paul D. replaced the old repeater, Bill, Bob and David mowed, weed-whacked and cleaned the grounds.

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BUILD AN ANTENNA (Continued):

Radio Antennas for Emergency and Portable Operations."

"Most of our emergency communications are likely to take place on two meters or 70 cm. The mode will likely be FM, although VHF packet is also being considered.

Is your 'rubber duck' antenna up to the task?" Les asked the gathered hams. "Sad it may be, but the duck most likely will not cut it!" (He accompanied this pronouncement with an on-screen photo of an unprepared little yellow rubber duckie, sad and shedding a tear.)

To get area hams up to speed, power-wise, Les and John will offer a J-pole antenna building workshop at our Oct. 10 meeting. We need to sign up well in advance, to allow them time to procure the right amount of components for this "How to Build a Simple Emergency Two-meter Amateur Radio Antenna" hands-on workshop.

(Sign up by emailing Les at Ihittner@hbci.com by no later than Oct. 5.)

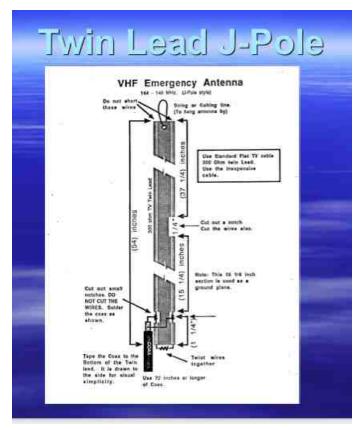
"The Twin Lead J—Pole will be our BIARC club project," said Les. "The J-Pole is a popular two-meter antenna that can easily be constructed.

"This antenna is also extremely portable. Consider the cost: Less than \$15. Consider the performance: 2.15 dBi gain. Consider the flexibility: Hang it from a tree, or tape to a wall or a portable fiberglass mast.

"Beginners can build this antenna in minutes," he promised. "And it rolls up and fits in the glove box!"

Cost will be \$15 for current members and the general public. Hams who join BIARC at this time will get a special bargain: The \$20 annual membership dues will cover the rest of 2015 and all of 2016, and, to boot, each new member will get a free J-Pole kit for the workshop.

"You will have an opportunity to assemble your J-Pole antennas at the October BIARC meeting. John and I will supply tools, an antenna tester, and a soldering station," said Les. "You may need an adapter to connect the J-Pole antenna to your handheld. We can put in a joint order for adapters – and save on freight. Bring your handheld to the meeting



and we will make up the order." There will be a small cost, per person, for the adapter.

"When considering a VHF antenna that is suitable for emergency applications: Consider the cost. Consider the performance. Consider the flexibility.

And, finally, consider the personal sense of satisfaction that comes with building your own."

Advantages of the J-Pole: Low cost; good performance - possibly better than the 5% mag mount; easy to deploy as a temporary antenna; can be mounted inside or outside.

Disadvantages of the J-Pole: Somewhat fragile.

For more on the 2M Twin Lead J-Pole, visit http://www.gsl.net/ku4jw/jpole.html.

PEPEEKEO (Continued):

John also did yard work, but his main job was to document and take pictures. Later that same day, at 2 p.m., was going to be the regular meeting of the Big Island Amateur Radio Club, so you know we all had to hustle to get everything done.

The UHF link was removed and a microwave antenna was installed with the expectation that in two weeks a crew would return to install the new link and do more yardwork.



PEPEEKEO REPEATER CLEANUP (Continued):



As of this moment (9-16) Pepeekeo is unlinked and has a PL of 100Hz to access.

We had long ago decided all the BIWARN repeaters would use 100Hz for tone access.

The next project will be to replace the Kulani machine and, finally, the equipment (and probably the building) at Naalehu. A few weeks ago Paul D. and Lopaka Lee, WH6DYN, replaced the antenna on the VOAD repeater on Mauna Kea.

Please consider this at dues time and make a contribution to the repeater fund.

73,

Bob Schneider, AH6J

Photos courtesy of John Bush, KH6DLK







Veteran BIARC member Irene Kubica, NH7PE, encourages her fellow hams to join in her favorite ham hobby: 10-Meters. And, as she loves to point out: Technician-level licensees are all welcome on this HF band. There are regularly scheduled nets, which let all interested operators get in some practice. For more information, log on to http://ten-ten.org.

October, the 10th month, is a hot time for 10M aficionados! The more hams, the merrier

Ten-Ten International Net, Inc., is gearing up for its traditional Oct. 10 (10/10) Sprint QSO Party, so be prepared for it. It's a 24-hour event from 0001UTC to 2359 UTC on Oct. 10. No scores may be assigned to any chapter.

Logs are due by Oct. 25. An award will be issued for working all 10 USA Call Districts. Current information about 10-10 and upcoming 10-10 QSO Parties and events is always available on the website at www.ten-ten.org.

And remember the Fall CW QSO Party on Oct. 17-18. You have until Nov. 2 to send in your log.

The 2015 W6OI-VE9TEN-DL0X special operational event is scheduled for Nov. 21-22. Mark your calendar now!

73, *Irene, NH7PE*

Announcing:

Hawaiian Islands Grid Madness 2015!

Join in Sunday, Sept. 20

This is a ham radio event sponsored by Aulani Hui Amateur Repeater Club.

With your VHF/UHF FM radio, contact as many stations as you can in as many grid squares as you can, using SIMPLEX ONLY.

We simplified last year's event, and extended to include all islands. Open to all, new hams are especially welcomed. Every participant submitting a log receives a certificate!

- SUNDAY Sept. 20, 1 p.m. to 5 p.m., HST
- SIMPLEX FM 146.400, 146.460, 146.580 MHz and 446.100, 446.200, 446.300 MHz
- EXCHANGE your call sign and 6character grid square
- Find your GRID SQUARE at www.qrz.com/gridmapper
- LOG time, freq, contact's call & grid square
- INFO PACKET and details at www.gridmadness.blogspot.com
 If you lose the link, just Google "GRID MADNESS."

Hope you can join in!

Questions and comments welcome.

73, **Stan, AH6KO**

(Aulani Hui Amateur Repeater Club Is a small group consisting of a few technically oriented hams in North Kohala, South Kohala and Hamakua who have agreed to support and maintain the FM repeaters and remote base stations we are deploying.

Right now this includes the 147.24 machine destined for the northern slope of Mauna Kea and the 444.975 machine in Waikoloa Village.

More radios will be added as time and money allow. This is all being done on a shoestring budget.

In Hawaiian, aulani means "a messenger," which seems appropriate for our purposes.)



American Radio Relay League motto: "To promote and advance the art, science and enjoyment of Amateur Radio."

Founded in 1914 by Hiram Percy Maxim, ARRL (American Radio Relay League) is the national association for Amateur Radio in the US. Today, with more than 161,000 members, ARRL is the largest organization of radio amateurs in the world. ARRL's mission is based on five pillars: Public Service, Advocacy, Education, Technology, and Membership.

For an introduction to the organization and its many facets, log on to http://www.arrl.org. Become a member and help yourself and your fellow inhabitants of ham world. Join or renew before the end of the year, and you'll beat the dues increase going into effect in January, advises Pacific Section Manager Bob Schneider, AH6J.

(The following stories are excerpts from the recent ARRL Letter.)

ARRL Letter Editor: Rick Lindquist, WW1ME

Vintage Transmitter Sale benefits the ARRL Teachers Institute

The sale of a vintage Collins transmitter has made it possible for a Connecticut Amateur Radio club to fund a seat for a future ARRL Teachers Institute on Wireless Technology participant. The ARRL-affiliated Chippens Repeater Association/Bristol Radio Club (CRA/BRC) donated the money it realized from the sale of the old transmitter to cover the League's cost of providing the opportunity for an educator at a Teachers Institute session. As part of its educational outreach to schools through the Education & Technology Program, each summer the League offers multiple expenses-paid Teachers Institute sessions at locations throughout the US.

"We have decided to fund a seat in the Teachers Institute program, since we believe that teachers bringing Amateur Radio and

wireless technology into their classrooms and exposing their students to STEM lessons would be an excellent use of the money," CRA/BRC Treasurer Bill Flaherty, W1GY, told ARRL Development Manager Lauren Clarke, KB1YDD, in a letter accompanying the club's check for \$2000. Clarke said the League greatly appreciates the club members' thoughtful and generous support.

"The Teachers Institute program, started by ARRL staff members and key volunteers in 2000, has grown into one of ARRL's cornerstone programs," said Clarke.
"Applicants far exceed the number of available spots every year. By sponsoring a 'seat' at a future Teachers Institute, the CRA/BRC is giving a teacher a very special opportunity to teach Amateur Radio and wireless technology and to engage students in STEM-related lessons."

Flaherty said the club hoped the donation would "help inspire future students to become radio amateurs." Read more.

ARISS-International Delegates Tackle Big Agenda in Tokyo

Amateur Radio on the International Space Station (ARISS) International delegates and representatives tackled a wide-ranging agenda when they met in late August in Tokyo. The August 20-23 gathering was held in conjunction with the Japan Amateur Radio League's 90th anniversary celebration and the JARL Ham Fair. Those attending represented Canada, Europe, Japan, Russia, and the US.

Keigo Komuro, JA1KAB, of ARISS-Japan and JARL delivered opening remarks. ARRL First Vice President Rick Roderick, K5UR, who was in Tokyo for the JARL Ham Fair, also spoke briefly to the gathering. Kicking off the meeting was a presentation by Hideshi Kagawa of the Japan Aerospace Exploration Agency (JAXA) on its initiatives to launch and deploy small satellites and technology payloads using JAXA's Epsilon launcher.

During the meeting, delegates voted to study the feasibility of creating an interoperable radio system based on the Kenwood TM-D710 transceiver, which would be interchangeable between the Columbus and Russian ISS modules.

"Currently items are certified for one or the other, but not both," explained NASA ARISS Technical Liaison Mark Steiner, K3MS. "They also use two different voltages, 28 V dc in the Russian segment and 120 V dc in the US segment. Future equipment will be able to be used in either. This will significantly improve our flexibility on orbit." Steiner added that the next set of equipment being proposed for launch will follow this new requirement for interoperability.

Delegates agreed to continue studying a proposal to use a so-called "Astro Pi" unit -- a modified Raspberry Pi computer device -- to generate a slide show of images for the Ham TV DATV system at times when no camera is attached. An Astro Pi unit will accompany the UK's first ESA astronaut, Tim Peake, KG5BVI, to the ISS in November.

A lot of discussion focused on fundraising and the formation of the ARISS-International Sustainability and Funding Committee. Delegates discussed funding projects and recommended yearly budgets. ARISS Chairman Frank Bauer, KA3HDO, encouraged all ARISS regions to support development of an international plan and strategy for funding and resources.

Delegates also considered a revision of the organization's current terms of reference, to better formalize and document team roles, responsibilities, and processes, and address other recent changes within the ARISS program.

ARISS-International delegates will meet next in Houston, Texas, in November 2016, the 20th anniversary of the inaugural ARISS working group meeting. Read more.

Boy Scouts Jamboree On The Air 2015 Station Registration is Open

Worldwide station registration is open for the 2015 Boy Scouts Jamboree On The Air/Jamboree On The Internet (JOTA/JOTI), which will take place over the October 16-18 weekend. Registration requires a scout.org username, which gives full access to the registration system as well as to many of the JOTA/JOTI activities that will be under way during the weekend. JOTA is aimed at fostering Scout-to-Scout communication across borders and is the largest Scouting event in the world, with upward of 750,000 Scouts participating from some 6000 stations in 150 countries. In the US 13,326 Scouts and visitors took part in JOTA 2014.

Registration will also provide everything needed to take part in JamPuz (short for "Jamboree Puzzle"), an identity code that JOTA-JOTI participants exchange with one another. Required JID codes will be issued later in September, and participation in JamPuz is optional.

The Boy Scouts encourage participating stations to submit JOTA reports and photos following this fall's event. "We need your report to demonstrate the success of JOTA to those in Scouting and Amateur Radio," said Jim Wilson, K5ND, the national JOTA organizer. He has asked stations to note down the number of Scouts participating, Amateur Radio licensees, and radios on the air, as well as the total number of contacts and states and countries contacted.

"We would also like to see your best photos and hear some stories about your event," Wilson said. He advised local JOTA team organizers to add these tasks to their JOTA "to-do" lists.

This is the 58th JOTA, held each year on the third weekend in October. Read more.

QCWA Honors 105-Year-Old Radio Amateur's 90 Years of Hamming

The Quarter Century Wireless Association (QCWA) has honored 105-year-old Charlie Hellman, W2RP, of Hastings-on-Hudson, New York, for his 90 years in Amateur Radio. The QCWA's announcement also served to flush

out another active ham who, while 1 year older than Hellman, has not been licensed quite as long.

On August 31, the QCWA presented a "90 Year Continuous Licensed Certificate Award" (No 1) to Hellman, whom the organization at the time called "the oldest living Amateur Radio operator in the United States and possibly the world." Hellman got his ham ticket in 1925, when he was 15 years old. He joined QCWA in 1975 and is a member of QCWA Chapter 181 in New York's Hudson Valley. He gets on the air regularly.

After QCWA posted its announcement on the QRZ.com news forum, however, Marcel Stieber, Al6MS, chimed in to point out that Hellman is not the oldest known ham. He said that Harry Wolf, W6NKT, of Morro Bay, California, is 106, although licensed but since 1936.

QCWA Webmaster Bob Roske, N0UF, stepped forward to renew Wolf's lapsed QCWA membership and noted that since Wolf had been licensed for more than 75 years, QCWA would issue him a life membership. And now the organization may recognize his longevity as well.

First licensed as W2AMK, Hellman was an educator. After working his way through the City College of New York, he taught physics on the secondary level. During World War II, the Department of War tapped Hellman to write a textbook, Elements of Radio, for training radio operators.

Two of Hellman's siblings also held ham tickets. His brother Robert, now deceased, was W2JAN. His brother Benjamin, 96, is W2VB.

Also an educator, Wolf indicated on his QRZ.com profile that he once taught electronics at the college level and, after retiring in 1973, went to live in Hong Kong where he operated as VS6GF for 4 years before returning to California. He said he's on the air every day, mostly on 40 meter CW.

Hellman's certificate reads, "The Quarter Century Wireless Association presents this 90th Anniversary Award to its Distinguished Member Charles 'Charlie' Hellman, W2RP, to commemorate Ninety Years of Service as a licensed Radio Amateur."

Hellman also received a congratulatory letter from QCWA President Ken Oelke, VE6AFO.

Nominations Open for the George Hart Distinguished Service Award

The ARRL is accepting nominations for the George Hart Distinguished Service Award. The deadline to receive nominations and supporting materials is November 1. The award honors longtime ARRL Communications Manager George Hart, W1NJM (SK), the chief developer of the National Traffic System (NTS). Hart died in 2013 at the age of 99.

Established by the ARRL Board of Directors in 2009, the George Hart Distinguished Service Award is given annually to an ARRL member for exemplary service to the League's Field Organization. Selection criteria include NTS operating record, Amateur Radio Emergency Service (ARES) participation, or service to the ARRL Field Organization in terms of appointments and/or leadership positions held.

Nominations should thoroughly document the nominee's lifetime activities and achievements within the ARRL Field Organization. Nominees are expected to have at least 15 years of distinguished service.

The Programs and Services Committee will serve as the Review Committee, and the ARRL Board of Directors will make the final determination at its Annual Meeting in January.

Submit nominations and related supporting material and letters of recommendation via email or postal mail to ARRL Field Organization Team Supervisor Steve Ewald, WV1X, 225 Main St, Newington, CT 06111.

IARU Monitoring System Reports Increased Russian Military Traffic

The September edition of the IARU Region 1 Monitoring System (IARUMS) newsletter has reported that Russian Military traffic in the Amateur Radio 7 and 14 MHz bands increased during August. At least some of these intruders were likely to be audible in other parts of the world. Monitors in Europe reported a Russian over-the-horizon (OTH) radar in Gorodezh on 14.108 MHz, causing strong interference daily

and often exhibiting splatter. In addition the Russian Navy was reported active frequently on 14.192.0 MHz using FM CW. Other monitoring stations in Germany reported numerous Chinese OTH radars in other bands, including on 75 meters.

Region 1 IARUMS Coordinator and veteran monitor Wolf Hadel, DK2OM, recently told the Rusk County Amateur Radio Club in East Texas that some of the worst offenders are OTH facilities in Russia and Iran. The signals can result in broad swaths of noise in the 20 meter band, he said. During his VoIP talk, Hadel pointed out that recruiting volunteer monitors with the "right equipment" is difficult, and he encouraged club members to join the hunt for ham band intruders.

According to Region 1 monitors, intruding signals said to be coming from Spanish fishing vessels have now been reported on all amateur bands -- shared and exclusive. A beacon, reported to be in Kazakhstan, has been transmitting "V" on 7027.5 kHz continuously. Apparent North Korean diplomatic traffic from the DPRK embassy in Moscow has been heard on 14.109.5 MHz.

Mario Taeubel, DG0JBJ, observed 31 OTH radars on 20 meters, 28 OTH radars on 15 meters, and 11 OTH radars on 10 meters during August. In addition, a Chinese OTH radar has often appeared on 80 meters in IARU Region 3.

Monitors in Europe also have monitored transmissions between taxi drivers and dispatchers on Amateur Radio frequencies, primarily on 10 meters.

The ARRL recently forwarded reports from IARU Region 2 and Hawaii to R2 Monitoring System Coordinator Jorge Del Valle, TG9ADV. These included so-called drift net beacons on 10 meters (28.281 and 28.226 MHz), as well as digital, radar, and phone intruders heard on 20 meters in Hawaii.

Authorized by the IARU Administrative Council, IARU Monitoring System volunteers work under the guidance of the IARU International Monitoring System Coordinator and regional coordinators. The IARU Monitoring System operations are coordinated under the Monitoring System Committee.

ARES/RACES Volunteers Activate for California Wildfire Emergency

Radio amateurs responded to the ongoing wildfire emergency in California. Earlier this month, ARES volunteers in Amador County supported communications at a Red Cross shelter at the Jackson Rancheria Conference Center, which has been housing evacuees from the Butte wildfire in Northern California.

ARES/Auxiliary Communications Service (ACS) volunteers were called out late on September 9. Amador County ARES Emergency Coordinator Daniel Edwards, KJ6WYW, had communications set up at the shelter by midnight and began contacting other ARES members and scheduling operators to work the shelter station 24 hours a day.

During the activation, members of Yolo County and Sacramento County ARES spelled the Amador County operators at the shelter. "This gave the Amador County members a break and for some time off to help their neighbors evacuate their positions," Sacramento Valley Section District 3 EC Greg Kruckewitt, KG6SJT, told ARRL.

Edwards said 20 operators took part in the activation, with two operators per shift. The station at the shelter was active for 120 hours. Bill Gustavson, K6BIL, who took part in the Amador County ARES response, said that at one point, with cell phone, Internet, television, and landline down, "my only source of information was ham radio. The radio was the only outside link to the world." He also said he was amazed to learn how many nonhams listen on scanners.

As some roads in the area reopened and evacuees were able to return home, Amador County ARES was released from supporting Red Cross shelter communication early on September 14. The Butte fire also extended into Calaveras County, in the ARRL San Joaquin Valley Section.

"The heart of our county is burned," Calaveras Amateur Radio Society President Ken Sanders, AE6LA, reported, with much of the area under mandatory or advisory evacuation alerts. "We've had an informal net going since the beginning on our 145.170 repeater," he said on September 14, adding that he expected that activity to continue "for several days."

Raging southeast of Sacramento in the Stanislaus National Forest region, the Butte Fire has consumed some 71,000 acres and was 49 percent contained as of September 17. The fire has destroyed more than 250 homes, and damage assessment continues.

Meanwhile, the 70,000+ acre Valley Fire west of Sacramento has destroyed nearly 600

homes as well as many other structures. ARRL Sacramento Valley Section Manager Ron Murdock, W6KJ, said Amateur Radio operators coordinated by Charlie Porter, N6JOA, at the University of California-Davis have been collecting veterinary supplies for evacuated domestic animals and livestock. "These will be transported to Petaluma and other unspecified locations in Sonoma County by members of the Class of 2017 Veterinary Sciences Department," he told ARRL.

In perspective:

Unifying all emergency & public service communications outside NTS under ARES label will help clarify our role and focus on common cause

Aloha.

Non-emergency public service communications support is also a sandbox that ARES members/organizations can and should play in. It's good training and it's good public service. It seems ARES has limited its role to emergency communications on the Big Island.

The communications support for the recent marathon near Volcano was not organized as an ARES event. Perhaps we should begin to think of ALL public service communications outside of the National Traffic System as ARES events and add the sponsors of such events to our list of ARES-served agencies. If certain club members have historically organized the communications for these events, that can continue. But treating these as ARES activities may lend additional credibility to the efforts, increase available resources, and give ARES members conscious training opportunities.

There seem to be big disconnects between various amateur radio support and public service communications activities on the Island of Hawaii. There is CERT. There is Civil Defense. There is ACS. There are non-emergency public service communications activities. And, finally – there is ARES.

I believe that in reality, there is only ARES and that ARES as an organization should support all of these other organizations and activities. Truthfully, this is really just a different way of thinking about these things. It is a way of thinking that UNIFIES the amateurs into a common cause. For instance, we don't want all hams to become CERT volunteers, but we want those CERT volunteers who become hams to realize that their communications efforts for CERT are a part of ARES. Hams in CERT should be a part **OF** ARES, not *apart*



FROM ARES. That should be the way we approach it from day one of license and training courses for CERT members. We can make similar efforts to turn the thinking of amateurs who are active in ACS.

Right now, the only role that I am aware of for ARES is providing communications for "Red Cross evacuation centers." Yet, in this county the Red Cross is activated/deactivated at the bequest of Civil Defense. In essence, when the Red Cross becomes a player they are working for Civil Defense. They are not in the field on their own. So: Is Red Cross really a served agency of ARES, or is the Director of Civil Defense our served agency? That simply MUST be clarified. Unifying all emergency and

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ARES (Continued):

public service communications under the ARES label will help clarify our role with each of them.

We are a bunch of men and women with radios. We serve agencies by providing them with what they ask for, if we are able to do so. We use our skills, jointly provided amateur radio infrastructure, personal equipment, and our volunteer time to do so. We should not tell them how to do their business, and in turn we should expect that they will not tell us how to do our business – as long as we give them the communications support they seek.

Please read the following article. It's very interesting.

73, **Les Hittner, K0BAD**

From the ARRL ARES Newsletter: ARES Supports Pikes Peak Ascent and Marathon

At 14,100 feet above sea level, the air gets pretty thin; your legs feel like lead and walking up hill knocks the wind out of you. You can look down on storms out on the plains and while it is nice and warm down below, there is still snow on the ground on the summit, even in August. Enter 2,600 intrepid souls who dare to run the 13 miles from the start line at 6,300 feet, gaining 7,800 feet along a trail course strewn with rocks, roots, and boulders to reach the summit of Pikes Peak (14,115 ft) --800 of those turn around at the top to run all the way back down. These are the Pikes Peak Ascent and Pikes Peak Marathon, two of the world's most challenging running races.

To put on this race requires large numbers of volunteers, Search and Rescue (SAR) teams, medical services, transportation, and a team of dedicated communicators.

Saturday and Sunday, August 15th and 16th, 22 Amateur Radio operators, mostly made up of Pikes Peak Amateur Radio Emergency Service (ARES) members, took to the mountain to support the runners. Getting to some of the aid stations required the operators to pack their gear in on the rugged trail. These operators tracked runners so that the SAR base could respond, coordinated



Volunteers in action for Pikes Peak ARES - Colorado Region 2, District 2.

resupply of aid stations, acted as weather observers, and dispatched transportation.

Although many of the other supporting groups had their own communication systems,
Amateur Radio still played a big role. When the race RFID tracking system failed to link up between reporting stations and cell phones proved unreliable, Amateur Radio worked like a champ, allowing race technicians to troubleshoot their system and align antennas. When a descending runner had a problem, Amateur Radio operators were able to assist by notifying SAR base, which was able to dispatch a team to find the runner and bring that person down.

For the members of Pikes Peak ARES, supporting events on "America's Mountain" is nothing new, be it the Pikes Peak International Hill Climb, a world famous motorsport race and the second oldest in the US after the Indy 500, or the Pikes Peak Cycling Hill Climb, or the Ascent and Marathon, the operators are very familiar with the mountain that inspired the song "America the Beautiful."

Representing Region 2, District 2 of Colorado ARES, Pikes Peak ARES members support 10 to 12 sporting events from May through September and know well the dangers of the altitude, the fickleness of the weather, and how fast things go from good to bad in and around the Rocky Mountains.

For more about Pikes Peak ARES, visit www.facebook.com/PikesPeakARES or on Twitter @PikesPeakARES. -- John Bloodgood, KD0SFY, EC and PIO, Region 2 District 2, Colorado ARES (Pikes Peak ARES)