

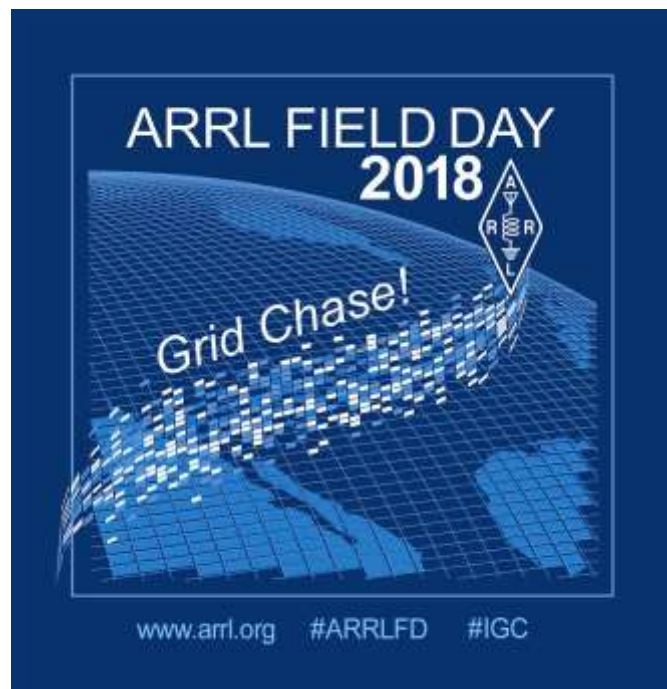
Anchorage Amateur Radio Club Newsletter



Next General Meeting
June 7, 2018
Radio Science and Operations
Center (RSOC) Building - 7:00pm
6721 Raspberry Road
Anchorage, AK



VHF Contest



Alaska Run for Women, ARRL VHF Contest,

ARRL Field Day (from front page)

Considerable activity continues in June. The Alaska Run for Women is June 9th, the ARRL VHF contest is June 9th and 10th, and ARRL Field Day is June 23rd and 24th; with setup on June 22nd.

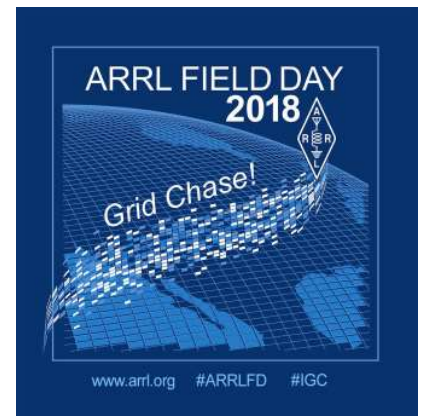
From the May 2018 AARC newsletter, Allen, KB1QCE is the coordinator for additional information regarding the Alaska Run for Women and is always interested in additional volunteers. Brandon, KL7BSC is anxiously awaiting for the VHF contest start. Please contact him if you're interested in joining him on his route from Homer to Fairbanks. Last but not least is ARRL Field Day. We will be setting up on Friday June 22, 2018 to operate June 23 through 24th, 2018 at the RSOC energized via our own 12 KW diesel generator set.

June 7th General Meeting Agenda: Field Day, Raffle, and "Tech Talks"

By Dave Heimke, AL7LO

It's that time again for Amateur Radio's most popular social event, the annual Field Day. It is an institution for many, a way to get together and set up emergency station equipment, operate with the intent of contacting many other Field Day teams around the country, socialize, and just plain have a ton of fun!

The fourth weekend in June this year is June 22-24. The AARC likes to set up on Friday and operate Saturday through Sunday with tear down Sunday afternoon. This will be our third Field Day at the RSOC, and the first one where we will be inside. We will still operate using emergency power. For more information, go here: <http://www.arrl.org/field-day> where you can see the rules. You can also contact Dave AL7LO for information at al7lo@arrl.net.



This month's meeting is June 7th, the first Thursday. We will open at 7:00PM as usual with club business. This will include an update on all the committee activities, especially about the successful courses we have offered and taught.

Once the business is complete there will be a presentation on Field Day, albeit an abbreviated one compared to year's past. Why the rush?

RAFFLE! The Kenwood two meter rig we have been raffling is ready to find a home. The winner will be drawn (remember, you did not have to be present to win, but why not come and get it?). Look at the previous blog post (included in this newsletter) for more information.

What else? Well, the plan is that the meeting closes about 8PM or so, as usual. And then.....drum roll.....our newest feature presentation will be "Tech Talks." For the next 30 minutes or so we will have a talk about a technical subject tied to our hobby. This first month will be to discuss how a simple radio link works. In 30 minutes you ask? How can we introduce a transmitter circuit, modulation, transmission line, antenna, free space propagation, receive antenna, transmission line, and receive circuitry all in that time? Come check it out. We might even touch on some cool subjects like the mythical grounding. You won't become an expert, but you may walk away with some "Ah-Hah!" moments, and hopefully a thirst for more.

Come see us Thursday!

Upcoming Local Event Communications

Remember the following events that you can assist with communications. Contact the coordinator indicated to help. Remember to have a safety vest, bear spray, bug repellent, after bite, proper clothes for the weather, chair, and a spare battery for your handheld radio. Be sure to know where the check-in for the event is (to help others) along with restroom locations. Each coordinator may have more specifics of the event volunteer requirements. Let the coordinator know if you have any physical limitations or desire a specific duty.

Alaska Run for Women (June 9th) - Allen, KB1QCE

Annual event to raise money for and awareness of breast cancer and women's health, and to show-case the talents of Alaska's women athletes.



Dog Jog (July 28th) – Friends of Pets—T.J., KL7TS

Annual July event to raise funds for their programs and to celebrate the bond between people and pets.

Tour de Cure (August 12th) - American Diabetes Association - Alice, KL2GD

A fund raising cycling event to raise money for diabetes research



RRCA Championship Event

Anchorage RunFest (Aug. 19th) – Anchorage Running Club—Keith, KL7MM

A fundraiser to support the Anchorage Running Club and its mission to provide a healthy lifestyle through running and exercise

Completed Local Event Communications

A sincere thank-you to everyone that helped with the following local communication service events.
A special thank-you goes to those that coordinated communications for these events:

Walk and Roll for Hope (May 5th) - Hope Community Resources—Keith, KL7MM

Providing community support to hundreds of individuals and families who experience intellectual and developmental disabilities, traumatic brain injury and mental health challenges.

Walk MS (May 12th) – Alaska Multiple Sclerosis Center—Allen, KB1QCE

Providing resources for Alaskans living with MS

Gold Nugget Triathlon (May 20th) - Gold Nugget Triathlon (GNT), Inc. - Alice, KL2GD

Interested in advancing sports for women of all abilities

We do have a few photos of participants:



Photo by Keith, KL7MM



Photo by Dan, KL4CX



Photo by Stuart Grenier (bystander) Aid wagon
underway

Completed Local Event Communications

(photos continued from previous page)



Photo by Keith, KL7MM

The bottom two photos aren't hams, but one participant (left bottom) had a flat tire in front of the Trek repair tent; how convenient. The lower right group from the bank were there for the duration of the race and were horse from cheering everyone on...



Photo by Dave, N9AIG



Photo by Dave, N9AIG

Raffle! Kenwood TM-271A 2 meter transceiver

By [DAVE HEIMKE](#)

The AARC is raffling off a nearly new 2 meter transceiver. Tickets are \$10 each, ***the raffle is open until the June membership meeting*** when the winning ticket will be announced. Need not be present to win. Permit #191.

This is a nice radio! If you are a new ham also consider taking one of the Introduction to Operating Courses (watch the "Education" pull down menu for listed courses) and learn to program the radio as well as operate it over simplex or on our repeater system. This radio can be a lifesaver if you travel on highways and don't have cell coverage.



Also keep an eye out for an accompanying antenna course if you are interested. It will be on our website soon.

The raffle benefits the AARC as we grow into our new home. Consider buying tickets to give your friend a present!

Tickets can be purchased during any club event. See website for open times. If you can't make it, and want to purchase a ticket (or tickets) contact AL7LO Dave Heimke with any questions (al7lo@arrl.net).



GoFundMe – Paint Funding Campaign

By [KENT PETTY](#)

Hi all. We need to paint the RSOC and have started a GoFundMe campaign.

If you [head to the following link](#), you'll be able to contribute directly to that fund, or contact any board member for other ways you can donate or help.

73, Kent, KL5T

Link: https://www.gofundme.com/help-with-our-paint-campaign?utm_source=internal&utm_medium=email&utm_content=campaign_link_t&utm_campaign=welcome



Let's Man the RSOC!

By [KENT PETTY](#)

A long-term goal for our awesome Radio Science and Operations Center is to man operations floor 24 hours per day. Whoa! That's a tall order!

To get this rolling, we can start in a limited way by having someone on-duty each evening to participate in the evening state-wide and local nets. If you are a general or extra class operator, would you be willing to help? This, of course, would include checking into the Sniper's Net, the Bush Net, and the Motley Net on HF, maybe linking with AL7N on CW for the Alaska CW net, and then participating in the various VHF/UHF nets that take place throughout the week.



If you have an interest in taking a shift of shifts, are willing to get trained up on the current equipment capabilities, and just want to have some fun, please let us know.

Drop me a line at vicepresident@kl7aa.net so we can talk more about how you can help.

Thanks and 73,

Kent, KL5T

First Tech Prep Course a Success!

By [KENT PETTY](#)

The first Technician License Preparation Course wrapped up Sunday, May 13, 2018 with excellent success. This was an intense, 2-day prep course conducted on Saturday, May 12 and Sunday, May 13. Seven individuals completed the course, including two youths of 14 and 15 years of age. Immediately following completion of the course on day 2, all participants took their exams with 6 of the 7 succeeding. Of special note both kids passed!



Instructors were Kent Petty, KL5T, and David Heimke, AL7LO. TJ Sheffield, KL7TS, Mike O'Keefe, KL7MD, Pete Summers, KL2GY were also of great help from the sidelines.

Special thanks to Kathy O'Keefe, KL7KO, who put together a VE team to officiate the testing on the afternoon of Mother's Day (sorry moms). [Ed. Volunteer Examiner team: KL7KO, AL2R, AL4G & AL4S]

This class is the first of many and progressive course offerings to follow. The next course to be taught will be an Introduction to Electric Circuits and Kit Building to be held on May 22, 2018 from 7 -9 pm. [Check this link for the current status of our courses.](#)

73, Kent, KL5T

Coordinated Communications Test

By T.J., KL7TS

A communications test was held on Wednesday, 30 May 2018 with Seward, Homer, Cordova and Niskiski, leading up to the "Kenai Connection" communications exercise, hosted by the State Emergency Operations Center (SEOC) on Thursday.

Club members Kent Petty, KL5T and TJ Sheffield, KL7TS were at the RSOC in support of the successful communications test.

After the communications test, both operators used string trimmers to do maintenance on the exterior of the facility.

The FCC provided wheelbarrow worked just fine!

(Photos by T.J. on the following page)

To paraphrase a famous speech:

*My fellow radio club members,
Ask not what your radio club can do for you,
Ask what you can do for your radio club*



This gives a whole new meaning to field day.

ARRL June VHF Contest, June 9th and 10th

By [KENT PETTY](#) Published [MARCH 30, 2018](#) [CONTESTING](#)

Sunspot numbers got you down?

Burned out on nets? Itching for something new? Try VHF contesting! The

ARRL June VHF Contest is coming

and you do NOT want to miss out!

Bouncing radio waves off mountains

to see around corners . . . child's

play! Firing up long-boom yagis from



mountaintops . . . all in a day's fun! Loading up your truck up with antennas and roving across the state making contacts . . . now you're talking!

Contests are THE time to find out just what the VHF/UHF bands can do, and you WILL be surprised. Join in as a "single operator" entry and test your home station's simplex capability. Take your go-box to a hilltop and enter as a "portable" station. Or you can fire up the amplifiers and light up the clouds as a "high power" entry.

Don't think you need a lot of gear to participate though . . . even an HT and some guts can get you plenty of contacts from a good location. Any and all stations who want to participate are encouraged to coordinate with Brandon Clark (me), KL7BSC, who will be leading a rover route through south-central during the event (route details below).

Let's light up Alaska this June!

Contest (continued)

KL7BSC Rover Route

I'll be entering as a "rover" (mobile station) and operating from multiple grid squares over two days. In true "ham-cation" style the route will go from Homer to Fairbanks with opportunities for contacts to/from up to ten different grid squares. (Check out QRZ for photos from past events.)

Friday night is a camp out in Homer to relax and prepare. On Saturday it's time to light up the air-waves, starting in Homer and continuing through Soldotna, Turnagain Arm, Kinkaid Park, Eagle River, Susitna North, and Talkeetna.

After some downtime to recharge, refuel, and maybe sleep a little, it's time to man up and saddle up for the final push north: operate from Healy, the hills above Fairbanks, and UAF to finish the event. Any other interested mobiles are welcome to participate. All you need is an FM dual-band or better rig and external antennas.

73

Brandon, KL7BSC

Higher Class License Self-study

Keven, KL2NV has a tip if you're studying to take the next level of ham license. Log on to www.hamstudy.org (they even have a smart phone app too).

Thanks for the tip Keven.

Dave, N9AIG

Rowan Street Moveout Continues

By T.J., KL7TS

Club members Tony Kyriss, NE7EK, Keith Clark, KL7MM and TJ Sheffield, KL7TS were at Rowan Street for Working Wednesday, to take down portions of the Rohn 45 tower and other appurtenances.

Tony, our intrepid tower climber, was literally singing in the rain as he removed the VHF antenna from the top of the mast, the rotor and grounding, coax and control cables.

The group dropped and coiled multiple coax runs, rotor cable, control cable and swept the roof with a push broom.

We recovered the 8' ground rod at the base of the tower and the club's hand-cranked diesel fuel pump.

A good evenings work at Rowan Street, followed by more work at the RSOC later that evening.



Photo by Keith, KL7MM



Photos by Keith, KL7MM

(Continued from Previous Page)



Photos by T.J., KL7TS



VEC Report

VEC Session Summary, May 2018										
Location	# Sessions	# Tested	Licensed / Upgraded	New License	Upgraded License	Passed Elem	Failed Elem	Tech	Gen	Extra
Anchorage	1	9	8	8	0	8	6	8	0	0
Fairbanks	1	4	4	2	2	5	3	2	2	0
Homer	1	7	6	4	2	6	4	4	0	2
Sitka	1	1	1	1	1	2	0	0	0	1
Tok	2	2	2	0	2	2	0	0	2	0
Valdez	1	2	2	0	2	2	0	0	2	0
Totals	7	25	23	15	9	25	13	14	6	3

12 Month Summary

Tot Sessions 12 mths	51
# People Tested	186
# Exams Taken	255
# Exams Passed	172
# Exams Failed	83
# New Hams	92
# Upgrades	63

Please remember to check “store” on our website to purchase your seat at a testing session. VEs are prohibited from accepting cash, checks, or other forms of payment at test sessions. Examinees need to be sure to show up with their “receipt” in hand, or otherwise presentable in electronic form to be permitted to test. To summarize, all purchases for testing must be made online at our website.

Regularly scheduled testing sessions are held in Anchorage, Fairbanks and Sitka as follows:

Anchorage

AARC Radio Science and Operations Center (RSOC)
 6721 Raspberry Road, Anchorage
 When: Second Saturday of each month at 2:00 PM
 Contact: Kathleen O’Keefe, KL7KO, 907.243.4675, koalaska@gmail.com

Fairbanks

Far North CB Radio Plus Building
 3451 College Road, Fairbanks
 When: First Saturday of each month at 1:00 PM
 Contact: Mike Perry, AL7F, 907.590.7215, patperry@gci.net

Sitka

Sitka Fire Department
 209 Lake Street, Sitka
 When: First Saturday of each month at 12:00 PM
 Contact: Benjamin Downing, KL2UF, 907.738.2703, aikiben@gci.net

Testing teams are also available in Bethel, Cordova, Homer, Juneau, Kenia/Soldotna, and Valdez and are scheduled on an as-needed basis. Check our website for info and updates.

VEC Report (cont.)

Please note: The Anchorage ARC VEC operates testing sessions only within the geographical boundaries of the State of Alaska. If you live in another state or country, even if your mailing address is not in Alaska, you can still test with our VEC. It is only the testing session itself that must take place within the state.

73,

Kent Petty, KL5T
Chairman, Anchorage ARC VEC

Home Brew Weather Station

I am always amazed with what can be put together at a very modest cost. Go to the following link to see a setup that downloads information directly from weather satellites. Thanks for the link Keven, KL2NV.

https://pietern.github.io/goestools/guides/minimal_receiver.html

Dave, N9AIG



Image downloaded by Pieter Noordhuis with his equipment

Tough Times Glossary

By George Wilkinson II, KL1JJ

Tough Times Glossary #7 (see #1 through #6 in previous issues of the newsletter)

Koko builds compound words, then use it. Bees use it to signal distance and direction. The corvus are as good at it as dolphins. So, if bees, birds, apes, corals, trees and, well, all life forms use it – what is it?

Communication is the exchange of thoughts, messages, or information, whether by speech, signals, writing, or behavior. It is also what is communicated; a message.

[Latin *communicare*, fr. *communis* common]

The gist is to make a concept, fact, or idea understandable to someone else, by some means, so that both the communicator and the receiver hold a common understanding.

Speaking of the means, let's put an 's' on the end to get **communications** defined as the technology employed in transmitting messages.

Now, what if a hospital's phone system goes down? Yes, it's one of those – a **communications emergency**, defined as "a lack of communication ability that can lead to harm to persons or property." If the emergency isn't resolved, perhaps with Amateur Radio Service emergency communicators, disaster can, indeed, ensue.

Remember that in previous definitions we learned that an emergency need not become a disaster. Unless it's a sea monster, then, yeah, you're pretty much screwed.

Tough Times Glossary #8

Function has the definition of the action or purpose for which a person or thing is suited or designed.

[Latin *functio* from *fungi* to perform, execute, discharge]

Easy peezy, right? A telephone's function is to facilitate speech; a light bulb is designed to help maintain the shape of one's nose; a dumpster lid functions to keep ravens from having fun. Don't think small. A function of the United States government is defense and all entailed. The accounting function at Boeing is larger than most medium-size businesses. Okay, now think small. Are your toenails mere vestigial remains, or do they have a function? Drop something on the end of your toe and you'll be glad you have them.

Critical Function is "a function that cannot be interrupted for more than a few days without detriment to the system of which it is a component."

[Latin *criticus*, fr. Greek *kritikos*, fr. *krinein* judge, decide]

If an organization's viability is diminished when one of its supporting functions is diminished, that function is critical.

Now, remember 'communications' as discussed previously. Because communication is vital to a hospital's ability to execute its mission, communications is part of its critical infrastructure.

Critical Infrastructure is defined as "systems and assets vital to the continuity of government, business, ministry, persons, or functions."

[Latin *infra* below + *structus* to construct]

In other words, critical infrastructure is the collection of functions which make up the fundament, the foundation, of a system as opposed to the bells and whistles.

In years past communications would not have been considered critical hospital infrastructure. Of late, however, hospitals have grown so large and complex that staff doesn't have time to run to several departments to, say, set up an operation. If communication is diminished patient intake must be reduced. This is bad news after a tornado or earthquake.

To the rescue comes Super Ham! Equipped only with a tiny hand-held radio, two antennas, a can of Spam and a spork, not to mention practiced procedures and protocols, he steps up, sets up (communications), and communicates. Our intrepid RF junky has dedicated himself, and a sizable percentage of his discretionary income, to prepare for just such a moment as this.

Have you signed up?

(Fred Meyer can be done via Internet)

Here are two ways you can help fund our Anchorage Amateur Radio Club. Both are really easy on your part. Please consider doing both options:

Fred Meyer will give us money!

All you have to do is shop there and sign up AARC as your non-profit beneficiary. Once you sign up, a portion of every purchase you make is donated to AARC. There is no increase to you for your purchase by declaring AARC as your beneficiary. Currently there are three individuals signed up for this worthy cause. Let's see if we can make it 100%.

You still earn your Rewards points, Fuel Points, and Rebates just as you do today.

The AARC's Fred Meyer non-profit number is 94846.

If you don't have a Fred Meyer Reward Card, they are available at their service desk.

Tell your family, friends and neighbors about this opportunity too.



Amazon Smile will give us money!

If you do shopping on-line at Amazon, you can designate AARC as your charitable organization. Amazon will donate 0.5% of your purchase to AARC. Log-on to:

<https://smile.amazon.com/ch/23-7225693>

For more information.

AARC is Accepting Credit Cards!

AARC can accept your credit card for payment (via Square Reader) of dues and donations. See Kent KL5T at the next club meeting, club working Wednesdays or board meeting. Note that accepting credit card payment via our web-site is still in progress.

Now may be the time to renew your membership; don't forget!

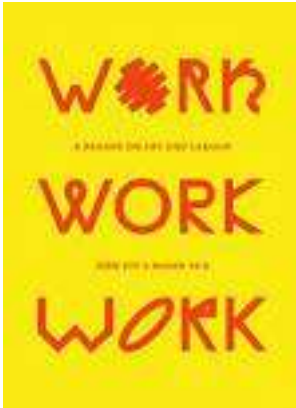
Thanks Kent KL5T, for setting this up



Time to sign-up to help with these projects!

Saturday Work Sessions 10AM to 3PM

(don't forget working Wednesdays too: 6:30PM to 9:00PM)



We need everyone's efforts for the following projects that have been identified. Contact the individual indicated to coordinate the work on these projects.

Project or Activity Need	Description	Contact
ARES - Anchorage Department of Corrections Emergency Coordinator	We need a lead person to coordinate support for the Anchorage area State of Alaska Department of Corrections emergency communications needs. An MOU is in place. We need a point person. Ready to get involved?	KL5T
ARES - Membership on Critical Resources Teams	Become a member of a team supporting a critical communications resource or served agency. We do need your help.	KL5T
Assist with donated tower take-downs and removals	Are you willing to assist with tower dismantling? We always need help. Are you willing to be a tower or ground crew member?	KL5T
Assist with removal and disposal of "dead lead" (old batteries)	These need to be hauled away periodically. Can you be the dead lead leader?	KL7TS
Build Worktop for Operating Table for MTV	The MTV uses a 2' x 4' portable table as a work top. It would be enlarged somewhat by building a 2' x 6' top that sits securely overtop. Do you have some woodworking skills?	KL7MM or KL5T
Cable Crimp Tool God / Goddess	We have a lot of crimp tools that need to be characterized, instructions provided, and training to be provided on their use. A worthwhile project. Are you up for it?	KL7TS or KL5T
Club Antenna Analysis, Characterization, and Repair	Evaluate antennas on the shelves for resonant frequency(ies), structural integrity, label, and store. Use the club's AIM antenna analyzer to characterize.	KL7TS or KL5T
Club Member Antenna Sweep and Analysis	Visit club member's home stations to sweep antenna systems with club's AIM antenna analyzer. Also check mobile systems.	KL7TS or KL5T
Club Work Shop Organization and Storage	We need to get the work shop area organized so it is more functional and looks like a professional shop. Are you a great organizer?	KL7TS
Document Scanning	Lots of club documents need to be scanned. Any help would be appreciated	AL2R or KL7GD

Continued on the next page

Project or Activity Need	Description	Contact
Equipment Inventory and Management	Assist Vice President with equipment inventory, labeling, and database management.	KL5T
Front Office Organization and Storage	The club's front office needs to be organized. Shouldn't be too difficult a job, just needs to be tackled.	KL7TS
Garage Organization and Storage	Need some real help here. If we can get this space organized it will make a real difference being able to get work done.	KL7TS
Hand and Power Tool Organization	Organize all hand and power tools at the club station. Many tools need to be labeled with ID numbers and added to the inventory.	KL7TS
LCD Monitor Repair	An LCD monitor needs repair. It needs a couple capacitors replaced. An instructional video for the repair is available. This is a good novice project.	KL5T
Manager the Club's Facebook Page	Yep, we are on Social Media and really need someone to manage our Facebook page. Can you help?	AL4S, KL5T, or KL7M M
MESH Network - File Server	Develop a file server for the MESH network using a Raspberry Pi. Systems are in place as examples.	KL5T
MESH Network - PBX	Assist with MESH system Raspberry Pi telephone server (PBX).	KL5T
Mezzanine Organization and Storage	This is our primary long storage area and really needs to be cleaned up. Can you help?	KL7TS or KL5T
MTV Equipment Outfitting	We need to get our MTV Properly outfitted so it can deploy and operate on a moment's notice. Can you work with our Heavy Rolling Stock Manager to assist?	KL7M M or KL5T
Project or Activity Need	Description	Contact
Portable Deployable Kit Manager	We need someone to manager our deployable kits. These include simple portable voice stations, packet stations, crossband repeater units, and MESH units in the future. This is a cool job!	KL5T
Reprogram Portable 440 MHz Portable Repeater Morse IDer	We need to reprogram the Morse IDer in our portable 440 repeater. We've got the keypad to do the job, but need someone to champion the	KL7TS or KL5T
RF Cable Labeling	Characterize and label all active and available antenna feedlines using club's cable labeler.	KL7TS
RFI Team Lead	The club has some excellent RFI detection equipment. We need to get it into service on a regular basis. How would you like to lead the effort to track down the countless sources of harmful interference in Anchorage?!	KL7TS or KL5T
WX3in1 Plus 2.0 APRS Digipeater / I-Gate	Configure hardware, set system parameters, and install the club's WX3in1 Plus APRS unit at AARC hillside site located at KL7QN's residence.	KL5T

Join us on “working Wednesdays” or **Saturday Work Sessions (10AM to 3PM)** for an opportunity to have “eye-ball” QSOs and get a project completed!

ANCHORAGE AMATEUR RADIO CLUB

BOARD MEETING

March 20, 2018

6721 Raspberry Road (RSOC)

Anchorage, AK

APPROVED

The meeting was called to order at 7:00 PM by President Lara Baker AL2R

A quorum was established

BOARD MEMBERS PRESENT:

Lara Baker AL2R, Jill Heimke WL7BTT, David Heimke AL7LO, T.J. Sheffield KL7TS, Keith Clark KL7MM, Lil Marvin KL7YF, Dan Knapp KL4CX, Richard Tweet KL2AZ, Kent Petty KL5T, Alice Baker KL2GD, Dave Webb N9AIG

BOARD MEMBERS PRESENT VIA TELECONFERENCE:

Rich Gillin AL4S

NON-VOTING MEMBERS/GUESTS PRESENT

Allen Abbott KB1QCE, Michael O'Keefe KL7MD

EXCUSED BOARD MEMBERS

None

UNEXCUSED BOARD MEMBERS

Jim Wiley KL7CC

REQUEST FOR AGENDA ITEMS

None

TIME CRITICAL ITEM(S)

None

REPORTS

SECRETARY REPORT

The January 2018 Board meeting minutes were presented. Motion made by Jill Heimke WL7BTT, second by Dave Heimke AL7LO to accept the minutes as presented. The motion passed with no objection. The February 2018 Board Meeting minutes were presented. Motion made by Alice Baker KL2GD, seconded by Keith Clark KL7MM to accept the minutes with one spelling correction. The motion passed with no objection. The March General Membership meeting minutes were presented. Motion made by Keith Clark KL7MM, seconded Jill Heimke WL7BTT to accept the minutes as presented. The motion passed with no objection.

TREASURER'S REPORT

Jill Heimke WL7BTT noted that bills are paid to date and reported on AARC account balances. A \$750 employee matching contribution from Alyeska Pipeline was received in recognition of Dave Heimke's donations. The CPA firm Rogers and Company has reduced their charges to AARC by \$527 and State gaming taxes have been filed. The new AARC mailing address (P.O.

Box 190192 Anchorage, AK 99519) is fully functional and the 9th Avenue post office box has been closed.

FINANCE COMMITTEE

Keith Clark KL7MM reported on the Finance Committee meeting held on March 12th. Discussions included 2018 YTD reports and spending graphs review, nonpayment of restitution to the AARC and associated follow up with the Attorney General. Building Committee expense forecast, and discontinuing payments on the Grubstake site resulting in a savings to the AARC of \$2940/yr. Discussion noted the capturing of donated services/goods/time is required for accurate budget forecasting and reporting.

PROJECTS COMMITTEE

T.J Sheffield reported that the project committee has 3 project carryovers with no expected expenditures.

GRANT COMMITTEE

Lara Baker AL2R reported that the AARC is up on the Grants.gov site, addresses and other information need updated on DUNS and other related sites.

FUNDRAISING COMMITTEE

Dave Heimke AL7LO reported on behalf of chair Dennis Stevens WL7AQ that one meeting has been held. Internet/Phone service is being researched, AARC has been featured in the Hillcorp newsletter noting the first \$500 donation to the AARC. Grant applications are being submitted locally, regularly scheduled meetings will be held with the date/time to be determined. Watch the KL7AA.net website for information.

GAMING COMMITTEE

Lara Baker AL2R reported that there have been no requests for the AARC gaming permit, the permit was renewed and is current through December 2018. Discussion was held on determining active permits in Anchorage, explore gaming opportunities and how to advertise AARC's permit availability.

BUILDING COMMITTEE

Dave Heimke AL7LO reported on creating a requirements list of items to be completed to progress the project with the goal of getting the building Open House and Vision Ready for April. Costs incurred to date have been the original professional inspection and appraisal as required for the lease application. Design/upgrades/replacement of the building's electrical system will be one of the first major projects with the goal being to get design complete and the Airport building permit review complete in preparation for municipal permitting and contracting for the project. Building heat issues/costs and refuse costs were discussed. Dave noted that the Saturday open times (10am – 3pm) as well as Working Wednesdays has been very productive. Removal of excess furniture, cabinets etc. is being coordinated and AARC assets are being categorized, sorted and labeled.

EQUIPMENT REPORT

Kent Petty KL5T reported on building move-in progress, equipment sorting, inventory and plans for a monthly summary report to the Board.

VE PROGRAM REPORT

Kent Petty KL5T gave the March report for testing sessions in Anchorage, Fairbanks Sitka and Valdez with 11 passed examinations resulting in 2 Technician, 5 General and 4 Extra class

licenses. The new Technician question pool has been published with one errata already sent out. This new question pool will be used starting 7/1/2018.

TRUSTEE REPORT

Keith Clark KL7MM reported that Working Wednesdays continue. Brief discussion was held on the possibility of an available Club Callsign that AARC may be interested in obtaining.

MEMBERSHIP REPORT

Rich Gillin AL4S reported that AARC has received \$450 in dues to date for the year. Current records indicate 59 active members. Brief discussion was held regarding AARC Bylaws, Rules of Procedure, quorum language, member tracking and verification.

BY-LAWS

No report

ARES

Kent Petty KL5T reported on the ARRL's movement regarding the ARES Membership Accountability System.

OLD BUSINESS

No Old Business was presented.

NEW BUSINESS

The AARC Access Policy was presented for discussion and adoption. Motion made by Keith Clark KL7MM, Seconded by Dan Knapp KL4CX to adopt the Access Policy. Discussion was held to clarify rolling stock and access levels. The motion passed unanimously.

The creation of an AARC Education Committee was brought up for discussion by Dave Heimke AL7LO. Dave noted that the intent is to provide community service by providing education ancillary to the AARC's mission and provide Science/Technology/Engineering/Math (STEM) training. Dave offered to chair the committee and offered suggestions for committee members. Dave indicated that he would have a structure developed in the next several weeks. Kent Petty KL5T proposed the Education Committee's Course 001 to be the \$99 Gordon West Technician Class. Motion made by Richard Tweet KL2AZ, seconded by T.J. Sheffield KL7TS to note Board support of the Education Committee and to develop a Technician level course Class as proposed. The motion carried unanimously.

The AARC list of standing Committees was reviewed and updated. Active Standing Committees are: Membership, Finance, Education, Grants, Projects, Equipment, Gaming, Building, ARES, and Fundraising.

The creation of an AARC GoFundMe site and its authorization was brought up for Board discussion. Lara Baker AL2R asked for a Board vote on this and it was approved unanimously.

The creation of an AARC Membership Drive and its authorization was brought up for Board discussion. Lara Baker AL2R asked for a Board vote on this and it was approved unanimously.

PROGRAM FOR APRIL MEMBERSHIP MEETING

Public Service Opportunities will be the topic for the April meeting.

ADJOURNMENT

The meeting adjourned at 8:42pm. Respectfully submitted as recorded on 03/20/2018 by Richard Tweet KL2AZ, Secretary

ANCHORAGE AMATEUR RADIO CLUB
BOARD MEETING
April 17, 2018
Radio Science Operation Center (RSOC)
6721 Raspberry Road
Anchorage, AK

APPROVED

The meeting was called to order at 7:00 PM by President Lara Baker AL2R

A quorum was established

BOARD MEMBERS PRESENT:

Lara Baker AL2R, Alice Baker KL2GD, Jill Heimke WL7BTT, Lil Marvin KL7YF, Dave Heimke AL7LO, Kent Petty KL5T, Rich Gillin AL4S

BOARD MEMBERS PRESENT VIA TELECONFERENCE:

Jim Wiley KL7CC, Dave Webb N9AIG

NON-VOTING MEMBERS/GUESTS PRESENT

Allen Abbott KB1QCE, Michael O'Keefe KL7MD

EXCUSED BOARD MEMBERS

Richard Tweet KL2AZ, T.J. Sheffield KL7TS, Dan Knapp KL4CX, Keith Clark KL7MM

UNEXCUSED BOARD MEMBERS

None

REQUEST FOR AGENDA ITEMS/CHANGE IN ORDER

None

GUESTS

None

TIME CRITICAL ITEM(S)

None

REPORTS

SECRETARY REPORT

Secretary report was tabled to the May Board meeting as the Secretary was excused.

TREASURER'S REPORT

Jill Heimke WL7BTT reported that all bills are paid except for ArcticCom, which AARC is awaiting a reply from regarding the facility. Account balances were presented. Jill noted AARC restricted funds are maintained in the regular savings account and are tracked as a sub account in the books. Donations to date of \$2896 include \$1646 from members and \$1250 from non-members.

FINANCE COMMITTEE

The April 9 Finance Committee meeting summary was presented which includes: 2018 year to date electric utilities at the RSOC average \$10/day, Business license renewals, Hughes Net service, QuickBooks accounts and classes, and discontinuing the Grubstake site.

GRANT COMMITTEE

Lara Baker AL2R reported there are no grants pending and Grants.gov login was discussed.

FUNDRAISING COMMITTEE

Two GoFundMe campaigns are up for the RSOC; exterior painting and repairs to the rooftop HVAC unit, the raffle for the VHF radio has started, AARC members are encourage to promote the RSOC and membership to their dentist, doctor etc. Pete Summers KL2GY and Dennis Summers WL7AQ promoted the RSOC open house with a press release, posters, signage, etc. and Rich Gillin AL4S posted open house information on the AARC webpage (www.KL7AA.net).

GAMING REPORT

Lara Baker AL2R reported another use for the AARC gaming permit has not been found to date.

BUILDING COMMITTEE

Dave Heimke AL7LO reported on the committee meeting schedule, cataloging of items requiring funding, Allen Abbott KB1QCE donated a \$100 Lowes gift card to the committee, discussion on using \$5000 of the budgeted \$8000 for repair of roof leaks.

MEMBERSHIP COMMITTEE

Rich Gillin AL4S reported that the AARC currently has 66 active members and determining the number of life members continues, Rich will work to get new members to the open house and summer events such as AARC supported races, Field Day, etc.

EDUCATION COMMITTEE

Discussion noted the committee's task is to feed the community with education. AARC Board noted support of the committee's efforts to provide Science, Technology, Engineering and Math (STEM) education, a syllabi template is being developed, A Course Catalog is also being developed and currently contains a two day **Technician Class**, and a 2 hour **Kit Building Class**. Other classes anticipated are a **DC Circuits Class** and an **Operating Class**.

EQUIPMENT REPORT

Discussion noted agreement to raffle a 2m

VE REPORT

Kent Petty KL5T reported on testing to date which has included 51 testing sessions, with 197 people tested on 277 exams resulting in 100 new hams and 65 upgrades. Kent noted there will be an additional testing session in Valdez on April 19th, one in Homer on May 12th and an addition Anchorage session at the completion of the Technician Class on May 13th. Income from testing to date is \$480.

TRUSTEE REPORT

Tabled to the May meeting as Keith Clark was excused

ARES

Tabled to the May meeting

OLD BUSINESS

GoFundMe – A discussion was held on the use of GoFundMe for fundraising

Membership – Discussion noted the membership drive kickoff at the RSOC open house, more use of social media, encouraging membership at club events, and 'bring a friend' to the RSOC

NEW BUSINESS

Policy on membership for individuals testing – Board discussion and agreement that this policy is for Anchorage only, those wanting the 12 months of free membership must submit a signed form with their information included and that Volunteer Examiners could ask those receiving a free membership for a \$20 donation.

Government Hill Commons - Discussion held on the project which is a historical site with a tower. They may host a MESH node for the AARC.

ADJOURNMENT

The meeting adjourned at 8:08pm.

Respectfully submitted as recorded on 04/17/2018 by Jill Heimke WL7BTT

Prepared by Richard Tweet KL2AZ, Secretary

ANCHORAGE AMATEUR RADIO CLUB

MEMBERSHIP MEETING

April 5, 2018

Radio Science Operation Center (RSOC)

6721 Raspberry Road

Anchorage, AK

APPROVED

Call to Order

The meeting was called to order at 7:00 PM by President Lara Baker AL2R. A quorum was established (21 signed in). Members and guests introduced themselves.

Announcements

Mark Sabel WD6BMJ reported on his work to date on documenting the history of the Radio Science Operating Center (previously known as the FCC Building). Issues with the FCC not maintaining historical records has made the process difficult. Mark noted that he is continuing the process with the plan being a published QST article documenting the history of the building and the AARC's move into it.

Alice Baker KL2GD reported on the 7 summer events supported by the AARC. Events planned are:

May 5 th	Hope Walk and Ride
May 12 th	MS Walk around Lake Hood
May 20 th	Gold Nugget Triathlon
June 9 th	Run For Women
July 28 th	Dog Jog
August 12 th	Tour de Cure
August 19 th	Runfest Marathon

Alice noted that the MS150 bicycle race, which had been supported by the AARC for numerous years was cancelled this year due to lack of participation.

Allen Abbott KB1QCE followed with a presentation on the benefits of participating in an AARC supported event. Allen noted that Field Day is an excellent time to learn/practice radio communications. Allen noted the AARC rolling stock available for deployment during exercises or emergencies and noted Keith Clark KL7MM is the Emergency Coordinator for AARC heavy rolling stock. Discussion was held regarding participation in parades such as the Fur Rondovous Parade or the Fourth of July Parade, and classes to train volunteers. Safety at these events, such as looking out for yourself, wearing a safety vest (be identifiable), be bear aware, have mosquito repellant, and also being comfortable while operating by bringing a chair/shade/raingear to your location were great discussion topics. Knowing your equipment, such as battery life, is very valuable when operating at an event as well as bringing go kits and equipment such as an external antenna and a mast of sorts to extend your operating range.

Craig Bledsoe KL4E noted that Matanuska Electric Association gives away their telescoping hotsticks when replacing with new.

DOOR PRIZES

3 Door prizes were awarded

The meeting adjourned at 8:02pm.

Respectfully submitted as recorded on April 5, 2018 by:

Richard Tweet KL2AZ, Secretary

ANCHORAGE AMATEUR RADIO CLUB
MEMBERSHIP MEETING

May 3, 2018

Radio Science Operation Center (RSOC)

6721 Raspberry Road

Anchorage, AK

APPROVED

Call to Order

The meeting was called to order at 7:00 PM by President Lara Baker AL2R. A quorum was established (22 signed in). Members and guests introduced themselves.

Announcements

Brandon Clark KL7BSC presented information on the upcoming ARRL June VHF event to be held Saturday, June 9th (1800 UTC) - Monday, June 11th (0259 UTC). Brandon briefed the group on various VHF operations, contests and categories involved.

Presentations

Tom Plawman of the Alaska Search and Rescue Association (ASARA) gave a presentation on Search and Rescue (SAR) operations in Alaska including a detailed explanation of the Alaska Incident Management Team (AIMT) and its function in coordination of volunteers and resources involved in SAR's. ASARA consists of over 31 volunteer organizations from Barrow to Sitka consisting of over 700 volunteers thereby providing statewide resources. AIMT consists of 40 individuals within 76 related organizations. 75% of whom are members of volunteer SAR teams. AIMT maintains a goal of a 3 hours deployment from the original request for assistance

Activation of the AMIT is by the Dept. of Public Safety Alaska State Troopers who also coordinates AIMT utilization by other agencies requesting assistance. DPS is the primary responsible agency for SAR missions on land. The Rescue Coordination Center (RCC) on JBER provides aircraft and Dept. of Defense support to the AST who although there is no requirement for the RCC to perform civil SAR's, the use them as an opportunity for training. The US Coast Guard is the responsible agency for maritime searches and also some land searches in Southeast Alaska and the Alaska Peninsula.

AIMT personnel are Incident Command trained who offer support to the primary Incident Command conducting the SAR mission. Key elements of AIMT include; an ASARA radio network for SAR communications, First Responder medical training, available year round for all weather all terrain SAR's, trained search dogs, experience with the general public and volunteers, and dive team members as well as many other qualifications and resources.

Tom noted that nationwide, 95-97% of SAR's have resolution within the first 24 hours and 3% can evolve into complex multiday operations. ASARA continues to recruit and develop regional expertise.

Allen Abbott KB1QCE started a group discussion on Go Kits. All present were asked what their favorite item was in their kit. Answers varied and included food, water, spare batteries, knife, flashlight, matches, heat packets, bear spray among others, Allen reminded all to be ready for a 72 hour deployment and it was noted that having a source of light available at all times within reach is essential.

DOOR PRIZES

3 Door prizes were awarded

The meeting adjourned at 8:40pm.

Respectfully submitted as recorded on May 3, 2018 by Richard Tweet KL2AZ, Secretary



Monthly Events



1st Thursday each month: AARC general meeting - 7:00 PM in the Radio Science and Operations Center (RSOC) Building at 6721 Raspberry Road, Anchorage. Talk in will be on 147.33+ repeater.

1st Thursday each month: Moosehorn Amateur Radio Club General meeting - 7:00 PM Location is at Borough Emergency Response Center on Wilson Way in Soldotna (behind Soldotna FD. Call for directions on 146.88 repeater (no tone). Moosehorn ARC also holds a weekly luncheon every Thursday, locations and times change — contact George Van Lone, KL7AN: donnav@acsalaska.net

2nd Saturday each month: PARKA (Polar Amateur Radio Klub of Alaska) Meeting at 11:00 AM. Polar Amateur Radio Klub of Alaska. All amateurs welcome. Denny's on Denali Street in Anchorage. Some business is discussed. Originally established as an all woman organization, membership now includes spouses or significant others. Talk in on 147.30+.

2nd Saturday each month (except for holidays): VE License Exams at 2:00 PM. at RSOC 6721 Raspberry Road. Be sure to bring photo ID, copy of license (if any) and any certificates of completion. Contact:

Kathleen O'Keefe, KL7KO, 907.243.4675, koalaska@gmail.com

3rd Tuesday each month: AARC Board Meeting at 7:00 PM at the Radio Science and Operations (RSOC) building. All hams are invited and encouraged to attend.

1st Tuesday of each month: EARS general meeting at 6:00 PM. EARS meetings are held at the EARS shack location. Contact info - Pat Patterson WL7PP for information. EARS: 552-2664 (recording); Talk in on 146.67-. Email: club@KL7air.us or kl7yk@arrl.net

4th Saturday of each month: Valley VE Testing at 7:00 PM. Sessions will be held at Fire Station 61, at 7 pm on the fourth Saturday of each month unless it is a major holiday weekend. Contact Ken Hudson, KL2HF, Kenputer@hotmail.com or 907-354-0206. (Note Change)

The last Friday each month: MARA meeting at 7:00 PM, Wasilla Fire Station 61. Talk-in help for the meeting can be acquired on the 147.33 repeater. Further details can be found by contacting Don Bush, KL7JFT, dbush@gci.net.

Every Monday at 11:00 AM: Meeting of interested Amateur Radio Operators — and lunch at Denny's on DeBarr — across from Costco. Many code and HF operators attend this function. Come talk radio. For information, contact Kathy O'Keefe, KL7KO, kokalaska@gmail.com

Every Saturday at 7:00 AM: Meeting of a group of Amateur Radio Operators at Village Inn on Spenard Road for breakfast. Topics? Radio, photography, and upcoming events For information, contact Kathy O'Keefe, KL7KO, kokalaska@gmail.com.

Active Nets in Alaska

VHF NETS

The local VHF Nets have a Packet side as well. Look for 2 meter Packet at 145.01 (Eagle) and 147.96 (Valley). The Eagle and Valley nodes provide a talk” or chat function. Also, if you are unable to connect directly to one of the nodes, try digipeating through EARS on either frequency. Do this by typing *c eagle v ears* or *c valley v ears* on the appropriate frequency. Check www.KL7AIR.us for more information on the digipeaters.

ARES Net: 147.33 w/ 103.5Hz tone (Backup 147.30 w/ 141.3Hz tone) —Thursdays at 8:00PM

No Name Net: 146.43 simplex—Sundays 8:00PM

South Central Simplex Net: 146.52 FM, 144.2 USB, 446.0 FM, 432.2 USB, 223.5 FM, 927.5FM, 1294.5 FM, 52.525 FM, 50.125 USB, 29.6 FDM, 28.4 USB, 145.01 Packet (Eagle Node), 147.96 Packet (Valley Node) - Tuesdays 8:00PM

Alaska VHF Up Net: 144.200 USB—Saturdays 9:00 AM

Alaska Morning Net: The Alaska Morning Net is held Monday through Saturday from 9:00 AM—11:00 AM on the IRLP Reflector 9109. This net can be reached via several hosting nodes in the area. Please visit www.status.irlp.net/index.php?PSTART=2&mode=3 to find the closest node. Also the net can be reached via EchoLink on 9191 (WL7LP-R) and Allstar nodes 27133 and 29332. The Alaska Statewide ARES net is held on Thursday evenings at 8:30pm (following the Anchorage ARES net) at the same locations and also the 8:30pm Sunday evening Alaska Statewide Radio Link.

HF Nets

Alaska Snipers Net: 3.920 MHz 6:00pm daily

Alaska Bush Net: 7.093 MHz 8:00pm daily

Alaska Motley Net: 3.933 MHz 9:00pm daily

ACWN (Alaska CW Net): 3540 kHz, 7042 kHz, 14050 kHz Non-directed, CW calling and traffic watch for relaying NTS of other written traffic. AL7N monitors continuously receivers always on WL2K. (RMS connection available— AL7N@winlink.org)

Alaska Pacific Net: 14.292 MHz 8:30am M-F

ERC HF Net: 3.880 MHz 8:30pm Sundays



DATA YOU CAN USE				
Frequency	Tone	Callsign	Features	Area
147.18-	88.5	ADES		JBER
146.88-	no tone	AL7LE	Phone patch	Kenai/Soldotna
146.82-	103.5	WL7CWE	IRLP	Anchorage
146.76-	123.0	KL3K	IRLP	Seward
146.94-	103.5	KL7AA	Phone patch	Anchorage to Wasilla
224.94-	no tone	KL7AA		Anchorage
444.70+	103.5	KL7AA	Phone patch	Anchorage
146.67-	103.5	KL7AIR	MARS station	Anchorage & Highway N
147.30+	141.3	KL7ION		Very Wide Area
146.85-	103.5	KL7JFU	Cross Banded to 444.600	Mat Valley
444.6+	103.5	KL7JFU	Cross Banded to 146.85	Mat Valley
146.91-	no tone	KL7JL		Homer
147.15+	107.2	NL7S		Wasilla
147.84-	103.5	WL7CWE		Wasilla repeater
147.33+	103.5	WL7CWF	Cross linked to 443.900	Very Wide Area
443.900+	103.5	WL7CWF	Cross linked to 147.33	Very Wide Area

South Central Area Simplex Frequencies	
146.52	National Calling and Emergency Frequency
147.57	DX Spotting Frequency
146.49	Anchorage Area Simplex Chat
146.43	Mat-Su Valley Simplex Chat
147.42	Kenai Peninsula Simplex Chat

WinLink Information		
144.9	WL7CVG-10	Anchorage Area RMS
145.19	KL7JFT-10	Palmer/Mat-Su RMS
147.96	KL7EDK-10	Fairbanks RMS
144.9	WL7CVG-4	South Central Digipeater
144.98	KL7AA-10	Anchorage AARC RMS



June 2018

Sun Mon Tue Wed Thu Fri Sat

					1	2 AARC Working Saturday at RSOC 10-3
3	4 7pm Fundrais- ing Committee	5	6 6PM AARC Working Wed. at RSOC	7 AARC Mem- bership Mtg ARES Net	8	9 Alaska Run for Women + VHF Contest
10 VHF Contest	11 7pm AARC Finance com- mittee Meeting	12	13 6PM AARC Working Wed. at RSOC	14 ARES Net	15	16 AARC Working Saturday at RSOC 10-3
17	18 7pm Fundrais- ing Committee	19 7PM AARC Board Meeting	20 6PM AARC Working Wed. at RSOC	21 ARES Net	22	23 Field Day
24 Field Day	25 7pm Fundrais- ing Committee	26	27 6PM AARC Working Wed. at RSOC	28 ARES Net	29	30 AARC Working Saturday at RSOC 10-3

Swap 'n Shop

Please watch the AARC web-site for new information between newsletters:

<http://kl7aa.net/swap-n-shop>



FOR SALE: All prices firm. All bought new by current owner with (with exception of VF-1): non-allergenic, non-smoking, and peaceful environment. All work as from factory.

LDG AT-600 Proll. Manual. Two years old. New Price \$350. For Sale \$150

MFL-868B **GIANT** SWR/Wattmeter (6-1/2") Manual. Nine months old. New Price \$150. For Sale \$75.

Cushcraft A449-11S New 11 element 440 Mhz Beam. Never been outside. New Price \$120. For Sale \$70.

MFJ-890 DX Beacon Monitor. Manual. Five years old. New Price \$120. For Sale \$50.

MFJ-1025 Noise Canceling Signal Enhancer. Manual. Six years old. New Price \$180. For Sale \$60.

MFJ-462B Multireader. Manual. Six years old. New Price \$200. For Sale \$60.

Heathkit VFO for AT-1, DX 60, etc. "Xeroxed" Manual. Do not know if it works. For Sale \$35.

Seller: John Bury, KL7QZ. Phone 907-349-8754. Email <johnburyak@gmail.com>

(Sorry, No Photos)

If you have anything you'd like included in the next newsletter such as items for sale, articles, questions, etc. email *editor(at)kl7aa.net*

Your current AARC Board/Officers

President	Lara Baker AL2R	president(at)kl7aa.net
Vice-President	Kent Petty KL5T	vicepresident(at)kl7aa.net
Treasurer	Jill Heimke WL7BTT	treasurer(at)kl7aa.net
Secretary	Richard Tweet KL2AZ	secretary(at)kl7aa.net
Board 2019	Dan Knapp KL4CX	
Board 2019	Lillian Marvin KL7YF	
Board 2019	Rich Gillin AL4S	
Board 2018	T.J. Sheffield KL7TS	
Board 2018	Keith Clark KL7MM	
Board 2020	Alice Baker KL2GD	
Board 2020	Jim Wiley KL7CC	
Board 2020	Dave Heimke AL7LO	
APRS	Kevin Opalka	
Activities	Allen Abbott KB1QCE	activities(at)kl7aa.net
Trustee	Keith Clark KL7MM	trustee(at)kl7aa.net
Newsletter Editor	Dave Webb N9AIG	editor(at)kl7aa.net
Membership	Rich Gillin AL4S	membership(at)kl7aa.net
VE Testing	Kent Petty KL5T	ve(at)kl7aa.net
Webmaster	Rich Gillin AL4S	webmaster(at)kl7aa.net
Internet/Network	Rich Gillin AL4S	ip(at)kl7aa.net