

Anchorage Amateur Radio Club



Radio Science and Operations Center
6721 Raspberry Road
Anchorage, AK



Keep up with the AARC at www.kl7aa.org

There will not be a July general membership meeting due to the Fourth of July holiday.





**ANCHORAGE AMATEUR RADIO CLUB
BOARD VIDEO CONFERENCE**

March 16, 2021

Radio Science Operation Center (RSOC)

6721 Raspberry Road

Anchorage, AK

APPROVED



The meeting was called to order at 7:00 PM by President Richard Tweet KL2AZ.

A quorum was established.

BOARD MEMBERS PRESENT VIA TELECONFERENCE:

Richard Tweet KL2AZ, Kevin Opalka KL1V, Dave Webb N9AIG, Keith Clark KL7MM, Mathew Notte WL4DX, TJ Sheffield KL7TS, Walter Yankauskas KL7WY, Matt Ostrander KL4QH, Kent Petty KL5T, Morgan Schoenecker KG7SEQ, Wigi Tozzi KL0R.

VISITORS:

None

EXCUSED BOARD MEMBERS:

John Lime III KL4OF, Lara Baker AL2R

UNEXCUSED BOARD MEMBERS:

Rich Gillin AL4S

REQUEST FOR AGENDA ITEMS/CHANGE IN ORDER:

None

TIME CRITICAL ITEM(S):

None

REPORTS:

SECRETARY REPORT

The March 4th membership videoconference meeting minutes and the board videoconference of February 16th meeting minutes were presented. There were no comments or corrections. A motion was made by Keith Clark KL7MM and seconded by Walter Yankauskas KL7WY to accept the minutes as corrected. The motion carried unanimously.

TREASURER REPORT

Kent Petty KL5T indicated that the club is solvent, and all the bills are current and paid. Discussed how to manage the grubstake repeater fund. He reviewed methods to use QuickBooks to manage and track specific project funding. TJ Sheffield KL7TS and Richard Tweet KL2AZ commented that this is a significant development and thanked Kent Petty KL5T for his work on this endeavor.

FINANCE COMMITTEE

Keith Clark KL7MM reported that QuickBook reports are all current. He recently worked with the Development Committee to develop a video and letter for sending to potential donors. He discussed establishing an endowment, and is waiting to hear back from Rogers & Co to hear about what is necessary to move forward. They are getting started to put things together for an application for the Rasmuson Grant.

Motion made by Keith Clark KL7MM to add TJ Sheffield KL7TS and Richard Tweet KL2AZ as signors on the Alaska USA gaming account and checking account, and add TJ Sheffield KL7TS to the Certification of Beneficial Owners. The motion was seconded by Morgan Schoenecker KG7SEQ. Discussion on the motion included clarification that the Certification of Beneficial Owners gives the authority to make changes to the Alaska USA accounts. The motion passed unanimously with two abstentions.

GRANT REQUESTS

Richard Tweet KL2AZ indicated that we have had no incoming requests.

GAMING

Keith Clark KL7MM reported that filing our gaming report with the state is under control. He is waiting back to hear from Tudor Bingo still, and waiting for Airport to see about possibilities for pull-tabs.

BYLAWS COMMITTEE

Discussion about benefits vs drawbacks occurred in Development Committee meeting on the change to donation-based club from member based. The bylaw change to convert to donation-based group is currently on hold.

TRUSTEE REPORT

Keith Clark KL7MM indicated the SHARES net and South Central Simplex Net have been occurring regularly every Wednesday and has been active. TJ Sheffield KL7TS made 3 contacts with the club

call in Idaho and captured it on film. Dave Webb N9AIG indicated there have not been any requests to use the RSOC call sign (KL7G).

PROJECTS COMMITTEE

TJ Sheffield KL7TS referred to the projects committee minutes for updates on the current list of projects. TJ Sheffield KL7TS and Kent Petty KL5T have been shoveling snow regularly and Richard Tweet KL2AZ thanked them.

DEVELOPMENT COMMITTEE

Discussions are being held with possible use of RSOC for training purposes. Kent Petty KL5T reported that Sherman Reynolds KL7QY (expired call) would like to donate a complete station to the club. Part of the equipment includes a Henry 3K classic amplifier. This could be very helpful for SHARES operations.

BUILDING COMMITTEE

Keith Clark KL7MM reminded everyone that adopt-a-room maintenance schedule continues. Kent Petty KL5T indicated that the Civil Air Patrol has been using the RSOC building regularly and adhering to safety protocols.

EDUCATION COMMITTEE

Kent Petty KL5T reported that there are currently no classes scheduled. A lot of Gordon West prep materials have been sold recently.

EQUIPMENT REPORT

TJ Sheffield KL7TS reported that he borrowed a club ICOM power supply as a loaner for the Providence EOC. Several cable kits have been purchased to cut coax and prepare cable for crimp or solder connectors. The crate of connectors in the basement is in the process of being sorted.

EMCOMM

Kent Petty KL5T discussed the Providence emergency station and said things are moving smoothly and in a good direction. At ANMC, the HF RMS is still down. It needed new USB DB-9 convertors which have been acquired and are pending installation. TJ Sheffield KL7TS reported that the firmware of the radios at Providence have been updated and a meeting is set later this week with the manager of the EOC to discuss other equipment required to get everything up to speed.

VE PROGRAM

Kent Petty KL5T reports that the VE program remains very busy with at least two sessions per day. To date in 2021, 259 people have taken examinations so far. In-person testing is not going to be

opening up until it is safe to do so. Walter Yankauskas KL7WY commented that he has thoroughly enjoyed working as a VE.

OLD BUSINESS

- 01.** Adopt a room - A spreadsheet is posted at the RSOC please sign up.
- 02.** Deceased members - Keith Clark KL7MM has one more contact to reach out to for engraving the plaque before it can be displayed at the RSOC.
- 03.** Welcomed Kevin Opalka KL1V to the Board.
- 04.** Activities Manager position is still open.
- 05.** Walter Yankauskas KL7WY indicated that the Gold Nugget Triathlon is happening May 15th and 16th. Volunteers will be needed but far fewer than past years due to changes in the route. Unknown exactly what volunteer radio support needs are at this time.
- 06.** Callout mechanism for emergency operations discussed. Richard Tweet KL2AZ reached out to Everbridge about possible options and has a meeting setup to discuss further.
- 07.** ALMR gear, no new news per Kent Petty KL5T.
- 08.** Harris Radio Representative- Remains a placeholder. No updates per TJ Sheffield KL7TS

NEW BUSINESS

01. RSOC continues to adhere to MUNI Emergency Orders related to COVID -19. 6 feet social distancing requirement still in effect, which makes returning to in-person meetings/operations difficult.
02. Discussed applying to 2021 nonprofit security program grant. It is tedious and difficult to apply to, but may be worth the effort. This will fall under Development Committee.
03. Membership Meeting Guest Speaker
 - a. Elecraft-April
 - b. Paul Toposki W1SEX-May

ADJOURNMENT

The meeting adjourned at 8:07 PM.

Respectfully submitted as recorded on 03/16/2021 by Morgan Schoenecker KG7SEQ, AARC Secretary.



ANCHORAGE AMATEUR RADIO CLUB
MEMBERSHIP VIDEOCONFERENCE

April 1, 2021

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 Richard Tweet KL2AZ. There were 24 attendees with 22 members in attendance.

A membership quorum was established.

Presentations

Richard Tweet KL2AZ introduced the guest speaker Eric Swartz WA6HHQ, one of the co-founders of Elecraft. . Eric Swartz WA6HHQ was present via zoom from Monterey Bay, CA. He discussed the origins of Elecraft and the various models of HF transceivers developed by Elecraft over the years. Eric Swartz WA6HHQ focused his detailed presentation on the development and features of the K4 transceiver, the newest model from Elecraft.

Q&A

TJ Sheffield KL7TS asked if there would be any issues with using the K4 or KPA1500 for the Alaska Emergency Frequency (5.1675MHz) which is out of the 60meter allocation. Eric Swartz WA6HHQ replied that the radios are shipped with a lockout on frequencies outside of the ham bands, but with software you can unlock it for MARS operation. Eric Swartz WA6HHQ commented that the K4 currently has a phenomenal amount of backlog and they are increasing production to get them built and sent out. TJ Sheffield KL7TS commented that Elecraft has provided excellent service for radios that have been sent in for service/tuning. Kevin Opalka KL1V asked about USB ports and various uses on the K4. Eric Swartz WA6HHQ discussed various software and firmware options on the K4.

Eric Swartz WA6HHQ was thanked by Richard Tweet KL2AZ for his engaging and informative presentation.

Business

Richard Tweet KL2AZ stated there was no official business to discuss. Each attendee introduced themselves to the group.

The meeting adjourned at 8:24 PM. Respectfully submitted as recorded by Morgan Schoenecker KG7SEQ (AARC Secretary) on April 1st, 2021.

Tech Talk

There was no tech talk this evening.



ANCHORAGE AMATEUR RADIO CLUB
BOARD VIDEOCONFERENCE
April 20, 2021
Radio Science Operation Center (RSOC)
6721 Raspberry Road
Anchorage, AK
APPROVED



The meeting was called to order at 7:00 PM by President Richard Tweet KL2AZ.
A quorum was established.

BOARD MEMBERS PRESENT VIA TELECONFERENCE:

Richard Tweet KL2AZ, Dave Webb N9AIG, TJ Sheffield KL7TS, Lara Baker AL2R, Kevin Opalka KL1V, Walter Yankauskas KL7WY, Morgan Schoenecker KG7SEQ, Wigi Tozzi KL0R, John Lime KL4OF, Matt Ostrander KL4QH.

VISITORS:

None

EXCUSED BOARD MEMBERS:

Kent Petty KL5T, Keith Clark KL7MM, Matt Notte WL4DX.

UNEXCUSED BOARD MEMBERS:

Rich Gillin AL4S

REQUEST FOR AGENDA ITEMS/CHANGE IN ORDER:

None

TIME CRITICAL ITEM(S):

None

REPORTS:

SECRETARY REPORT

The board videoconference of March 16th meeting minutes were presented. There were several comments and minor corrections. A motion was made by Lara Baker AL2R to accept the minutes as corrected and for Richard Tweet KL2AZ to clarify names of individuals involved in bank account. The motion was seconded by John Lime KL4OF. The motion carried unanimously. The April 1st general membership videoconference meeting minutes were presented. No comments or corrections. A motion was made by Lara Baker AL2R to accept the minutes as presented. The motion was seconded by Dave Webb N9AIG and carried unanimously.

TREASURER REPORT

Richard Tweet KL2AZ filling in for Kent Petty KL5T reported that bills are paid and up to date.

FINANCE COMMITTEE

Richard Tweet KL2AZ reported that the main topics discussed at Finance Committee were the SBA Economic Injury Disaster loan grant, the progress on the 2021 Non Profit Security Grant Program, and the progress of an MOU with ANTHC.

GRANT REQUESTS

Richard Tweet KL2AZ indicated that we have had no incoming requests.

GAMING COMMITTEE

Lara Baker AL2R indicated that there are no new updates.

BYLAWS COMMITTEE

Changes regarding converting from membership-based organization to donation-based organization are on hold.

TRUSTEE REPORT

Richard Tweet KL2AZ indicated the SHARES net and South Central Simplex Net have been occurring regularly every Wednesday and has been active. Dave Webb N9AIG indicated there have not been any requests to use the RSOC call sign (KL7G). Lara Baker AL2R reported he is unsure yet if the KL7AA call sign will be used for the Gold Nugget Triathlon.

PROJECTS COMMITTEE

TJ Sheffield KL7TS thanked Dave Webb N9AIG for creating Projects Committee minutes. TJ Sheffield KL7TS that he has been incorrectly referring the to "Providence EOC" but the title is Providence Hospital Command Center or HCC. The new emergency manager is very engaged and has approved funding for equipment that arrives tomorrow. The station is high quality, has a good signal, and is moving along well.

DEVELOPMENT COMMITTEE

Richard Tweet KL2AZ deferred discussion about the non-profit security grant to Old Business.

BUILDING COMMITTEE

Keith Clark KL7MM is excused for this meeting. No updates provided.

EDUCATION COMMITTEE

Lara Baker AL2R reported that there are no classes scheduled currently, and that training materials continue to be ordered and shipped out.

EQUIPMENT REPORT

TJ Sheffield KL7TS reported that there is a large pile of equipment in the conference room at the RSOC that he plans to address in the coming days. The power supply loaned to Providence HCC will be returned this week. TJ Sheffield KL7TS discussed a possible flea market event in September.

EMCOMM

Kent Petty KL5T is excused for this meeting. No updates provided.

VE PROGRAM

Lara Baker AL2R reports that they continue to hold two examination sessions a day. A new session of 1730 AKST is being added on Mondays. Walter Yankauskas KL7WY commented that it has been going well, and some new VEs have been showing up.

OLD BUSINESS

- 01.** Adopt a room - A spreadsheet is posted at the RSOC, please sign up.
- 02.** Deceased members - Keith Clark KL7MM still working on it, no updates.
- 03.** Bylaws Committee-The Bylaws do not need to be changed for membership type, but there may be a need for an update to Bylaws discussed in Development Committee. May keep this in Old Business as a placeholder.
- 04.** Activities Manager position is still open.
- 05.** ALMR gear. No new updates per TJ Sheffield KL7TS.
- 06.** RSOC occupancy and compliance with MOA and state emergency orders. As of right now, no definite plan for return to in-person meetings at the RSOC. The Club will continue to operate under the most recent orders.
- 07.** 2021 Non-Profit Security Grant Program Opportunity. Richard Tweet KL2AZ reports that he is done with approximately 80% of the forms. The main focus is one major project to replace and improve the exterior lighting on the facility. Lara Baker AL2R suggested emphasizing reducing the facility's impact on climate change in the grant application.
- 08.** Emergency Call Out Mechanism. Richard Tweet KL2AZ reached out to Everbridge along with TJ Sheffield KL7TS, and agrees that it is a wonderful product but out of the Club's price range. There are possible free versions of a call-out system. TJ Sheffield KL7TS suggested reaching out to Providence HCC manager to see if our volunteer status may provide us with access to the Everbridge system.
- 09.** Harris Radio Representative- Remains a placeholder. No updates per TJ Sheffield KL7TS.

NEW BUSINESS

1. SBA Economic Injury Disaster Loan application. TJ Sheffield KL7TS reported that we qualify for this loan. It provides for 6 months of operational expenses. As a non-profit we get a reduced rate on the interest and payments deferred for one year. There is no prepayment penalty and it is 30 year loan. Lara Baker AL2R and Matthew Ostrander KL4QH both commented they think it is a great opportunity for the Club. A motion was made by Lara Baker AL2R to proceed with finalizing SBA Economic Injury Disaster Loan application. The motion was seconded by TJ Sheffield KL7TS. The motion was passed unanimously.

2.Membership Meeting Guest Speaker

Paul Toposki W1SEX-May

Lara Baker AL2R potential speaker on Risk Assessment.

3.Walter Yankauskas KL7WY reminded everyone that the Gold Nugget Triathlon is in a month.
The precise amateur radio volunteer needs are unknown at this time.

ADJOURNMENT

The meeting adjourned at 7:48 PM.

Respectfully submitted as recorded on 04/20/2021 by Morgan Schoenecker KG7SEQ, AARC Secretary.



ANCHORAGE AMATEUR RADIO CLUB
MEMBERSHIP VIDEOCONFERENCE
May 6, 2021
Radio Science Operation Center (RSOC)
6721 Raspberry Road
Anchorage, AK



APPROVED

Call to Order

The meeting was called to order at 7:02 PM by President Richard Tweet KL2AZ. There were 17 attendees with 15 members in attendance.

A membership quorum was established.

Presentations

Richard Tweet KL2AZ introduced the guest speaker Paul Topolski W1SEX. Paul Topolski W1SEX is an ARRL WMA Section Technical Specialist and delivered his presentation on oscilloscopes. This presentation included an introduction to oscilloscopes, and some of the uses that benefit amateur radio. He reviewed what an oscilloscope can measure, different types of scopes and their features, differences between analog and digital scopes, samples of waveforms produced by HF transmitters, how to measure capacitance and inductance, and available resources for learning more about oscilloscopes. He reviewed the oscilloscope architecture in detail, comparing and contrasting different types, prices, and availability.

Q&A

TJ Sheffield KL7TS asked Paul Topolski W1SEX if there are accessories besides probes he recommends when acquiring a used scope. Paul Topolski W1SEX indicated that finding good probes can be expensive, but for casual use some of the Chinese probes are ok and eBay can be a good place to find probes.

Paul Topolski W1SEX was thanked by Richard Tweet KL2AZ for his engaging and informative presentation and encouraged everyone to check out his informative QRZ page.

Business

Richard Tweet KL2AZ reviewed business to discuss. Walter Yankauskas KL7WY asked for volunteers for the Gold Nugget Triathlon May 15th, and 16th. Richard Tweet KL2AZ indicated that the club has applied for a DHS security improvement grant for lighting improvements to the exterior of the RSOC. Lara Baker AL2R reviewed that the club has been approved for a very low interest loan. TJ Sheffield KL7TS thanked Richard Tweet KL2AZ for pursuing and working on the DHS security improvement grant, and commented that it would decrease the electrical bill, and would be good for the airport and the neighborhood. Richard Tweet KL2AZ discussed returning to normal operations at the RSOC tentatively in September, based on CDC and MOA guidelines. TJ Sheffield KL7TS discussed a possible flea market event, different than a Ham Fest, as a way to sell some of the Club's equipment. He suggested an outdoor event possibly in September, and if club members would like to donate equipment to sell or would like the Club to sell equipment on their behalf that may be an option. Richard Tweet KL2AZ discussed potential training opportunities at the RSOC. It would likely be a three month, one day a week training at the RSOC, possibly starting in September. Walter Yankauskas KL7WY asked about changing the time of the South Central Simplex Net to something earlier than 8pm.

The meeting adjourned at 8:01 PM. Respectfully submitted as recorded by Morgan Schoenecker KG7SEQ (AARC Secretary) on May 6th, 2021.

Tech Talk

There was no tech talk this evening.

From the Blog.....

Which can be found at KL7AA.ORG/BLOG/

W1JD's 160 Meter Antenna

Posted On May 25, 2021 @ 8:04 AM

By: JD Delancy, W1JD
May 23, 2021

Since deciding that working on either a five or maybe nine-band Worked All States (WAS) on High Frequency (HF) would be fun, give me something to do to waste the hours away during the quarantine/Pandemic, I needed to do something for a 160 meters (~1.825 MHz) antenna. A half-wave dipole at that frequency requires each side of the center to be about 128-130 feet long for an overall length of about 256-260 feet. A quarter-wave vertical would have to be about 128 feet tall unless it's loaded to reduce its height to somewhere around 64 feet or less and require a lot of ground radials. That's a bit much to fit into a housing sub-division lot where the parcel is an odd-ball shape, not like a rectangular or square; mine is more like a badly distorted Trapezium.

I have a full-size 80 meters inverted vee cut for around 3.500 MHz, fed with 450-Ohm ladder line, and apex-ed at about 85 feet on the tower. I tried my antenna tuners on the vee and they tuned 1.825 MHz down to about 1.9-to-1 standing wave ratio (SWR), not the best-in-the-west, but could be usable.

The next brainstorming idea was a 128-foot horizontal wire. I found a straight shot across the backyard to a 75-85-foot-tall Popular tree just shy of the property line. Shot a rope over a tall branch, about 60 feet up, to pull that end of the wire up. At the other end, about 8-feet from another property line, a WA1FFL Ladder-Loc insulator was attached to the wire along with one side of a 450-Ohm ladder line. That wire is in a more-or-less East-West direction. Then took a 64-foot piece of wire, attached it to the other side of the WA1FFL insulator and the other side of the 450-Ohm ladder line on the WA1FFL insulator. Tied a rope thru an insulator on the 128-foot piece, shot it the other end over another tree near the property line, and pulled assembly up to ~41 feet. Took the end of the 64-footer, stretched it out somewhat parallel and downward to the more-or-less North-South running chain-link fence. At its end, the wire was directly attached to the chain-link fence's top support metal rail (a 1.25-inch, 10-foot pipe) with a hose clamp. The chain-link fence's metal top rails insert into each other to provide support to the chain-link web. Initial antenna tuner attempt obtained a 1.4-to-1.00 SWR; promising. I strapped across each of the top rail junctions and secured each strap with a hose clamp at each side of the joint out to where the fence stops, at both ends. SWR came down to a steady 1.01-to-1.

Does it work? Oh, my goodness, winner, winner chicken dinner, YES! Using the TS-950 at 100 watts, I've worked 49 states with Alaska as the "on-top" accomplishment, still lack Hawaii to complete 9-Band WAS (459 of 460 contacts required and confirmed; 160 is the final band), and 11 countries (Ukraine and Australia being the best so far) on 1.8 MHz, all confirmed in the Log-book of The World (LOTW). Maybe after I finish one of the WAS awards, I'll see if I can do a five or maybe nine-band DX Century Club (DXCC) or maybe chase the 3,141 counties in our country.

Eternally five years away? No, batteries are improving under your nose

Posted By *Kent Petty* On May 25, 2021 @ 7:37 AM

From Lara Baker, AL2R
5/24/2021

Worth a Look: A really interesting article on battery technology improvements in *Ars Technica*. Scott K. Johnson does a great job explaining the complexities in a level that pretty much anyone can understand (though if needed, use Wikipedia for the terms he doesn't get to, such as [anode](#)^[1] and [cathode](#)^[2]). The best part to me is, "the real price of lithium-ion cells, scaled by their energy capacity, has declined by about 97 percent since their commercial introduction in 1991." [Eternally five years away? No, batteries are improving under your nose](#)^[3] is about a 12-minute read.

HOT OFF THE PRESS: New AnyTone AT-D878UVII Available at CQRadios.com

Posted By *Kent Petty* On May 3, 2021 @ 4:23 AM

By: Kent Petty, KL5T
May 3, 2021

The new [Anytone AT-D878UVII Plus](#)^[1] is here! This is the latest AnyTone DMR UHF/VHF handheld and only available presently at [CQRadios.com](#)^[2]. While the price is great to begin with, because of a partnership with the AARC, you can use coupon code "AARC10" to get an additional 10% off of the \$247.00 list price. Oh, and shipping is free! This radio is currently only available at CQRadios.com!

This is the new [AT-D878UVII VHF/UHF dual-band Anytone analog and digital radio](#)^[1] comes with repeater roaming capabilities, GPS, and many other features. This transceiver has a 1.77-inch color TFT display with an easy-to-use menu structure. This is a DMR ready radio with a large memory for future enhancements and storage. This radio is ideal for amateur radio, Fire stations, Search & Rescue, EMS, Police, Sheriff, Forestry, Security operations, and many other applications. The UV plus comes with Bluetooth allowing it to work with a headset for convenience. Additional accessories are also available, including the AnyTone speaker/mic.

But there is more! Do you need a hotspot to go along with the radio? CQRadios also offers the [Boomerang 3 DMR Dual Band Duplex Pistar Hotspot](#)^[3]. This unit is fantastically priced at \$125.....it's in the neighborhood of \$300 for similar units found elsewhere. Again, get 10% off when you use the "AARC10" discount code at checkout...yes...free shipping as well!

This [Pistar DMR hot spot](#)^[3] uses a duplex MMDVM board with dual antennas to provide both time slot 1 and 2 monitoring. This unit uses a large OLED screen for better viewing. The Boomerang 3 provides both wifi and RJ45 network connections and comes in a 3D printed case. This unit is designed to provide the best possible performance for the money.

[Click here to get to the AT-D878UVII](#)^[1]

[Click here to get to the AnyTone OEM speaker/mic](#)^[4]

[Click here to get to the Boomerang Hotspot](#)^[3]

[Click here to get to the CQRadios.com main page](#)^[2]

Remember, use code AARC10 at checkout to get 10% off your total price. And shipping is free!

NSF Funds Creation of Research Lab at Alaska's HAARP

Posted By *Walter Yankauskas* On April 19, 2021 @ 10:47 AM

04/15/2021

A 5-year, \$9.3 million National Science Foundation (NSF) grant will allow the University of Alaska Fairbanks (UAF) Geophysical Institute to establish a new research observatory at the High-frequency Active Auroral Research Program ([HAARP](#) ^[1]). A former military facility, HAARP is now operated by UAF and is home to HAARP Amateur Radio Club's KL7ERP. The new Subauroral Geophysical Observatory for Space Physics and Radio Science will be dedicated to exploring Earth's upper atmosphere and geospace environment. The facility's 33-acre Ionospheric Research Instrument will be the centerpiece of the observatory.

"This NSF support will provide the scientific community increased access to the instruments at the observatory and, hopefully, grow the scientific community," said Geophysical Institute Director Robert McCoy, the project's principal investigator.

A second NSF-funded project will add a Light Detection and Ranging (LiDAR) instrument at the site, which will allow the study of other regions of the upper atmosphere. A LiDAR sends pulses of laser light to determine the composition, temperature, and structure of regions of the upper atmosphere from 90 to 150 kilometers. UAF hopes to add additional instruments over time at the Gakona, Alaska, research site.

The research grant will allow scientists to investigate how the sun affects Earth's ionosphere and magnetosphere to produce changes in space weather. Their work will help fill gaps in knowledge about the region, which is important because ionospheric disturbances, if severe enough, can disrupt communication systems and damage the power grid.

Research at the observatory is initially expected to include the study of various types of aurora and other occurrences in the ionosphere, which stretches from about 50 to 400 miles above Earth's surface.

The Gakona facility is a prime location for the study of the ionosphere and magnetosphere because of its location in relation to one of Earth's magnetic field lines that reaches deep into the magnetosphere, the magnetic field that shields the planet from much of the sun's plasma energy.

"Amateur radio will clearly benefit with an improved understanding of ionospheric propagation and space weather physics, and providing improved HF propagation prediction modeling data," HAARP Research Station Chief Engineer and ARRL Life Member Steve Floyd, W4YHD, told ARRL. He said, "Radio science experiments will also provide a valuable data set to encourage development of new radio technologies and modulation methods useful from VLF through HF."

Floyd is the KL7ERP trustee, which, he says, is available "to demonstrate amateur radio to visiting scientists and students, to maintain contact with Alaska hams, and to provide visiting hams with an opportunity to operate from this unique Alaska location."

For more than 25 years, UAF, the US Air Force, the US Navy, and the Defense Advanced Research Projects Agency (DARPA) have collaborated on ionospheric research at HAARP. As Air Force funding for research and development decreased, the Air Force transferred the research equipment to UAF under an Education Partnership Agreement (EPA). The UAF Geophysical Institute operates the facility under an agreement with the Air Force.

aarl.org/news ^[2]

How to Keep Tabs on the AARC / RSOC

Posted By *Kent Petty* On January 1, 2021 @ 2:03 PM In General Info

What are the various ways we attempt to keep our members informed about the ongoings of the club and maybe other interesting topics related to amateur radio? Well, we've got more than one! Let me list the ways!

1 **General Membership Meetings:** Held on the 2nd Thursday of every month at 7 pm. If it weren't for COVID-19, we'd be having these meetings in-person at the RSOC. Until COVID-19 resolves, we're holding these meetings via ZOOM. The next meeting is scheduled for January 7. Go to the club's website to get the Zoom link. You can find our calendar listed on our main webpage at kl7aa.org, but you can go directly to our calendar at <https://kl7aa.org/events/>^[1].

Monthly Newsletters: If you are a club member, you should be receiving our monthly newsletter via e-mail when it publishes. If you are a member and you are NOT receiving the monthly newsletter via e-mail, please let us know at editor@kl7aa.org^[2]. Of course, ANYONE can find our current and archived newsletters on our website at <https://kl7aa.org/newsletters/>^[3]

1 **Webpage:** Lot's of information is located on our webpage. The home page is located at <https://kl7aa.org/>^[4]

Blog Posts: We put out blog posts on our website. These can be found on our home page on the website at <https://kl7aa.org/>^[4], or directly at <https://kl7aa.org/blog/>^[5]. Typically, our blog posts also get inserted in our newsletter and are also "pushed" out to our Facebook and Twitter pages. More on Facebook and Twitter below.

1 **Facebook:** Our Facebook page is located at <https://www.facebook.com/kl7aa/>^[6]. As mentioned above, most activity is related to blog posts we put out, but there is some other action if you are into that sort of thing! We have 344 followers.

1. **Twitter:** Yes, we have a Twitter account, @AnchorageARC. Our blog posts show up there for sure. Right now we have 42 followers.

2. **KL7AA Reflector:** What does the reflector do? Well, if you send an e-mail to it from your registered e-mail address, that message will be distributed to the 151 current subscribers on the list! It's a great way to get info out to the group, and a great way to keep up with some of the current happenings. Further, as a registered member of the list, you can get a list of the other registered members (well, at least those who don't opt to conceal their identity in the options), can set the system to give you daily messages, and set a number of other options. To join the reflector go to <http://www.qth.net/mailman/listinfo/kl7aa>^[7]

There, you can subscribe and get started. It's pretty simple and straight forward, but if you need help, give us a shout at info@kl7aa.org^[8].

Happy New Year!

AARC/RSOC Now Accepts Donated Vehicles of All Types!

Posted By *Kent Petty*

GREAT NEWS! The Anchorage Amateur Radio Club (AARC) / Radio Science and Operations Center (RSOC) has partnered with Vehicles for Charity. What does this mean? Well, now you have an opportunity to part with unwanted cars, trucks, motorcycles, RVs, campers, ATVs, UTVs, snowmachines, airplanes, heavy equipment, etc. at no cost to you! All proceeds benefiting the AARC / RSOC! Vehicles can be running or not!

Vehicles can be donated at any time and the process is easy. The proceeds of each donation benefit the AARC / RSOC, an organization devoted to supporting our community through emergency communications and STEM education.

The AARC / RSOC will use support from the vehicle donation program to help fund many worthy initiatives, including operation of the RSOC itself, repeater sites, purchase of new emergency communications and training equipment, resources for our training room, test gear, operation of our heavy emergency communication heavy rolling stock, etc. For example, a recent fundraising event outside of the vehicle for donation program enabled us to purchase a badly needed new set of tires for our Ford F-350 communications support/response vehicle.

HOW TO DONATE

The process is simple and you can donate by going to vehicle donation page at: <http://www.vehiclesforcharity.org/Donate/AARC.html> ^[1].

The donated vehicle is usually picked up in 3-5 days at the donor's convenience. Please provide a clean title (if applicable) and make sure the vehicle has no major damage. A receipt for the donation will be sent as a follow-up in the mail which can be used for tax purposes.

Maybe it's time to let go of that clunker you'd had in the driveway, or maybe even a herd of vehicles on the back of the property! We could sure use your help!



Support the Grubstake Repeater

Contributions made through this page will directly support ongoing operational costs of the [Grubstake repeater site](#).

Site rent is \$150 per month. The repeater is currently funded through June 2021.

If you so choose, you can request to be publicly recognized for your contribution to keep the Grubstake repeater online and your name will appear in the list below.

AARC currently funds the Grubstake wide-area repeaters, which provide coverage across the Matanuska-Susitna Valley and into Anchorage. If sufficient funds are not available, the Grubstake wide-area repeaters will be shut down due to financial constraints. In addition to monthly rental charges, there is a premium charge for getting to the repeater site by helicopter when things go wrong or simply for annual inspection and maintenance. As many of our members may know, these repeaters serve a very, very wide area. From far north in the Mat-Su Valley, to the Anchorage bowl, and even to the Kenai Peninsula, they serve us well. They are important for general ham service, but more importantly, they play a critical role from an emergency communications perspective. The weekly ARES net is even held on 147.33/83 repeater.



New Swap & Shop

Posted By *Kent Petty* On June 29, 2020 @ 5:51 PM In Swap & Shop | [No Comments](#)

We've got a new way to post members' items they'd like to sell or trade on our site. Simply e-mail swapandshop@kl7aa.org^[1] and your listing will get posted as a blog post on the website, pushed out to our Facebook page, Twitter page, and also to the KL7AA Reflector. Oh...yes, and the listing will be included in our monthly newsletter.

Be sure to include:

- Your Name
- Your Callsign (if you have one)
- Contact info – you MUST provide either a good telephone number or e-mail address (or both!)
- A clear listing of the equipment or items you have for sale or trade and the prices of each.



Motorola XTS3000 For Sale – DMR

Posted By *Kent Petty* On May 18, 2021 @ 7:51 AM

From Eric Coulter
5/17/2021

I have a refurbished Motorola XTS3000 no display screen for sale for \$400.00 or best offer. I'm not really educated on the specifics of this radio. Everything's in the photos below.

Contact info:
E-mail: anthonycoulter3808@gmail.com
Phone: 907.521.9604



Have you signed up to support YOUR Radio Club?



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, if you haven't signed up, please do.

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 UB064.

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.

(Fred Meyer can be done via Internet)

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 of dues and donations. See Kent Petty KL5T at the next club meeting, club working Wednesdays or Board meetings.

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

Thanks Kent KL5T, for setting this up!!





Board of Directors



Position	Name	Call	Term Ends	Contact
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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: Meets on 146.52 FM then shifts to 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) - Wednesdays 8:00PM

Alaska VHF Up Net: 144.200 USB—Saturdays 9:30 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 Emergency Preparedness Net: 14.292 MHz 8:30am M-F

ERC HF Net: 3.880 MHz 8:30pm Sundays

**ATTENTION! South Central Simplex Net has a NEW TIME:
The Net will now be every Wednesday starting at 7:00 PM local
Alaska time.**

Update from TJ Sheffield, KL7TS (Net Manager of South Central Simplex Net):

After each excursion to a different band/mode, they return to 146.520 FM simplex and ask for questions, comments, late check-ins or one-way signal reports before moving on to the next frequency/mode:

146.520 FM

144.200 USB

446.000 FM

432.200 USB

223.500 FM

52.525 FM

50.125 USB

29.600 FM

28.400 USB

29.075 AM

27.035 USB—Citizens Band (CB) Channel 7

927.500 FM

1294.500 FM

1296.100 USB

145.010 Eagle Node (packet)

147.960 Valley Node (packet)

144.390 APRS (text message check-in). Listen for instructions from Net Control with regard to APRS callsign/SSID

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		Anchorage, Wasilla, Northern Kenai
224.94-	no tone	KL7AA		Anchorage, Wasilla, Northern Kenai
444.70+	103.5	KL7AA		Anchorage, Wasilla, Northern Kenai
146.67-	103.5	KL7AIR	MARS station	Anchorage & Highway N
147.30+	141.3	KL7ION		Anchorage, Wasilla, Northern Kenai
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	KL7PM		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		
144.91	WL7CVG-10	Anchorage Area RMS, 1200 baud
145.19	KL7JFT-10	Palmer/Mat-Su RMS
144.91	WL7CVG-4	South Central Digipeater, 1200 baud
144.97	KL7AA-10	Anchorage Area RMS, 1200 baud
223.66	WL7CVG-10	Anchorage Area RMS, 9600 baud
441.175	WL7CVG-10	Anchorage Area RMS, 9600 baud



Support Amateur Radio in Anchorage, Alaska

Donate online or mail this coupon to AARC, PO Box 190192, Anchorage, AK 99519

Online donation is convenient and secure at <https://kl7aa.org/> , select donations at the top right of the home page.

Name: _____

Address: _____

City/State/Zip: _____

Phone: _____

Email address: _____

I want to make a one-time general donation

\$25 \$50 \$75 \$100 \$250 \$ _____

I want to make regular monthly donations. *Thank you for your ongoing support! Indicate the monthly amount:*

\$25 \$50 \$75 \$100 \$250 \$ _____

I want to sponsor a specific project/program.
Sponsorships are \$25 monthly

Please send me a supply of donation envelopes

Please charge my credit card below



Why donate? The Anchorage Amateur Radio Club is a nonprofit organization (501C3) that supports community program communications such as the Anchorage RunFest, Walk and Roll for Hope, the Dog Jog, Tour de Cure, Alaska Run for

Women, The Women's Gold Nugget Triathlon and Team Rubicon. We also periodically practice our emergency communication skills in case of a major disaster such as an earthquake. Our equipment is both battery and generator backed up. We are run only by donations and volunteers. Please donate to this worthy organization.

Total donation: \$ _____

Check or money order enclosed

VISA MasterCard Exp: _____ CVV code: _____

Account # _____

Signature: _____

I would like to be kept up to date on AARC activities; please send me your monthly newsletter