

Anchorage Amateur Radio Club

Next Meeting September 3rd

September Program

Craig Bledsoe, KL4E

"Tuners, Loops, Baluns, Oh My!"

The program for September will be given by Seth, K1YS, from the MARA Club. His presentation will show us what can be done with big wire loops (I think his is 800 feet) coupled with remote tuners and baluns. He described to me how well these antennas are working and that approximately five Valley hams have already built up this system with great success. Sounds great to me and I have always wanted a loop antenna at the AL7FS QTH especially for use with Alaska 80 and 40 meter QSOs.

Don't miss this one. It should be very educational and useful.

al7fs

+++++



2004 Elections

Election Committee will present a slate of candidates for officer and board positions. Additional Nominations will be accepted from the floor. Nominations remain open until Friday, October 1, 2004 and additional nominations will be accepted from the floor at both the September 3 and October 1 General meetings. After receipt of additional Nominations, if any, Nominations will be closed.

All are encouraged to considered becoming involved in the club by running for an officer or Board position. We will need six one year board members and 1 three year board member. We are especially looking for interested parties for Activities Chairman, Vice President and Secretary.

You may find that becoming more active with AARC activities will enhance your enjoyment of Amateur Radio. As your contributions to the club and to the community increase you will begin to realize that you can make a difference in our hobby and our town.

Jim Larsen, AL7FS
President, AARC

Anchorage Hamfest and Flea Market September 11th and 12th

Hamfest is a simple old fashioned swap meet. We will not have anyone from ARRL, no banquet and only ad hoc informal presentations. **Boniface Bingo is the site this year.** Admission is free, tables for \$10 (contact John Lynn) or free for informational ones if absolutely nothing is sold from the table. (Also contact John Lynn). Time will be 10AM to 4PM on both Sat & Sun.

KL7FAA, the Alaska FAA Amateur Radio Association, will bring and demonstrate their Radio Frequency Interference van and their Emergency Preparedness van at the hamfest and will be parked in the parking lot during hamfest hours on Sat, Sept 11. One of the vans will have an active HF station going, with club members making contacts during the hamfest hours.

Please contact John Lynn (KL7CY) or Judi Ramage (WL7DX) if you can help.

- John = kl7cy@arrl.net 337-1091
- Judi = damage@gci.net



NO ANTENNA?

Jim Wiley, KL7CC

I wish that I had a dime for every time I have heard some ham complain that "I can't get on that band, because I don't have an antenna for that band."

In a word, my answer is always the same - "Hogwash", I tell them. Unless you have no antenna at all, you can get on any ham band you choose with whatever antenna is at hand. Of course, I do not dispute the fact that some antenna arrangements are more efficient than others, and that a person must use some ingenuity when using antennas on bands for which they were not designed, but it can be done.

I have seen other hams use (and used myself, at times) VHF ground-planes working on 80 or 160 meters (the VHF antenna, feed line and all, is used as a makeshift vertical), 75 meter dipoles used at VHF and UHF, and everything in between, including a few "non-antennas" such as railroad trestles, flagpoles, water towers, etc. that when properly matched, put out some outstanding signals.

The classic example comes from the earliest days of radio, when the original experimenters (Hertz, Marconi, et al) were first getting on the air. They used antennas that worked well, even though they had no more idea about resonance or matching than the Man in the Moon!

It is an established fact that an antenna need NOT be resonant to be effective. The ONLY reason most hams use "resonant" antennas is to facilitate the use of low-impedance transmission lines (coaxial cable, for example) which are easy to use, and thus have become almost universal.

The only "truth" in connecting an antenna to a transmitter (or receiver) is that you should attempt to make the best match possible between the radio and the antenna, but there is no rule that says the SWR on the feed system must be 1:1 for efficient use. Let me clarify something here, in case you are becoming confused: While it is important that the transmitter (or receiver) "look" into an impedance at or near the value for which it was designed, the actual antenna (or feed system, or both) may present a considerable mismatch and still be an effective system. The disparity (if any) is corrected by an impedance transformation device, commonly called an antenna tuner (or trans-match), connected between the actual transmitter output and the antenna (or feed line).

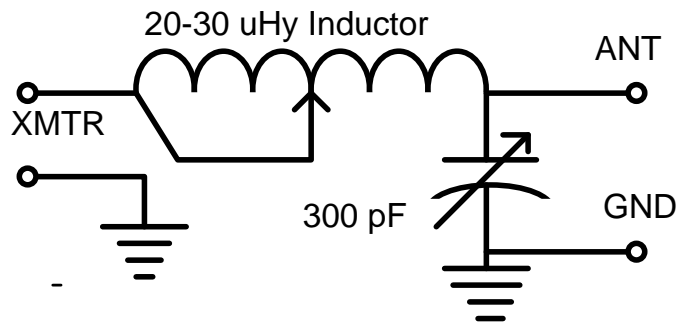
Thus, to work a VHF ground plane on 80 meters, simply remove the connecting feed line from the 2-meter set, short the feed line inner and outer conductors together, connect the result to one terminal of an appropriate antenna coupler, (connect the other antenna terminal on the coupler, if any, to ground) and away you go. Most HF antennas (e.g. dipoles) will work at VHF simply by plugging them into a VHF radio. They are so long (electrically speaking) that they become "aperiodic" antennas, which are broadband, non-resonant systems that work in a very interesting fashion.

Aperiodic antennas work by a simple process - they are so long (wavelength wise) that when a signal is applied, almost all of it is radiated into space before the energy reaches physical end of the antenna and is turned back toward the source. The remaining reflected energy is so small as to be of no consequence! It is almost as if you had connected your radio to a dummy load, but in this case the termination, instead of absorbing energy and turning it into heat, radiates it into space (where it does some good).

Antenna coupling units can be purchased ready made, or built easily with only a few parts. Coils can be easily built from PVC tubing (for the form) and standard 12 AWG (bare copper) house wire. Note: If you decide to build your own coupler, be aware that some PVC is unsuitable because it absorbs RF energy. To test PVC for RF absorption, put a small length (6" or so) in a microwave oven and "cook" it for 15 seconds or so. If it becomes warm (or hot) do not use it - try another style until you find some that works. I have only found one or two types that were unsuitable (the vast majority is OK), but there is no way of telling the "good" from the "bad" without making this simple test.

One interesting approach is to use coaxial cable between the antenna coupler and the antenna, and installing a special 4:1 "balun" transformer between the coax feeder and the actual antenna. Such a transformer is made by Palomar, as their model SB series. DO NOT use a conventional balun transformer in this sort of service, it will almost certainly be destroyed! CQ magazine for February, 1993 (page 32) contains an article about building such a transformer and using open-wire feeders with HF antennas.

The ARRL antenna compendium, Vol. 3, has a number of interesting antenna projects, and a couple of designs for antenna couplers. I have had great success with a matching single wire antennas with a simple "L" network, consisting of an adjustable coil (tapped or roller type) and a single variable capacitor of about 300 pF. The adjustable coil goes in series between the antenna and transmitter, and the capacitor connects (most of the time) between the antenna and ground. In some cases, "reversing" the circuit, with the variable capacitor on the transmitter side makes a better match. See the drawing below for explanation:



kl7cc

Alaska QRP Club meets the Third Friday of every month - 7:00 PM (Some show for dinner at 6PM): Hams with QRP (low power under 5 watts) and Homebrewing interests meet for a social meeting monthly. Meet at Dennys (in the back room) on DeBarr near Bragaw. Contact is Jim Larsen, AL7FS, JimLarsen2002@alaska.net or 345-3190.

Low Earth Orbit (LEO) Net

The **9 AM LEO Road and Weather Group** has moved to the **147.27/87 WL7CVG Mt. Susitna repeater** with a + split and **103.5 Hz tone**. Remember to check your tone encode and make sure it is set to 103.5 Hz as that is the only tone the 147.27 WL7CVG repeater will now accept.

Thank you,
 The Gahlee Group Moderator
 Dan O'Barr, KL7DR
 Wasilla, AK
KL7DR@ARRL.net

Anchorage Amateur Radio Club Board Meeting, July 20, 2004

The AARC Board met Tuesday, July 20, 2004 at Hope Community Resources Administrative Building, 540 West International Airport Road. In attendance were President Jim Larsen, AL7FS and Treasurer Steve Jensen, KL0VZ. Also in attendance were Directors Lil Marvin, NL7DL, George Wilkinson, KL1JJ, Jim Wiley, KL7CC, Jim Tvrdy, KL7CDG, Steve Gehring, NL7W and Richard Block, KL7RLB. Heather Hasper, KL7SP was also present.

Reports

Secretary

There was no formal report as the Secretary was absent.

Treasurer

Steve Jensen will add to the Treasurer's Report the amount of gaming revenue from 2003 along with the amounts allocated and amounts to be allocated for the current year.

Gaming - There was no formal report.

ARES

Heather Hasper reported on upcoming public service events, the Friends of Pets Dog Jog, July 24, and the Alaska 10km Classic, August 7.

VEC

Jim Wiley reported that the first remote VE test has been given. He has prepared a PowerPoint presentation for the NCVET conference in Gettysburg. He also reported that a maintenance contract for the remote testing software would be required in the future.

Old Business

ARRL Convention

John Lynn reported by email that the ARRL had been informed of the Convention, scheduled for September 11-12 at the Northway Mall (Note 8/26/04 - Changed to Boniface Bingo).

State Fair

George Wilkinson reported that he needs assistance for the State Fair. Volunteers are needed to man the booth through the week.

Garage Open House - Discussion postponed.

Treasurer's Assistant

Steve Jensen is currently in discussion with a possible candidate.

Generator Cover

Jim Wiley is seeking assistance to install covers on the second trailer generator. He estimates 10 to 20 hours of assembly will be required.

Grubstake Repeater

Jim Wiley reported that the new repeater is almost ready for

shipment and may be operational this autumn.

Susitna Repeater

Jim Wiley reported that repairs should be complete by mid-August.

Alternate Gaming Coordinator

Jim Larsen will follow up with a possible candidate.

40 Meter Beam Antenna

The antenna has been delivered and a check will be issued in accordance with the purchase agreement.

501C3

Jim Larsen and Steve Jensen met last week to review next actions on this item. The forms should be complete in August for legal and accounting review.

KL7AA Domain Server

Jim Larsen will move the domain to 1&1.com for hosting.

New Business

KL7AA Call Approvals

None.

Garage Sign

The Board elected not to install a sign.

Club Elections

Jim Larsen will appoint the election committee and deal with Board approval by email.

Garage Lighting and Electrical Systems

George Wilkinson and Jim Wiley will present a plan for inspection and repair to the Board.

Garage Security System

Steve Jensen presented general information about an alarm system for the garage at a cost of \$300. No action taken at this time.

Garage Wall

Jim Wiley will present a plan to the Board.

ARES EOC Training

ARES has been offered software training and EOC orientation by the Anchorage Office of Emergency Management. Dates have not yet been determined.

Generator Repair for Tower Trailer

Cost for repair and upgrade of the trailer electrical system were discussed. Approval will be handled by email. President Larsen directed ARES not to use the generator until its safety can be established.

Meeting Dates

Several Board members suggested that the Club explore changing the General membership meeting nights from Friday to some other weekday. No decision was made.

AARC Memberships for New Licensees

Jim Larsen and Jim Wiley will design a method to grant new licensees a one year Club membership at the VE examination session.

Club Telephone

Steve Jensen reported that voice mail is being added to the Club phone to better accommodate announcements.

Club Asset Investment Review

Steve Jensen was appointed Finance Committee Chair to review Club investments to maximize return and asset security.

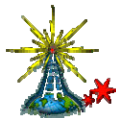
Restaurant Income

The Board requested a report on restaurant income for 2004. Steve Jensen will provide the information.

Remote Testing Software Funding

The Board reiterated its desire to fund remote VE testing software with non-gaming income. Steve Jensen will review the records to assure that the accounting is clear.

Prepared from notes by Jim Larsen and respectfully submitted by Philip Mannie, Secretary.



Repeater Report

Doug Dickinson, KL7IKX

The 146.94 Repeater has lost its main receiver, we're still operating on the remote receivers. The main receiver suffered some internal damage from what appears to have been lightning or high voltage static discharge. Repairs are underway. Meanwhile I suggest the use of a 100.0 Hz subtone to make the best of the remote receivers. Rick (KL7YF) and I have been working on getting the main receiver re-built and re-installed.

All the other systems are up and working.

If anyone has 220 equipment, I'd like to suggest a really quiet no-frills repeater on 224.940 (input on 223.340), it's coverage is great, the 222 band enjoys some of the benefits of the 2meter band as well as the penetration of the 440 band. The repeater is co-located with the 146.94 and 444.70 repeaters, it puts out 25 watts into a 6db omni directional antenna, with 10 degrees of downtilt. Feedline is 1/2" heliax, so almost all the power leaving the amp is applied to the antenna, resulting in very good coverage. There is no phone patch equipment on this repeater, but for rag-chewing and local coverage it's great.

73

Doug KL7IKX



QRP Mail Reflector

If you like QRP or low power news, it is real simple to sign up for the new QRP-L list.

Step #1: First point your browser to (click the link below):

<http://mailman.qth.net/mailman/listinfo/qrp-l>

Step #2: On the web page you will see a section titled "Subscribing to QRP-L". Enter your e-mail address in the "Your email address" entry box.

Step #3: Pick a password for your account and enter it in the box marked "Pick a password" and then enter the same password in the box marked "Reenter password to confirm". This password will be used to change your settings on the list such as digest mode, etc.

Step #4: If you would like the e-mails in daily digest form click yes on the line marked "Would you like to receive list mail batched in a daily digest?"

Step #5: Click on the "Subscribe" button below the information that you just entered.

Now, keep in mind that you are not instantly subscribed to the list. Jim Lowman (the list owner/moderator/guy in charge) has to approve you. If your e-mail address does not have an amateur callsign in it, he will most likely ask for this information before approving you. This is an effort to block Spam Mail so be patient. After you send your info to Jim, you'll get access...

Hope this helps and I'm looking forward to seeing all of you on the QRP-L mail reflector.

Jim Larsen, AL7FS/QRP



KL7AA Mail Reflector

Subscribing to the KL7AA Mail Reflector is about the same as for the QRP list. This is the list used to send notices via email to club members and other hams in the southcentral Alaska area. Just go to:
<http://mailman.qth.net/mailman/listinfo/kl7aa>
and follow the steps.



From the SEC Section Emergency Coordinator

ARRL has decided to implement a new comms system utilizing Winlink 2000. I have looked at it closely and based on feedback from other amateurs both in and out of State, I have decided that it is not a system that we will set up here in Alaska. It is not workable in that it depends heavily on using the internet to handle traffic. While the concept is intriguing, it will fail when we need it the most. I am hearing from other sections who are also going to pass on it. When Hurricane Charley hit SW Florida, all the commercial comms were wiped out. If they had set up Winlink to handle the communications, it would have been a dismal failure. RF works and it worked very well.

Amateurs around the state have been on standby to assist with the fires this summer. The firefighters had good comms and we weren't needed for that task. In the lower 48, the amateurs helped on some of the fires but they were managing comms in the shelter system. It takes very specialized training to operate in a fire environment.

I have been meeting with VOAD [Volunteer Organizations Active in Disaster] both on the local and state level. This is an organization that coordinates meeting needs during disaster so that the resources are sent where they are needed and don't pile up in any one area. I encourage you to participate with VOAD in your local areas.

Enjoy what is left of our summer!

Linda

Linda
Linda Mullen AD4BL
ALASKA SEC STM
ad4bl@mosquitonet.com
Fairbanks, Alaska

+++++

Emergency Response Communicators (ERC) Net

Dan O'Barr, KL7DR reports that there is are some new nets on Sunday nights. The ERC Net is designed to help hams get on the air more often, stay familiar with their equipment, and get to know their fellow hams in the area so that they can work together better in an emergency. Check it out.
Sunday, 7:30PM on 147.27 Repeater (103.5 tone)
Sunday, 8:30PM on 3.880 MHz HF SSB

+++++



Mount Susitna Repeater Final Installation Near

Designed & Built by KL7CC – Chief Site Mgr is KL7CY

For the past year or so, the Mount Susitna Repeater has been operating as a test repeater to see how it works. It works very fine.

In recent months, however, a problem has developed that has mystified troubleshooters. As such, the repeater has been degraded. Currently plans call for the full, **new** VHF/UHF package along with **new** feedline **and** antennas to go on the mountain approximately September 1st. This install will put the repeater back to full operations and will also allow for backup VHF and UHF units as well as a backup Antenna. Enjoy.

N2CQ QRP CONTEST CALENDAR

September 2004

Wake-Up! QRP Sprint (CW) *** QRP Contest ***

Sep 04, 0400z to 0600z

Rules: http://ruqrp.narod.ru/index_e.html

Michigan QRP Labor Day Sprint (CW) *** QRP CONTEST! ***

Sep 06, 2300z to Sep 07, 0300z

Rules: <http://www.qsl.net/miqrclub/contest.html>

Adventure Radio Spartan Sprint (CW) *** QRP CONTEST! ***

Sep 07, 0100z to 0300z (Monday Evening in US/Canada)

Rules: <http://www.arsqrp.com/>

Swiss HTC QRP Sprint (CW) *** QRP Contest ***

Sep 11, 1300z to 1900z

Rules: <http://www.htc.ch/>

Second Class Operator Club Marathon (CW) *** QRP Contest ***

Sep 11, 1800z to 2400z

Rules: <http://www.sk3bg.se/contest/socms.htm>

NA Sprint (CW)... QRP Category

Sep 12, 0000z to 0400z

Rules: <http://www.ncjweb.com/sprintrules.php>

End of Summer PSK31 20 Meter Sprint *** QRP Contest ***

Sep 12, 2000z to 2400z

Rules: <http://2hams.net/ARCI/index.htm>

QRP Afield (All) *** QRP Contest ***

Sep 18, 1500z to Sep 19, 0300z (Enter your best 6 hours)

Rules: <http://www.qsl.net/wq1rp/>

NA Sprint (SSB)... QRP Category

Sep 19, 0000z to 0400z

Rules: <http://www.ncjweb.com/sprintrules.php>

RUN FOR THE BACON (CW) *** QRP CONTEST! ***

Sep 20, 0100z to 0300z

Rules: <http://fpqrp.com/fpqrpapun.html>

Fall QRP Homebrewer Sprint (CW/PSK31) ***QRP CONTEST***

Sep 27, 0000z to 0400z

Rules: <http://www.njqrp.org/data/qrp-homebrewersprint.html>

72 de

Ken Newman - N2CQ

N2CQ@ARRL.NET

+++++

For Sale:

Complete ham station. Kenwood TS-930S, Ham IV rotator system, rooftop antenna tower, Kenwood station monitor, speaker, microphone, headphones, VHF transceiver, antennas, and a long list of accessories. \$1500 for the total package. Please call **Gus McKenzie, AL7IR**, 345-0980 or email via EWMcKen@aol.com

+++++



ARES Contact Information

District Emergency Coordinator:

Phil Mannie, KL0QW

Contact via Pager: 268-7609

Email via kl0qw@alaska.net

Additional information on ARES can be found at the following URL:

<http://www.qsl.net/aresalaska/>

+++++

Alaska CW Net (ACWN)

Alaska CW Net (ACWN) still maintains a daily traffic watch on 3534 7042 and 14050 Khz....from Fairbanks. ACWN is a registered ARRL Section Net in Alaska.



Starting at about 0230Z every evening, AL7N in Fairbanks **maintains traffic watch** simultaneously and as continuously as possible on all three frequencies, until the following morning about 1700Z. Also guards 2 meters 144.100 Mhz (CW mode) in Fairbanks area.

Weekends, monitor continuously whenever in the house where can hear the speakers, day and night.

Saturday schedules with K6KPH on 14050 at or after 1800Z, whenever we can get thru depending on 20 meter band condx and contest QRM. K6KPH is relay to lower 48 NTS; closes down about 0100Z.

ACWN encourages other operators around the state of Alaska to participate and will gladly exchange WX and signal reports if nothing else...just to keep the pipe open. Will handle legal 3rd party written traffic to anywhere, even to e-mail addresses if specified. Working CW speed is regulated to suit the operator receiving...

If other nets have traffic they can't move, send 'em down to ACWN! "Listeners" on the ACWN watch frequencies probably won't hear anything unless they call with traffic or just call for a signal check/report which will be gladly supplied to anyone if we can hear 'em at all.

Ed Trump, AL7N

ACWN Net Manager



A Thoughtful Moment on “WINNING TEAMS”

(source: http://www.mpka.net/Soke_Says/attitudes.htm)

1. Keep skid chains on your tongue; always say less than you think. Cultivate a low, persuasive voice. How you say it often counts more than what you say.
2. Make promises sparingly, and keep them faithfully, no matter what it costs.
3. Never let an opportunity pass to say a kind and encouraging word to or about somebody. Praise good work, regardless of who did it. If criticism is needed, criticize helpfully, never spitefully.
4. Be interested in others, their pursuits, their work, their homes and families. Make merry with those who rejoice; with those who weep, mourn. Let everyone you meet, however humble, feel that you regard them as a person of importance.
5. Be cheerful. Don't burden or depress those around you by dwelling on your minor aches and pains and small disappointments. Remember, everyone is carrying some kind of load.
6. Keep an open mind. Discuss but don't argue. It is a mark of a superior mind to be able to disagree without being disagreeable.
7. Let your virtues, if you have any, speak for themselves. Refuse to talk of another's vices. Discourage gossip. It is a waste of valuable time and can be extremely destructive.
8. Be careful of another's feelings. Wit and humor at the other person's expense are rarely worth it and may hurt when least expected.

9. Pay no attention to ill-natured remarks about you. Remember, the person who carried the message may not be the most accurate reporter in the world. Simply live so that nobody will believe them. Disordered nerves and bad digestion are a common cause of backbiting.

10. Don't be too anxious about the credit due you. Do your best, and be patient. Forget about yourself, and let others “remember.” Success is much sweeter that way.

Remember: 10% of life is what happens to you, 90% is how you react.

+++++

(Unapproved)

Anchorage Amateur Radio Club Board Meeting, August 17, 2004

The AARC Board met Tuesday, August 17, 2004 at Hope Community Resources Administrative Building, 540 West International Airport Road. In attendance were President Jim Larsen, AL7FS, Vice President Randy Vallee, KL7Z, Treasurer Steve Jensen, KL0VZ, Secretary Philip Mannie, KL0QW and Activities Manager Craig Bledsoe, KL4E. Also in attendance were Directors Jim Wiley, KL7CC, Steve Gehring, NL7W, George Wilkinson, KL1JJ, Jim Tvrdy, KL7CDG and Judi Ramage, WL7DX. Visitors Heather Hasper, KL7SP, TJ Sheffield, KL7TS, Dan O'Barr, KL7DR, and Larry Wood, ADF Communications Battalion Administrative Officer were also present.

A quorum being present, Jim Larsen called the meeting to order at 7:00 PM.

Reports

Secretary

Minutes for the June Board meeting were accepted and notes from July were corrected.

Election Committee

There was no formal report from the Committee. Jim Larsen agreed to stand for President and Heather Hasper for Treasurer. Jim Larsen also suggested that Mike Wood, KL1RO, may be willing to stand for election.

The Board also agreed with the Election Committee proposal that candidates for this year's election be permitted to stand for one office only.

Treasurer

Steve Jensen reported that gaming income for the year is at about 70% of the forecast amount. He noted that last year's gaming income was about \$137,000. He has not yet received a reply on restaurant income from the bingo operation manager.

Steve also suggested that a note be added to the monthly

financial report stating that all Club expenses save software development are appropriate for the use of gaming income.

Jim Wiley mentioned that it would be useful to track funds allocated to approved but incomplete projects and suggested that the Club consider on-going funding of remote testing software maintenance; he has not yet received a dollar figure from the developer.

Steve Gehring suggested that the Club adopt a capital budget and Craig Bledsoe mentioned that capital projects are typically funded for development, use and maintenance and disposal.

Steve Jensen noted that in these issues of business management there were limits to the Treasurer's knowledge of accounting and time to invest. Steve Gehring suggested that Board members assist the Treasurer by getting together to design the reports and gather the necessary data.

George Wilkinson reported that we could expect the amount due for the latest trailer work to be reduced as we were billed at commercial rather than non-profit rates.

Steve Jensen reported that state convention door prizes and other related expenses were budgeted.

ARES

Philip Mannie reported briefly on July and August public service events. The August ARES meeting will be devoted to work on the Anchorage Red Cross HF station.

VEC

Jim Wiley reported on the NCVEC meeting where he presented the remote testing software. While there are still minor software issues to be resolved, one successful exam has been delivered and the software was well received. Jim suggested that this might become the usual method of VEC testing in a few years. Other VECs raised no objection to reimbursing the Club for the use of the software and billing methods for other VECs were under consideration. We still await the developer's estimate for the cost of maintenance and expansion.

Jim Wiley went on to report that he had been appointed head of the question pool committee.

Old Old Business

None discussed.

Old Business

State Convention

The Convention Committee provided no formal report.

State Fair

George Wilkinson reported that the estimated budget would be under \$1,000. Judi Ramage moved that the Board approve up to \$1,500 for State Fair expenses; the motion passed unopposed.

Dan O'Barr reported that MARA will provide APRS, Packet and IRLP demonstrations for the State Fair.

Grubstake Repeater

Jim Wiley reported that the repeaters have not yet been delivered.

Susitna Repeater

Jim Wiley reported that he, John Lynn and one or two others would fly to Susitna for repair of the repeater. While he and his crew are planning to ride with Jeremy Lansman for this trip, Wiley moved that the Board approve \$2,500 in additional funds (\$1,500 has already been approved for transportation) helicopter transportation for Susitna repair; the motion was approved.

Gaming Coordinator

Jim Larsen reported that the Board needs to find an alternate Gaming Coordinator and that state requirements for the individual filling this position need to be determined.

501C3

Steve Jensen reported that the forms have been started but are not yet complete.

KL7AA.org

Jim Larsen reported the kl7aa.org domain will be moved to a hosting service in the near future.

CCV Garage Electrical

George Wilkinson reported that Raven Electric will inspect the garage and formulate a plan for the electrical and lighting requirements.

EOC Training

Philip Mannie is working with AOEM staff to schedule ARES EOC training for September.

CCV Garage

Walls and doors between Club and Jim Wiley spaces at the CCV garage are still needed.

CCV Garage Phone

Philip Mannie volunteered to connect the CCV Garage office phone. He anticipates that this will be accomplished early in September.

VE New Membership Procedures

Jim Larsen will provide material to AARC VEC to register free one year Club memberships for new licensees.

Generator Safety

Anchorage ARES has been tasked with providing the Board with a rationale and documentation for configuration and operation of the AARC power and tower trailers.

New Business

KL7AA Call Usage Approvals

State Fair, State Fair Special Events Station and State Convention have been granted approval to use the Club call.

Red Cross Grant

Heather Hasper submitted a grant proposal for Anchorage Red Cross HF station rotor and feedline. A motion by Jim Wiley to approve up to \$250 for the project was approved.

Generator Cover

Jim Wiley reported that the cover for the second power trailer generator was about half complete. Heather Hasper and George Wilkinson have been working with him on this project.

Board Email

Jim Tvrdy expressed concern that Board action by email may require additional safeguards to ensure that Board members receive such emails in a timely way. While no action was taken by the Board, suggestions included return receipts and requesting response in the subject line. In the event a Board member does not respond, he suggested using alternate means (such as telephone) to ensure the information gets to all Board members.

CCV Garage Trailer Storage

George Wilkinson volunteered to head up efforts to get covered storage for the power and tower trailers in place at the CCV garage. The current approved budget for this project is \$10,000.

Hope Cottage Grant Request

Hope Cottages has requested an additional \$1,000 above their budgeted \$5,000 grant, to replace carpet in one of their facilities with more sanitary floor coverings. The Grant Committee had no objection and a motion by Jim Wiley to add \$1,000 to the Hope Cottage 2004 grant was approved.

There being no further business, the meeting was adjourned at 9:12 PM.

Respectfully submitted by Philip Mannie, Secretary.

Frequently Asked Questions About Amateur Radio and Broadband Over Powerline (BPL / PLT)

An excellent resource for understanding BPL can be found at:

<http://www.qrpi.org/~k3ng/bpl.html>

and also at:

<http://www.arrl.org/tis/info/HTML/plc/>

Geocaching

Combining passions

By Mike Wood, KL1RO

My love for Alaska and the outdoors is as strong as my love for high tech gadgets. Geocaching lets me combine both of my passions in one fun, family friendly activity.

What is Geocaching? Geocaching (pronounced Geo-caching like cashing a check) is a fun activity that involves using a GPS to locate hidden caches placed by others. There are over 430 such geocaches in Alaska, with over 240 in the Anchorage area alone. Globally you will find over 115,000 geocaches in over 200 countries!

A basic geocache is a container, such as an ammo can or Rubbermaid container. What is in a cache will vary, but there is one item that is common and that is a logbook. The logbook is for each finder to record their visit and perhaps share some thoughts. Other items in the cache may be simple trade items, toys, books, movies, and sometimes cash or other nice treasures.

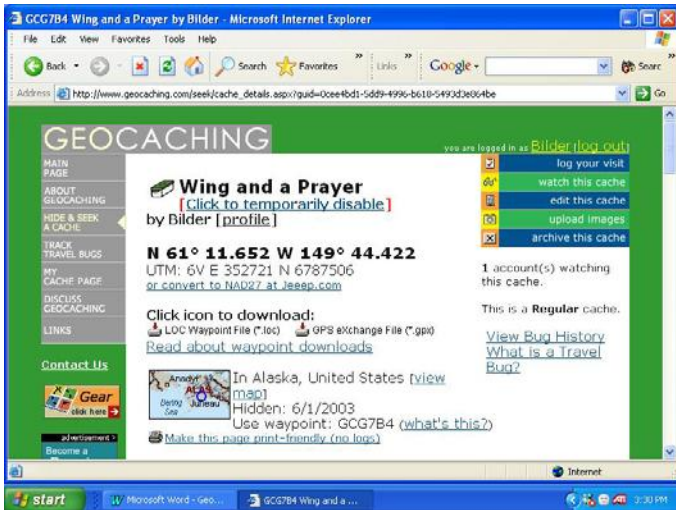


Typical ammo can style geocache.

How do I find a Geocache?

The tools needed for geocaching are a GPS unit and a visit to the [Geocaching.com](http://www.geocaching.com) website. <http://www.geocaching.com/> Geocaching.com is the number one site for locating caches near you. All you need to do is enter your zip code and you will be given a listing of the caches nearest your location.

You can look through the list and find a cache that interests you. Caches have a rating system that covers the difficulty and terrain. Difficulty is rated by how well the cache is hidden. The terrain rating tells you how hard the path to the cache will be. A cache rating of 1/1 will be the easiest. While a rating of 5/5 will be the hardest. Choose a rating that best suits your physical abilities as well as how difficult of a hide you wish to look for.



Typical cache listing on the Geocaching.com website. Bilder is my geocaching username.

Each geocache listing gives the GPS coordinates to the cache as well as a brief description and (sometimes) a hint to help you out. All you have to do is enter the coordinates into your GPS and off you go. Sound easy? It is not as easy as it looks. Caches are hidden so that passers by will not easily find them. Also, you must remember that GPS accuracy will only get you within 10-20 feet of the actual location. That is where the fun begins. I would recommend that when your GPS reads less than 10 feet from the cache that you quit looking at the GPS and start to look at your surroundings. Think of where you would hide a cache if you were in the area. That pile of sticks by the tree, under that bush over there, in among those rocks, start to search and soon your efforts will be rewarded.

Once you find the cache, there are a couple rules to the game that you should follow. They are:

- 1 Write an entry in the logbook
2. If you take something from the cache, leave something in return.
- 3 Put the cache back exactly as you found it.

When you get home you can record your find on the geocaching.com website. Go the listing for the cache you found and click on the "Log this cache" option in the upper right of the screen. Some very entertaining reading can be found in the log entries. They are worth looking through.

Some items should not be placed in caches. These are items such as food or other aromatic items (animals will tear a cache apart to get at the food), weapons or other dangerous items, and other items that may not be suitable for children.

You will find geocaches hidden in all types of settings. Some are hidden out along the trails and in the hills around town. Others are hidden in the middle of downtown. The more urban caches will tend to be **micro caches**. A micro cache is a variation in that it is very small. Usually all you will find in a micro cache is a log sheet and a pencil stub. A micro will usually be a 35mm film canister, altoids tin or other similar small container. Some micro caches are very (and I do mean

very) well hidden. Some of the toughest caches I have found have been micros that were designed to blend in the their surroundings so well, that I have actually touched them a couple times before I realized that I had my hand on the cache.

Other variations of the game are **puzzle caches**. These caches will not give you the actual coordinates to the cache, but rather require you to solve a puzzle to find the location. Some are as simple as some trivia questions while others use more difficult puzzles.

Multi-caches are another fun twist to the game. In a multi, you will go to the first set of coordinates given; there you will find the coordinates to the next stage and so on till you find the actual cache. Some multi caches have only two stages, others are far more difficult.

Another variation is called the **Virtual cache**. A virtual cache differs in that there is no container to find. The coordinates will lead you to an area that the hider wished to share with others. Usually to log a virtual as a find you will need to answer a question about the area or take a picture to prove you were there. For those that are not into hunting for containers, a virtual cache is a nice alternative.

Event caches are another fun part of the game. Geocachers tend to know each other as a nickname on the website. Event caches give us a chance to meet face to face and exchange fun and ideas.

These are the main cache types you will run across. Another part of geocaching that you will encounter is the **Travel Bug**. A travel bug is an item with a special tag available for purchase from the Geocaching website. The number on a travel bug tag allows you to follow the movements of your "bug" from once cache to another. If you find a travel bug in a cache, only take it if you are able to place it in another cache. Travel bugs are not meant to be kept. They are there for the sole purpose of moving from one cache to another. Some have a very specific purpose (travel to all 50 states for example). Others are there just to move around. The owner of the travel bug can track its movements and see how many miles it has moved. My daughter currently has a travel bug as part of a social studies project. Its goal is to travel to all 50 states before returning to Alaska. You can see the travels of her bug for yourself. [Traveling Taz](http://www.geocaching.com/track/details.aspx?id=29238)
<http://www.geocaching.com/track/details.aspx?id=29238>

For a new comer to geocaching I would recommend that you start off finding some of the easy regular caches out there. This will let you get a feel for how caches are hidden and will also help to boost your confidence in geocaching. Once you get a feel for how regular caches are hidden, you may want to try a micro cache or possibly one with a higher difficulty rating.

If you cannot find a cache, do not get discouraged. Use the hint on the cache page, or if you are really stumped, contact the person who hid the cache and ask them for a hint. Once you find a cache or two you will start to get a feel for how the mind of a geocacher works. You never know what new twist

will be added to the next cache hidden. Who knows, maybe after you find some geocaches, you will want to hide one of your own.

No matter what your physical ability, there is a cache out there that you can find. If you want to find a way to get your kids away from the video games and outside with you, take them geocaching. My girls love "treasure hunting" and look forward to the next outing.



Kids really love looking for "treasure".

Modern GPS cost fewer than 100 dollars for a basic no frills unit. Many GPS units can be hooked up to your computer, making the entry of coordinates simple. There are a number of geocaching software titles out there to help you sort things out. Most of these programs were designed by geocachers and are free to use. With the addition of APRS, you can have fun hamming it up while you are out looking for that elusive cache.

Geocaching- Where else can you play with over 20 billion dollars of military hardware and not blow anything up?

Here are some useful links for Geocaching:

<http://www.geocaching.com> – The place to start. Check out the guides to finding and hiding caches.

<http://www.geocacher-u.com> - Geo-University. Great site! Full of info and tips for both the beginner and the experienced Geocacher.

<http://www.brillig.com/geocaching> – Cache maps and info.

<http://www.clayjar.com> – Neat tools and a chat room.

<http://www.garmin.com/aboutGPS> –GPS info



Mike Wood, KL1RO has been an active Geocacher since March 2003. Mike earned his Technician License in July 2004 and hopes to get his General by the end of the year. His geocaching username is Bilder. His email address is mike.wood@acsalaska.net

+++++



One Day Ham Class And Exam

On Saturday, September 18th, there will be a free Amateur Radio class and exam open to everyone. Class will start promptly at 10AM at Holy Spirit Episcopal Church in Eagle River. This church is conveniently located at 17545 North Eagle River Loop Road (just above downtown Eagle River). The class will last all day with a multiple-choice exam given at the close of the session, so please bring a government-issued photo I.D for positive identification at the time of the exam. There will be no charge except for the cost of the training materials (approximately \$20 each), or you may bring your own copy of the July 2004 edition of "Now You're Talking".

If you would like to be a communications volunteer for the Iditarod or help with many other public service activities in the state of Alaska, obtaining your Amateur Radio license is an important step in that direction.

Please contact Dan O'Barr, KL7DR, at 373-2569 in Wasilla or e-mail dan@obarr.net for additional information and to enroll in this class.

+++++



Technical Specifications New Mount Susitna Repeater System

VHF input 147.870, repeater output 147.270
CTCSS tone required, 103.5 Hz (same as before)

NEW!

This system also features a UHF side, operating on 443.300, + 5 MHZ standard shift, CTCSS 103.5

Hz. You transmit on to the repeater on 448.300, and listen on 443.300.

The UHF and VHF sides are cross-linked. You can transmit on either VHF or UHF, and be heard on both sides simultaneously. This also means that if you have a dual-band set, you can monitor yourself to see how your signal is doing through the repeater. Remember to keep your mic and speaker separated and the volume low or you will get feedback howling.

Transmit power for both bands is 10 watts to the antenna.

+++++



Some help for AO-51

Dan O'Barr <kl7dr@yahoo.com>

I sent this to: <http://groups.yahoo.com/group/fm-satellite> as a lot of folks on there just can't get the hang of the "Satellite Dance." KL7DR

Wow, looks like you folk could use a little help. I love the LEOs and I am so happy to have AO-51 up and working so well. I worked a pass today with an ICOM IC-W31A hand held and stock robber ducky antenna. There are a lot of big guns in the lower 48 that hit AO-51, on almost every pass, with hi power. Most times they do it with no audio or the sub-audible 67 Hz tone. This effectively keeps everyone else from being able to work the bird or hear it. On the daytime passes, we can work it just fine, until the footprint gets over the mid to upper part of the lower 48. At night it's the same thing, only in reverse. Blanked signals and problems until the footprint leaves the lower states, and then it's perfectly clear over Canada and Alaska. You have got to find the jammers and shut them down, or you will only be able to work a few passes when they aren't on

Generically sub-audible tones called a Continuous Tone Controlled Squelch System or CTCSS. Motorola calls them Private Line or PL, and General Electric calls them Call Guard or CG. Other brands refer to them as Privacy Codes. Most manufactures now identify them by their actual frequency (like 67), while others still call them by a number like 1 to 38 or 1A to XZ.

Please remember to be absolutely certain you can hear the downlink signal "BEFORE" you transmit anything more than a very short ID (your callsign) on the uplink frequency!!!! AO-51 requires a 67.0 Hz tone on your transmit signal (same tone as SO-50). The uplink freq is 145.920 MHz and the downlink freq is 435.300 MHz + and - 10 KHz for Doppler effect. The downlink transmitter will come on within one second after it hears an uplink signal with a 67 Hz tone,

and it stays on for approximately 10 seconds after the uplink signal drops.

This operation is just like a terrestrial FM repeater with a 1 second kerchunk filter and a 10 second hang time.

If you can set split-band channels on a semi-duplex HT like the Yaesu VX-5R and 7R, use these channels with the 67 Hz tone.

REC. TX.

Ch.1 435.310 145.920 Acquisition Of Signal (AOS)

Ch.2 435.305 145.920

Ch.3 435.300 145.920 MAX ELEVATION

Ch.4 435.295 145.920

Ch.5 435.290 145.920 Loss Of Signal (LOS)

If you've got an Alinco DJ-596 you will need to program the up-link of 145.92 with the 67 Hz tone into a channel. Then go into it's split mode and use the UHF VFO mode to tune the down-link , frequencies.

My favorite way to operate the LEOs is in full duplex with headphones to prevent feedback. There are only two current production HTs that will do that, and they are the Kenwood TH-D7 and the ICOM IC-W32A. You can also go full-duplex with a Bearcat scanner or UHF HT hooked to a UHF yagi (home brew or store bought) for down-link, and you 2-meter HT with a whip antenna, or 2-meter mobile for your up-link.

I don't know if hyper links will come through, but if they do, check some of these out.

<http://gahleos.obarr.net/>

<http://groups.yahoo.com/group/gahleos/>

<http://www.ptsi.net/user/kc5jdg/mm27.html>

<http://members.aol.com/greg6fzh/kc7qfs.htm>

<http://www.uksmg.org/grid.htm>

<http://www.clarc.org/Articles/uhf.htm>

<http://members.aol.com/k5oe/>

<http://kd4app.webhop.org/>

<http://on6sat.com/links/>

Take care & 73,
Dan O'Barr, KL7DR
President of MARA inc.
<http://www.KL7JFU.com>
KL7DR@ARRL.net
KL7DR@AMSAT.org
<http://gahleos.obarr.net>

Alaska State Fair - Special Event (KL7AA)

Corliss Kimmel (AL1G) will be hosting a special event for the Alaska State Fair at her home qth. **Club members are welcome to come and operate.** The event will run from Aug 26 through Sept 6. Modes available will be SSB, CW and RTTY. Hours of operation, rather than being "officially" set, will be informal and determined by operator available time, band conditions, fishing trips, etc.

Corliss will design a certificate for the event and will utilize her QSL manager to handle certificate and QSL requests.

Please contact Corliss if you are interested in operating during the special event. [mailto: AL1G_ak@yahoo.com](mailto:AL1G_ak@yahoo.com) phone: 561-8902.



ARES



"Professor" John Lynn (KL7CY) shed light on coaxial cable characteristics at the Alaska District 7 Amateur Radio Emergency Service (ARES) training session on Saturday, 17 Jul 2004.

Alaska District 7 ARES provides training opportunities the 3rd Saturday of every month. This training can range from a classroom experience to "real world" participation in Public Service events.

The July, 2004 training session invited individuals to bring in lengths of coaxial cable for testing using a variety of techniques, from basic checks that any ham can do all the way through the use of some very sophisticated test equipment.

Coaxial cable is a common method of sending RF power from your transmitter to the antenna and for bringing back very weak signals from the antenna to your receiver. If your coax

is in poor shape, station performance will typically suffer. QRP operators (those who use low power of 5 watts or less) are very aware of the need for good quality transmission lines.

All of the coaxial cables used at Field Day were tested, along with pieces brought in by interested amateurs. "Professor" Lynn used a variety of test equipment to illustrate the properties of coaxial transmission line and his clever use of a video camera allowed the test equipment adjustments to be projected onto a screen for the audience to view. The following test equipment was demonstrated:

500 Volt Megger – This device tests cable insulation resistance and can identify wet or damaged cables.

Volt / Ohm meters – Both digital and analog meters were used to measure continuity along the outer shell or the inner conductor of coaxial cables.

TDR – The Time Domain Reflectometer was used to identify impedance discontinuities and to determine the velocity of propagation within the cable.

LCR – The Inductance, Capacitance and Resistance Bridge was used to measure capacitance of the cable to see if the dielectric (insulating material) has degraded due to moisture or other conditions.

Bird Wattmeters – Two were used to measure cable loss at both VFH and UHF frequencies and this measured loss was compared with the cable manufacturer's specifications.

MFJ Antenna Analyzer – This device was used to determine the frequency at odd quarter wavelengths that produces zero impedance, enabling calculation of the cable velocity factor. This calculated number can be compared with manufacturer's specifications or you can determine the physical length of a coaxial cable that is not easily measured in the field.

Alaska District 7 ARES would like to thank John Lynn (KL7CY) for his dedication in bringing in a wide variety of test equipment, preparing the lecture, setting up the demonstrations and for sharing his knowledge of the subject with other amateur radio operators.



The Red Cross HF Beam

The Anchorage area Amateur Radio Emergency Service (ARES) group recently held their August training session at the American Red Cross (ARC) building in Anchorage. There is a new ARC ham club located at the ARC HQ and the ARES folks assisted in getting the HF beam antenna working. While there is still some rotor work left, the major part of the work that needed to be done by winter is now complete. Well done.

ARES locally is under the leadership of Phil Mannie, K1OQW, the District Emergency Coordinator.



Data You Can Use:

Officers

President	Jim Larsen, AL7FS
Vice President	Randy Vallee, KL7Z
Secretary	Phil Mannie, KLØQW
Treasurer	Steve Jensen, KLØVZ
Trustee	Jim Feaster, KL7KB
Activities Chairman	Craig Bledsoe, KL4E
News Letter Editor	Jim Larsen, AL7FS
Membership Chairman	Fred Erickson KL7FE
Past-President	-

Three Year Board Members

Jim Wiley, KL7CC
Richard Block, KL7RLB
Lil Marvin, NL7DL

One Year Board Members

Pat Wilke, WL7JA
Jimmy Tvrdy, KL7CDG
Judi Ramage, WL7DX
Steve Gehring, NL7W
George Wilkinson, KL1JJ
Mike O'Keefe, KL7MD

AARC web page & Email contact addresses:

Homepage: <http://www.KL7AA.org/>
Email Reflector: KL7AA@QTH.NET
Webmaster: AL1G_ak@yahoo.com
President: JimLarsen2002@alaska.net
Membership: frederickson@iname.com
Newsletter: JimLarsen2002@alaska.net

News Letter Submissions, Information or corrections:

Submissions must be received 2 weeks before meeting
Email: JimLarsen2002@alaska.net
Mail: 3445 Spinnaker Drive, Anchorage 99516

KL7G CODE PRACTICE SCHEDULE

Schedule: 7:00am, 10:00am, 4:00pm, 7:00pm, 10:00pm
AK time, every day on 145.35 MHz @ 7 wpm

NOT ACTIVE AT THIS TIME

+ = + = + = + = + = + = + = + = + = +

Nets in Alaska:

The following nets are active in South-central Alaska:
Alaska Sniper's Net 3.920 MHz 6:00 PM daily
Alaska Bush Net 7.093 MHz 8:00 PM daily
Alaska Motley Net 3.933 MHz 9:00 PM daily
Alaska Pacific Net 14.292 MHz 8:00 AM M-F
ACWN (Alaska CW Net) 3534, 7042 Daily @ 0700 – 1000, and 1900 - 2400 Alaska Time - AL7N or KL5T monitoring.

Net Purpose: Formal NTS traffic via CW.

No Name Net 146.85/.25 repeater Sundays 8:00 PM
Grandson of SSB Net 144.20 USB Mondays 8:00 PM local
Big City Simplex Net 146.520, 446.0, & 52.525 FM

With Packet 145.01 Tuesdays 8:00 PM local
ARES net 147.27/87 103.5Hz - Thursdays at 8:00 PM local
PARKA net 147.30/90 Thursdays at 7:00 PM local
ERC VHF Net 147.27/87 103.5Hz – Sunday 7:30 PM local
ERC HF Net 3.880 MHz – Sunday 8:30PM local

Any AARC sponsored repeater, with or without an auto-patch, will always be open to all licensed amateur radio operators in the area who are authorized to operate on those frequencies.

Anchorage & Mat Valley Area Repeaters

KL7AA systems at Flattop Mt., 2,200 ft
146.94/34 MHz, 80 watts, autopatch, 141.3 Hz PL
224.94/223.34, 25 watts, no patch, no PL
444.70/449.70, 25 watts, autopatch, 141.3 PL
****147.27/87 MHz, no patch, Mount Susitna 103.5 Hz**
KL7CC, Anchorage Hillside, SCRC & QCWA
146.97/.37 MHz, 30 watts, autopatch, 103.5 Hz PL
KL7M Anchorage Hillside
147.21/.81 MHz, on IRLP, 97.4 Hz PL
KL7ION at Mt. Gordon Lyon, PARKA 3,940 ft
147.30/90, MHz - 80 watts, no patch, 141.3 Hz PL
KL7AIR Elmendorf AFB, EARS
146.67/.07, 107.2 Hz PL
KL7JFU, KGB road, MARA club
146.85/.25, autopatch, no PL
KL7DOB, Alcantra (Wasilla Armory)
146.64/.04, simplex patch, no PL
KL7DJE at Grubstake Peak, 4,500 ft. <down >
147.09/.69 MHz, 25 watts, no patch, 100 Hz PL
444.925/449.925, 10 watts, no patch, 141.3 Hz PL
KL3K, Girdwood
146.76/16 MHz, 25 watts, no patch, 97.4 Hz PL

South Central Area Simplex Frequencies

146.52 MHz Calling and Emergency frequency
147.57 / 447.57 (crossband linked) HF spotters & chat, 103.5 HZ PL
146.49 MHz Anchorage area simplex chat
146.43 MHz Mat Valley simplex chat
147.42MHz Peninsula simplex chat

Internet Links, the favorites from our readers:

QRP and Hombrew Links <http://WWW.AL7FS.US>

AARC <http://www.KL7AA.org/>

SCRC <http://www.KL7G.org>

EARS <http://www.qsl.net/kl7air>

MARA <http://www.kl7jfu.com/>

Moose Horn ARC <http://www.alaksa.net/~kl7fg>

ARES <http://www.qsl.net/aresalaska>

KL7J <http://www.alaska.net/~buchholz>

Fairbanks AARC: <http://www.kl7kc.com/>

Yukon Amateur Radio Association:

<http://www.klondike.com/yara/index.html>

HAARP Project:

Amateur Radio Reference Library

<http://www.area-ham.org/library/libindex.html>

Hamradio: <http://www.hamrad.com/>

Solar Terrestrial Activity <http://209.130.27.95/solar/>

ARRL <http://www.arrl.org/>

Propagation Report Recording 566-1819

Please let us know if there are other clubs pages or good starting points that should appear here. Report dead links or bad info to JimLarsen2002@alaska.net.

+==+==+==+==+==+==+==+==+

NEWSLETTER ARTICLES; All articles from members and interested persons are very welcome. If you wish to submit any articles, jokes, cartoons, please have it typed or neatly handwritten. It can be submitted by mail, computer disk or E-mail to the newsletter editor at the address listed above. Submissions must be in the hands of the editor **no later than the 14 days prior** to the meeting or it may not be included.

+==+==+==+==+==+==+==+==+

Regular HAM Gatherings:

Alaska QRP Club, Third Friday - 7:00 PM: Hams with QRP (low power under 5 watts) and Homebrewing interests meet for a social meeting monthly. Meet at Denny's on DeBarr & Bragaw in the back room. Hungry QRPers start showing up about 6PM. Info contact Jim Larsen, AL7FS, JimLarsen2002@alaska.net or 345-3190.

Tuesdays Lunch, 11:30 AM: Join the gang for lunch and an eyeball QSO at the Royal Fork, "South, on Old Seward Highway. Attendance varies from 8 to 24 each week.

Thursdays Brunch, 10:30 AM: Brunch at Lily's on Tudor Road just East of Tony Romas. A great bunch of folks attend this one.

Saturdays Breakfast, 7:30 AM: Here is a good way to get started on the weekend. Come and meet with some of the locals and have a great breakfast at Phillips Restaurant, at the corner of Arctic and International. Great Fun.

+==+==+==+==+==+==+==+==+

THIS MONTH'S EVENTS

1st Friday each month - AARC general meeting - 7:00 PM in the Carr-Gottstein Building, on the APU Campus. Talk in will be on 147.30+ repeater.

1st Tuesday each month: VE License Exam 6:30 PM, at the Hope Cottage offices, 540 W International. Bring photo ID, copy of license (if any) and any certificates of completion.

1st Tuesday each month: EARS general meeting - 6:30PM in the club house/shack in the basement of Denali Hall (building 31-270) on Elmendorf AFB. Talk in on 147.67-repeater.

2nd Friday each month: SCRC general meeting at 7:00 PM at Denny's on Debarr & Bragaw. Talk in on 147.57 simplex.

2nd Saturday each month: VE License Exams at 2:00 PM. at Hope Cottage 540 W. International. Be sure to bring photo ID, copy of license (if any) and any certificates of completion.

2nd Saturday each month: PARKA Meeting at 11:00 AM. at Peggy's, across from Merrill Field.

3rd Tuesday each month: AARC Board meeting at 7:00 PM at Hope Cottage 540 W. International. All are invited and encouraged to attend.

3rd Friday each month: Alaska QRP Club. 7:00PM at Denny's on DeBarr in the back room. Info: Jim Larsen, 345-3190. Bring projects to share with the group. Some show up at 6:00PM to eat.

3rd Saturday each month: ARES General meeting 9:30AM to 12:00 PM. Call Phil Mannie (kl0qw@alaska.net) at 762-9590 for additional information. Also check for ARES Info at: <http://www.qsl.net/aresalaska/>

The last Friday each month: MARA meeting at 7PM Fire Station 61, located two blocks up Lucille Drive, from the Parks hwy. Talk-in help for the meeting can be acquired on either the 146.640 or 146.850 repeaters. Further details can be found by contacting Len Betts, KL7LB, lelbak@yahoo.com.

The last Saturday each month at 11:00 AM: Quarter Century Wireless Assoc - QCWA at the Royal Fork, South of Dimond on Old Seward Highway. You need not be a QCWA member to attend.

Who Do I Contact to Join AARC?

Fred Erickson KL7FE -
frederickson@iname.com

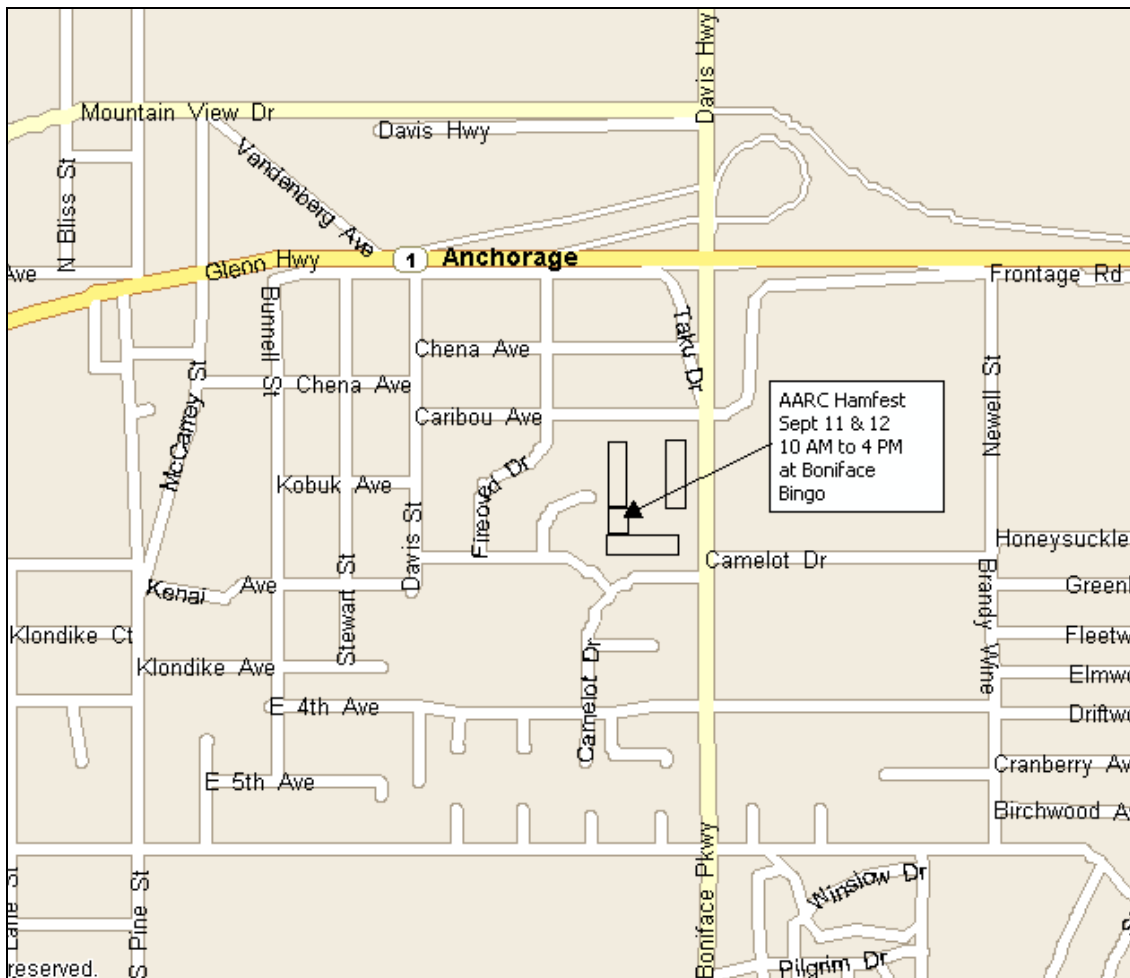
Phone number: 345-2181

New Hams receive 1yr complimentary membership
Annual Dues are \$12

Additional Member in same household is \$6

Anchorage Amateur Radio Club, Inc
Post Office Box 101987
Anchorage, Alaska 99510-1987

PRSRT STD
U.S. Postage
PAID
Anchorage, AK
Permit No. 223



AARC Hamfest will be at Boniface Bingo – September 11 and 12 from 10AM to 4PM

Full Time Student is no charge