Anchorage Amateur Radio Club

Next Meeting June 3rd

June Program

American Red Cross by: Jesse L. Jones, KL1RK

Due to circumstances beyond her control, the guest speaker wasn't able to make our May meeting.

The American Red Cross has a new State Volunteer Manager and is working to restructure its volunteers. Heather Adams will be speaking to us at the June General Membership Meeting about the role of volunteers in the Red Cross. Please plan to attend and see how this reorganization may affect you and your club!



THREE WEEKS TO FIELD DAY

Ready or not, here it comes!

Field Day is at Kincaid Park again this year and park management has approved our application for two (2) locations.

The CW / Digital station will set-up on the North End concrete pads, pretty much the same location as last year. Dick Block, KL7RLB is looking for a motor home to support this operation so if you have a motor home available please let us know!

New for 2005 is our South End operation on the snow storage pad. Here we'll find the CCV with the high-power SSB station, the Near Vertical Incidence Skywave (NVIS) station, the Satellite Station, the VHF Station, the Get-On-The-Air (GOTA) Station (in the Red Cross ERV), the Alternative Power station (in the VW camper), the Automatic Position Reporting System (APRS) demo station, the Amateur Television (ATV) demo station and the Weather Port tent.

A major effort is underway to invite elected officials this year so we really need to be on our toes!

The South End should provide a high visibility location for the public, since every vehicle coming into or out of the park will pass by our "traveling circus" on their way to the Chalet. Please let us know if ignition noise becomes a problem because one reason we go to Kincaid Park is for the low electrical noise characteristics.

Set-up is Friday evening, 24 Jun 2005. Talk-in and event traffic will be on simplex, 146.46 MHz. Current assignments and job openings for Friday evening are:

TBD: Driving the CCV

TBD: Driving the North End motor home KLØVZ: Pulling a tower / power trailer NL7W: Pulling a tower / power trailer KL7MD: Pulling a trailer with the Weather Port

KL7SP: Pulling a truckload of stuff

KLØQW: APRS demo, ATV demo (if available)

KL7TS: Satellite station

KL7MM: Alternative Power station

The APRS and ATV demos are scheduled for Saturday between 1200 and 1700, the exact time to be determined. Phil, KLØQW will support this effort (if he is available).

If you ever wanted to know more about these modes please contact us and get involved. Both of these demos are high visibility / high impact with the public and elected officials so we want to be successful!

The ATV demo will transmit video from the North End station to the South End station, using our existing X-50 dual-band verticals on both ends. A down-converter will feed the onboard color television in the CCV.

The APRS demo will be a bicycle mobile with mapping software on the CCV satellite station. We'll turn the monitor around so the public can see both the APRS mapping software and the ATV video from the open areas of the motor home.

We still need to prepare one more demonstration mode so if you have something in mind please let us know.

Field Day is a place to learn about our existing systems, develop our skill sets and expand our possibilities in a fun and challenging environment. Please become a part of this effort by volunteering now!

Sincerely,

FIELD DAY CO-CHAIRMEN



Keith Clark – KL7MM: aksunlite at

aol.com HM: 243-0706 WK: 277-3545

TJ Sheffield - KL7TS: kl7ts at arrl.net

HM: 248-3864 WK: 265-2409 ++++++++++++++++

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, <u>JimLarsen2002 at alaska.net</u> or 345-3190.

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Anchorage Amateur Radio Club Board Meeting, May 17, 2005

The AARC Board met Tuesday, May 17, 2005, at Hope Community Resources Administrative Building, 540 West International Airport Road.

Board Members Present:

Officers: President: Jim Larsen (AL7FS), Vice-President: Judi Ramage (WL7DX), Secretary: Fielder G. Dowding (KL7FHX), Treasurer: Heather Hasper (KL7SP), and Activities Chairman: Jesse Jones (KL1RK).

Three Year Directors: Richard Block (KL7RLB), Frank Pratt (KL7RX), and Jim Wiley (KL7CC). One Year Directors: Steve Gehring (NL7W), Steve Jensen (KL0VZ), Carl London (N5XLI), Ed Moses (KL1KL), Mike O'Keefe (KL7MD), TJSheffield (KL7TS), and Mike Wood (AL2N).

Committee Chairmen: Alternate Gaming: Mike O'Keefe (KL7MD) Newsletter: Jim Larsen (AL7FS) VEC: Jim Wiley (KL7CC)

Visitors: Susan Wood (NL7NN) Gladys Meacock (KL7JB) George Meacock (NL7RD) Patrick V. Wilke (WL7JA) Richard W. Kotsch (WL7CPX)

Jim Larsen (AL7FS) having ascertained that a quorum was present opened the meeting at 1904.

Reports

Secretary Fielder G. Dowding (KL7FHX) provided copies of the minutes of the April2005 board meeting. Motion: Minutes for the April 2005 board meeting approved as corrected.

Treasurer Heather Hasper (KL7SP) provided copies of the Treasurer's Report. Motion: Treasurer's Report approved.

Fur Rondy

ARES

Heather Hasper (KL7SP), reminded us about up coming activities.

Jim Wiley (KL7CC): progressing, nothing new to report.

Old Business

Tower For Club station at CCV Facility - Process Jim Larsen (AL7FS): process of submitting project to technical committee to ensure proper engineering and legal matters.

Installation TJ Sheffield (KL7TS) presented two methods of installing a tower at the CCV Storage Facility: 1) mount on roof with guy lines to corner of building, and 2) bracket with elevated guy line to North and two more to corners of building. Engineering cost estimated to range from \$1,500.00 to \$2,500.00 for a single sheet detail.

Batteries

For Mt Susitna - Process

Jim Larsen (AL7FS): document process of submitting project to the technical committee.

Field Day

TJ Sheffield (KL7TS): Need for motor home for cw and digital station. The weekend is June 24 through 26.

State Fair

Jim Larsen (AL7FS): Nothing new at the moment. There will be more activity next month.

Brochures

Mike Wood (KL1RO): Commented about brochure to have available.

Flea Market

Jesse Jones (KL1RK): Planning progressing.

Fur Rondy

New Sign - Process Documentation

See Reports section.

Display System

Jim Larsen (AL7FS) and Mike Wood (KL1RO) report that with help of Keith Clark (KL7MM) the system should be here next month.

Welfare/Hospitality policy

Jim Larsen (AL7FS): Deferred to next month.

Finance/Investment/Capital

Heather Hasper (KL7SP): visual presentation. Discussion revolved around Gaming Income for 2004 that needs to be expended in 2005.

Internet

New Server - charge card (Phil Mannie: .org, .com, .us)

Jim Larsen (AL7FS): Started to setup the new server, but was unwilling to use his personal charge card. We have discussed getting a charge card for the club.

CCV Contingency Fund -- Bylaws

VEC

Steve Jensen (KL0VZ): Discussed dedicating gaming fund monies for future expenditure. Charles Dunnigan, Esq., recommends changing by-laws to include the purpose of this dedication.

Jim Larsen (AL7FS), Richard Block (KL7RLB), and Steve Jensen (KL0VZ) will get together to resolve concerns in the wording before a final vote of the Board.

New Business

KL7AA No uses for the coming month.

Process -- Technical Committee and New Projects

Alternate Gaming member Mike O'Keefe (KL7MD) has taken the test and Heather Hasper (KL7SP) has received the certificate from the State of Alaska Gaming Board.

CCV Storage Garage Lease

Richard Block (KL7RLB): EOC -- Municipality of Anchorage, Incident Control Center. Volunteer Radio Room: AARC has approximately \$2,600.00 worth of equipment there. Proposed redesign using office furniture. Cost is about \$6,500.00. The object is to have the Municipality fund this, but would like the club to support this project.

Motion: Allocate \$6,500.00 and seek approval of general membership to purchase and install furniture needed to establish a workable Volunteer Radio Room. Steve Jensen (KL0VZ) second.

Jim Larsen (AL7FS): Project needs to be processed through the Technical Committee.

Tabled until next board meeting.

APRS Software

TJ Sheffield (KL7TS): visual presentation. Proposes to expend \$120.00 to get this software with the idea of moving to the \$500.00 professional software. Willing to send to the Technical Committee for review.

Adjourn

Motion: Judi Ramage (WL7DX) moved and Edward Moses (KL1KL) seconded. 2132

End Notes:

Susan Wood (KL7NN) and Gladys Meacock (KL7JB)

The following letter was presented to the board by Gladys Meacock (KL7JB). 5/15/2005

AARC

Subject: Upgrading of the Ham Radio Location board for the Anchorage Fur Rendezvous Dog Races

From: Susan Wood, NL7NN and Gladys Meacock, KL7JB

The present board now used to track the progress of the dog Mushers has not had an upgrade since the ``80's. It consists of 2 heavy steel panels about 7'by 7' that are bolted to a wooden flatbed provided by the Anchorage Dog Racers Association and is located directly adjacent to the Dog Racers room where official results are kept. This is also the official starting and ending point for the Dog Mushers. Thousands of Fur Rendezvous passersby line 4 th Avenue, view the board and watch the start and end of the Races. I feel that it is one of the showcase events for the AARC due to the sheer number of people that see AARC activities up close.

A control operator and two Hams man the station. The control operator checks in with the 12 checkpoint Hams on the 27 mile trail. (There are 19 checkpoints with 1 becoming 19 on the return until 7 becomes 13) The two hams on the platform with the control operator show the dog mushers progress by magnets on the outlined trail on the board.

The present board needs to be upgraded. It either needs to be changed or sanded, painted and a new map and system for showing the progress of the dog mushers in place. The present system is OK but needs to have a paper trail so that in the event that the control operator is ill, anyone can step in and easily continue the event. A closer working relationship needs to be established with the Dog mushers Association so that they know what we are doing and what our intentions are. Information needs to be a two way street. They spoke repeatedly about how they needed us and thanked us at the 2005 event. Their cell phones were not as effective as planned.

At this time we have no dollar figure for expenses and need direction from the AARC Board with expectations, etc. Then we can do an approximate dollar amount and continue with the planning process.





If you like to **stay in touch on KL7AA news** and other posts of local interest.

Step #1: First point your browser to (click the link below): http://mailman.qth.net/mailman/listinfo/kl7aa

Step #2: On the web page you will see a section titled "Subscribing to KL7AA". 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.

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Working LEO Satellites, KL7XJ



Here **Dale Hershberger**, **KL7XJ** is working SO-50 and AO-51. Dale is the **AMSAT** (http://www.amsat.org)
Representative and can be reached at: **daleh at alaska.net**He is using an HT and Arrow Antenna combo. Dale is an instructor for the NASA Challenger Center in Kenai when not working satellites. He previously provided the program for one of the AARC general meetings.

Information on Low Earth Orbit Satellites at

http://gahleos.obarr.net/



ARES Contact Information

District Emergency Coordinator: Position Vacant

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

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

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N2CQ QRP CONTEST CALENDAR

June 2005

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

Jun 4, 0400z to 0600z

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

QRP TACtical Contest (CW/SSB/PSK) ... QRP Contest!

Jun 4, 1800z to 2359z

Rules: http://www.n3epa.org/Pages/TAC-Contest.htm

Adventure Radio Spartan Sprint (CW) ... QRP Contest!

Jun 7, 0100z to 0300z (First Monday 9 PM EDT)

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

Run For The Bacon (CW) ... QRP Contest!

Jun 20, 0100z to 0300z

Rules: http://fpqrp.com

SP QRP Contest (CW) ... QRP Contest!

Jun 25, 1200z to Jun 26, 1200z

Rules: http://www.sk3bg.se/contest/spgrp.htm

ARRL Field Day (CW/SSB/RTTY)... QRP Category

Jun 25, 1800z to Jun 26, 2100z

Rules: http://www.arrl.org/contests/calendar.html?year=2005

QRP ARCI Milliwatt Field Day (ALL)... QRP Contest!

Jun 25, 1800z to Jun 26, 2100z

Rules: http://www.qrparci.org/contest.htm

QRP BARBERSHOP QUARTET CONTEST (CW QRP)...

QRP Contest!

Jun 29, 9PM to 11PM EDT Rules:

http://www.io.com/~n5fc/barbershop contest.htm

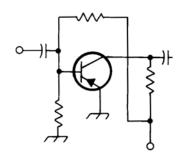
Amateur Radio Emergency Services Weekly Net

Thursdays, 8:00 PM on 147.27/87 103.5Hz

Emergency Response Communicators (ERC) Net

Sunday, 7:30PM on 147.27 Repeater (103.5 tone)

Sunday, 8:30PM on 3.880 MHz HF SSB



qrp kits

The "KD1JV Power and SWR Meter Kit"

The Power and SWR Meter kit, designed by Steve "Melt Solder" Weber KD1JV, is a handy accessory for both station and field use. It is a self contained power meter and SWR indicator for 50 Ohm coaxial transmission lines.

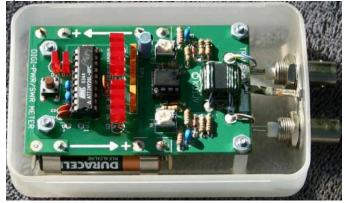
With this device, you can measure the output power of your QRP transmitter and the SWR on the transmission line to your antenna. Frequency coverage is all amateur bands from 160 to 6 meters.

The circuit uses bright LED's to display the power and SWR in binary coded format. This results in a very compact test instrument.

The SWR/Power meter is powered by two internal "AAA" battery cells. The meter automatically powers itself down after a period of inactivity to conserve battery life.

Steve Weber has generously permitted the 4SQRP Group to produce this kit to help fund OzarkCon 2005. Thanks Steve!

Here is the SWR/Power meter built by Joe, WØMQY in a travel soap dish (snap-on cover not shown). The soap dish makes a handy case and has a bit more space than an Altoids tin.



Specifications::160 to 6 meter operating range 9.9 Watt and 990 mW power scales Peak hold mode (9.9 watt scale only) 1:1 to 9.9:1 VSWR scale Accuracy 5% of reading Sensitivity, 20 mW minimum Manual and auto power shut off Self contained, fits in Altoids tin Two digit BCD encoded display Single push button operation Powered by 2 "AAA" batteries Ideal for portable and field use

What you get: You will receive the PC board, all board mounted parts and the instruction / operation manual. The builder will need to provide the enclosure, antenna connectors of your choice and the batteries.

Price: \$26.00 post paid to any location in the USA.

More Info at:

http://4sqrp.com/kits/swr_pwr/swr_pwr.htm
Downloadable manual is available on this site.



A Sense of Wonder

Why I build. Why
I bother.
Ron D'Eau

Claire

Ron, AC7AC, is a QRP acquaintance

of mine. I have been reading Ron's posts and occasionally communicating with him on various issues. I liked what he had to say about a sense of wonder and share it with you. Jim. AL7FS

In the years before television, our family enjoyed something that was attractive enough to pull me away from my Philmore crystal set with its finicky "cats whisker" that had to be set just right to hear the whisper of broadcast stations in my headphones. Our whole family would visit a large railway station a few miles away. My older brother, Mom, Dad and I spent many happy warm summer evenings there on the station platform watching the steam locomotives chugging back and forth along sidings assembling cars into trains. The ballet of moving rail cars was interrupted from time to time by a passenger train arriving at the platform, the car windows filled with the faces of travelers arriving from a distant city.

To this kid, watching one of those huge steam locomotives hauling a long train clanking, chugging and blowing off steam as it stopped only a few feet away from me was almost as exhilarating as snagging clear-channel radio station KFI on my Philmore late at night.

Almost. I guess that's why I ended up in electronics instead of working on the railroad.

Technology has given me many great tools. There's a lot that I can see on TV that expands my world. There's even more on the World-Wide Web. Still, those appliances tend to isolate me from the real world. It's the difference between driving my MGA roadster and cruising along in an air-conditioned, sound-insulated luxury car. The modern car may offer greater convenience and comfort, but it does so at the cost of isolating me from the world outside.

There's more than nostalgia or the necessity of saving money

in tinkering with homebrew designs and assembling kits. It's a search for a balanced life in which we make time to experience things that interest us "up close and personal". It's coaxing an unlikely collection of parts into herding electrons around so we can pick up the movement of a telegraph key or the sounds of a voice from a distant place.

It's a sense of "wonder" - like seeing that giant steam locomotive roll to a stop next to me all those years ago.

How can a person be healthy without experiencing a sense of "wonder" every day?

Ron AC7AC

June ARRL VHF QSO Contest

The June ARRL VHF QSO Contest will be a week after the next AARC meeting so this should give folks time to think about participating. VHF contesting has never gained popularity in Alaska, but it does make for a great scheduled time for some "weak-signal/VHF-DX" activity. June is a nice time of the year for car travel/hiking and perhaps we can encourage a couple folks to become VHF-Up Rovers. VHF-Up Roving has taken hold in the lower-48 in a big way! Lots of fun for weak-signal operating and exercising a little friendly competition J BTW, I would think this activity would be attractive to the QRP bunch...very similar type of operating!

Ed Cole, KL7UW my e-mail is <u>kl7uw@amsat.org</u>

Free advice for Portable Operators http://pwl.netcom.com/~n7cfo/portadv.htm

Free advice for rovers

http://pwl.netcom.com/~n7cfo/advice.htm

Call for Volunteers 2005 Mayor's Midnight Sun Marathon

June 18, 2005

John Lynn, KL7CY, is calling for volunteers to staff the Mayor's Midnight Sun Marathon. He can be contacted at Telephone 907-337-1091

Email johnlynn@gci.net or KL7CY@arrl.net



What Walkie-Talkie should you use to operate the LEO Amateur satellites?

By Dan O'Barr, KL7DR dan@obarr.net http://gahleos.obarr.net

The Kenwood TH-D7A (G) is by far the best over all hand held ever made to work the LEO FM voice and digital Amateur satellites. It is the only currently produced HT that does full-duplex well, and it will also do APRS and packet with its built in TNC. However, it's not without its issues. Mainly, it is very delicate, doesn't stand up to rough handling and Alaska's climate very well, and it is extremely difficult to program. It also has the nasty little SMA antenna connector, poor battery life, and doesn't have dual receive in one band. I can't remember if it's VHF or UHF, but that's the main reason I sold the last one I had.

The ICOM IC-W32A is a full-duplex rig, but its 2-meter transmitter de-senses its 440 receiver, (the main reason I sold the last 4 I've had). So, it doesn't work the birds in full-duplex very well. For semi-duplex, my all time favorite is the Yaesu VX-7R. I have tried most of the currently produced bunch, and I've had mixed, but mostly good results with the Kenwood TH-F6A and TH-G71A, Yaesu VX-5R, and Alinco DJ-596TMKII and DJ-V5TH. I haven't tried Yaesu's FT-60 and VX-6, or ICOM's IC-T7H and IC-T90A yet.

There are three older HTs (no longer made), that are really good for voice on the FM birds. They are the ICOM IC-W31, Yaesu FT-51, and the Kenwood TH-78. But like the Kenwood TH-D7A (G) they all are very delicate and finding one in good shape is nearly impossible. They all do full duplex very well, have BNC antenna connectors, and you can buy extra large batteries for them. There are some even older models like the Yaesu FT-530, ICOM T-8A, and the Alinco DJ-580 that are good RF wise and work the birds quite well, but they are very awkward to operate. Most of the real old dual-band HTs are narrow banded and tuned for the 440 to 450 MHz area, so they lack the sensitivity in the 435 to 436 MHz area, necessary to hear the satellites' weak downlink signals.

In my opinion, the perfect single hand held rig for working the LEO FM voice and digital Amateur satellites, would have a good full-duplex RF section and TNC like the Kenwood TH-D7A, but would also have the toughness and features of the Yaesu VX-7R, but also have a BNC antenna connector. Some of the features I like most about the VX-7 are; good battery life, the dual receiver V+U, V+V, and U+U (not needed for sat operation, but I like it), and for us old geezers, it's easier than

others to program, has very loud receive audio, an easy to read display, and most of all—it's very tough and water PROOF.

Keep in mind that my favorite way to operate the Amateur birds is in full duplex. That way, you can hear your own downlink signal and optimize on it, so you can hear the other operators better when you release your PTT. Also, any 2 meter radio with CTCSS tones will work as an uplink transmitter with almost any antenna, including some rubber duckies. All of the radios discussed above, any handheld scanner, and most of the newer Amateur HTs that receive 435 and 436 MHz will work as a downlink receiver for full-duplex operation. That's the way I did it for a long time before Arrow came out with their duplexer. I still prefer to use 2 radios when I'm doing a demonstration. I have used an ICOM IC-T2HSPORT for uplink and an ADI AT-400HP as a downlink so those watching can hear both sides of the QSO. These radios only cost about \$100 each and work better than a single radio. If you use the Arrow antenna with two radios (one for each band), you don't need the duplexer, which saves you some money, and because the duplexer has significant loss on UHF, you can hear the birds better without it.



Alaska State Defense Force Demos Ham Radio in Glenallen

Craig Bledsoe, KL4E

This is a brief summary of the 49th MP Brigade's Communications deployment to Glennallen, Alaska from 05 May 05 to 07 May 05. We conducted eleven satellite communications demonstrations on AO-51 and SO-50 across Alaska, Canada, and the Lower 48, and we trained one local Amateur Radio operator, Richard Lampe, KL1DA, in satellite procedures. We had full-time VoIP contact with ASDF HQ (WO1 Amanda Isakson), Juneau's 1st BN (MAJ Wayne Longacre, KL0XT - both on satellite and eQSO), Camp Denali (WO1 Rick Renaud), and CPT O'Barr's (KL7DR) base network in Wasilla. We provided numerous briefings on the ASDF and its communications capabilities to visitors ranging from state and federal dignitaries to hordes of school children (many of whom want to join the ASDF when they grow up!)

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Past AARC President, Jim Tvrdy, KL7CDG, and past AARC Secretary, Liz Tvrdy enjoy breakfast at the regular Thursday ham breakfast. (Thursdays Brunch, 10:00 AM: Brunch at Lily's on Tudor Road just East of Tony Romas.



Thanks for all those who came out to assist the Gold Nugget Triathlon and the Walk for Hope.

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Heather Hasper, KL7SP









VALLEY HAMFEST [MARA-THON] 21 MAY 2005 HAMFEST PRIZE RESULTS:

YOU HAD TO BE THERE!

MAIN PRIZE RANDY VALLEE, KL7Z \$300 GIFT CERTIF

PURCHASED FROM HAM RADIO OUTLET.

TED WALDEN, KL1HY \$25 GIFT CERTIF FROM NORTHERN MIST GIFTS.

DAVID GEHRING, KL1TN ARRL HANDBOOK FROM MIKE KL7BK.

STEVE BLACKETT, AL1X \$23 GIFT CERTIF FROM UPS STORE.

PAT WARBER, KL1UW 5 GIFT CERTIF FROM THE 1 CAFÉ / MACSTORE.

TOM RUTIGLIANO, NL7TZ UTILITY TOOL FROM OBARR'S A TECH SERVICES.

RICHARD LAMPE, KL1DA RC MOTORCYCLE FROM RADIO SHACK.

OTHER DOOR PRIZES DONATED BUT NOT DRAWN AT HAMFEST TO BE AWARDED AT ANY OF OUR REGULAR MARA MEMBERSHIP MEETINGS =

2M WHIP ANTENNA FROM STEVE TOLLEY KL7FZ.

CAP & CERTIF TO EMBROIDER BY HEADQUATERS EMBROIDERY.

GIFT CERTIFS FROM MOOSETRAX ELECTRONICS.

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BZZZT!Jim Wiley, KL7CC

Ahh spring - the time when a young man's fancy turns to things other than radio, flowers begin to bloom, and birds and power lines break out in song! Its that last part that's the problem - power line problems that have been dormant during the winter seem to come out all at once in the spring, and can drive a ham batty all summer long.

This article is going to be rather lengthy, so grab some coffee and sit down.

So, how do you identify the trouble, and once identified, what do you do about it? Well, first off, let's remember that power lines (in fact any electrical circuit) should be considered very hazardous - do not attempt to repair problems yourself. Get a professional! That being said, the first thing to do is identify the problem. Many instances of "power line noise" are not from power lines at all, but other sources. For example, famous candidates are defective thermostats on electric blankets, aquariums, and home heating systems. problem areas include brush-type motors (mixers, electric drills, sewing machines, etc.) - plus fluorescent lights, SCR type light dimmers, neon signs, "smoke-eaters", cash registers, and oil burners. Some types of interference come not from "sparking" devices, but from RF sources that sound like arcing, such as "touch- control" lamp dimmers, TV set horizontal oscillator harmonics, medical and industrial RF heating devices, and so on.

Step 1 - Is the noise intermittent or continuous? If the noise is intermittent, coming on for a few (or several) seconds once in a while (several minutes to perhaps an hour between cycles), it probably is a defective thermostat, oil burner, or similar on-off controlled device. If the noise exhibits a "whining" characteristic, particularly if it changes up and down in pitch, then it probably comes from an electric motor. If the noise is found every 16 KHz or so across the band, it is from a TV horizontal oscillator, whereas if the interference is found every 50 to 150 KHz, particularly if it drifts slowly up or down the band, it is likely to come from a "touch control" dimmer. Defective advertising signs show up as a BZZT - BZZT -BZZT - BZZT on a regular cycle, usually from 1 to 10 seconds in duration as the sign makes shifts from one lighted pattern to another. Cash registers sound like signs, but cycle in an irregular manner, and of course stop once the particular sales slip is completed. True power line noise is different in duration and sound - typically it lasts for several minutes to hours, and is affected by wind or rain (makes it better or worse). Primary (high voltage) leakage often has a "singing" or "whistling" sound (listen on AM mode), as parasitic capacitance causes each arc to "hit" several times on the positive and negative peak of the 60 Hz cycle. If you have a scope attached to your set, power line problems are easily separated from other problems by the type of display they present. Power line (and other) noise often is better (or worse) on some bands as opposed to others. This effect is caused by

natural resonances in the "antenna" connected to the interfering device.

Step 2 - How to find the problem. First, try to get some indication of direction by pointing a beam antenna at or away from the source and noting the relative strength. If you have other hams nearby (within a few blocks) ask them if they are having problems too. Power line problems can cover up to 1 mile (occasionally more), most other problems are limited to several hundred feet. If you are the only one bothered, the problem is almost certainly very close at hand. If others hear the problem, see if everyone gets it from the same or different directions. If you are lucky, you will be able to do some rough triangulation to narrow down the search. Use a DF loop if you have one - even a modest DF loop will often lead you directly to the house or power pole with the problem. A standard AM transistor radio makes a good tool for some problems, the ferrite "loopstick" antenna in the set is basically a loop antenna, and will give peaks and nulls as the set is rotated. Experiment first to see how the set performs on a known signal, preferably one from some distance away. Try driving around the suspect area in your car, using the broadcast AM radio (tuned off station) to hear the noise. When you are really close, the noise will come in loud and clear on almost anything! Once you have found the problem, now you have to get it corrected.

Step 3 - Correcting the situation. If the source of your interference turns out to be a power line, then your problem is basically solved. Call the power company (Chugach or ML&P, as applicable) and let them know what you have found. The utilities are very good about helping, and they give fairly rapid response. Typical response from Chugach is 3 or 4 working days - if you have the problem localized! Do try to get the source at least approximately located, however. The power utilities have other priorities, and frankly, RFI complaints are not high on their list. If you can give them a well defined search area or even a particular pole or line segment, then they become much more interested in helping correct problems. Basically, the power companies have some RFI location gear, but their personnel are not well trained in it's use, and for most HF type interference it isn't even the best tool to use.

If, however, the source of the interference is not a power line, but in another persons home or a commercial business, then things can become more difficult. It often takes considerable persuasion before a business owner will have a defective sign serviced (costs money, you know) or a filter installed on a cash register.

Isolating problems in private buildings can be complex. Occasionally a business owner or home owner will let you temporarily turn off the building power at the main breaker, but this is rare. Of course, if they do let you make the test, and the interference stops as soon as you open the switch, it is a pretty convincing demonstration. Caution - for large commercial buildings, have this test done only by a licensed electrician - there can be complications in stopping and starting large commercial loads. Another complication: Many

times the interference will not begin again immediately as soon as power is restored. The problem is frequently caused by something that is heat sensitive, and it make take several minutes for the device to start causing problems, even if power is interrupted for only a few seconds.

Homeowners are even worse - after all they aren't having any problem (usually) and they usually couldn't care less about ham radio. In fact, some are downright antagonistic!

In each case, you need to use tact, and point out the following facts: (1) Defective electrical devices are a proven fire hazard. All that arcing causes heat, and the arcing itself further wears the defective part, making the problem worse. Eventually the item will fail, hopefully not disastrously, but why take the chance? (2) Interference is definitely under the jurisdiction of the FCC, who has the power to force the owner of the interfering device to correct the problem, and can levy fines if the owner fails to act. (3) Defective appliances, signs, etc. all waste electricity - and in these times who has money to throw down the drain? (4) If the device is producing RF interference (as opposed to arcing type interference) often installing a line filter can correct the problem - and see (2) above.

Many hams have a line filter or two to use for testing, and frequently installing one of these can correct (or reduce to tolerable levels) thermostat and small motor type problems. Electrical appliances, particularly in commercial applications, should be repaired or serviced by experienced electricians.

Unfortunately, most professional electricians have little or no knowledge of RF interference problems or how to cure them. Therefore, you may find yourself in the position of advising the expert, so to speak. Most electricians will gladly accept help and advice if you don't become pushy or try to show them up. Correcting these problems often requires coordination between the ham, the owner of the interfering device, and the service person.

The ARRL handbook is a good source of additional material on this subject, as are the few books specializing in interference location and elimination. It would be a good investment for any ham to have such a book as part of his or her permanent collection.

Eventually, one or more of these methods will succeed, and you will be rewarded with truly quiet, low noise listening. If you have never operated from a quiet location, you have a treat coming. I try my best to track down each problem as it comes up, and the results are nothing short of amazing! Many times I have been asked how it was I was working some DX station that another ham only a few miles away couldn't even hear - and the only difference was that my noise level was zero, or nearly so, and the other guy was trying to listen through a S-3 noise level.



Data You Can Use:

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News Letter Submissions, Information or corrections:

Submissions must be received 2 weeks before meeting

Email: JimLarsen2002 (at) alaska.net

Mail: 3445 Spinnaker Drive, Anchorage 99516

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 autopatch, 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-a/o Mar05

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

**443.3/448.3, 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

VE Testing in the Valley

Valley VE testing sessions will be held at the Wasilla Red Cross at 7 pm on the fourth Saturday of each month unless it is a major holiday weekend. The address is 262 E Nelson St in Wasilla. Nelson Street is the extension of Bogard to the west from Main Street/Wasilla Fishhook, and the Red Cross is on the south side of Nelson about halfway from Main to Lucille. (eff. 9.25.04)

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
Practice Exams: http://www.AA9PW.com/
Fairbanks AARC: http://www.kl7kc.com/
Yukon Amateur Radio Association:
http://www.klondike.com/yara/index.html
Links for Homebrewers & QRPers
http://www.amqrp.org/misc/links.html

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 at alaska.net.

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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 at 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, 10:00 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 TJ Sheffield – KL7TS: kl7ts at arrl.net HM: 248-3864 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 at 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 Or pay membership renewals?

Fred Erickson KL7FE 12531 Alpine Dr Anchorage, AK 99516-3121 frederickson (at) iname.com Phone number: 345-2181

Annual Dues are \$12 (prorated as appropriate) Additional Member in same household is \$6 Full Time Student is no charge Ask about Life Memberships **Anchorage Amateur Radio Club, Inc** Post Office Box 101987

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