Anchorage Amateur Radio Club
Next Meeting November 5th

November Program
Craig Bledsoe, KL4E

Amateur Satellites
AL7EB, Ed Cole, will provide a presentation on the current status of our amateur satellite program and future planned activities of AMSAT.

The Cold, Hard Facts:
Preventing Hypothermia
By Dr. Bob Armstrong, N7XJ
The ARS Sojourner

It's a beautiful weekend. You decide to take the "little rig" and climb to the summit of a nearby mountain. A breeze is blowing, and a very light rain begins to fall.

It's cool, but comfortable. You put up an antenna and settle back against a granite boulder to operate for a few hours. Or perhaps you're at the beach, or building a snow cave for a winter operating adventure in sub zero weather.

What do these situations have in common? They may put you at substantial risk for heat loss injury, also called hypothermia!

WHAT IS HYPOTHERMIA?

As warm-blooded creatures, we must maintain our body heat much higher than the ambient temperature. Even on a warm day, you can suffer serious injury due to loss of body heat.

By definition, hypothermia is the loss of two degrees Centigrade (about 3.5 degrees Fahrenheit) of core body temperature. Signs of mild hypothermia are first seen when the body core temperature drops to 96.8 F.

Muscle tone increases, blood pressure becomes elevated and the metabolic rate climbs. At 95 F shivering reaches its maximum. When the core temperature falls to 93 F a person will become confused or irritable, and will stagger and have slurred speech. His memory and judgement will be poor. He might undress himself or fail to perform simple essential tasks of survival.

More extensive heat loss injury can be fatal. "Moderate" hypothermia begins with loss of consciousness (90 F) and hypothermia is "severe" when reflexes and response to pain are completely absent (80 F) and the victim appears to be dead. A few lucky individuals have survived core temperatures as low as 60 F, but such events are rare.

WHO IS AT RISK?

The elderly and the very young, and those with poor health are at highest risk for heat loss injury. Diabetics and those with neurologic illness are more severely affected. Fatigue, sleep deprivation and dehydration increase the risk of heat loss injury, as do alcohol and sedative medications.

Acclimatization to the cold does NOT help protect against heat loss injury. It's good to be in excellent physical condition, but knowledge and preparation is far more important.

MECHANISMS OF HEAT LOSS

Understanding the four ways heat is lost from the body will help you prevent hypothermia:

Radiation: This is the simple "giving up" of heat to a cooler environment. Decreasing the amount of skin you allow to be exposed to the environment will help limit this loss. Pay special attention to your neck and head where blood vessels do not contract in response to cold. Wearing a hat and a scarf is essential!

Conduction: Heat will be conducted away from your body when you expose it to cooler objects, such as rocks, pavement, metal, water and snow. Minimize this loss by putting an insulator such as a chair, a sleeping pad, a wet suit, gloves and insulated boots between you and the things you touch.

Wearing wet clothing will increase your conductive heat loss by five times or more. Direct exposure to water increases your heat loss twenty-five times or more!

Convection: This is heat loss due to wind or movement. Your body radiates heat that remains nearby and surrounds you like a blanket. Wind and movement disperse this "heat shield". Putting up a shelter against the wind and wearing layers of loose clothing can help conserve your radiated heat.

Evaporation: This is by far the most important heat loss mechanism. It takes a tremendous amount of body heat to dry you by converting the sweat, water, or snow on your skin to water vapor. "Get dry!" and "stay dry!" is the best way to preserve your body temperature. Incidentally, you're much better off drinking water from an icy stream than eating snow because of the amount of body heat required to convert snow to water inside you.
CLOTHING

Dressing wisely is important to keep you safe and comfortable in the wilderness. You should think about heat regulation whenever you do something more strenuous than walk in the park. The hard work of climbing, snowshoeing, carrying a pack, or digging a snow cave will cause your body to generate an excess of heat that must be disbursed. Sweating is the result, but the moisture on your skin will cause rapid heat loss when you stop moving.

The Eskimos put it simply: in very cold weather "if you sweat, you die." Your clothing should be quickly adaptable to get rid of heat when exercising and to conserve it when you rest.

It is essential to stay dry! Some military units have soldiers strip off clothing to the skin while they dig snow caves, and then immediately put on dry clothing when the work is done.

It is helpful to think of your clothing in three functional layers:

Undergarments: These should provide insulation and be able to "wick" sweat away your skin. Snug fitting underwear that maximize contact with the skin are best.

A material such as polypropylene that "wicks" well but conducts heat poorly is ideal. A bit of Lyca adds some stretch for a snug fit.

Outer garments: Wear multiple layers of loose fitting clothing. Buttons or Velcro closures around sleeves, cuffs, waist and other openings will allow air movement to get rid of extra heat while you exercise. Quickly close up your sleeves etc. to maintain your body heat when you stop moving.

Cotton is a poor choice of material for outer garments. It absorbs moisture quickly, but loses up to 90% of it's value as an insulator when wet. Wool is a good insulator and can absorb a great deal of water without losing it's properties, but it dries very slowly. Goose down is a superb insulator, but it compresses and works very poorly when wet.

Thinsulate is a new, lightweight synthetic material that has excellent insulation properties and works well even when it's wet.

Protective outer garments: These should be made of tough, non-porous material such as nylon or one of the new polymers to keep out wind, rain or snow.

USE YOUR HEAD!

Heat loss injuries have been devastating to armies and civilians throughout history.

In modern times, knowledgeable outdoorsmen with average physical conditioning can survive and be comfortable over long periods of exposure to subzero weather.

Plan your hikes and adventures and give careful thought to heat regulation. Watch your companions for signs of heat loss injury and provide warmth and shelter for them immediately if they begin to shiver or show other symptoms of heat loss.

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Dr. Bob Armstrong, N7XJ, an avid outdoorsman, QRPer and practicing physician living in Manti, UT, is health and fitness editor of The ARS Sojourner.

With permission, reprinted from The ARS Sojourner, the monthly on-line magazine of the Adventure Radio Society: 
www.ARSqrp.com

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 Gahleo Group Moderator
Dan O'Barr, KL7DR
Wasilla, AK
KL7DR@ARRL.net

(Uniform)

Anchorage Amateur Radio Club Board Meeting, October 19, 2004

The AARC Board met Tuesday, October 19, 2004 at Hope Community Resources Administrative Building, 540 West International Airport Road. In attendance were Treasurer Steve Jensen, KL0VZ, Secretary Philip Mannie, KL0QW and Directors Richard Block, KL7RLB, Jim Wiley, KL7CC, Steve Gehring, NL7W, George Wilkinson, KL1JJ, Mike O'Keefe, KL7MD, Jim Tvrdy, KL7CDG and Judi Ramage, WL7DX. Visitors present were Heather Hasper, KL7SP and TJ Sheffield, KL7TS.

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

Visitors' Forum
KL7ARC Grant
Heather Hasper reported on the completed installation of rotor control and coax cable at the Anchorage Red Cross station and presented the Club with a plaque of appreciation.

Reports
Secretary
Minutes of the September Board meeting meeting were approved.

Election Committee
Philip Mannie reported for the committee. Ballots were mailed and we are awaiting their return by October 31.
Treasurer
Steve Jensen submitted a written report. He went on to say that the 2003 tax report was complete and 2003 taxes on restaurant income have been paid along with a deposit for 2004 taxes. The restaurant has produced some $10,000 income so far this year and the $8,000 had been deposited in the gaming account.

In August the Club received a letter from the Alaska Revenue Department Auditor questioning three expenses: Club coats, $5,000 to general fund to correct a previous error of restaurant income going to gaming account and $56,000 to CCV operating fund. Steve has conferred with the Club accountant and legal counsel on these matters and reports that the Club attorney was confident that all three issues would be resolved in our favor. We will need to document the homeland security, emergency and public service value of the CCV, and get the Club accountant to document the size of the CCV operating fund. While the Club has a letter establishing the purpose of the fund, we may also need to amend the Bylaws to clarify how the fund is to be used.

Jim Wiley suggested that the Board advise the membership of the situation and moved a $2,500 appropriation to cover legal and accounting costs between now and the November general meeting. The motion passed.

Gaming
There was no formal report.

ARES
Philip Mannie reported on ARES activities. The EOC training session has been postponed due to IT work at the EOC. The Jamboree on the Air activity was also cancelled. It was suggested that this event could be of great value to the Club and that someone from the Club or ARES volunteer to manage it next year.

VEC
Jim Wiley reported that the VEC was operating normally.

Old Business
Mt. Susitna Repeater
Jim Wiley reported on problems with the UHF side of the repeater. It is his opinion that both UHF transmitters have failed. He suggested that the Grubstake UHF radios be rechanneled and installed at Susitna while the failed radios are repaired under warranty and rechanneled for Grubstake. He expects the new radios can be installed in the next couple of weeks.

Grubstake Repeater
Jim Wiley reported that most of the equipment of Grubstake is here.

Alternate Gaming Coordinator
Joe Quickel, KL1OL, has been suggested for this position.

Steve Jensen reported that the forms were being reviewed by legal counsel prior to submission.

Garage
Mike O'Keefe reported that repairs to the lights were partially complete and that the service plugs would also be repaired. A proposal for a roof for the trailer storage area is in preparation. Steve Jensen suggested Mike Anderson at USKH for engineering consultation. Jim Wiley suggested that the structure be configured in such a way that we can take it with us at the conclusion of our tenancy if possible.

VE Software
Jim Wiley reported that he has a preliminary idea of costs associated with the maintenance contract.

2005-2006 Operating Budget
Richard Block moved acceptance of the 2005-2006 Operating Budget. The motion passed.

Capital Expense Budget
Richard Block suggested that a Capital Expense Committee propose a budget for the Board's consideration. The committee will consist of Jim Tvrdy, Jim Wiley, Richard Block, TJ Sheffield, Steve Gehring and Philip Mannie.

New Business
Call Approvals
The Board approved the use of the KL7AA call for the November Sweepstakes ARES project. Contest logs will be submitted to the Trustee.

Repeater Spares
Jim Wiley suggested that shelf spares be acquired for the Susitna and Grubstake repeaters at a cost of about $6,000, and that an additional $4,300 in spare duplexers, filters, isolators and other equipment be acquired. Richard Block moved that a proposal of up to $6,000 be approved for presentation to the membership. The motion was approved. Dick also moved that the additional $4,300 be approved for presentation to the membership; this motion also passed.

Repeater Extenders
Jim Wiley suggested that the Club fund six 'repeater extenders', cross band transceivers built on DR-605 radios to listen to Susitna on UHF and retransmit on VHF, at a cost of about $8,000. George Wilkinson requested a coverage plan. Jim will prepare a plan for next month's meeting.

Pt. MacKenzie
Mike O'Keefe reported that nothing was being done at this time to remove our equipment from the old Pt. MacKenzie tower.

December Meeting and Christmas Party
There will be a December general membership meeting, Friday, December 3, 2004. Judi Ramage has made reservations for the Christmas party December 10 at the South Royal Fork.
Garage Tower
Jim Wiley will report next month on expected costs to erect a tower at the garage facility.

Conex Cleanout
Craig Bledsoe, KL4E has expressed an interest in some of the surplus items from the Conex. Jim Larsen is still seeking volunteers for the clean out.

License Class for CAP
Mike O'Keefe proposed a Technician license class for the CAP, tentatively scheduled some time after the New Year. The cost would be $30 per student and the Club would supply instructors. The Club may need to advance funds for course material.

QSL Manager
The Board recommended that Corliss Kimmel, AL1G, be contacted to see if arrangements can be made to use her QSL manager for Club QSLs.

Honorary Memberships for Charter Members
Jim Tvrdy proposed that surviving KL7AA Charter members receive honorary life memberships. The motion was approved.

UAA Amateur Radio Class
Heather Hasper reported that she had been approached by UAA to teach a remote Technician license class.

There being no further business the meeting was adjourned at 9:25 PM.

Respectfully submitted by Philip Mannie, Secretary.

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 Denny's (in the back room) on DeBarr near Bragaw. Contact is Jim Larsen, AL7FS, JimLarsen2002@alaska.net or 345-3190.

Emergency Response Communicators (ERC) Net
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

QRP Mail Reflector
Subscribing to the QRP Mail Reflector is about the same as for the KL7AA list. This is the list used to stay in touch with other low power operators. Just go to:
http://mailman.qth.net/mailman/listinfo/qrp-l
and follow the steps.
Alaska CW Net (ACWN)

Alaska CW Net (ACWN) still maintains a daily traffic watch on 3540, 7042 and 14050 Khz...from Fairbanks. ACWN is a registered ARRL Section Net in Alaska.

Starting at about 0100Z every evening, AL7N in Fairbanks maintains traffic watch simultaneously and as continuously as possible on all three frequencies, until the following morning about 1600Z. 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

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

An excellent resource for understanding BPL can be found at:

http://www.qrpis.org/~k3ng/bpl.html
and also at:
http://www.arrl.org/tis/info/HTML/plc/

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Technical Specifications

New Mount Susitna Repeater System

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

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.

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Volunteers are what makes the Club Successful

Here is a good example of the hard work some of our members do for the club. I want to encourage all of you to be involved. Volunteer to help. We still have lots to do with ARES kits as an example.

Thank you, Mike O'Keefe - KL7MD, Heather Hasper - KL7SP and Jim Wiley – KL7CC. The generator cover looks great.

73, Jim
Jim Larsen, AL7FS
President, AARC
Data You Can Use:

Officers
President: Jim Larsen, AL7FS
Vice President: Randy Vallee, KL7Z
Secretary: Phil Mannie, KLOQW
Treasurer: Steve Jensen, KLOVZ
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 Reflectors: 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

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, SCR & 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)

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

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
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.

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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.

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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.

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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 Debar & 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 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
Annual Dues are $12 (prorated as appropriate) Additional Member in same household is $6
Full Time Student is no charge
A fine example of Manhattan Construction (built on blank PC board) – 20 meter CW transceiver by Jim Kortge, K8IQY (picture taken by AL7FS at 2004 ARRL Pacificon Convention)