The Anchorage Amateur Radio Club News

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

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# Volume 35 No. 8: August 2006 Anchorage Amateur Radio Club

Next Meeting August 4th



KL7AA.org is now operational as

http://www.kl7aa.net

### **August Program** Mike O'Keefe, KL7MD

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John Ramsey from the American Red Cross and Mike O'Keefe will be talking about the amateur radio operator's role in the case of a natural disaster like a 9.6 earthquake. We'll be discussing how AARC and ARES fit in to the EOC emergency plan in regards to assisting the ARC and the congregate care facilities.



## **ALASKA QSL Forwarding Service**

Due to the cost of envelopes and labels, I'll have to raise the cost of mailing the QSL cards to \$0.12 per card on the first of May (individual's money already deposited will still be used at the \$0.10 rate until depleted). This will also allow me to cut the quantity of cards in an envelope to seven instead of ten, thus cutting down storage time.

In the past month I have forwarded close to 250 QSL cards directly to the countries of Japan, Germany, Russia, United Kingdom, Canada and Serbia.

Taking the cue from the AARL Outgoing QSL Service, please sort your cards as follows: Alphabetically by parent call sign prefix (AP, C6, CE, DL, ES, EZ, F, G, JA (JB, JC, JD), LY, PY, UN, YL, 5N, 9Y and so on). Canadian and Australian cards should be sorted by numerical callsign (VE1, VE2, VE3 & VK1, VK2, VK3 etc). NOTE: Some countries have a parent prefix and use

additional prefixes, i.e. G (parent prefix) = M, 2E, 2I, 2M, 2W. Since my file is in Numerical/Alpha order, you can put the numbered prefix first, and please sort the cards as stated above though.

By combining all our individual country QSL cards I can make up a small package to send to the QSL Bureaus thus creating a savings and cutting down the delay time in receiving a return card. Remember the more people that use this QSL forwarding service, the cheaper it will become. -- Jim KL7CDG

# Ham Radio Classes **Now Forming**

As a Licensed Ham Radio Operator You Get To: Serve Your Community Talk To Other Hams On The Radio Meet New Friends Have Your Own Individual Callsign



The Anchorage Amateur Radio Club will be holding a 4 week course where YOU will learn everything you need to earn your entry level FCC Amateur Radio license and begin to talk on the radio with other hams in the area.



Classes Begin on September 18<sup>th</sup> at 6:30 PM. Registration is required (to order materials) For more information please contact: Kathy O'Keefe, KL7KO, 907-243-4675 kok@woodscross.net

WHEN: Monday & Wednesday Evenings (6:30 - 9:00PM) September 25 - October 18, 2006 (8 Sessions)

WHERE: American Red Cross of Alaska, Anchorage Office 235 E 8th Avenue, Anchorage, AK



Alaska QRP Club meets the Third Friday of every month -7:00PM (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, Jim@AL7FS.us or 345-3190.

#### **Technical Topics** Submitted by Steve Gehring, NL7W **Procedures for firing up a 4CX1000A Amplifier Tube**

At 02:04 PM July 17,2006, Steve Gehring wrote:

>A friend is selling a nice 30S-1 with a (New Old Stock)NOS tube soon; he's wondering what the procedure is for firing up this tube that's never had RF applied to it.

>Could someone pass on a prudent method for turning up this new tube?

>Thanks and 73.

>Steve Gehring, NL7W

From: Alek Petkovic [mailto:vk6apk@eon.net.au] Sent: Monday, July 17, 2006 1:28 AM To: Steve Gehring

Subject: Re: [Amps] **Procedure for firing up NOS** 4CX1000A in a 30S-1?

G'day Steve,

Are you ready for some fun?

In Australia, when confronted with this sort of situation, we use the following procedure.

1. Have plenty of cold beer on hand.

- 2. Invite all the local hams around.
- 3. Get yourself a broomstick.
- 4. Get everybody drinking.
- 5. Draw straws for who gets to use the broomstick.
- 6. Turn off the AC mainswitch at the main board.
- 7. Plug the amplifier into a power outlet.

8. Turn on the amplifier's switch and the power outlet switch.

9. Get everybody another beer and get them outside to where the main board is.

10. Turn on mainswitch with the broomstick.

11. Everybody cheers when they hear the bang coming from the vicinity of the shack.

12. Start up generator and plug in some lights and fridge to keep the beer cold.

13. Light up the barbecue and wait for the power company linesman to come and replace the pole fuse.14. etc etc etc.

73 from cold but sunny Perth, Alek. VK6APK

## Trivia Technical Question

submitted by Neil Thalaker, KL7BGZ

VSWR is the ratio of two impedances: the ratio of two voltages? the ratio of two currents? the ratio of forward and reflected power? (Answer later in NL)



#### MARA Grant Request Submitted July 2006 Recommended for Membership Approval by AARC Board on July 18,2006

The AARC Board of Directors reviewed and discussed a grant request from the Matenuska Amateur Radio Association at its July 18<sup>th</sup> meeting. The MARA President, Vice President and the MARA Grant Project Leader all attended and presented their request to the Board. The Board felt this was a worthwhile project and voted to pass this to our membership for approval.

Below are some of the details to help members understand more fully what the request entails. The grant request will be put to the membership at the August 4<sup>th</sup> meetings. MARA representatives will be there to answer questions.

Matanuska Amateur Radio Association, Inc. (MARA) Mobile Communications Center Grant Proposal

#### Purpose

The Matanuska Amateur Radio Association (MARA) is applying for grant **funds to be utilized for the construction of a non motorized "Mobile Communication Center".** 

#### **Grant Project Contacts**

Richard Plack, KL7DY Phone: 907-745-5222

Michael Heusser, KL7SG Phone: 907-746-3031

Tom Rutigliano, NL7TZ Phone: 907-376-2857

## **Project Description**

After another year of community support activities, MARA and its general membership, has decided to seek an estimated \$16,000 grant to improve its ability to serve the public interests of the residents of the Matanuska Borough and the State of Alaska.

MARA proposes to build a mobile communications center, comprised of an 8 foot wide by 16 to 20 foot long enclosed trailer. Inside the trailer will be three operator positions, heat for winter operation, and miscellaneous electrical items required for operation. Collapsible antenna masts will be attached to outside of the trailer.

Primary power for the communications center will be a bank of four 12 VDC batteries. A 45 Amp power converter/battery charger will maintain the battery charge. Long term power will be supplied by a small 120 VAC gasoline generator set. In the event fuel can't be located for the generator set, the tow vehicle alternator can alternately supply power. During battery operations, a small static inverter will supply power for laptop computers and other items requiring 120 VAC.

**Operators will supply their own radio gear for use inside of the communications center.** Each operator position will have 12 VDC, 120 VAC and UHF/VHF antenna connections available. One position will have HF antenna connections available.

Depending on the operating site, VHF/UHF omni directional or Yagis directional antennas will be utilized. VHF band pass filters can be installed in the communications center to allow for simultaneous operation of two VHF transceivers. HF operations will utilize a G5RV type dipole antenna with an antenna tuner.

Internal lighting will be operated from 12 VDC or 120 VAC as dictated by available power.

#### **Project Schedule**

Upon receipt of funding, the communications trailer will be acquired within 30 days, purchase of the other items required for this communications trailer should be completed within 60 days and final installation and testing is scheduled for completion prior to December 2006.

## Quantity

#### Description

- 1 Trailer 8x16 or 20' / Communication Center
- 1 Trailer Jacks (set of 4)
- 2 Trailer Windows
- 1 Roof Vent
- 1 Heater (24,000 BTU)
- 1 Thermostat (bimetallic)
- 2 Propane Tank (30 lbs)
- 1 Propane Regulator
- 1 Propane Hose (22")
- 1 Trailer Insulation
- 2 Fire Bottle (extinguisher)
- 3 12 VDC Light
- 4 120 VAC Light
- 4 Fold up camp chairs
- 4 Folding Table
- 1 First Aid Kit
- 3 Dual Band VHF/UHF Antenna
- 2 Antenna Mast (fiberglass)
- 1 DC Power Supply/Charger (45 Amp)
- 3 DC Power Outlet
- 1 120 VAC static inverter
- 1 120 VAC Generator (used)
- 1 Coaxial Cable (100' roll)
- 2 Diplexer (VHF/UHF)
- 2 12 VDC Power Connectors (12 pair)
- 1 16 Ga Zip Cord Red/Blk (200' Roll)
- 1 12-3 Stranded wire (100')
- 4 Paint/Logos
- 1 Misc. Items
- 1 Weight Distributing Hitch Estimated Shipping 10%

Material Costs and shipping	\$15,534.49
Project Total	\$25,992.68
Grant Request Amount	\$15,534.49



## **Call for AARC Historical Documents**

Heather Hasper, KL7SP, has taken on the activity of collecting and organizing our Club historical documents. She is looking for AARC documents that you no longer want to maintain in your house. These might include newsletters, membership rosters, flyers, photos, or any other item of historical interest.

Please contact Heather at <u>KL7SP@ARRL.NET</u> or via pager at 907-275-7474



AARC NOAA/NWS Skywarn Project



Submitted by Steve Jensen - KL0VZ

#### Recommended for Membership Approval by AARC Board on July 18, 2006

At it's July 18<sup>th</sup> meeting, the AARC Board of Directors reviewed and discussed a Project Proposal for amateur radio at the National Weather Service Office in Anchorage. The Board felt this was a worthwhile project and voted to pass this to our membership for their approval.

Below are some of the details to help members understand more fully what the request entails. The grant request will be put to the membership at the August 4<sup>th</sup> meetings.

ARCTiCOM, Inc. proposes to provide the materials and labor required for the NWS Project as defined by Steve Jensen of AARC. The price of this installation is based on the following:

Furnish and install one Yaesu FT-8800RA2.

Furnish and install one FP-1030A power supply for the FT-8800RA2 radio listed above.

Furnish and install one Alinco DR135TPMKII Radio.

Furnish and install one DM-330MRT power supply for the Alinco DR135TPMKII Radio listed above.

Furnish and install two Diamond X-50 Antennas on the existing tower.

Furnish and install two tower side mount brackets.

Furnish and install two antenna installation kits required to mount the two Diamond X-50 antennas to the existing tower.

Furnish and install two polyphasers at the base of the existing tower.

Furnish and install two runs of plenum LMR-400 antenna cable and connectors from the existing tower thru the existing raceways, conduit and raised floors.

Furnish one DTMF Microphone.

Furnish and install one external Speaker.

**Total Project Recommended for Approval:** \$7,820.00



# Details of the Skywarn Proposal from the April 2006 AARC newsletter:



Report on AARC project to support "Skywarn" program in NOAA National Weather Service Central Alaska Office. April 2, 2006

"All weather is local"

This is an adage that was truly brought home to me as a long haul truck driver. More than once we would find ourselves driving across the Midwest in horrible freezing rain, moving into and out of road ice in a short period of time.

We give our National Weather Service (NWS) the responsibility to let us know when the weather is getting dangerous. To meet that end the NWS invests in state of the art technology; imaging equipment, and computer models. Even with this effort, on a daily basis the forecasters in the 'war room' over on Sand Lake still benefit from knowing 'what is really happening' from time to time in their forecast region. Recognizing this information gap is a service that Ham radio can fill, the AARL has an MOU (Memorandum of Understanding) with the National Weather Service supporting the development of 'Skywarn' programs. In many regions of the lower 48, established Skywarn programs are providing service to the community by training radio operators to accurately report the weather they see to the forecasting office as real-time useful information. Often these programs are in place to track tornados, but there is also a need for tracking heavy rain, blizzard, high wind and other severe weather.

Did you know there are **six distinct micro-climates in the Anchorage Bowl** alone? We all have personal experience with this phenomenon. The NWS works day and night to keep us informed on the changes as they happen, at least the changes that they know of....

Here is the part where **Ham radio can provide service** to our community. NWS has 'state of the art' equipment, and skilled and trained staff, but they still need reports from the ground. "Hey, the radar says its raining and blowing like crazy up on Rabbit Creek, can anybody report what it looks like up Rabbit Creek way?" This quality of information will provide benefits to us all!

With this as a back-drop, I am working to prepare **a proposal for the membership of AARC to support** installing Ham radio in the National Weather Service office on Sand Lake Road here in Anchorage. At this writing, I have conducted a site visit to the office, have reviewed the information the forecasters are trying to collect, and will develop a full equipment proposal for a first phase of program installation for this office. I will propose that AARC buy the radio equipment and professional installation from a local vendor.

As the equipment is installed, **there are two training components** to develop. The NWS needs to have FCC licensed operators to use the equipment. They have committed to get the forecasters licensed to operate Ham radio. The second bit of training is to provide the opportunity for Ham radio operators to learn accurate weather spotting. This training will give the Ham radio community the education to tell the forecaster what they need to know in language that accurately describes the local weather condition.

This **proposal will include installing a 2m / 70cm voice system, and a packet system in the NWS facility.** With this equipment, the forecasters in the NWS office can collect real time and accurate information from virtually every place in their service area; immediately from the Anchorage Bowl, south onto the Kenai Peninsula, and north into the Susitna River valley. As the skill of the operators increase, the weather service can develop their own VOIP system or use the IRLP system that is developing in our state to access the Copper River Valley and the Kuskokwim River Valley. Both areas are part of the service area for the Sand Lake office.

This is a program that meets AARC objectives and is a worthy use of club funds by developing a program that provides a

public safety service. In the days ahead I will provide our board the opportunity to provide comment on the equipment that is appropriate for this installation, and prepare to ask the membership to approve funding this program. At the end of the day, we can improve the service of Ham radio to our community, and put our radio skills to use for benefit of our larger community. Please forward any comments to me at this email address <u>opssteve@yahoo.com</u>

Steve Jensen, KLØVZ

#### **KX1 Field Day in Alaska** Mon, 26 Jun 2006 from Rick Dwight, KL7CW

KL7CW spent Field Day 2006 in the field with his Elecraft KX1 portable CW transceiver. <u>http://www.Elecraft.com/</u> This is his report. al7fs



Once again my little KX1 on internal cells did a super job in a contest from Alaska. I knew conditions in Alaska would only be fair at best so I opted to hike to a nearby mountaintop and carry my new Jackite 31 ft mast and RG58 fed dipole up the mountain with my 62 lb backpack. With better conditions my usual 26 ft wire from a poorer location would have worked fine. I used two of your dupe sheets back to back taped to a piece of cardboard. Past experience has taught me that my old body NEEDS a proper chair for long operation. The chair was a cheap but very comfortable sling type folding chair that broke half way through the contest !

I was quite comfortable operating WITHOUT a table. I attached the KX1 to the top portion of an 8 1/2 x 11 clipboard with two large heavy duty rubber bands, and simply used a folded ARRL logsheet slipped partially under the KX1 that held it on the clipboard. Nothing slipped and I was very comfortable holding the clipboard/kx1 on my lap. The dupe sheet rested on my backpack where I could see it or on my leg or with a corner tucked under the clipboard. I think this is even more comfortable than bending over a table. Since the chair was quite low slung I could even use it inside my backpacking tent, but move it outside when it was warm and sunny. For

scratch paper I used yellow sticky notes on portions of the log I was not writing on. If you write very small and organize your scratch sheets one pad of sticky notes will last for several contests.

Unless I am traveling very light I always carry my lightweight noise canceling headphones. During the FD the wind on my tent made quite a noise that the headphones mostly cancelled. Even in quiet areas the noise canceling phones just seemed to make the signals stand out very clean. I believe someone even makes some noise canceling earbuds.

Since I had the 31 ft mast I could erect my inverted vee on perhaps a 20 or 30 degree slope just below the top of the mountain that sloped toward the lower 48 states. Thus my vee at 31 ft acted as if it were perhaps 40 or 50 feet high. The Jackite mast is a medium duty mast, since I was in an exposed windy location I retracted the top section and had only a 29 ft mast.

I must have been quite a sight to all the hikers with my big backpack with mast and lawnchair bungee corded on the back. However this is Alaska and everyone just said HI as they passed me on the way up and said something like.....guess you are getting in shape for sheep hunting in the fall. It is not unusual to see "old guys" hiking up steep mountains with backpacks full of rocks who are getting ready for hunting season. Now I need a shorter lighter mast for vertical climbs of over a few thousand feet.

The antenna was a 20 meter inverted vee with approximately another 16 feet of wire after each end insulator. The pole was bungee corded to the end of the tent and to change bands it was very easy to just telescope the mast part way, then hook up or disconnect the clip lead jumpers to change between 20 and 40 meters. For 80 meters I simply clipped on approximately another 33 feet to the ends of the vees. This setup performed very well on 40 meters and I am sure with better propagation it would have been a great performer on 20. On 80 it would probably be a good "cloud warmer". No luck on long haul 80 meter QSOs but seems to work fine for local QSOs out to at least several hundred miles. Perhaps loading the feedline and vee against several counterpoise wires on 80 would make it a better DX antenna.

# Hope this report might encourage readers to just get outside and operate.

PS the KX1 operates just fine with a 26 ft wire and 17 ft counterpoise in most conditions..... Rick KL7CW Palmer, Alaska KX1 # 798

#### Added Comments from Rick:

I took no pictures on this Field Day. My backpack got to be so heavy that I thought the extra pound or two for a camera would be the straw that broke my back. In fact I hid my broken lawnchair under a tree and needed to hike up and retrieve in a day or so. I had been sick all week before field day, stayed up most of the night Friday packing and getting ready for FD. Had a nice hike up Saturday morning, but was so tired I needed to take a long nap in the afternoon. That was OK since 20 meter QSOs were hard to come by.....perhaps only 5 or so an hour at times. Late Saturday evening fired up on 40 and QSOs were very easy to make, perhaps 15 or more per hour, but once again I was too tired. Had a bit of a fever and chills so couldn't keep warm even in my WARM bag, so about 4am I packed up and hiked down the hill. I really enjoyed myself in spite of being under the weather. Wish I could have operated most of the night and all day Sunday. After I got home I was able to get lots of sleep so feel much better today.

I never heard ANY strong signals on 20, but did hear weak and moderate signals from all over the US. I think a 100 watt station could have made QSOs at a good rate on 20 CW, but my 1.5 watt QRP was just not enough.

Was there something wrong with my set up, or were conditions just too mediocre for a good QSO rate on 20 with QRP ? Usually if 20 is open I hear some extremely strong signals from VE7, Washington, Oregon, and California. Since 40 worked so great the hour or so I operated there, I think that there was no feedline problem. The SWR was fine on 20, 40, and 80.

PS....no mountains in the way for the WEST coast and most of the rest of the US. The FD QTH should have been much better than my home QTH (in Palmer) since at home most of the US is blocked below about 13 degrees elevation.

Hope to be at QRP meeting if we are still in town. Will try and bring in a few goodies I have been building. Rick KL7CW





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.



## ALASKA STATE FAIR VOLUNTEERS

To: AMATEUR RADIO OPERATORSFrom: ANCHORAGE AMATEUR RADIO CLUBRe: ALASKA STATE FAIR

We need Volunteers to Staff our informational booth at the Alaska State Fair. Fair Dates are August 24<sup>th</sup> through September 4<sup>th</sup>. The booth must be staffed on weekdays from 12-10PM and 10AM to 10PM on Weekends and Labor Day.

We will provide you with an admission ticket and a parking pass for your vehicle.

Additional details and to volunteer, email Judi Ramage at <u>damage@gci.net</u> or call 688-0290 or John Lynn at <u>JohnLynn@gci.net</u> or call 337-1091

We had loads of fun last year and met lots of wonderful folks. Come join us at the Fair.

#### N2CQ QRP CONTEST CALENDAR August 2006

Summer FOX Hunt - QRP 20M CW UTC: Every Fri thru August 18, 0100z to 0229z EDT: Every Thur thru August 17, 9 PM to 1029 PM Info: <u>http://www.qrpfoxhunt.org/</u>

North American QSO Party (CW) ... 100W Max. (/QRP noted on entry) Aug 5, 1800z to Aug 6, 0600z Rules: http://www.ncjweb.com/naqprules.php

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

Aug 8, 0100z to 0300z (First Monday 9 PM EDT) Rules: <u>http://www.arsqrp.com/</u>

~~~~~NAQCC
Straight Key/Bug Sprint (CW) \*\*\* QRP Contest \*\*\*
EDT: Aug 8, 8:30 PM to 10:30 PM
UTC: Aug 9, 0030Z to 0230Z
Rules: http://www.arm-tek.net/~yoel/contests.html

Worked All Europe DX Contest (CW) ... 100W category Aug 12, 0000z to Aug 13, 2359z Rules: <u>http://www.darc.de/referate/dx/xedcwr.htm</u>

QRP ARCI Silent Key Memorial Contest (CW) \*\*\* QRP CONTEST! \*\*\* Aug 19, 1500z to 1800z Rules: <u>http://www.qrparci.org</u> ~~~~?BUBBA

Summer QRP Sprint \*\*\* QRP CONTEST! \*\*\* Aug 19, 1600z to 2200z Rules: <u>http://www.azscqrpions.org</u>

North American QSO Party (SSB) ... 100W Max. (/QRP noted on entry) Aug 19, 1800z to Aug 20, 0600z Rules: <u>http://www.ncjweb.com/naqprules.php</u>

RUN FOR THE BACON (CW) \*\*\* QRP CONTEST \*\*\* EDT: Aug 20, 9 PM to 11 PM UTC: Aug 21, 0100z 0300z Rules: <u>http://fpqrp.com</u>

Hawaii QSO Party (CW/SSB/Digital) ... QRP Category Aug 26, 0700z to Aug 27, 2200z Rules: http://www.karc.us/hi\_qso\_party.html

Colorado QRP Club Summer VHF/UHF QSO Party (CW/SSB/FM) Aug 27, 1600z to 2000z Rules: <u>http://www.cqc.org/contests/index.htm</u>

QRP BARBERSHOP QUARTET CONTEST (CW QRP)... QRP Contest! Aug 30, 9 PM to 11 PM EDT Rules:

http://www.io.com/~n5fc/barbershop\_contest.htm [5th wed]

Ken Newman - N2CQ



## NOTES ON BEAM STACKING

Some Interesting Results at 10, 15 and 20 Meters

By Lewis G. McCoy, W1ICP (Submitted by Frank Pratt, KL7RX)

A commonly asked question from beam owners is how close can beams for different bands be mounted to each other without one having an appreciable effect on the other. Recently, we constructed a 15-meter beam and this looked like a good opportunity to check the effect of mounting this antenna close to an existing four-element 20-meter beam.

Many old timers will recall that it was always considered advisable to break up guy wires or any metal pieces that could be resonant lengths. This was done to avoid coupling between these resonant lengths and the antenna. Such coupling would cause the metal objects to radiate and upset the desired antenna pattern, which should be the *only* radiating element. One important point that is sometimes overlooked is that it is extremely difficult to couple r.f. energy between two nonresonant elements. Twenty and 15-meter beams are not resonant to each other so in theory, they could be mounted quite close to each other without having any interaction.

The tests that were conducted brought out several interesting results that may be of worth to other amateurs desiring to use single-band beams on the same boom or supporting mast. We are not going to go into detail of the advantages in using single-band beams versus the popular tribanders except to state that it is pretty well agreed that tribanders are a "compromise" antenna.

Many amateurs coming into amateur radio in the last ten years take for granted that a triband beam is just as good as a single-band beam, for any given band. For the benefit of those amateurs, a triband beam must be a compromise for a couple of reasons. First, in order to get maximum gain from a beam antenna, there is always an optimum spacing length between the driven element and the parasitic elements. When you use three elements such as is common practice in triband trap beams, you must compromise on the spacing because it is not going to be the same on all three bands. Therefore, it is impossible to obtain maximum possible gain on all three bands. Second, the feed impedance of the tribanders cannot be the same for all three bands. Because the antenna is fed with a single length of coax there are bound to be mismatches over the three bands. Third, inserting traps in the elements adds to the ohmic losses in the antenna. In a singleband beam you can adjust the elements for optimum gain and because only one band is involved, it is a relatively simple matter to get a match for your coax feed line.

Don't ask us to tell you how *much* better a single bander is versus any given band of the three-

bander. We can tell you that if you want to spend an interesting evening, get out your copy of the A.R.R.L. *Antenna Book* and look up the section of multi-element directive arrays. There are charts given for spacing versus gain. You can easily see the difference in comparing three-element optimum spacing for single banders versus the fixed dimensions of the tribanders.

To be fair, it should be pointed out that only a single tower and feed line is required for a triband beam. But if you want the most efficient antenna, the monobander is the answer. This, of course, brings us to the problem and effects of putting different monobanders to the same boom or support.

#### **Method of Testing**

One simple method of checking to see if one beam has an appreciable coupling on the other is to check the standing-wav-ratio curves, both with the beams by themselves and then mounted close to each other. If one beam is coupled to the other, the feed point impedances would change, thereby changing the standing-wave ratio. To check, all that is required is to insert an s.w.r. bridge in the coaxial line, make an s.w.r. curve across the amateur band, and then repeat the process with the two beams at different proximities to each other.

We have a 60-foot tilt over tower so it was no great problem to make changes in the antenna. In making these tests, it was a good opportunity to check the impedance change in the beams both at their normal height, tower up, and at ground level, tower cranked down.



Several tests were made including the following:

- 1) 20-meter beam by itself.
- 2) 15-meter beam by itself.
- 3) 15-meter beam stacked 10 feet above 20meter beam.
- 4) 15-meter beam stacked 1 foot above 20meter beam.
- 5) The two driven elements mounted in line on the same boom, driven elements 1 inch apart (this was as close as they could be mounted without actually shorting to each other).

The above checks were made at normal height. In addition, s.w.r. curves with the beams cranked down to ground level were taken, elements lying horizontally in a vertical plane (reflector of 20-meter beam was actually resting on ground). Also, similar curves were run with the elements vertical to ground, ends at ground level.

#### **Ground-Level Tests**

It was fully expected that there would be a radical change at ground level, but this was not the case. At ground level the entire curve remained approximately the same but shifted downward in frequency about 100 kc. The only assumption that we made, and it is a guess, was that our electrical ground was well down below the earth's surface. Otherwise, it could be expected that the impedance of the antenna would not remain at a matched condition, even though the curve shifted downward in frequency. It would be of interest if someone who could raise or lower a beam, and lived over a salt marsh where the electrical ground was known to be at ground level, could make a similar test. We always remember the ham that lived in Florida, right on the beach, and as the tide rose and fell, his s.w.r. changed!

#### **Stacking Tests**

In our first stacking test, the 15-meter beam was mounted 10 feet above the 20-meter antenna and s.w.r. curves were made on both antennas. The first thing that was apparent was the lack of change in either curve as compared with when the antennas were by themselves. Next, the two antennas were brought within one foot of each other, the 15-meter driven element directly over the 20-meter driven element. To our surprise, the s.w.r. curves still remained the same which indicated no coupling between the antennas.

In the next test, the 15-meter beam was mounted in line with the 20-meter antenna with the two driven elements about one inch apart. In fact, they were so close; we had to jury-rig some insulators between the two to keep them from actually shorting. This close proximity showed a marked change, particularly in the 15-meter s.w.r. curve. The 20-meter curve didn't have as radical a change. The curve shifted downward in frequency but instead of a perfectly matched condition, the best frequency showed an s.w.r. of 1.5 to 1.

The change in the 15-meter beam curve was much more evident. In this case, the best condition for the antenna alone was about 1.5 to 1 but this rose to about 4 to 1 when the 20-meter beam was added.

In the last test, the two beams were kept in line on the same boom but with the two driven elements about 1 foot apart, as in the stacked test. The s.w.r. curves were just about the same as with the 1-foot stacking, indicating little, if any, coupling between the two antennas.

The probable reason for the impedance changes when the driven elements were mounted 1 inch apart was because of capacitive effects of the two masses of metal to each other. Probably the big question is what effect does one antenna have on the other as to pattern changes. In theory, if the two antennas don't couple to each other, there shouldn't be any change in patterns.

After completing the above tests, we checked out a 10-meter beam stacked above the 15-meter unit. The 10-meter beam has 3 elements with (usual) spacing, using Plumber's Delight construction, gamma matched and resonant at 28.6 Mc.

The s.w.r. curve of the 10-meter beam by itself shows what happened when the 10-meter and 15-meter driven elements were about 1 inch apart. Under the latter condition, the 10-meter resonant point apparently shifted downward in frequency and at the best, the s.w.r. was about 3 to 1. In this test, the 15-meter curve also shifted downward approximately 100 kc. and the s.w.r. at best rose to slightly over 2 to 1. In making these tests, the 20-meter beam and in no instance did the 20-meter curve change appreciably.

In the final setup, the 10-meter beam was mounted about 1-1/2 feet above the 15-meter beam, was approximately 1 foot below the 15meter beam, which in turn was about 1 foot above the 20-meter job. With these spacings the 10-meter curve reverted back to what it was by itself, indicating little if any coupling between the 10- and 15-meter units.

#### Conclusions

With 1 foot minimum separation between the three beams the s.w.r. curves were the same as if the beams were by themselves. Although it was impossible to make practical pattern tests on the stacked antennas, after nearly a year of use we can say there is no *apparent* change in the pattern. For what it is worth, checks with an amateur approximately three miles away showed no appreciable change in the front-to-back ratio either with the beams stacked or by themselves.

As stated earlier, it is a fair assumption that if there is no coupling between the three antennas to change the s.w.r. curves, or the feed impedances of any of the three, then it follows that there should be little if any pattern changes as compared with each beam itself.

The installation requires three separate coaxial lines (we're looking for a motor-driven switch!), and wind loading is of course greater than with a trap beam, but the combination has been up for a year without developing any problems. And, we don't have to worry about lossy traps and compromise spacing.

Note: The above article appeared (with s.w.r. curves in the November 1967 issue of QST magazine). At the time, Lewis McCoy, W1ICP, was on the Technical Staff.



## MESSAGE TRAFFIC ANOTHER PERSPECTIVE (Opinion)

Larry Plessinger - AL7LW

An article by the Alaska Section Traffic Manager in the June KL7AA newsletter (available at <u>http://www.KL7AA.net/</u>) prompted me to present some of **my views regarding formal message traffic**, and to present some **food-for-thought relative to disaster traffic handling**.

I'm sure Ed's observation that getting third-party written traffic to and from Alaska via the National Traffic System is a challenge, and he accurately outlined some of the propagation and NTS constraints. I believe another factor is that internet email, and long-distance telephone service deflects most written traffic away from amateur radio, and unfortunately the traffic that does get into the radio traffic system is usually so mundane that many operators don't wish to bother with it. During the last 20 years or so we have handled 162 radiograms at our station, and most were "happy birthday" or "please renew your amateur license," usually transmitted after the license has already been renewed. I don't have a solution to suggest. There's no question that handling traffic improves an operator's proficiency, but even the promotional efforts of dedicated persons such as AL7N, AD4BL and others does not seem to greatly improve the situation. Generating traffic for

the purpose of jump-starting the system simply adds more tedious traffic, and the frustration continues.

Emergency, and health & welfare traffic is an entirely different ballgame. I'm confident that any Ham would gladly handle traffic in the event of an emergency. When the next big quake occurs, it is likely that the power grid, the telephone system and the internet will fail. The only remaining communication will be the same as in 1964 amateur radio. Is the Ham community ready? I believe so. The Anchorage ARES Hams have planned and trained, and there are over 100 Alaskan Hams that exercise their equipment and skills daily on the Alaska-Pacific Net, the Sniper's Net, the Bush Net, the Motley Group, and other nets. Granted, many do not have emergency power, and most have seldom if ever handled written traffic, but I believe there are adequate stations with back-up power and the skills and equipment to get the job done. Additionally, there are capable old-timers out there that are not active on the nets who will step forward again when needed.

For efficient operations during an emergency, traffic handling experience and familiarity with the ARRL standard message format would be beneficial, but be prepared to think "outside the box" when the next "big one" hits Anchorage. Alaska is different from most other potential disaster locations in that a high percentage of the population relocated from somewhere else and therefore has extended family elsewhere in the country they will be attempting to contact. The operations manuals from the ARRL, and dozens of other radio organizations declare that the ARRL standard message format shall be used for all written traffic. However, if a disaster were to occur in Alaska, the standard format SHOULD NOT BE USED for health & welfare traffic because the standard format is too cumbersome for use when transmitting a high volume of traffic. In the case of a disaster in Alaska, especially one affecting Anchorage, it is likely that only a handful of Alaskan HF stations with emergency power and high-power capability would be handling hundreds, or more likely thousands of welfare messages to the South 48 on SSB.

Therefore, for high-volume "welfare" traffic during a disaster the message format should be:

ADDRESSEE - AREA CODE ADDRESSEE - PHONE NUMBER ADDRESSEE- NAME (name only, no address) BRIEF TEXT SENDER'S NAME.

No message number, no precedence, no handling instructions, no station of origin, no check, no place of origin, no time filed, no date, no address. Bottom line, "just meat, no bun," - no lettuce, tomato or special sauce. During the Iniki hurricane in Kauai in 1992 two Hams, KH6BFZ and WH6CEN, originated over 1000 messages with two transmitters from one tourist location in six hours using this message format. That's nearly one and one-half messages per minute, per operator. That could never be accomplished using the ARRL format. Hams operating for long hours on emergency power should not spend half their time transmitting numbers, dates, and times that, in the real world, are unnecessary and many Hams don't understand. Welfare messages that originate in the ARRL format should have the preamble removed when relayed by the high-volume station. It must be noted that this in no way precludes stations handling traffic from maintaining a traffic log with as much information as they care to include. I'm simply pointing out that transmitting a preamble for H & W traffic during an emergency is a waste of valuable airtime.

Please do not misunderstand; the ARRL message format is an excellent, time-proven message concept. My point is that it will not work in a situation where there may be thousands of messages originated in a short period of time. To reinforce this view, here are a couple more reasons. Of the dozens or Anchorage ARES Hams that will be dispatched to emergency shelters, how many will have hundreds of ARRL message forms in their response kit? The answer - none, and that's okay; when using this short message format all they need are a few pads of blank paper and a few pencils. Also, these operators will not have the time to do word counts and fill out hundreds of ARRL message headings, while performing all the other emergency response functions. When time and operator availability permits, the traffic can be passed on VHF or 75-meters to the long-haul Hams for dissemination to the South 48.

I appreciate that NTS proponents and perhaps some ARRL Field Organization people may be incensed by this message format. Here, in advance, is my response:

In the ARRL Public Service Communication Manual, it states:

"IN A WIDESPREAD DISASTER SITUATION, IT IS SELDOM POSSIBLE TO HANDLE ALL THE WELFARE TRAFFIC WITH EFFICIENCY AND DISPATCH. SOMETIMES, IN FACT, SUCH TRAFFIC PILES UP ALARMINGLY, TO THE EXTENT THAT MUCH OF IT IS NEVER DELIVERED."

I understand that statement to mean that the ARRL message format is so cumbersome that the job can't be done. Or stated another way, it is more important to follow the ARRL format than it is to deliver the message. I find that position unacceptable. Many Alaskans have a "can do" attitude, and I am confident that Alaskan Hams "can do" and "will do" whatever is necessary to get the job done.

As regards to disaster traffic going to the outside world, there is the Alaska-Pacific Emergency Preparedness Net, which resulted from the 1964 earthquake and exists for the purpose of "handling third-party traffic during a disaster." On the Alaska-Pacific Net roster there are over 125 operators in 12 states and 4 Canadian provinces, over half of which meet on 14.292 MHz each weekday as a demonstration of their availability and preparedness. In the event of an actual emergency, traffic handling stations would be designated to operate on 14.292 MHz, 3.920 MHz and other frequencies as necessary to funnel traffic out of and into Alaska. Keep in mind that in a disaster situation, outgoing traffic always has precedence. One final point: There is a standing invitation for any Alaska Ham with a capable 20-meter station to join and participate in the Alaska-Pacific Net (14.292, 8:30AM Mon-Fri). Larry Plessinger – AL7LW

Larry has been an active amateur radio operator for over 46 years and is a group control operator for the Motley Group and a former radio operator at KL7USA. Larry's wife Brenda (AL7LX) is net manager for the Alaska-Pacific Net, comanager of the Alaska Earthquake/Tsunami Nets, a net control operator for the Sniper's Net and the Motley Group, and former Alaska Section Traffic Manager.



#### **ARES Contact Information**

Heather Hasper, KL7SP KL7SP@AARL.NET Pager: 907-275-7474



Information on Low Earth Orbit Satellites at

http://gahleos.obarr.net/

Excellent site for LEO Info by Dan O'Barr, KL7DR

#### **Trivia Technical Question Answer**

The ratio of the maximum to minimum voltage is known as the Voltage Standing Wave Ratio (VSWR)





Soldotna HamFest July06



Packet Radio? By Ron Keech, KL1PL and Tim Comfort NL7SK

Have you been hearing about the Packet Peanut Gallery? Do you have a TNC collecting dust in a closet? Have a Digital Station setup but can't seem to connect to a local node?

- Packet Peanut Gallery (PPG) is a group of hams that gather during the local vhf nets to throw text back and forth. Listen for us during these nets: ERC Net Sunday at 1930 No Name Net Sunday at 2000 Grandson of Sideband Monday at 2000 Big City Simplex Net Tuesday at 2000 Parka Net Thursday at 1900 ARES Net Thursday at 2000
- 2. Get that gear back online, it's easy and fun! Will also make a great traffic route the next time we have an emergency.
- 3. There are several data systems listening for you 24/7. Set up for 1200 baud for most and 8 data bits, 1 stop bit and no parity. See the list below for additional info.

## Local Nodes of Interest-

Eagle Node is NL7C-2 at 145.01 FM simplex. Valley Node is KL7JFU-2 at 147.96 FM simplex. ANCBBS is KL7AA-7 and is also on 145.01 FM simplex or via Eagle Most nodes can talk to each other so try it, from Valley try connecting to Eagle or even ANCBBS. There are of course other systems in the area, these are the most often used.

#### Digi Links -

KL7IKX-3 direct then "c valley" at the prompt this will allow you to get to valley if your unable to hit it directly. Don't try to true digi, just connect to KL7IKX-3 and then "c nodename".

Others will be online soon as well keep an ear open for those additions to other digi links.

Expect the digi link to be slower than direct as anytime you digi thru you have added another link in the chain.

On most nodes you have access to a help section, simply type ?, H or Help to access it. That will provide a list of options available to you. One command to keep in mind on Valley or Eagle is of course "talk". Talk will put you into the chat mode and you will be able to message in real time to other amateur stations that are online. Some of the other packet systems also support a talk mode.

TNCs come in all flavors and no single one is the end solution to all your digital needs, but most do most things. Soundcard interfaces offer another means of connecting your computer to your radio. Software is usually more important than the flavor of interface you end up using. Several stand alone applications offer PSK, BPSK, Gtor, Packet etc... Some offer a wide variety of possible modes. Not promoting any flavor over another, I myself use the Rascal interface and MixW software combo. Rigblaster and others offer like applications. Read up on it, it's easy simply Goggle on "packet radio" or "digital ham modes" etc...

I wanted to touch on the Packet side as we are trying to generate interest into VHF digital modes. There is a whole world of digital possibilities in Ham Radio. From HF PSK to Meteor Scatter on 6 meters to EME. If you have the notion try it. If you want more information contact your local club for who is using digital modes in your area. I am far from an expert on the subject but there are folks who can do it justice, just ask. Remember from HF weak signal work to Amateur TV and EME, the digital Ham world is yours to master. Pick your favorite and run with it!



#### Southcentral Alaska Packet Nodes

#### 145.0100 MHz

CALLSIGN ALIAS LOCATION

| 145.050 |        |              |                       |
|---------|--------|--------------|-----------------------|
| NL7C-2  | EAGLE  | SITE SUMMIT  | ANC/MAT SU/KENAI AREA |
| KL7AA-8 | AARC   | PART OF ANCE | BBS                   |
| KL7AA-7 | ANCBBS | DOWNTOWN     | ANCHORAGE BOWL        |
| KL7AA-1 | ANC    | RABBIT CRK   | ANCHORAGE AREA        |
|         |        |              |                       |

| KL7GG-1   | NEST | EAGLE RVR | ANC/MAT SU       |
|-----------|------|-----------|------------------|
| KL7IKX-10 | DPD  | S.ANCH    | ANC/MAT SU/KENAI |

#### 147.3600

KL7GG-2 ERAK EAGLE RVR ANCHORAGE 9600 BAUD

#### 147.9600

| KL7AA-8  | AARC   | PART OF A | NCBBS           |              |
|----------|--------|-----------|-----------------|--------------|
| KL7IKX-3 | #EMLNK | S. ANCH   | REFLECTOR       |              |
| KL7JFU-1 | VALLEY | FISHOOK/H | HATCHER PASS RO | MATSU / ANCH |

HF Side of things 300 BAUD

## 3.605 LSB

KL7AA-10 HF80 S.ANCH

## 440.0500

KL7IKX-4 DD S.ANCH ANCHORAGE NL7C-4 EAGLE4 S.SUMMIT ANCHORAGE

THERE IS A FULL DUPLEX UHF LINK BETWEEN DPD AND ANCBBS/AARC THIS TIES 145.0500 TO 145.0100 (USING AARC) 440.0500 IS USED AS A BACKBONE TO TIE THE HF NODE KL7AA-10 HF80 INTO THE NETWORK.

ALL NODES OPERATE AT 1200 BAUD UNLESS OTHERWISE NOTED. THE FULL DUPLEX LINK BETWEEN ANCBBS/AARC AND THE 440.050/145.050/147.96 NODE STACK IS NOT A USER LINK. 73!

Ron Keech, KL1PL and Tim Comfort NL7SK Questions? ronkeech @ kl1pl.us nl7sk @ gci.net





## Data You Can Use:

#### **Officers**

PresidentJim Larsen, AL7FSpresident@kl7aa.netVice Pres.Judi Ramage, WL7DXvicepresident@kl7aa.netSecretaryDianeOlson,secretary@kl7aa.netTreasurerHeather Hasper, KL7SPtreasurer@kl7aa.netTrusteeKeith Clark, KL7MMtrustee@kl7aa.netActivitiesChairmanVacant

News Letter Editor Jim Larsen, AL7FS Membership Chairman Fred Erickson KL7FE membership@kl7aa.net Past-Pres. Jim Larsen, AL7FS pastpresident@kl7aa.net

#### **Three Year Board Members**

Jim Wiley, KL7CC jwiley at alaska.net Paul Spatzek, WL7BF Paul.Spatzek at acsalaska.net Frank Pratt, KL7RX kl7rx at arrl.net **One Year Board Members** Steve Jensen - KL0VZ, jensens at acsalaska.net Richard Kotsch - WL7CPX, richardkotsch at yahoo.com TJ Sheffield - KL7TS, kl7ts at hotmail.com Edward Moses - KL1KL, kl1kl at ak.net Mike O'Keefe - KL7MD, mok at gci.net Kathleen O'Keefe - KL7KO kok at woodscross.net Nick Casler - KL1XD ncasler at tertiary.net Art Morton - ALØU, Jam443 at Chugach.net Bill Reiter - KL7ITI, wwryter at cs.com

#### AARC web page & Email contact addresses:

Homepage:http://www.KL7AA.net/Webmaster:webmaster@kl7aa.netPresident:president@kl7aa.netVice President:vicepresident@kl7aa.netMembership:membership@kl7aa.netNewsletter:editor@kl7aa.net

News Letter Submissions, Information or corrections: Submissions must be received 2 weeks before meeting Email: editor@kl7aa.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 (problems) 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 Palmer IRLP 146.64/.04, simplex patch, no PL Mile 58.3 Parks Highway IRLP 147.09/.69 MHz, 97.4 Hz PL KL3K, Girdwood - IRLP 146.76/16 MHz, 25 watts, no patch, 97.4 Hz PL South Anchorage IRLP 146.79/19 MHz, 100 Hz PL Anchorage IRLP – KB8JXX 146.82/22 tone unknown 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 147.42 MHz Peninsula simplex chat 146.58 MHz Simplex IRLP - Wasilla Lake

#### **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. Wasilla Red Cross is in the Westside Mall, next to Speedy Glass...it's just a click up from AIH hardware

#### Internet Links, the favorites from our readers:

**ORP and Hombrew Links** http://www.AL7FS.us AARC http://www.KL7AA.net/ SCRC http://www.KL7G.org http://www.qsl.net/kl7air EARS 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 & ORPers http://www.amgrp.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 <u>editor@kl7aa.net</u>.

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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 10 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.

**Tuesday Lunch, 11:30 AM:** Dennys on Denali behind Sears. Several old timers show for this and have lots of stories to share.

Thursdays Brunch, 9:30 AM: Brunch NW corner of Debarr and Bragaw. 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

 $1^{st}$  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.

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

1<sup>st</sup> Wednesday quarterly: EARS general meeting, Meets quarterly at R1 North, next scheduled meeting is the first Wednesday of May at 1730. Additional meetings as required will be announced. Contact info - PO Box 7069, Elmendorf AFB 99506 Or email Ron Keech, KL1PL for information. Email - <u>kl7air@qth.net</u> or <u>ronkeech@kl1pl.us</u> (home) 349-2442

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

 $2^{nd}$  Saturday each month: <u>VE License Exams</u> 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.

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

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

**3<sup>rd</sup> 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.

**3<sup>rd</sup> 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 .

## <u>Who Do I Contact to Join AARC</u> <u>Or pay membership renewals?</u>

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.