# Anchorage Amateur Radio Club

Next Meeting June 6<sup>th</sup>, 2008, 7:00 PM

# JUNE PROGRAM:

Our program will be presented by John Mears, AL7LA who will be discussing Submarine Communications.

# Ground Resistance Testing & Ohms Law **By: John Howard** Part 3 of 3

This is the third of three articles explaining grounding system resistance and ground system testing. In the first article we discussed that the ground system resistance is a finite resistance that exists between the grounding system and a point in the earth remote from the ground system. We also learned that this resistance is determined by the resistivity of the soil and the size of the grounding system.

Part one mentioned that there are two methods of testing a grounding system; the Fall of Potential (FOP) and the Clamp-On. Part two discussed the FOP method of test. This third article will explain the Clamp-On test method and the typical difficulties and pitfalls in obtaining valid results. As the name infers, when the Clamp-On test can be performed, it is a far simpler and quicker test than the Fall of Potential (FOP). Part two of this series is included with this newsletter should the reader like to review.

The FOP test is an IEEE standard and is often specified because engineers are familiar with it. The Clamp-On test is not often specified for resistance testing. When possible, Lyncole engineers will perform both tests and the differences range from exactly the same to 10-15% difference. Our conclusion is that both tests when performed properly are "accurate enough".

Most times invalid testing with the Fall of Potential method is caused by not isolating the ground system from the utility neutral conductor. With the Clamp-On method, you will see that invalid results are generally caused by not having a single point ground.



Our desire is that these articles will help responsible personnel under-

stand how testing should be performed and give them the ability to evaluate testing results.

As a quick summary, first remember that we are testing a finite resistance. It is only difficult because it is similar to testing a resistor while installed on a circuit board. Remember from the 2<sup>nd</sup> article that the Fall of Potential test injects a known current though the ground resistance.

While the known current is flowing through the unknown resistance, a voltage is developed. This voltage is measured by the meter. The meter then uses Ohm's law to calculate and display the resistance.

Remember that with the FOP test, the ground system had to be isolated from the utility's neutral conductor for a valid test. The opposite is true for the Clamp-On test; the ground must be bonded to the utility neutral. We will see why in subsequent paragraphs.

First, an explanation on how the Clamp-On meter works. The meter has two control transformers located in the meter head. One of the transformers induces 60 milli-volts into any metallic object it is clamped around. Nothing more complicated then transformer theory. The only thing unusual is that the meter operates at around 2000+ Hz.

In Figure 1 we show the meter installed around a conductor loop containing a resistor. When the meter induces the 60 milli-volts, current will flow. The amount of current will be determined by the resistor and of course, the 60mv.



The second control transformer measures the amount of the 2000 hz current flowing. The meter then "knows" the amount of voltage it generated and now the amount of current flowing as a result of that voltage. With two of the three unknowns in Ohm's law known, the meter simply reads out in Ohms.



#### Ground Resistance Testing & Ohm's Law Part 3 cont.

**Shifting to the real world**. Figure 2. illustrates the meter as in a real life situation installed on the grounding electrode conductor. The path for the current flow is as shown (red dots); from the meter head through the grounding electrode conductor, the neutral-ground bond at the service entrance, the utility neutral conductor, the many paths (all in parallel) of neutral grounds, through the earth, the ground under test and back to the meter head where a transformer measures the amount of current flow.

A key to understanding meter operation is that there are two resistances in the current flow of Figure 2; the first is the ground system under test and the second is the combined grounds of the multi-grounded neutral conductor. The utility neutral conductor ties every ground in the area together and they are all in parallel. They can be poor grounds, but with hundreds or more in parallel, their resistance if negligible. With the utility neutral grounds effectively zero, the resistance left in the loop determining the amount of current flow is the ground system under test. An XIT system is illustrated in Figure 2, however it does not matter if it is an XIT, a driven rod, a small ring or large grid.



**The Challenge** to using the Clamp-On meter is that you need a single point ground. You can see from the Figure 2 that all of the current flowing from the meter must be forced through the ground system under test and returned via the utility neutrals multiple grounds and earth.

Figure 3 shows multiple connections to the ground ring. The current (red dots) will take the path of least resistance and return to the meter via the second connection to the ground ring. The meter would be reading the resistance of the metallic conductors and bus bar, or as low as it can read which is 0.10 ohms. If one of the conductors were disconnected from the bus bar, a valid reading could be achieved as the current would be forced to flow through the ground system and return via the multi-grounded neutral conductor. There are other challenges in utilizing the Clamp-On meter, but most are caused by multiple connections to the ground ring. Certainly, with a single ground rod (as in figure 2), you can see how easy it would be to obtain a valid test.



In real life, it is not uncommon that an actual test of an installed ground system at an operational facility cannot be accomplished. I believe we understand a lot about testing, but our engineers encounter facilities that cannot be tested. At these facilities we evaluate the grounding system based on visual inspection, system age and discussion with local personnel. Sometimes part of the ground system, maybe a single driven rod might be testable.

Also we can build a computer model that will simulate the ground resistance. For this we need soil resistivity data and an as-built drawing of the installed ground system. The risk with this simulation is that we cannot determine the amount of deterioration of the ground system over time. Most driven rods made of steel with a thin copper cladding. Copper and steel are dissimilar metals, a corrosion cell waiting to happen. It is not a question of whether they will corrode, but merely when.

Normally, we are comfortable with the simulation of ground systems no older than 3-4 years. Some soil and situations degrade ground systems very quickly. We have known of driven rods that last only two years. Although it is impossible to predict the life of a driven rod, generally speaking the better (lower) the soil resistivity, the shorter their life and also the more residual current flowing to the ground system, the shorter their life.

### Ground Resistance Testing & Ohm's Law Part 3 cont.

Hopefully, this series of articles have been helpful in understanding what determines the resistance of a grounding system and how proper testing is accomplished. They should have at least provided enough understanding to evaluate tests results and know when testing is not possible. We hope that you will not insist on or pay for testing that is invalid.

Should you have any questions or comments do not hesitate to contact us.  $\Box$ 

JHoward@Lyncole.com



John is a retired Navy Officer with 22 years of service. He had extensive training in electricity and electronics and provided technical support for navigation, communica-

tions and radar systems. He has been an instructor and supervisor at both the Naval Submarine and Naval Guided Missiles Schools. Commander Howard's previous position was as the Navy's Technical Representative at Rockwell International

He has been involved in field testing and all facets of the business through first hand experience. He works with many national and international telecommunications carriers developing and refining their grounding procedures and electrical protection requirements.

★★★★★★★★★★★★★★★★ The Alaska DX Club (KL7DX and ★ KL7CQ) has been granted a third call sign ★ which we will be using for a yearlong spe-★ cial event (2009) in honor of the 50th An-★ niversary of Alaska's Statehood. The call ★ sign is KL5O.

Attached a picture of what the QSL card  $\stackrel{\bigstar}{\underset{\bigstar}{\leftarrow}}$  will look like.





# The Alaska DX Club

The current Alaska DX Club was formed by Corliss Kimmel, AL1G and Frank Hurlbut, KL7FH to promote contesting from Alaska as a

club. The club has two callsigns, KL7CQ and the recently acquired KL7DX.

We acquired KL7CQ first and have used it in a few contest. It was great to work Wilse Morgan, the former holder of KL7CQ when he called us.

The family of Robert Rapuzzi of Skagway, the former KL7DX, graciously granted us permission to get his callsign upon his becoming a silent key in March of 2003.

Our first major contesting effort as KL7DX was a great success. We operated Multi-Op, Two Radios, High Power in the ARRL International DX phone contest: 3086 Q's, 1,833,084 points. The ops were KL7FH, AL1G and KL1MX.



# KL7AA Club Business

# ANCHORAGE AMATEUR RADIO CLUB

MEMBERSHIP MEETING May 2, 2008 Carr Gottstein Building – APU Campus Anchorage, AK

## Call to Order

The meeting was called to order at 7:04 PM by President Kathleen O'Keefe (KL7KO).

## Announcement

Kathleen O'Keefe announced the resignation of an AARC Board Member and noted that the Board was considering between 2 candidates for replacement. The successful candidate choice will be brought to the membership for approval at the June membership meeting.

## **Presentations**

T.J. Sheffield (KL7TS) gave a presentation on NVIS (Near Vertical Incidence Skywave) antennas. T.J. provided an interesting history of the development of this antenna from its use during World War II, to the Russians use of multi mode/multi channel to the United States use on the USS Anaconda. T. J. explained its use between 2 MHz to 10 MHz, use of the F layer, takeoff angles used by NVIS and optimum antenna height.

T.J. also spoke briefly on the upcoming Field Day event. Setup will begin Friday, June 27<sup>th</sup> at Kinkaid and the stations will begin operation at 10am Saturday. Location will be in the Nike staging area of the park. Field Day Captains and Activity Specialists are still being sought for the event. Contact T.J. at <u>KL7TS@arrl.net</u> for more information.

# <u>Other</u>

Ron Keech (KL7YK) reminded all of the May 10<sup>th</sup> Amateur Radio/MARS crossband event which will operate on 20, 40 and 80 meters. Ron also noted the upcoming Amateur Radio Military Appreciation Day which will be on May 24<sup>th</sup> at the Joint Military Mall. MARA will be bringing in their communications trailer for the event. KL7AIR will be operating a special event station in conjunction with the 2008 Arctic Thunder Air Show. Listen for "This is KL7AIR special event for Arctic Thunder 2008".

Heather Hasper (KL7SP) briefed the members on the May 18<sup>th</sup> Gold Nugget Triathlon. This National qualifying event has sold out the 1200 available positions. The event runs from 8am to Noon and volunteers are being sought.

Heather also provided and update on the 2008 Alaska Hamfest/Convention. Speakers from Dayton will also be participating at this event including Lyle Johnson KK7P, Clint Hurd KK7UQ and Joel Harrison W5ZN ARRL President. Amateur Radio Newsline will be promoting our event. Convention costs, registration counts and other ongoing arrangements were explained. George Strother (KL7GS) and Mike Romanello (KL7BK) are planning on attending the Dayton Hamfest to promote our event.

Heather provided an update on the Arctic Circle Special Event Station. The W1AW/KL7 call has been issued for the first time in Alaska for portable use in Alaska from July 26<sup>th</sup> to August 10<sup>th</sup>. The Fairbanks club is working on providing logistic support. Trucks with trailer towing capability and motor homes are being sought for the event. Event planning will be done primarily via the AARC teleconference bridge and via email.

## **Door Prize Drawing**

KL2AZ, KL1KL, KL7MM, KL2DI, R2D2 (son of KL3BD and KL3KD), KL1IL.

The meeting adjourned at 7:55pm.

Respectfully submitted as recorded on May 2, 2008 by: Richard Tweet, KL2AZ Secretary



# KL7AA Club Business

# ANCHORAGE AMATEUR RADIO CLUB BOARD MEETING May 20<sup>th</sup>, 2008 540 WEST INTERNATIONAL ROAD Anchorage, AK (UNAPPROVED at Printing)

The meeting was called to order at 7:00 PM by President Kathleen O'Keefe A quorum was established: (2 Officers, 7 Board members needed)

## **BOARD MEMBERS PRESENT:**

President Kathleen O'Keefe KL7KO, Vice President Jim Larsen AL7FS, Treasurer Heather Hasper KL7SP, Secretary Richard Tweet KL2AZ, Paul Spatzek WL7BF, Craig Severson KL2FN, Susan Woods NL7NN, T.J Sheffield KL7TS, Mike Romanello KL7BK, Tom Rutigliano NL7TZ, Diane Olson KL1MY, Michael O'Keefe KL7MD, John Orella KL7LL

### NON-VOTING MEMBERS PRESENT None

EXCUSED

Activities Director Richard Kotsch WL7CPX

### UNEXCUSED

Frank Pratt KL7RX

### **REQUEST FOR AGENDA ITEMS**

T.J. Sheffield requested to add Title 21 to Old Business. Tom Rutigliano requested to add MARA trailer update Michael O'Keefe requested to add KL7AIR repeater to Old Business

### GUESTS

None

### SECRETARY REPORT

Previous Board meeting minutes for April Board Meeting and General Membership meeting minutes for May were presented. Motion made Diane Olson KL1MY, seconded Heather Hasper KL7SP to accept the minutes as presented. The motion carried unanimously.

### **CORRESPONDENCE REPORT**

Heather Hasper reported that correspondence this month was all Treasurer related.

### **TREASURER'S REPORT**

Heather Hasper presented the Treasurers report for month ending April 2008. No grants are before the club, several applications have been distributed.

Capital Project Committee is meeting once per month, CCV insurance is paid through May 2009, Components are being purchased for Field Day as previously approved, State of Alaska Income Tax has been filed. The credit card machine has been obtained, discussion on budget item Travel and expenses to date, Fax machine/phone issue at the CCV garage to be resolved. Jim Larsen noted the AARC CPA has sent a list of 3 recommended bookkeepers to be reviewed. Discussion was held regarding the Grubstake repeater rent costs and fuel costs associated with the site's operation. The site owner requested the AARC consider increasing the amount paid from the current \$100/mo. Any amount deemed appropriate by the club would be appreciated in lieu of renegotiating rent costs. The next amount charged to a tenant is \$500/mo. Motion made John Orella KL7LL, seconded Diane Olson KL1MY to increase the amount paid to ArcticCom to \$200/mo beginning June 2008. Motion discussion included AARC has been at \$100/ mo for 2 <sup>1</sup>/<sub>2</sub> years, fuel oil costs have risen 250%, responsibility for repairs to equipment on site, other AARC site locations, ability to lower payments should fuel costs drop. The motion passed unanimously. Motion made Diane OlsonKL1MY, seconded Tom Rutigliano KL7TZ to accept the Treasurers report as given. The motion carried unanimously.

## **VE REPORT**

There was no report as Jim Wiley was not in attendance.

#### **TRUSTEE REPORT**

There was no report as Keith Clark was not in attendance.

#### **MEMBERSHIP REPORT**

There was no report as Fred Erickson was not in attendance.

#### **ARES TRAINING**

The June ARES training will be the Mayors Marathon on June 21<sup>st</sup>. Contact John Lynn KL7CY (johnlynn@gci.net) to volunteer for this event.

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## <u>OLD BUSINESS</u> REPLACEMENT TREASURER

Jim Larsen reported that as reported during the Treasurers report, he has received a list of 3 recommended bookkeeping firms for review from the AARC CPA, Lisa Rogers.

## **CAPITAL PROJECTS**

T.J. Sheffield reported that the Capital Projects Committee met on May 7<sup>th</sup>. Three projects were listed as complete and 1 project was put on hold. The scope of the range extender project needs to be reworked. Discussion was held regarding the idea that AARC obtain tools for fabrication work such as a drill press, chop saw, table saw, and radial arm saw. Discussion points were AARC liability, donations or loan of equipment by members, and available space. This discussion point was deferred to the Capital Projects Committee for discussion and review.

### STATEWIDE CONVENTION/HAMFEST

Heather Hasper reported on George Strother KL7GS's success with marketing at the Dayton Hamfest. George secured a booth space and reported much interest and that he remained busy until the close of the event. Centerpieces for the Banquet dinner are being designed and will be auctioned off by silent auction with the proceeds to benefit the YLRL scholarship fund. Most speakers are in place for the event including the KL7DX Russian Robinson Radio Club from the Cleveland Volcano DXpedition. The Statewide Convention/Hamfest will be their first presentation on the expedition after it's completion. The Augie Hebert memorial Luncheon is being finalized. Sponsorships are still being sought, with the reminder that we all can contribute to the success of this event by downloading a sponsor form from the Akhamfest.com website and contacting businesses we all frequent regularly.

## **REAL ESTATE**

There was no report as Keith Clark was not in attendance.

# **KL7AIR REPEATER**

Michael O'Keefe brought up for discussion the request from last months meeting to loan or donate a repeater to KL7AIR for use. The AARC is in possession of 2 repeaters that could be used for the purpose. Keith Clark has the notes for review and the AARC awaits Keith's recommendation to finalize this request. T.J. Sheffield asked that this be made a discussion item for the next Capital Projects Committee meeting.

## MARA TRAILER UPDATE

Tom Rutigliano, NL7TZ reported on the status of the MARA trailer. The trailer is 99% complete with the installation of the fuel lines, batteries and light wiring to be completed.

## TITLE 21

T.J. Sheffield reported that chapter 14 contains favorable definitions of amateur radio towers.

T.J. also reported that the Municipality of Anchorage Assembly will be holding public hearings on Chapter 5 on June 10<sup>th</sup>. The scope of this hearing is unknown at this time. Membership support at the June 10<sup>th</sup> hearing (comment: public hearings begin no earlier that 6pm and end no later than 11pm as part of the Assembly agenda). It was recommended that members of the radio club attend this meeting to show support for amateur radio should any questions be raised by the assembly.

## NEW BUSINESS

## **BOARD MEMBER RESIGNATION**

Kathleen O'Keefe reported that Richard Block had submitted his resignation for the AARC Board of Directors and the club was in need of a replacement to fill out Richard's term. Discussion of a replacement candidate was held with a recommendation by Heather Hasper, KL7SP, seconded by T.J. Sheffield KL7TS to recommend Calex Gonzalez KL2BT for the position. The move to appoint Calex to the position was approved by a show of hands and will be submitted to the Membership at the June meeting for approval.

# DONATION TO QTH.NET, NEWSLINE and AARL

Jim Larsen noted that this site has been maintained by the founders own money and a few donations. This website is in need of equipment upgrades. Jim recommended a donation of \$1500-2000 to qth.net. Discussion included qth.net is owned by QSL.net and cash donation bottles are at the CCV garage to assist and need to be brought to the membership meetings to assist with these type of funding issues. Qth.net hosts mail servers for Radio Clubs including KL7AA and KL7AIR. Motion made Jim Larsen AL7FS, seconded Michael O'Keefe to donate \$1500 to qth.net. The motion carried unanimously.

Discussion was held regarding previous donations to Newsline, which was \$2000 in 2007 and \$1500 in 2006. Heather Hasper noted that Newsline will be promoting the 2008 Convention/Hamfest soon.

# KL7AA Club Business cont.

Discussion was also held on the AARC's 50 year affiliation with ARRL, history of ARRL and Alaska, and if approved, donation should be made at Convention/ Hamfest. Motion made Michael O'Keefe KL7MD, seconded Mike Romanello KL7BK to donate \$1500 to Newsline and \$2500 to ARRL. Motion carried with 1 nay vote.

## **CLEARWIRE vs. ACS FOR REMOTE INTERNET**

Kathleen O'Keefe reported that Clearwire internet access at Bartlett High School during the Gold Nugget Triathlon was unusable. Discussion was held regarding ACS's mobile broadband service. Further action was tables pending a site survey to be done with ACS mobile broadband from several locations later this month.

## **REPORT ON CCV and POWER/TOWER TRAIL-ERS**

Michael O'Keefe, KL7MD provided an update on status of the CCV and the power trailers. Both batteries in the diesel generators are dead and minor repairs and service are needed. Mike will be taking them to Alaska Diesel Electric for routine maintenance to be completed prior to Field Day. Discussion was held on the possibility of the CCV being supplied with water while deployed.

# FIELD DAY

T.J. Sheffield provided an update on Field Day activities and goals. Much preparation has gone into being ready to also operate HF Digital modes during the event including RTTY, AFSK, and PSK31. Corney Eastman KL7FK will be Station Captain for the GOTA station. The planned layout for the North and South Stations at Kincaid Park was explained. AARC will not be able to utilize the Westside Community Patrol motorhome this year and Michael O'Keefe has volunteered the use of his for the event.

# PROGRAM FOR UPCOMING MEETINGS

The guest speaker for the June meeting will be John Mears. July will not have a guest speaker as the meeting will be a barbeque to be held at the CCV garage location. There will not be an August membership meeting as the Convention/Hamfest is occurring. September's speaker is scheduled to be Richard Block KL7RLB.

# APPROVALS, KL7AA IN THE NEXT MONTH

Keith Clark will be notified of the upcoming use of KL7AA for the Mayors Marathon on June  $21^{st}$  and Field Day on June  $28^{th} - 29^{th}$ .

# ADJOURNMENT

Motion made Diane Olson KL1MY, seconded Mike Romanello KL7BK to adjourn. Motion carried. The meeting adjourned at 8:56pm.

Respectfully submitted as recorded on 05/20/08 by Richard Tweet, KL2AZ Secretary





# THIS IS CHECK POINT # 5, ALL THE RUNNERS ARE MAKING RECORD TIME THROUGH HERE! THEY'RE NOT EVEN STOPPING FOR A CUP OF WATER !

**LIDS Cartoons** are the creation of NL7SK, Tim Comfort and are available for purchase on CD for only \$15. All sale proceeds go to support the Matanuska Amateur Radio Association.

www.kl7jfu.com



# KL7AA BADGES are AVAILABLE!

The badge comes with your Name and Callsign engraved, the club logo on an arch 3 inch dome as well as the option of purchasing individual name plates for each position you have served for AARC. If you are interested in purchasing an AARC badge, the costs is \$20.00 per member for each badge and \$2.00 per customized name plate. Badges have the option of a pin or magnet attachment.

For more information about this project or to order your badge today in time for the convention and outdoor public activities, please contact Michael O'Keefe, Kl7MD at 907-351-4038 or via email at: mok@gci.net.

When ordering, please indicate your name, Callsign and if you wish to have any additional name plates added.

Orders take approximately 10 days for printing and our made locally in Anchorage. Thanks to Frank Pratt, KL7RX for helping us track these down. Also thanks to Kl7MD for picking up this project.



### Are you a member of ARRL?



ARRL is the American Radio Relay League. This is the national organization that advocates on behalf of ama-

teur radio operators to the FCC and the communications industry. **KL7AA** has been an ARRL affiliated club for more than 50 years. Consider becoming a member of ARRL today. <u>www.arrl.org</u> +=+=+=+=+=+=+=+=+

**News Letter Submissions, Information or corrections:** Submissions must be received 2 weeks before meeting Email: <u>editor@kl7aa.net</u> Mail: PO BOX 101987, Anchorage, AK 99510-1987

**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.

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**OPINIONS** expressed in The Modulation Times are not necessarily those of the Anchorage Amateur Radio Club. **MEMBERS** and **non-members** are invited to submit articles of interest. AARC assumes no responsibility for contributed items or their return without a self addressed stamped envelope. Sources of the items must be provided and ALL material is subject to editing required to conform to space limitations.



With a removable liner, lots of pockets, and waterproof, the coat gives the radio club great publicity with a full back, club logo and a Name and Call-Sign Personalization on the left chest. For those of you interested in purchasing a coat, the costs are <u>\$50 per club member</u>. This is a great price for a coat than can be used during summer amateur activities or as a winter coat during Sled Dog races or November Sweepstakes. Must have a

current club membership. If you are interested in ordering a coat, a sign up sheet will be available at the club meeting or feel free to contact Craig Severson, KL2FN; <u>chipman</u> <u>at clearwire.net</u>



# ARES TRAINING: 6/21/2008 Mayor's MARATHON

We will be providing public service communications support for the 2008 Mayor's Marathon.

The event start /finish takes place at Romig school. Since 1974, runners from all over the world have traveled to Anchorage, Alaska to participate in one of the most scenic and enjoyable marathons in the U.S., the Mayor's Midnight Sun Marathon. There will be over 3,500 runners on three different courses. Volunteers are still needed to support the communi-

cations effort. For more information or to volunteer for a position contact John Lynn, KL7CY at kl7cy@arrl.net or via phone at: 337-1091.

# http://www.mayorsmarathon.com/



BLUE Net: Frequency 147.30+-shift 141.3 Hz RED Net Frequency 147.27 + shift 103.5Hz repeater RED Net alternate 147.33 +shift 103.5 Hz repeater APRS will operate on 144.39 for data UHF voice alternate 444.7 +shift with 103.5Hz repeater



# ARES - Section 7, District 7 (Anchorage, ALASKA)



# Mission statement:

Dedicated to amateur radio as it pertains to disaster services. The history of amateur radio operators' involvement in sending life-saving information in and out of disaster areas [and] providing help during and after earthquakes, floods, hurricanes and tornadoes. "HAM's have been there to assist local, state, and federal agencies and relief organizations such as the American Red Cross and Salvation Army." When All Else Fails, Amateur Radio.



The ARRL Certification and Continuing Education Program, was approved by the ARRL Board in January 2000. Volunteers from all over the country assisted in pulling together information for the course. Because the topic of emergency communications is so diversified and so much information is available, the material is broken into three levels: Introductory, Intermediate and Advanced Emergency Communications (Levels I, II and III).

Each on-line course has been developed in segments -- learning units with objectives, informative text, student activities, and quizzes. Courses are interactive and include direct communications with a Mentor/Instructor and other students.

Check out: <u>http://www.arrl.org/cce/</u> for more information.

ARES District 7 Contact Information Michael O'Keefe, KL7MD DEC7 at kl7aa.net



ARES DI: KL7AA	ARES DISTRICT 7 & 5 KL7AA & KL7JFU		June	2008	00		
Sun	Mon	Tue	Wed	Thu	Fri	Sat	
I	2	3 2008 HAMFEST Planning MTG 5:30 PM	4	S S	6 AARC Meeting TPM	~	FIIMTEUR RYOO
×	6	01	]] MARA Board Meeting 7PM		13	14 PARKA Meeting 11 AM	EMPERATION SEMILOR
15 2008 HAMFEST Planning MTG 12 PM	16	17 AARC Board Meeting 7PM	18	19	20	21 EARS: 3PM Mayor's Marathon	unchorage Amateur Radio Clu PO BOX 101987 Anchorage, AK 99510-1987 <u>www.KL7AA.net</u>
22	23	24	25	26	27	<sup>28</sup> FIELD DAY	ARES NETS: ARES NETS: 1st Thursday: HT / Portable 2nd Thursday: Mobile Madness
29 FIELD DAY	30	EARS: R1 Nor Parka, meets a Contact: Lil Ma	EARS: R1 North, Contact: Ron Keesch: KL7YK@arrl.net Parka, meets at Peggy's restaurant, 11AM Contact: Lil Marvin NL7DL, 277-6741	on Keesch: KL7 aurant, 11AM 77-6741	/YK@arrl.net		3rd Thursday: RED CROSS 4th Thursday: Emergency Power
<i>6/21 May</i> Contact: John L <i>6/28 6/</i> Contact: TJ Sh To add to the Cale	<ul> <li>6/21 Mayor's Marathon</li> <li>Contact: John Lynn, KL7CY@gci.net: 337-1091</li> <li>6/28 6/29 FIELD DAY 2008</li> <li>Contact: TJ Sheffield, KL7TS@hotmail.com</li> <li>To add to the Calendar please contact: John Lynn at Johnlynn @gci.net</li> </ul>	ri:net: 337-1091 <b>7 2008</b> otmail.com John Lynn at Johnlynr	ARES We Mara port to pa	ARES TRAINING: We will be partic Marathon and mol port of the event. to participate.	ARES TRAINING: We will be participating in the Mayor's Marathon and mobilizing the CCV for sup- port of the event. Stations are encouraged to participate.	he Mayor's CV for sup- encouraged	Adration Marathon
ARES NE	ARES NET: Thursday Nights 8:00 PM 147.2	/ Nights 8:00	PM 147.27	'+ PL: 103.5	7+ PL: 103.5 or 443.30+ PL 103.5	PL 103.5	AHHL FIELD DAT

# <u>Data You Can Use</u>:



### 2007 Board of Directors

President:Kathleen O'Keefe, KL7KOpresident at kl7aa.netVice Pres:Jim Larsen, AL7FSvicepresident at kl7aa.netSecretary:Richard Tweet, KL2AZsecretary at kl7aa.netTreasurer:Heather Hasper, KL7SPtreasurer at kl7aa.netActivitiesChairman:

Richard Kotsch, WL7CPX <u>activities at kl7aa.net</u> **Trustee:** Keith Clark, KL7MM <u>trustee at kl7aa.net</u> **Membership Chairman:** Fred Erickson, KL7FE <u>membership at kl7aa.net</u> **News Letter Editor:** 

Heather Hasper, KL7SP editor at kl7aa.net

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

Frank Pratt, KL7RX kl7rx at arrl.net (3rd year) Paul Spatzek, WL7BF Paul.Spatzek at acsalaska.net (2nd Year) Michael O'Keefe, KL7MD mok at gci.net (1st Year)

### **One Year Board Members**

Diane Olson, KL1MY, oldwoman\_69 at hotmail.com TJ Sheffield - KL7TS, kl7ts at arrl.net Craig Severson - KL2FN, chipman at clearwire.net John Orella: KL7LL, kl7ll at arrl.net Susan Woods: NL7NN, NL7NN4606 at yahoo.com Richard Block: KL7RLB, kl7rlb at clearwire.net Tom Rutigliano, NL7TZ, tomr at alaska.net Mike Romanello, KL7BK, kl7bk at mtaonline.net

### AARC web page & Email contact addresses:

Homepage:http://wwWebmaster:webmasterMembership:membershipNewsletter:editor at ki

http://www.KL7AA.net/ webmaster at kl7aa.net membership at kl7aa.net editor at kl7aa.net

**News Letter Submissions, Information or corrections:** Submissions must be received 2 weeks before meeting Email: <u>editor at kl7aa.net</u>

#### 146.94/34 MHz, 80 watts, auto-patch, 141.3 Hz PL 224.94/223.34, 25 watts, no patch, no PL 444.70/449.70, 25 watts, auto-patch, 103.5 PL WL7CVG: Mount Susitna 4,396 ft

who are authorized to operate on those frequencies.

KL7AA: Flattop Mountain 2,200 ft

VHF: WL7CVG/R1 147.270/147.870 PL 103.5, no auto-patch UHF: WL7CVG/R3 443.300/448.300 PL 103.5, no auto-patch

Any AARC sponsored repeater, with or without an auto-patch, will

always be open to all licensed amateur radio operators in the area

Anchorage & Mat Valley Area Repeaters-a/o Feb 28, 2007

WL7CVF: Grubstake: Hatcher Pass 4,536 ft VHF: WL7CVF/R1 147.330 / 147.930 PL 103.5 Hz (no patch) UHF: WL7CVF/R3 443.900 / 448.900 PL 103.5 Hz (no patch)

<u>KL7ION at Mt. Gordon Lyon: PARKA</u> 3,940 ft 147.30 / 147.90, MHz - 80 watts, no patch, 141.3 Hz PL

KL7AIR Elmendorf AFB: EARS: 146.67/146.07, 107.2 Hz PL

#### WL7CWE: Cliffside Amateur Radio Association

KL7CC, Anchorage Hillside, SCRC & QCWA 146.97/.37 MHz, 30 watts, auto-patch, 103.5 Hz PL

<u>KL7M Anchorage Hillside</u> 147.21 / 147.81 MHz, on IRLP, 97.4 Hz PL

KL5E Chugiak: 147.15/147.75, 123.0 Hz PL, auto-patch

KL7JFU, KGB road, MARA: 146.85/146.25, auto-patch, 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

<u>KL3K</u>, Girdwood - IRLP 146.76 / 146.16 MHz, 25 watts, no patch, 97.4 Hz PL

KL7AX: South Anchorage IRLP - 146.79/ 146.19 MHz, 100 Hz PL

<u>WL7CWE</u> Anchorage IRLP 2 Meter: 146.82/146.22MHz PL 103.5 6 Meter: 51.65 output / 51.15 input, PL 103.5Hz 70 cm: 444.85/449.850 MHz PL: 103.5 Hz (Node 3400)

South Central Area Simplex Frequencies 146.52 MHz Calling and Emergency frequency 147.57 MHz National DX Calling / Coordinating frequency 146.49 MHz Anchorage area simplex chat 146.43 MHz Mat-Su Valley simplex chat 147.42 MHz Peninsula simplex chat

# <u>Nets in Alaska</u>:

The following nets are active in South-Central Alaska:

# <u>VHF</u>

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
ACWN (Alaska CW Net) 3534, 7042 Daily @ 0700 –1000, Net Purpose: Formal NTS traffic via CW.
Alaska Pacific Net: 14.292 MHz 8:00 AM M-F
ERC HF Net: 3.880 MHz – Sunday 8:30PM local

HF



ARES Net: 147.27/87 103.5Hz - Thursdays at 8:00 PM local PARKA Net 147.30/.90, 141.3 HZ Thursdays at 7:00 PM local No Name Net: 146.85/.25 repeater Sundays 8:00 PM and 1900 - 2400 Alaska Time - AL7N or KL5T monitoring. Alaska VHF Up Net: 144.200 USB Saturdays 9:00 AM local Big City Simplex Net: 146.520, 446.0, 52.320 FM, 29.6 FM 28.400 USB

Grandson of SSB Net: 144.20 USB Mondays 8:00 PM local Statewide LINK ARES Net: 147.27/87 103.5Hz Sunday 8:00 PM local: Echolink: KL7TO

**Internet Links, the favorites from our readers:** AARC http://www.KL7AA.net/ SCRC http://www.KL7G.org EARS http://www.kl7air.us http://www.kl7jfu.com MARA Moose Horn ARC http://www.moosehornarc.com **ARES** http://www.gsl.net/aresalaska Practice Exams : http://www.AA9PW.com Fairbanks AARC: http://www.kl7kc.com/ ALASKA MARS: http://www.akmars.org Alaska VHF-Up Group: http://www.kl7uw.com/avg.htm Bethel Amateur Radio Klub: http://www.al7vk.org/ Yukon Amateur Radio Association: http://www.klondike.com/yara/index.html Links for Propagation http://www.haarp.alaska.edu/ http://www.amgrp.org/misc/links.html **QRP and Homebrew Links** http://www.AL7FS.us Solar Terrestrial Activity <u>http://209.130.27.95/solar/</u> **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 editor@kl7aa.net

### **Regular HAM Gatherings:**

**Tuesday Lunch, 11:30 AM:** Denny's on Denali behind Sears. Several old timers show for this and have lots of stories to share about amateur radio in Alaska.

**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 American Diner, at the Northeast corner of Arctic and International. Great Fun.

# Who Do I Contact to Join AARC

Fred Erickson KL7FE 12531 Alpine Dr Anchorage, AK 99516-3121 E-mail: membership (at) kl7aa.net 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



# **MONTHLY EVENTS**

1<sup>st</sup> Friday each month: <u>AARC general meeting</u> - 7:00 PM in the Carr-Gottstein Building, on the APU Campus. Talk in will be on 147.27+ repeater.

### 1<sup>st</sup> Tuesday each month (except for holidays):

<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. Contact: Jim Wiley, KL7CC 338-0662.

2<sup>nd</sup> Saturday each month: <u>PARKA Meeting</u> at 11:00 AM. Polar Amateur Radio Klub is the only YL club in Alaska. All amateurs welcome. Peggy's, across from Merrill Field. Talk in on 147.30+.

### 2<sup>nd</sup> Saturday each month (except for holidays):

<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. Contact: Jim Wiley, KL7CC 338-0662.

**3<sup>rd</sup> Saturday of each Quarter month:** <u>EARS general</u> <u>meeting</u> at 3:00 PM. EARS meetings are held formally each Quarter during the first month: Jan, April, July, and October. Meetings are held informally each month at R1 North. Contact info - PO Box 6079, Elmendorf AFB 99506 or email Ron Keech, KL7YK for information. EARS: 552-2664 (recording); Talk in on 146.67-. Email: KL7AIR@arrl.net or KL7YK@arrl.net

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

**3<sup>rd</sup> Saturday each month:** <u>ARES General meeting</u> **9:30AM to 12:00 PM.** Call Michael O'Keefe, ANC DEC: dec@kl7aa.net HM: 243-4675 for additional information. Also check for ARES Info at: <u>http://</u> www.qsl.net/aresalaska/

4<sup>th</sup> Saturday of each month:<u>Valley VE Testing</u> at 7PM. 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.

**The last Friday each month:** <u>MARA meeting</u> 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 Tim Comfort, NL7SK, <u>NL7SK at arrl.net.</u>





On the weekend of June 28 - 29, the public will have a chance to meet and talk with these ham radio operators and see for themselves what the Amateur Radio Service is about. Showing the newest digital and satel-lite capabilities, voice communications and

even historical Morse code, hams from across the USA will be holding public demonstrations of emergency communications abilities.

This annual event, called "Field Day" is the climax of the week long "Amateur Radio Week" sponsored by the ARRL, the National Association for Amateur Radio. Using only emergency power supplies, ham operators will construct emergency stations in parks, shopping malls, schools and back yards around the country. Their slogan, "When all else fails..."is more than just words to the hams as they prove they can send messages in many forms without the use of phone systems, internet or any other infrastructure that can be compromised in a crisis. More than 30,000 amateur radio operators across the country participated in last year's event.

Come out to see the Anchorage Amateur Radio Club and Amateur Radio Emergency Services equipment and setup. For further information or if you have questions, please contact our team leaders TJ Sheffield, KL7TS and Keith Clark, KL7MM. TJ can be reached at kl7ts (at) hotmail.com and Keith can be reached at aksunlite (at) aol.com.

If you are interested in participating, please complete the sign up sheet below so that we can keep you updated about our Field Day activities and schedule updates. We will have a great event and great activities. Come out and join us and learn what fun amateur radio can be and how to get your amateur radio 'ham' license before the next disaster strikes.

If you are interested in participating, please go to: <u>http://www.kl7aa.net/FieldDay2008.htm</u> and use the SIGN UP sheet so our event coordinators can keep you notified of any updates and our operating plan and schedule.

# DAYTON 2008

Attached are some photos of George, KL7GS promoting our upcoming convention at Dayton. Thanks to Gordon West, we were fortunate to have two booth spaces to promote the ARRL Alaska Convention. Thank you to George, KL7GS, Wilse Morgan, WX7P, Gordon West, WB6NOA for all their efforts to promote our upcoming event.





Be sure to Register soon! Alaska tourism is in full demand and hotel rooms and available flights are going rapidly. Check out <u>www.akhamfest.com</u> for travel opportunities and to keep updated about our program and events.



# **ALASKA ARRL Convention**

# HAMFEST 2008

Arctic Circle Special Event Station Thinking of doing something fun and unusual this Summer that involves ham radio? Want to become part of a once-in-a-life-time experience that YOU can participate in and enjoy the magic of amateur radio? Join fellow ham radio operators from all over the world in activating Special Events Station W1AW/KL7 on the legendary Arctic Circle 66°33'N in northern Alaska's Land of the Midnight Sun!

The ARRL executive committee has approved our request to operate the ARRL national organization callsign in Alaska for our ARRL Convention.

All amateurs, regardless of license class, are cordially invited to help make this special amateur radio event a success and a memory that will not soon be forgotten. The Special Event will operate from the Arctic Circle during the week preceding the upcoming 2008 ARRL Alaska State Convention. Operations from the Arctic Circle will begin with setup on Friday, July 25th and plan to be on the air July 26th through August 10th, with at least four stations including two all-band HF stations, a two-meter FM station and a Satellite setup. Six-meter operations may also be available.

Visitors can sign up to operate any of these stations or, if you prefer, you are encouraged to bring your own radio equipment to Alaska and set up a temporary operation on the Arctic Circle adjacent to the Special Event station with your own call sign. (Grid Square BP-56)

Guest operators will receive a certificate of operation from this unique location and QSL cards with this special unique callsign will be available.

Commercial sponsorships are being pursued and we are currently planning the logistics of what equipment will be used. Keep checking www.akhamfest.com for more updates about our special event stations.

Transportation up to Alaska's Arctic Circle can be made at any of the Tour companies that offer daily round-trip service to Alaska's Arctic Circle and even beyond to Deadhorse-Prudhoe Bay on the North Slope. You can return back down to Fairbanks Alaska and motor your way down through Mt. McKinley-Denali Park or you can just fly straight down to Anchorage, Alaska.



Make your Travel Plans Now!

Tours, Hotels and Transportation book up fast during Alaska's busy summer season. Don't delay, make your reservations ASAP!





# **ALASKA ARRL Convention**

# WHEN: August 1 –4, 2008 WHERE: Anchorage Sheraton

The ARRL Alaska State Convention will be the largest hamfest and gathering of ham radio operators in Alaska in over 30 years.

# TABLES

# Local Amateur Operators: \$20.00/ Table

In an effort to accommodate our national vendors, tables are available to local operators on a first come, first serve basis. Operators wishing to reserve a table prior to the hamfest to ensure space and availability may do so by submitting a request via email to: info(at) akhamfest.com This does not include the admission cost of entry into the Exhibit Hall. Tables will only be available on Saturday. Sunday will be dedicated to National Vendors and out Country store auction.

# vendors

Ham Radio Outlet, ICOM, VIS Amateur Supply EZ HANG, Idiom Press, Yaesu, AMSAT, HEIL Sound, NGC, Comet Antennas, VIS Amateur Radio Supply, W5YI, Gordon West Radio School

# CQ CQ CQ, HOUSING OPTIONS Attention all Anchorage and Mat Valley Amateurs

We are looking for housing and motor home/trailer space for our Alaska Out of Town Amateurs. Anyone who can graciously provide a spare room or space to park a camper, please contact Carol Bush/ KL2FA at <u>cbush@gci.net</u> or call 907 746 6844. We are not looking for hook ups for the campers, just a place to park them during the HAMFEST. We'll list your information and any details or requirements you may have for your visitors, so as to match the folks up the best we can. This will definitely help our Out of Town Hams.

Thank you Carol Bush, KL2FA For More information, Feel free to contact:

- → Heather Hasper, at KL7SP@arrl.net,
- → Mike Romanello,KL7BK, KL7BK@mtaonline.net
- → Richard Tweet, at KL2AZ@arrl.net, 907-244-4335



# High Frequency Active Auroral Research Program (HAARP) Tour August 4th 2008

On Monday, August 4, travel 125 miles through the Matanuska Valley and along scenic views of the Chugach Mountains to the town of Gakona. Then tour the High Frequency Active Auroral Research Program (HAARP), a world class ionospheric research facility. Tour includes round trip transportation, facility tour and a box lunch. Due to Air Force regulations, all visitors must be U.S. citizens. Tour cost \$100.

Sign up for this tour on the Registration

page at www.akhamfest.com

# THE MODULATION TIMES

Anchorage Amateur Radio Club, Inc Post Office Box 101987 Anchorage, Alaska 99510-1987 www.kl7aa.net PRSRT STD U.S. Postage PAID Anchorage, AK Permit No. 69



# WELL, WE DID ASK HIM TO BRING HIS OWN EQUIPMENT FOR OUR FIELD DAY EVENT !