# Anchorage Amateur Radio Club

Next Meeting JUNE 5<sup>th</sup> 2009, 7:00 PM

#### JUNE PROGRAM:

John Main, KL2LM; will be discussing the role of the Elmendorf Air Force Base Office of Emergency Management, ICS and the National Incident Management System.

# PACLink vs.

# Standard Packet Mail

By Ron Keech, KL7YK

Recently Alaska ARES began testing the VHF to Internet Mail process called Radio Message Server (RMS).

Initial results are favorable in the event of the loss of conventional email services (internet availability) by emergency providers.

#### VHF RMS System Hardware:

- TM-261 Kenwood VHF Transceiver (any VHF radio will work)
- Kantronics 3+ TNC (any supported TNC will work)
- Mid Range Pentium Windows XP system (High Powered PC not needed)
- 2 Meter JPole Antenna
- Decent VHF operating location

Software Application:

- Winlink 2000 Packet RMS Server
- RMS Relay

Dedicated internet access (no dialup). In this case it's a local area network connected to a provider via a WIFI link. Cable Modem, DSL or similar speed internet access is preferred.

An RMS can be either VHF or HF. For now I will talk about the VHF form of setup as HF Mail uses different radios and TNCs.

Currently ANC ARES has an operational VHF RMS running in Anchorage operating on the above listed hardware and software. The designated call sign is WL7CVG-10 (the SSID denotes the RMS Server). It is located at R1 North on Elmendorf AFB in the Elmendorf Amateur Club Station. Extensive testing has shown this route is fully functional for handling

basic email communications from VHF radios to the Internet. This is a standard process and has been around for quite some time.

In a crisis where an emergency communications provider is:

1. Unable to directly access the internet due to operating location 2. Lost internet access due to damage to the infrastructure of the facility

Using conventional off the shelf Amateur hardware, email can continue to flow to those agencies needing the information be that a Hospital, Crisis Management Team or a remote emergency responder.

No, its not fast (1200 baud) but it is better than no message service at all. There are limitations on message size when sending mail over VHF on the standard Amateur Radio setup. Mainly due to the speed issue, large messages or attachments can take some time to get transferred. The Client side application is PACLink or Airmail. PACLink directly interfaces with regular email applications, like Windows Outlook or Firefox Thunderbird etc... Airmail does not but it has an internal email program.

So its slow, it's also fairly robust and error checking and compression are built into the client application. That compression process also makes monitoring the traffic nearly impossible. Unlike standard packet mail which is simple ASCII (plain text) the application uses the x.25 standard for messaging. Thus interception of the traffic using standard packet systems will not work.

If you keep in mind that size is a problem and keep the emails to less than 10 kilobytes it is able to move those files in a timely manner. The average email is less than 5k for reference. It can handle files as large as 120 kilobytes (compressed) but that would take a long time to get transferred.

Best course of action is to limit using attachments and keep the message to a few paragraphs ideally. Just the critical information you need to exchange not a 3 page Situation Report with graphics and pictures.



# PAClink vs. Standard Packet

We have also been testing the use of a digi system to support indirect access to the RMS Server. Should someone be out of range of the RMS directly they will be able to digi thru an intermediate system to get the message passed. Here again message size needs to be kept in the 10k range or less for speed.

Use of the current generation of VHF RMS is based on the expectation that the loss of internet access is not widespread. Or the traffic is coming from a location that simply has no internet access available. Work is underway developing a software addition to the RMS that will route the traffic from a VHF RMS to a HF RMS should the internet be lost at the VHF RMS site. The RMS software will at this time cache or store messages until the internet access is restored should there be a short time loss involved at the RMS location. Unlike an HF RMS, a VHF RMS Systems uses a fixed frequency.

Now, HF Mail or HF RMS Server. Same client side applications here as on VHF. But here you use HF Radios and Pactor capable TNC's. The computer required is the same as on VHF as well. As is internet access for normal routing of traffic.

If the HF RMS loses internet access, and this is the critical reason HF RMS is a great idea. The HF RMS will direct the traffic over HF to another HF RMS for delivering the traffic to the internet. In our situation at the moment that means either to Fairbanks or to the lower 48. Both of which are active and operational. Ideally for HF the RMS will be able to support all 3 Pactor modes and the soundcard WinMor mode when The HF systems that the Airmail Program provides the frequencies to tune to for the HF RMS's, which includes a Propagation table.

That being said on the Amateur Bands 90% of the HF Mail traffic is using only Pactor 1 since it is nonproprietary and not cost prohibitive. Several Models of Kantronics TNCs and Timewave TNCs support Pactor 1.

Pactor 2 and 3 are proprietary and only operate on SCS brand TNC's. These modems run \$1000 and up. A

used AEA (Timewave) or Kantronics Pactor capable TNC can be had for less that \$200. New they are running \$400-\$500 these days.



HF RMS - The HF Radio must be able to scan several frequencies listening for stations attempting to connect and this means the ability to be channelized.

Most modern HF radios are capable of doing this, as are a great many older rigs.

Standard 100 watt radios work fine. Antenna considerations for HF are a bit more complicated than VHF as there is quite a bit of separation between the frequencies to be scanned and used.

Large Log Periodic's are great but usually far beyond the affordable range of the regular Amateur operator. The real estate needed for such a wideband antenna is also a factor even to those who can afford the antenna.

More practical would be a trapped vertical that is tuned to the specific frequencies to be used. Fan Dipoles cut to the specific frequencies will work as well. Multiband antennas that require tuning are not practical as the auto tuners take too long to accommodate the scanning process.

The HF RMS also will cache or store messages until they can be delivered either to the internet or to another HF RMS.

HF Client - The Client side of HF Mail is possible using a less complicated antenna since the client is calling on a specific frequency; it does not have to listen to all possible channels for the RMS. The RMS does the scanning. So providing that the client is operating a laptop computer, HF radio and a Pactor capable TNC they should be able to access an HF RMS either nearby or far away. This includes a mobile or other remote setup.

Bear in mind mobile operations are much harder to accomplish since it uses much small antenna setups.

In the Anchorage area there is not currently an HF RMS available. There is one in Fairbanks and 40 or more in the lower 48 states. All of which are within communications range of the Anchorage area.

ARES is looking at standing up an HF RMS in the near future in Anchorage. Other RMS assets are available but not on the Amateur Bands. The Military Affiliated Radio Service or MARS runs VHF and HF RMS's in Alaska and the lower 48. In Alaska the HF RMS is at Ft Wainwright in Fairbanks. The VHF RMS is at Ft Richardson here in Anchorage. While only MARS Operators are authorized to use the MARS RMS's they have been given the latitude to provide message support to ARES and other civil agencies on an as available basis. MARS is also looking to stand up an HF RMS on Ft Richardson soon.

# WINLINK PACMAIL

NAME	CALL SIGN	LOCATION	FREQUENCY
Anchorage ARES RMS	WL7CVG-10	R1 North (Elmendorf AFB)	144.900 MHz
Palmer (MATSU) RMS	KL7JFT-10	KL7JFT QTH (Portable)	145.19 MHz
South Central Alaska Digi	WL7CVG-4	Grubstake Mt. (Hatcher Pass)	144.900 MHz
FAIRBANKS HF RMS	KL7EDK	Fairbanks	(80,40,30,20 Meter Bands)
FAIRBANKS RMS	KL7EDK-10	Fairbanks	147.960 MHz

To find an RMS Packet or RMS Pactor gateway near you visit the Winlink 2000 website at http://www.winlink.org and click on MAPS or REPORTS.

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DIGITAI	L in South Central A	LASKA
CALL SIGN	NAME/LOCATION	FREQUENCY
KL7AA-1	KL7AA HAMSHACK (Packet)	
KL7AA-2	APRS I-Gate (CCV Garage)	144.390
KL7AA-3, 4, 5	Portable Packet Stations	
KL7AA-6	Eagle Digipeater (MATSU)	The first the first line with the
KL7AA-7	Anchorage AARC BBS	
KL7AA-8	AARC	
KL7AA-9	Portable Digipeater #1	
KL7AA-10	Portable Digipeater #2	
KL7AA-11	Portable APRS #1	
KL7AA-12	Portable APRS #2	A pocket PC portable packet station
KL7AA-13	CCV APRS (Motor home)	
KL7AA-14	National Weather Service Packet Sta	ition (Sand Lake Road)
KL7AA-15	CCV Packet Station	
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# **KL3BD MT. MCKINLEY EXPEDITION**

#### To all my friends,

I plan to fly up to the Kahiltna Glacier on the 27<sup>th</sup> of May, depending on the weather, and spend a month climbing the mountain with all my friends. Actually it is a solo climb but I will have radio contact and GPS tracking with text messaging along the way, allowing others to be there with me, Summit day should be somewhere around June 20<sup>th</sup> to the 24<sup>th</sup>. High winds are common on the summit since it reaches into the jet stream so waiting for a calm, 20-30 mph, day is a must.

Mt. McKINLEY, called DENALI (the Great One) by Alaskan Natives, is the highest point in North America and higher above the surrounding terrain than Everest. It's height above terrain puts it into the jet stream creating the greatest hazard on the Mountain, severe weather conditions of -50 F (-45C) and 200 mph winds (320 kph). To remain stationary in a 100 mph wind you have to lay down and dig your ice ax in.

The Node will be on IRLP Reflector 9006 for the duration of the climb so multiple stations may connect and participate at once. I will be monitoring the reflector any time I am awake and out of the impressive mile deep Kahiltna Glacier canyon. Much of my HF time will be on the Alaska HF Nets on 3.933, 3.920, 7.093 and 14.292 MHZ. See www.KL7AA.net for details on Alaskan nets. The summit bid should occur between June 20<sup>th</sup> to 24<sup>th</sup>. Check in on IRLP 9006 for updates.

I will be packing 35 days of food for the month long trip at a weight around 70 pounds for the food and about 30 pounds of radio gear then there is the tent, sleeping bag and technical climbing hardware, cold weather camping gear as well as skis with climbing skins. I usually leave the skis cached at 12,200 since the snow is hard and crusty above there because it never thaws and is wind blown very hard. The last trip I started out with 218 pounds. My goal for this trip is 175 pounds. On the lower glacier I pull a sled behind me with 85 to 90 pounds in my pack. Progress is very slow but that allows for good acclimation to the thin air. On the steeper portions I will have to make as many as three carries to get my gear up to the next camp. I will also cache gear at major camps for use on the way back down. I burry them in the snow so the Ravens don't get to the food and mark them with 4 foot long bamboo wands. My first cash last time moved a quarter mile down the valley on the glacier from it's original GPS position after 30 days of climbing.



To track my progress from Kotzebue to the top of the mountain go to <u>www.aprs.fi</u> a ham radio tracking website based in Finland, then under *Track Callsign* type in my HAM call **KL3BD** and click search. The third line of the bubble window gives the text message for the day. Once the search is completed, you can

select 7 days under the *Show last* drop down list. To view the mountain in Google Earth (if it is installed on your machine), under *Other views* on the lower right of the screen, click Google Earth KML.

At the head of the Kahiltna Glacier at the 12,500 camp (63° 4'30.74"N, 151° 8'19.04"W) there is no VHF communications only HF. HF SSB will be mostly on the Alaska Nets on 3.933, 3.920, 7.093, 14.292. I will also be doing 6 meters as conditions allow.

At the 14,500 Mid Camp, (63° 3'59.98"N, 151° 4'23.49"W) communications will be good and from then on to the summit.

I hope to spend nearly a week at the 17,500 High Camp ( $63^{\circ}$  4'51.99"N, 151° 3'22.00"W).

For Ham operators with IRLP Node access I will be on Reflector 9006 once in high enough to reach Kenai, 200 miles away. A simplex IRLP node has been graciously dedicated for the expedition by the Moose Horn Amateur Club of Kenai and AL2B

For people with scanners in Kotzebue you can listen in on 146.520 when I chat with my wife Kathy, KL3KD, nearly every day.

Please pray for a safe trip up and down.

Bob Douglass, KL3BD

Editors: note: This will be KL3BD's third ascent to the top of Mt. McKinley having accomplished this feat in 2004 and in 2001.



In regards to thin air, at 20,000 feet there is so little oxygen in the air that ones brain has the "problem solving capabilities" of a 7 year old. That means you have to preplanned contingencies for many emergency scenarios so recognition and reactions are automatic. Ones memory recall is good but linking two memories together and making a conclusion from that takes a lot of concentration. I don't know of anyone who has ever used oxygen on Denali. The biggest problem on summit day is forgetting to drink and eat. I carry a drinking bag with a hose like runners use in front under my Parky and this time I plan on setting a timer on my cell phone to remind me to drink. The air is so dry that each breath sucks significant moisture right out of your lungs. Even with more than adequate clothing you will get hypothermia if you get dehydrated because of reduced circulation. Dehydration will also cause altitude sickness but it is reduced within 15 minuets of drinking. I got altitude sickness on summit day the first trip up. You are very tired and when you sit down to rest you instantly "fall asleep", it more like passing out and kind of scary when you come back to life. You also get tunnel vision and your depth perception goes. You cant see a step down or a dip in the snow and when you step into it you jolt you back as you drop a few extra inches before your foot makes contact.

My radio gear is based around an awesome Lithium Ferrous Oxide A123 battery pack Provided by the guys at BUDDY POLE ANTENNAS. One great thing about the LiFe battery is that it can provide 80% of its rated capacity at -4 F where a Lead Acid Gel Cell has less than 20% of its capacity available at that temperature. The A123 pack also weighs 1/4 as much as the lead acid. I have a 11 watt flexible solar panel to keep the battery pack charged but it will perform like a 15 watt panel because of the thin atmosphere and cold temperatures making it more efficient. A Vx-8 with a speaker-mic mounted GPS will provide digital APRS capability with its built in TNC and analog voice to the IRPL Node in Kenai, Alaska. Backup V/UHF com will be with a Vx-7 which I used on the 2004 climb. I have mounted a dual band mobile antenna on a 19 inch long aluminum Picket Snow Anchor for a counterpoise which gives me good propagation when on the move, sticking out of my pack. I also have an Alinco DJ-G5 and an Arrow antenna for a cross band repeat at fixed camps in marginal areas as well as making satellite contacts . HF equipment is an FT-857 with a Z-100 auto tuner provide by KL7CY feeding a 80 meter dipole antenna of light weight transformer wire laid out on the snow. Effective height above ground will be from 500 to 2000 feet with ground level of 12,000 and 17,000 feet at the main camp sites. Just think of a 2,000 foot tower with its base at 12,000 feet, any HAM's dream.

Last climb I made a contact with Southern California on 40 meters with only 5 watts SSB and the voice processor off. I also made the first 6m contact from the mountain. I will use the AM-FM radio built into the VX-8 to listen to stereo FM broadcast stations and weather stations from Anchorage as I slowly trudge up the glaciers. It nestles in a small pouch on the shoulder strap of my back pack with coax running to the dual band antenna on my pack and getting power from the LiFe A123 battery pack. The RF path to Anchorage could be made with 1/4 watt and a paper clip for an antenna if it was not for the South Buttress which keeps Anchorage in its shadow most of the climb. Last climb I had about 20 friends make it to the summit with me via IRLP and on the summit at -50 F I made simplex VHF contact over 200 miles to Glen Allen Alaska with KL7DA with 5 watts and the Vx-7 in a pocket inside my Parky on a short rubber duck laying up against my chest.

My motto on the last climb was: "I will be high enough to give you a live, first hand description of what heaven looks like. But when, not if, the weather turns bad, I will be able to give you a first hand description of what Hell looks like when it freezes over." The motto for this climb is "Happy 60<sup>th</sup> Birthday to me". To do the mountain at 60 has been a "wouldn't it be neat if I could" idea since the last climb. I plan on having a piece of frozen Cheese Cake with a candle on it at the summit.

The 12,200 foot camp is a storm ravaged area and last climb the entrance to my roomy snow cave drifted over. I could hear the wind pounding the snow outside so I just kicked back, rested, listened to FM Broadcast radio and repaired gear. I heard foot steps on the snow above and people yelling at me but the storm prevented the Park Ranger and his friend from hearing my reply. I heard them say "he must have suffocated in there because he has not been out in over 24 hours". They could not see my vent hole in the ceiling just a few feet away. They could tell where the entrance was at by the antenna stuck in the snow so they dug frantically with their hands following the coax down into the entrance. Finally, they got in far enough they could see me sitting back eating a warm meal wearing light clothing in my warm abode. Once they got in I had to put on a coat as when they opened the entrance and a draft developed. Many times for a quick camp I just slept I my Bivy Sack, a Gortex sleeping bag cover, at intermediate points between main camps instead of putting up the tent or digging a cave.

My Home Location, Kotzebue, Alaska is an Eskimo village of 3,500, 33 miles North of Arctic circle on West coast of Alaska, 100 miles from the Russian boarder on the Arctic Ocean. We are 550 miles from the nearest road and about 100 miles north of where the US and Russia come very close together and where the Arctic Ocean and the Pacific Ocean meet.

### A FCC LOOKS TO RAISE VANITY CALL SIGN FEES FOR SECOND CONSECUTIVE YEAR

The FCC released a Notice of Proposed Rulemaking and Order (NPRM) on May 14 seeking to raise fees for Amateur Radio vanity call signs <a href="http://hraunfoss.fcc.gov/edocs\_public/attachmatch/FCC-08-126A1.pdf">http://hraunfoss.fcc.gov/edocs\_public/attachmatch/FCC-08-126A1.pdf</a>

Currently, a vanity call sign costs \$12.30 and is good for 10 years; the new fee, if the FCC plan goes through, will go up to \$13.40 for 10 years, an increase of \$1.10. The FCC is authorized by the Communications Act of 1934 (as amended) to collect vanity call sign fees to recover the costs associated with that program. The vanity call sign regulatory fee is payable not only when applying for a new vanity call sign, but also upon renewing a vanity call sign for a new term. Instructions on how to comment on this NPRM are available on the FCC Web site www.fcc.gov/cgb/consumerfacts/howtocomment.html

The vanity call sign fee has fluctuated over the 12 years of the current program -- from a low of \$11.70 in 2007 to a high of \$70 (as first proposed in the FCC's 1994 Report and Order). In 2007, the Commission lowered the fee from \$20.80 to \$11.70. The FCC said it anticipates some 15,000 Amateur Radio vanity call sign "payment units" or applications during the next fiscal year, collecting \$201,000 in fees from the program.

The vanity call sign regulatory fee is payable not only when applying for a new vanity call sign, but also upon renewing a vanity call sign for a new term. The first vanity call sign licenses issued under the current Amateur Radio vanity call sign program that began in 1996 came up for renewal three years ago.

Those holding vanity call signs issued prior to 1996 are exempt from having to pay the vanity call sign regulatory fee at renewal, however.

That's because Congress did not authorize the FCC to collect regulatory fees until 1993. Such "heritage" vanity call sign holders do not appear as vanity licensees in the FCC Amateur Radio database.

Amateur Radio licensees may file for renewal only within 90 days of their license expiration date. All radio amateurs must have an FCC Registration Number (FRN) before filing any application with the Commission. Applicants can obtain an FRN by going to the ULS <http://wireless.fcc.gov/uls/> and clicking on the "New Users Register" link. You must supply your Social Security Number to obtain an FRN. The ARRL VEC will process license renewals for vanity call sign holders for a modest fee. The service is available to ARRL members and nonmembers, although League members pay less. Routine, nonvanity renewals continue to be free for ARRL members.

Trustees of club stations with vanity call signs may renew either via the ULS or through a Club Station Call Sign Administrator, such as ARRL VEC.

League members should visit the "ARRL Member Instructions for License Renewals or Changes" page www.arrl.org/fcc/memberlicenseinstructions.html while the "Instructions for License Renewals or Changes" page covers general renewal procedures for n o n m e m b e r s w w w . a r r l . o r g / f c c / licenseinstructions.html. There is additional information on the ARRL VEC's "FCC License Renewals and ARRL License Expiration Notices" page www.arrl.org/arrlvec/renewals.html.

License application and renewal information and links to the required forms are available on the ARRL Amateur Application Filing FAQ Web page. The FCC's forms page also offers the required forms www.fcc.gov/formpage.html

# AMATEUR RADIO

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



# KL7AA General Meeting Club Business

#### ANCHORAGE AMATEUR RADIO CLUB MEMBERSHIP MEETING May 1, 2009 Carr Gottstein Building – APU Campus Anchorage, AK

#### Call to Order

The meeting was called to order at 7:00 PM by President Randy Vallee, KL7Z. 25 were in attendance.

#### Presentation

T.J. Tombleson KB8JXX gave a presentation of the proposed Cliffside Amateur Radio Association linked repeater project. T.J. explained the 3 proposed phases of the project; Phase 1 is to provide service to the major cities in the State (Anchorage and Fairbanks), Phase 2 is to provide overlapping service along the road system of Alaska and Phase 3 is to provide service to rural Alaska. T.J. explained the partnership he has developed with AT&T Alaska for their installation, maintenance and hosting of 25 linked repeater sites throughout Alaska. T.J. explained the project as a system to provide general use communications throughout the state as well as being a back up communication link in emergencies which will be built for high reliability. The project will be built in 5 networked segments in order to avoid a single point of failure, 4 of which will be along the road system and 1 for rural Alaska. T.J. noted this project will take two summers to complete once all equipment is obtained. General discussion covered repeater site backup power, overlapping coverage, legal protection, control operators, ability to break repeater sites away from the network for use in emergencies and other uses. T.J. noted he is looking for a webmaster, grant writer, volunteers to research equipment, prepare donated equipment and also setup/design/construct antenna supports. T.J. noted that he has 22 repeaters available for installation at this time and none of the support equipment needed. For additional information visit the www.WL7CWE.org website.

#### **OTHER**

Heather Hasper, KL7SP made the following announcements:

- Jerry Curry KL7BDK announced the launching of the BEAR 3 and provided frequency information for the event.
- The Walk for Hope is scheduled for May 2nd. Contact KL7CY at ARRL.net for information

- The MARA Hamfest will be held on May 16th.
- The Gold Nugget Triathlon will be held on May 17th and volunteers are needed for the event.
- The June 6h Anchorage International Airport Disaster exercise is a large city-wide emergency exercise and a great opportunity for amateur radio to demonstrate it's effectiveness. Volunteers are still needed for this event. Contact KL7SP at ARRL.net for more information.

Heather announced the recent Technician class held resulted in 42 additional amateur radio operators in Anchorage.

Hugh McLaughlin KL7HM announced the membership survey was going online and would be available until May 31st. The results of the survey will be announced in the July Newsletter.

#### Door Prize Drawing

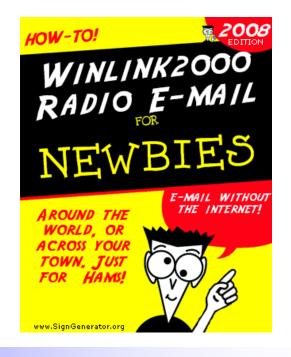
Chuck, KL1KL, KL2RQ, KL7IAF, AL7FS, KL1UK, KB8JXX, KL7BGZ, KL7FHX, AB3AC, WL7NJ and KL7SP.

The meeting adjourned at 7:53pm.

Submitted as recorded on May 1, 2009

Richard Tweet, KL2AZ Secretary

http://groups.yahoo.com/group/ LOADING\_WL2K\_USER\_PROGRAMS/





# Field Day 2009

Field Day is an annual emergency communications training exercise and is the largest on-the-air operating event in amateur radio. The last full weekend in June provides a unique opportunity to showcase the capabilities of the Amateur Radio Service.

At Field Day we have a chance to demonstrate these resources to the public, elected officials, served agencies and other amateur radio operators world-wide.

### Where and When?

Field Day 2009 will be held in Kincaid Park, at the Hundeplatz dog training area.

The concrete pads in this area are the building foundations of the 1st battalion, 43rd Air Defense Artillery, Army Air Defense Command Post (AADCP) (pronounced "Ad Cap").

This location, the bunker near Kincaid Chalet and the facilities on Site Summit are part of the last two Nike-Hercules missile battalions in the United States.

These sites, along with one at Homestead AFB in Florida, were deactivated in July, 1979, fully five years later than any other sites in the continental United States.

The Hundeplatz itself is a clearing that Army helicopters used as a landing field. More information can be found at:

#### http://home.att.net/~nikealaska/point/AADCP.html

Take Raspberry Road west into the park. Turn right (north) approximately one-half (1/2) mile after crossing under the wooden foot bridge.

Set-up begins Friday morning, June 26<sup>th</sup>, at the CCV garage on Rowan Street, starting at 0900 hrs.

That's right, Friday morning! We have a lot of field testing to do and we want these systems operational as soon as possible.

The event officially kicks-off the next day, on Saturday, June  $27^{\text{th}}$  at 10:00AM, with continuous operation for the next 24 hours.

Talk-in on Friday and Sunday (while we're driving) will be on 146.490 simplex.

After setup we'll switch to the portable repeater on 449.650, minus (-) no tone, for the remainder of the weekend.

Kincaid Park is electrically quiet and we've been out there for the past several years, however this year everything will be concentrated at the "north end" of our operating area.

### **Our Approach**

What is the real purpose behind Field Day?

We believe that in addition to food, fun and camaraderie, there is a serious side to Field Day.

This event provides an opportunity to design and test enhancements to our communications systems, develop operator skills, continue relationships with served agencies and showcase our capabilities to elected officials and the general public.

Our national association for Amateur Radio, the ARRL, sponsors Field Day and encourages us along these lines.

Field Day is an operating event, not a contest, however we believe one method to bench-mark our progress (year-by-year) is to track point scores and compare them with other organizations within Alaska, the Northwest Division and even Nationwide.

These "points" are one measure of how much our radio club is willing to deliver in terms of contacts, new technology and getting our story out in front of the public.

Each QSO (radio contact) counts for points and premiums are placed on solar, battery and low-power communications.

This makes sense, because in a real emergency, extending our operating time by conserving batteries and fuel would be a critical factor in our success.

Some clubs in Alaska choose to run lower power levels (150 watts or less) and pick up the power multipliers.



To be heard by Lower 48 stations, our club chooses to run the full legal limit of 1,500 watts, powered by 240 vac diesel generators.

CW (Morse code) and Digital QSO's are worth twice as much as SSB (voice) contacts because of their efficient use of bandwidth.

These signals simply get though better. The ARRL encourages us to operate these modes by assigning higher point values to the contacts.

### **Bonus Points**

Another way the ARRL encourages us to expand our capabilities and showcase our operating skill is by offering Bonus Points. Many Bonus Point categories have a solid basis in emergency communications preparedness.

### Get-On-The-Air (GOTA) Station

The ARRL wants us to provide an opportunity for new (or generally inactive) operators to Get-On-The-Air.

Our GOTA station will have a fighting chance this year, with a Yaesu Mark V transmitter running the maximum allowable GOTA power of 150 watts.



The GOTA station will use our best HF antennas, including the SteppIR yagi and a SteppIR vertical for the low bands.

We will have dedicated, full-time "coaches" to assist new operators in making SSB (voice), CW (Morse code) or Digital (computer) contacts.

### **Communications Doctrine**

Over the years, the club has made a conscious decision to own the equipment we will train on and respond with.

One design goal is to ensure all communications systems can be set up by (at most) a three-person crew, and our "stretch" goal is to have all systems deployable by a single individual.

The club communications doctrine, or philosophy, has evolved into "M-B-C" which stands for Multi-<u>Mode</u>, Multi-<u>Band</u> and Multi-<u>Channel</u>.

In general, amateur radio operators never use the word "channel" to describe our operations; however there are established locations within the ham bands where scheduled net operations, QRP calling frequencies, formal traffic handling, DX windows and other activity can be found. In some sense, these frequencies are indeed "channels" and can be programmed into our radios' memory banks.

One design goal for any field deployed transmitter (and antenna system) is to provide multi-mode operation on multiple ham bands and be "frequency agile" within those bands.

SSB (voice) contacts typically occur in the upper portion of a band, while CW (Morse code) contacts occur at the low end of the band. Digital (computer) contacts are found somewhere in between.

Since we often train in a contest environment, the ability to be "frequency agile" within a band is a worthwhile design goal.

Once our communications philosophy is fully built-out, any operator should be able to sit down at any transmitter and choose to operate SSB, CW or digital modes, into efficient, "frequency agile" antenna systems that automatically track the operating frequency and effectively propagate these signals for DX (long distance) or regional communications.

### **Seven Primary Systems**

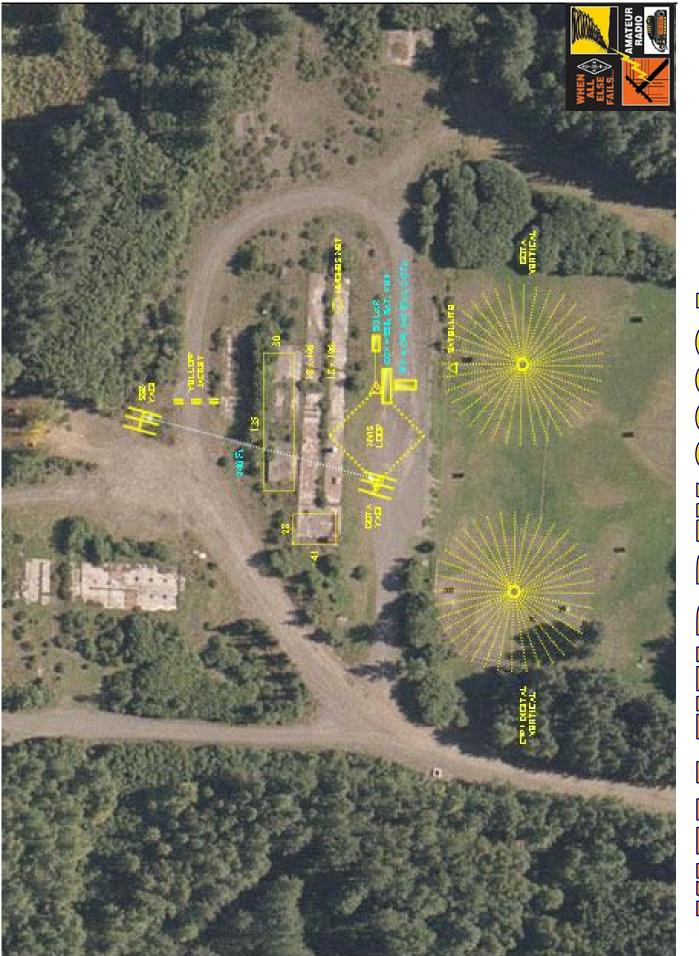
There are seven primary systems at Field Day, and each system has two (or more) subsystems.

Our training goal is to have at least one crew captain fully trained on each subsystem, and then "each one, teach one" into the future.

- 1. Crew Support Weatherport tent
  - CCV motorhome
- Power Distribution / Antenna Masts

   12kw diesel generators
   Spider boxes
   40 ft. masts
- Yagi Antennas SteppIR yagi Cushcraft "arctic mod" yagi

continued page 9.



# FIELD DAY cont.

- 4. Loop Antennas SAMS tuner CCV roof tuner Support towers
- Vertical Antennas SteppIR verticals Dual-band tower verticals Either system as a phased array
- 6. Satellite Systems Amateur satellite ground station HughesNet commercial system
- 7. Computer Infrastructure Wireless LAN CAT 5 LAN

<u>**Crew Support</u>**: Consisting of the Weatherport tent and CCV motor home, this system will be tested in a "new" configuration at Field Day. This year we will assemble the Weatherport perpendicular to the CCV, so both entrances are sheltered by the motor home awning.</u>

These two structures form a capital "T" that we are calling the T-Mobile configuration (not affiliated with any cell phone service providers of the same name).

**<u>Power Distribution</u>**: The club has two diesel generators, each rated at 12kw and both provide 120 and 240 vac power. Each generator comes with a "spider box" for power distribution, providing several GFI protected power outlets and the ability to daisy-chain one spider box to another.

The AARC trailer has a short (1 ft.) pigtail and 155 ft. of 4C / 8 cable available. The SCRC trailer has a 26 ft. pigtail and a 107 ft. of power cable.

This year we'll attempt to run the entire camp on a single generator. Richard, KL2AZ will provide a recording power meter to capture peak and average power load and determine how well our power distribution system is balanced.

The camp will run the first 12 hours on one generator, then shift to the second generator for the remainder of the exercise. This way we can balance the accrued engine hours and save fuel by running only one generator at a time.

Each power / tower trailer has a 40 ft. crank-up mast and outriggers that are unique to the trailer.

The outriggers that stabilize these trailers are not standardized, so training on both configurations is recommended. The mast location on each trailer is different, which means one trailer is unable to be towed by a pickup with a camper shell.

**Yagi Antennas:** The three element SteppIR yagi is a high performance, frequency agile antenna system that covers six amateur bands and all the frequencies in between.

This antenna is assigned to the GOTA station and is primarily used for DX (long distance) communications.

The Cushcraft tri-band yagi is a conventional trapped antenna, fitted with "arctic modifications" that allow quicker assembly in the field. This antenna covers three amateur bands, primarily the phone (voice) portion of the band. It is assigned to the SSB station.

**Loop Antennas**: One full-wave 80m loop antenna can be tuned by either of two remotely controlled antenna tuners. The Swiss Antenna Matching System (SAMS) is a full legal limit, remotely controlled, weatherproof antenna tuner located on the tower. This system matches the loop at its feed point and minimizes coaxial cable power losses.

SAMS tracks the operating frequency and preset inductor and capacitor combinations ensure the loop is frequency agile. This antenna is assigned to the SSB station and is used for regional (NVIS) communications.

The CCV roof tuner is an SGC model, rated at 500 watts, and will tune a mobile whip, the loop antenna or a dipole. This configuration provides a useful communications system for quick field deployment at times when the power / tower trailers are not available.

The 48 ft. support towers have an improved rigging process that allows deployment by a three-person crew. Future development and testing may allow these towers to be handled by a single individual.

**Vertical Antennas:** Two SteppIR verticals are used at Field Day. Each antenna is frequency agile and can cover ten amateur bands and all the frequencies in between.

While we are not yet ready to operate these verticals as a phased array, the potential is there and only computer modeling is needed to make this system a reality.

One vertical antenna is assigned to the GOTA station and the other is assigned to the CW / digital "timeshare" station.

In the future, our 48 ft. support towers can be operated as dual-band verticals on 80m and 40m.

This system needs additional development to "frequency scale" a known impedance matching technique and for operation as a phased array.

## FIELD DAY cont.

<u>Satellite Systems</u>: Amateur satellite operations are available using a field-deployed satellite ground station. A high-performance computer tracks the orbits of various amateur radio satellites and automatically adjusts the uplink and downlink antennas for azimuth and elevation. Additional development work is needed for complete computer control of the satellite radio for real-time Doppler frequency tuning adjustments.

A recent acquisition, the HughesNet commercial satellite system will debut at Field Day 2009, providing real-time Internet access for our remote location. This system will be invaluable in a real communications emergency!

<u>Computer Infrastructure</u>: Working hand-in-hand with the HughesNet satellite system is a cable-based Local Area Network (LAN).

This system allows computer networking between the SSB, CW / digital and GOTA stations for real-time log checking, instant messaging, email and even video tele-conferencing (in the future). Also under development is a wireless version of this same system.

#### **RF Exposure Calculations**

Part of site preparation is an evaluation of potential RF exposure levels. We used the University of Texas online calculator, which follows the ARRL recommended approach when calculating the FCC mandated RF exposure limits: <u>http://hintlink.com/power\_density.htm</u> Conservative numbers are used in all cases

Assumes ground reflection effects

Assumes 67% transmit time (i.e. ten minutes on-the-air,

Uncontrolled

Yes Yes Yes Yes Yes

ten minutes off-the-air and ten minutes on-the-air).

- Assumes 1,500 watts
- Assumes 8.5 dBi yagis
- Assumes 4.4 dBi loops
- Assumes 2.2 dBi verticals

Assumes 40 ft. to yagi or loop

Assumes 100 ft. to verticals

Duty Factor	Freq	Controlled
20% SSB	4.000	Yes
	7.300	Yes
	14.350	Yes
	21.450	Yes
	29.500	Yes

Duty Factor	Freq	Controlled	Uncontrolled
40% CW	4.000	Yes	Yes
	7.300	Yes	Yes
	14.350	Yes	Yes
	21.450	Yes	Yes
	29.500	Yes	Yes
Duty Factor	rFreq	Controlled	Uncontrolled
100% RTT	Y	4.000 Yes	Yes
		7.300 Yes	Yes
		14.350 Yes	Yes
		21.450 Yes	Yes
		29.500 Yes	No

The "uncontrolled" expose limit is exceeded only at 100% duty factor, at the top of the 10 meter band, and is an unlikely scenario at this point in the solar cycle.

#### Help Make Field Day a Success

Please join us for Field Day 2009 and begin your field based training experience using the club's high performance communication and support systems.

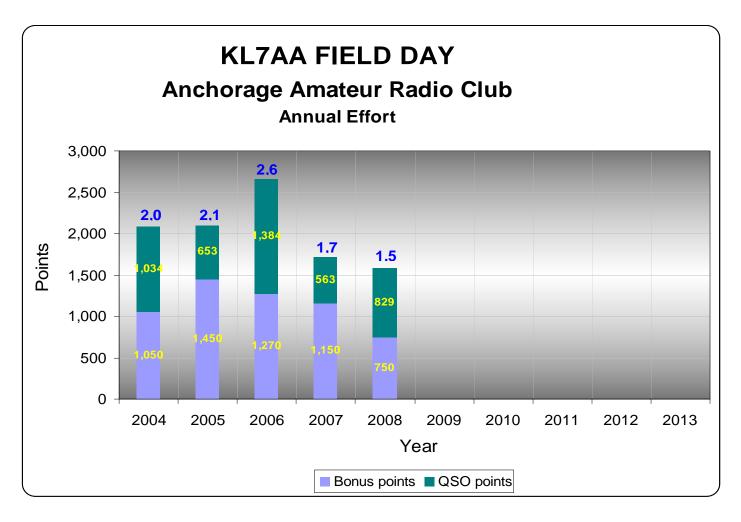
There are dozens of jobs that make Field Day a success, and for many clubs, Field Day is the focus of their operating year.

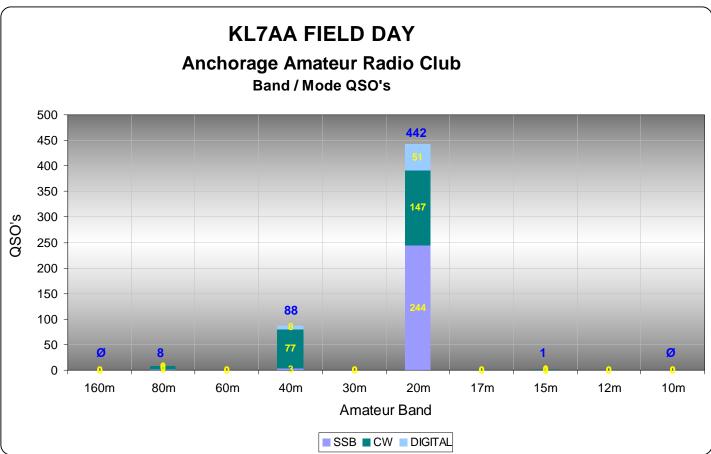
Field Day planning occurs every Wednesday evening at the CCV garage on Rowan Street, starting at 7:00PM. You can make Field Day better by getting involved!

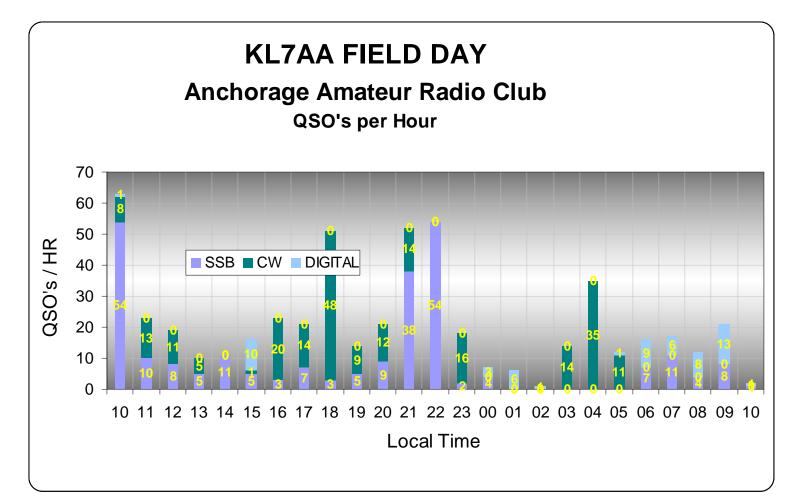
Sincerely,

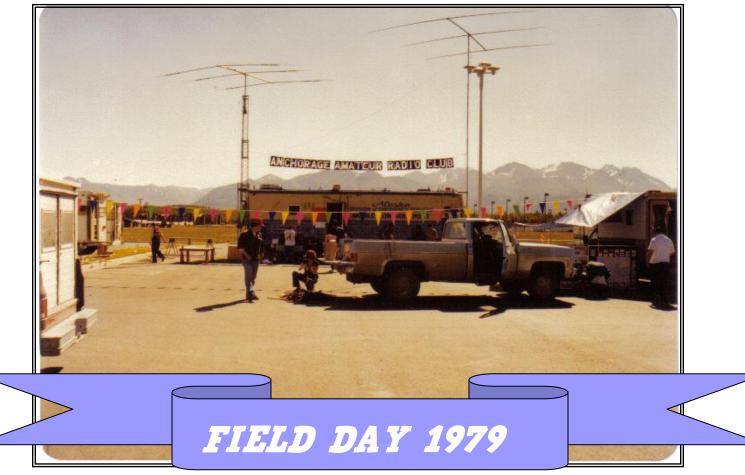
Keith Clark, KL7MM TJ Sheffield, KL7TS Field Day Co-Chairmen











**JUNE 2009** 

# THE MOTLEY GROUP PICNIC - 2009 "THE" ANNUAL PICNIC FOR ALASKA'S HAM RADIO OPERATORS JUNE $27^{TH}$ & $28^{TH}$

**Byers Lake State Campground**, Mile 147 Parks Hwy. - "D" Row Stay for a few days or a few hours. Some Hams arrive as early as Tuesday and stay a week. Some arrive Saturday and stay a few hours. Most arrive Friday and leave Sunday. Fish, hike, canoe, chat with other Hams, operate field day or just relax.

Here are some of the scheduled activities in which you may participate. (Subject to change, depending on weather and interest level.)

Thursday, 1830 – EARLY BIRD DINNER (potluck) - NL7TZ campsite

Friday, 1730 – SOCIAL HOUR - Motley campsite

Saturday, 1000 – GROUP HIKE ON THE LAKE TRAIL – meet at NL7TZ campsite

Saturday, 1300 to 1600 – RADIO WORKSHOP – Motley campsite ANTENNAS, ETC. – Moderator: Jim Movius, KL7JM Present your questions and comments or "show & tell" one of your projects.

Saturday, 1830 – THE MOTLEY PARTY - Motley campsite POTLUCK DINNER - AWARDS CEREMONY

> **DOOR PRIZE DRAWINGS - CHINESE AUCTION** (Please bring an item for the Chinese auction)

Sunday, 0900 – FAREWELL PANCAKE BREAKFAST (potluck) - NL7TZ campsite

SOUVENIRS FOR PURCHASE :Motley Group "Hooded" Sweat ShirtsDOOR PRIZESMotley Group "Hooded" Sweat Shirts•Antenna Analyzer – MFJ 209Two-Meter Handheld Radio – Icom Sport•Digital Multimeter – DMM850Electronic Bug Swatter

## **QUESTIONS, COMMENTS, SUGGESTIONS:**

Larry, AL7LW – Manager, Alaska Motley Group CHECK IN TO THE MOTLEY GROUP - 3.933 MHZ – 2100 HOURS, DAILY

# The 4th Annual Kenai Peninsula HAMFEST

Saturday, July 18th, 2009 10 AM to 4 PM.

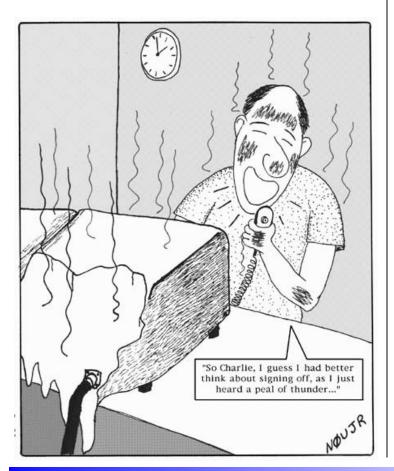
AtKenai Peninsula Borough Emergency Management Building Wilson Lane, Soldotna

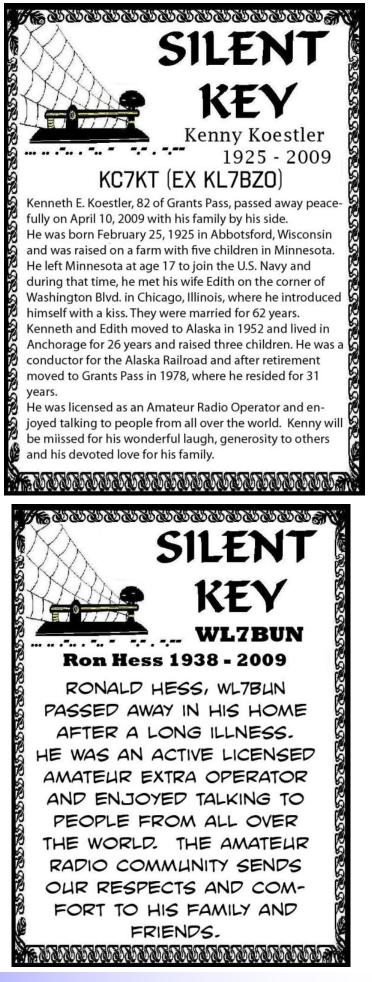
Talk-In on the 146.88/28 repeater CASH Admission (to be determined)/ Door Prizes.

Grand prize (to be determined) Must be present to Win! Winner will be selected about 3:30 pm.

### HamFest Swap Meet.

Bring your stuff to sell. Selling fee (to be determined). Table setup 9 to 10 AM. Cash only for admission and table fee.





# Amateur Radio Emergency Communications Enhancement Act of 2009 HR 2160

On Wednesday, April 29, Representative Sheila Jackson-Lee (D-TX) introduced HR 2160. the Amateur Radio Emergency Communications Enhancement Act of 2009 in the US House of Representatives. This bill, if passed, would "promote and encourage the valuable public service, disaster relief. and emergency communications provided on a volunteer basis by licensees of the Federal Communications Commission in the Amateur Radio Service, by undertaking a study of the uses of Amateur Radio for and disaster relief emergency communications, by identifying unnecessary unreasonable impediments the or to deployment of Amateur Radio emergency and disaster relief communications, and bv making recommendations for relief of such unreasonable restrictions so as to expand the uses of Amateur Radio communications in Homeland Security planning and response." The bill has been referred to the Committee on Energy and Commerce.

If enacted into law, HR 2160, would instruct the Secretary of Homeland Security to undertake a study and report its findings to Congress within 180 days. The study would spell out uses and capabilities of Amateur Radio communications in emergencies and disaster relief. The study shall:

Include recommendations for enhancements in the voluntary deployment of Amateur Radio licensees in disaster and emergency communications and disaster relief efforts.

Include recommendations for improved integration of Amateur Radio operators in planning and in furtherance of the Department of Homeland Security initiatives.

Identify unreasonable or unnecessary impediments to enhanced Amateur Radio communications -- such as the effects of private land use regulations on residential antenna installations -- and make recommendations regarding such impediments. Include an evaluation of Section 207 of the Telecommunications Act of 1996 (Public Law 104-104, 110 Stat 56 [1996]).

Recommend whether Section 207 should be modified to prevent unreasonable private land use restrictions that impair the ability of amateurs to conduct, or prepare to conduct, emergency communications by means of effective outdoor antennas and support structures at reasonable heights and dimensions for the purpose in residential areas.

The Secretary of Homeland Security shall utilize the expertise of the ARRL and shall seek information from private and public sectors for the study.

The bill currently has five co-sponsors: Madeleine Bordallo (Guam), Mary Jo Kilroy (D-OH), Zoe Lofgren (D-CA), Blaine Luetkemeyer (R-MO) and Bennie Thompson (D-MS). Representative Thompson currently serves as Chairman of the Committee on Homeland Security. Representatives Jackson-Lee. Lofgren Kilrov and are members of that committee.

"We understand that Representative Jackson-Lee was very impressed with the radio amateurs she encountered on a visit to an Emergency Operations Center in Houston during Hurricane Ike last September," said ARRL Chief Executive Officer David Sumner, K1ZZ. "We are grateful to her and to the five original co-sponsors for their of Amateur and support Radio the encouragement that their bill offers."

ARRL President Joel Harrison. W5ZN. concurred: "We excited are to have Representative Sheila Jackson-Lee introduce HR 2160. It is extremely encouraging to have the support of a number of original co-sponsors -- including several members of the House Homeland Security Committee -- who recognize the importance of Amateur Radio's long history of public service."

# KL7AA Club Business

#### ANCHORAGE AMATEUR RADIO CLUB

Board of Directors Meeting May 19, 2009, 7:00PM Hope Community Resources 540 WEST INTERNATIONAL ROAD Anchorage, AK (UNAPPROVED at Printing)

Attendance:

Randy Vallee, President, Heather Hasper, KL7SP, Vice President, Calex Gonzalez, KL2BT Secretary, Pat Wilke, Activities Manager, Sean Jensen, KL2CO; Hugh McLaughlin, KL7HM, Bruce McCormick, KL7BM, Susan Woods, NL7NN, TJ Sheffield, KL7TS, Michael O'Keefe, KL7MD, Eric McIntosh, KL2FM

Excused: John Orella, KL7LL, Tom Rutigliano, NL7TZ, Richard Tweet, KL2AZ

Unexcused: Craig Severson, KL2FN

Visitors: Mark Kelliher, KL7TQ Jim Wiley, KL7CC

Randy Valle, KL7Z, the president opened the meeting at 7:04PM and a quorum was established. Request for additional items were made. Jim Wiley requested to move the NCVEC conference item to the VEC Report.

<u>Secretary Report</u>: After review, Sean, KL2CO motioned to accept the minutes as presented, PAT Wilke, WL7JA second the motion. Motion approved unanimously.

#### Treasurer's Report:

Calex presented the treasurer's report. It was reported that our Boniface Bingo revenue has been significantly reduced this year and that we are now receiving quarterly payments rather than monthly payments as has occurred in the past. Our revenue for the 1st Quarter was \$10,000. Michael O'Keefe, KL7MD then provided some insight into why the revenue has been reduced due to the upgrades and capital investments and renovations that have been made by the Boniface Bingo Partnership over the last year thereby decreasing the partnership distributions. Heather Hasper, KL7SP made a request and Eric McIntosh, KL2FM seconded that action to request Johnny Gibbons, the financial managing attorney for Boniface Bingo to attend the next Board meeting to answer questions from the board and present further information about the status of the Bingo Hall. Heather, KL7SP then made a motion to approve the Treasurers Report, Sean, KL2CO seconded. Motion approved unanimously.

Activities Manager: Pat Wilke indicated that the speaker for the June meeting would be John Main, KL2LM and he would be discussing the OEM on Elmendorf Air Force Base and NIMS compliance. Heather indicated that she has spoken with Mel Bounds at the MARA hamfest and he agreed to be a speaker later in the year.

#### **VEC Report:**

Jim Wiley indicated that the VE Program was operating as normal. Active VE sessions in Anchorage, Wasilla, Fairbanks, monthly and occasionally in Bethel. There have been roughly 65 new operators over the last 6 months with some of them being upgrades. There was discussion about the number of recently trained law enforcement officers. Jim inquired as to how many others might be interested in obtaining licenses in the next ham radio course. Heather, KL7SP indicated that the Anchorage Police Department had formed a small radio club and acquired the call sign KL7APD and that there was good camaraderie being developed between the two clubs and ARES. There is a continued campaign to encourage others to acquire their ham licenses. There is interest by many in both clubs for a General class.

#### VEC Attendance at the NCVEC Conference:

Jim Wiley described the conference and the effort involved to attend. The conference is in Gettysburg, PA during the third week in July. Jim was going to inquire to see if an alternate location would be chosen. In 2008 the committee met by teleconference and they hope to rotate alternating years meeting in person and then by teleconference. Jim indicated that based on the cost of the travel he would like to request \$3000. The budget for 2009 was reviewed and the 2007 conference attendance was estimated to be \$2500 previously approved. Jim was then presented with a pre-agreement authorization to review and acknowledge. Concerns were expressed about the mode of travel and if a higher mode was not able to be accommodated Jim would not be able to attend. The board then inquired and asked if Jim, KL7CC was not able to attend was there someone else on the VEC Board who may be able to attend in his absence. After some thought Jim indicated that the other members of the VEC Board include: Kent Petty, KL5T, Jim Moody, NL7C, Tim Michael, NL7D, Michael McLaughlin, WA7UX and possibly Roger Hansen, KL7HFQ.

# KL7AA Club Business

Eric, KL2FM also indicated that the VE sessions in Anchorage were going well. Eric has taken on the testing sessions in Anchorage due to Jim moving to Chugiak. The board will consider who to attend the conference on behalf of AARC. The technician question pool will be getting upgrades in 2010. The committee is about 1/3 of the way through the technician question pool review.

#### **Trustee Report:**

No report as the trustee is on vacation.

#### Membership Report:

Fred Erickson, KL7FE indicated that there were currently 323 active members; 306 of which were ham operators. Other members include honorary members and associations.

**ARES Updates:** Heather Hasper, KL7SP indicated that the Gold Nugget Triathlon was a good success. ARES training has been suspended for the summer season. No ARES training in June, July or August. June 6, multi-agency city wide exercise; ANC Borealis at Anchorage International Airport. Need 25 volunteers. Exercise will involve the Airport, the port of Anchorage, the City EOC, and all 3 hospitals. ARES has also been asked by the ANC OEM to be part of the 2010 city exercise scheduled for March.

#### Real Estate:

Marke Kelliher described the space available at the Greenwood property that the board had visited earlier in the month. The discussion then included the estimated costs of the utilities for water, sewer, construction, snow removal, insurance, property taxes and other potential costs that could be incurred if property acquisition was completed. The owner is willing to finance the AARC at 7% for 30 years at a total cost of \$650,000, costing roughly \$2995/month not including utilities or taxes.

Pat Wilke indicated that Tom Rayfield with South Central Radio owned the center unit and is interested in selling this unit. He is asking \$400,000. A letter from the AARC gaming attorney Charles Dunagan was provided to the board members to provide insight into the legalities of using gaming revenue for the purchase of property and the exclusive use of such property acquired. It was requested that we inquire to our attorney and get confirmation regarding tax exemption of property taxes for nonprofit organizations. It was also recommended that we get confirmation from our attorney on the legal use of funds if property is acquired with gaming income and then resold, what are the restrictions if any on the sale income source. If we purchase the property and sell it for a larger price are we subject to capital gains taxes and is this legal under state gaming regulation. Due to the exclusive use clause defined in the state statutes, it was recommended that all members of the board solicit organizations, renters, and potential users that would meet the exclusive use nonprofit status required for the extra space.

TJ, KL7TS requested that every member of the board list their concerns about property acquisition and provide them at the next board meeting as this could be the largest financial decision the AARC will ever make. It is also recommended that all board members make a list of what their priorities are for a club house. Heather recommended a detail report of the utilities needed, snow plow, heating, water, property taxes, insurance and all potential expenses be considered and reviewed by the committee.

#### **CCV REPAIR STATUS:**

Michael O'Keefe indicated he was still trying to find an RV facility to repair the levelers on the CCV motor home.

<u>Intercom Report:</u> No updates have been made. Project is still incomplete due to the Project Manager out of town.

#### MT. Susitna Repairs:

Heather described the schedule for the MT. Su updates; Maintenance is scheduled for June 21 (Sunday) with rental of an R44 helicopter. The helicopter will carry 3 people plus 150 lbs of equipment and pick up at 0900 at Merrill Field in ANC. Current attendance will be by KL7MD, KL2AZ and a ProComm technician. Maintenance will include Antenna maintenance, Battery backup, review and address COAX/Heliax if accessible. Acquire more photos of the coax run and installation for legal records. Get an exact GPS location of equipment, repeater, tower etc for modeling purposes.



# KL7AA Club Business

#### **Grubstake STATUS:**

Heather, KL7SP indicated that the Grubstake repeater would be pulled off the hilltop later this month and come into the shop for maintenance by Arcticom and to build up the spare repeater currently sitting at the CCV Garage. A digipeater is also being built to install at Grubstake to provide WINLINK coverage. This digipeater will be on the same frequency as the WINLINK RMS WL7CVG-10 installed at R1 North on Elmendorf Air Force Base. There will be no extra rental space charges for the installation of the additional equipment.

#### Membership Survey:

The survey is open for participants. So far only 37 respondents. The survey will remain open until 5/31. Mark, KL7TQ will email the link to the KL7AA reflector. Results will be in the July 2009 Newsletter.

#### Alaska State Fair:

Pat Wilke indicated he would work with Heather Hasper to find out what needed to be completed and start recruiting volunteers. Randy Vallee was going to contact John Lynn and see what involvement he might have for this year.

#### **MOOSEHORN ARC GRANT Request:**

The Moosehorn Amateur Radio Club has submitted a grant request for \$17.654.90 to support the construction of an Emergency Communications Trailer. It was noted that the Moosehorn club has not received a grant from AARC in several years and that they do meet the qualifications and grant requirements for an amateur radio club, 501c3 nonprofit organization. Susan Woods, NL7NN motioned to approve the grant request as presented. Sean, KL2CO seconded the motion. The motion carried unanimously.

#### HAMFEST, Saturday, September 19, 2009

Dave, KL2OS has been outreaching to vendors for door prizes and researching a location.

#### **Governor's Picnic:**

### Saturday, July 25, 2009, 12PM -3PM.

The picnic is an outreach to the public by government agencies. The board organizing the picnic has reviewed the role that ARES and Ham radio plays in supporting those agencies and will allow us to participate in the outreach. Volunteers will be needed to man the CCCV, provide public demonstrations and answer questions from the public about ham radio.

#### **Board Attendance:**

Due to work schedule, Craig, KL2FN has not been able to attend or participate in the board meetings. It is recommended that he be removed from the board for lack of attendance. Eric, KL2FM recommended Dave Koch, KL2OS as a replacement Board Member. Eric will contact Dave to see if he would be willing to serve on the board.

#### New Business:

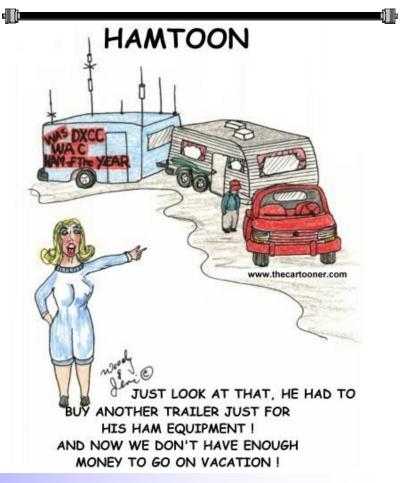
Field Day: Need to request use of the KL7G call sign from the South Central Amateur Radio Club for the GOTA station. TJ, KL7TS then provided an update about Field Day. They are looking for a volunteer to coordinate the food efforts for the event. Also wondering which public agencies should be invited.

#### **Approvals for KL7AA:**

Request to use the call sign for Field Day, 2009.

Heather, KL7SP made a motion to adjourn the meeting, Bruce McCormick second the motion. Motion approved unanimously. Meeting concluded at 845PM.

Respectfully submitted: Heather Hasper, KL7SP AARC Vice President



### **KL7AA HAMSHACK**

The KL7AA station is available for training in HF operations. Learn from an experienced HF operator about propagation, voice and Morse code modes as well as best practices and legal operations. The station is fully integrated with a PC and soundcard to operate in many digital modes. There are weekly contests to participate in even if just helping Hams all over the world gain points and multipliers to win awards.

Your club station is quite capable and has great ears. Club operators have made many QSO's with all modes on all continents. Recent activities have seen SSTV QSO with New Zealand, hearing a Fallujah Iraq operator on PSK, a 15 meter contact to Peru during the CQ WW Phone contest. Common contacts are made with the lower 48 states and Caribbean, Canada, Japan, Korea, Taiwan, China, Russia and islands in the Pacific.

Take advantage of this unique benefit! Arrange a session by contacting the club trustee, Keith Clark, KL7MM to meet at the KL7AA station on Rowan Street.



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

Step #1: First point your browser to: http://mailman.gth.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.



#### Are you a member of ARRL?



ARRL is the American Radio Relay League. This is the national or-Amateur Radio ganization that advocates on behalf of amateur radio operators to

the FCC and the communications industry. **KL7AA** is an ARRL affiliated club with more than 50 years. Consider becoming a member of ARRL today.

Fore more information about the ARRL DXCC Program check out: http://www.arrl.org/awards/dxcc/

#### 

News Letter Submissions, Information or corrections: Submissions must be received 2 weeks before meeting Email: editor@kl7aa.net

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.

The MODULATION TIMES is the monthly newsletter of the Anchorage Amateur Radio Club, published by and for its members. The entire contents of this newsletter are copyright 2008 by the Anchorage Amateur Radio Club.

Permission is hereby granted to any not for profit Amateur Radio Publication to reprint any portion of this newsletter provided both the author and Anchorage Amateur Radio Club are credited.

ARES DISTRICT 7 & 5 KL7AA & KL7JFU	HINTEUR RADO		une 2009	5000		Anchorage Amateur Radio Club PO BOX 101987 Anchorage, AK 99510-1987 <u>www.KL7AA.net</u>	adio Club 7 0-1987 <u>et</u>
ADIO TY L TY AOF			ARES NET:Thursday Nights 8:00 PM 147.27+ PL:103.5 or 443.30+ PL 103.5	Thursday Nights 8:0 or 443.30+ PL 103.5	s 8:00 PM   03.5	47.27+ PL:1	03.5
	Sun	Mon	Tue	Wed	Thu	Fri	Sat
6/6 ANC ARES EXErcise Contact Heather Hasper, KL7SP kl7sp@arrl.net 275-7474 6/20 Mavor's Marathon		1	7	ŝ	4	5 AARC Meeting 7PM	6 ANC EXERCISE
Contact: John Lynn, KL7CY johnlynn@gci.net 6/28 - 6/29 FIELD DAY	Γ	8	6	10 MARA Board Meeting 7PM		12	13 PARKA meeting 11 AM
Mayor's Mayor's Mayor's Marathon Marathon	14	15	<i>16</i> AARC Board Meeting 7PM	17	18	61	20 EARS 3PM MA YORS MARATHON
Solution of the second se	21 SoluSTICE	22	23	24	25	26 MARA meeting 7PM	27 FIELD DAY
WWW.AITESAISASKA.Org ARES NETS: 1st Thursday: HT / Portable 2nd Thursday: Mobile Madness 3rd Thursday: RED CROSS 4th Thursday: Emergency Power	28 FIELD DAY	29	30	Parka, meets at Contact: Lil Marv EARS: R1 North Contact: Ron Ke	Parka, meets at Denny's on Denali at 11AM Contact: Lil Marvin NL7DL, 277-6741 EARS: R1 North, Third Saturday of each month. Contact: Ron Keech: KL7YK@arrl.net	at 11AM 41 each month. net	



# **PUBLIC SERVICE ACTIVITIES**

# Public Service

Listed below are events that local radio clubs and event coordinators are looking for communication volunteers to support these upcoming public service events. Your participation is appreciated.



John Lynn, KL7CY has volunteered to coordinate this event for 2009. The Mayor's Midnight Sun Marathon takes place on June 20, 2009. This is the largest running race of the year with over 15,000 participants. There are volunteer opportunities for both new and more advanced operators. To volunteer or to find an Elmer to learn more for this event, please contact John Lynn, KL7CY at: johnlynn@gci.net or via phone, 337-1091. For more information go to:

### http://www.kl7aa.net/MayorsMarathon.htm



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



# 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.

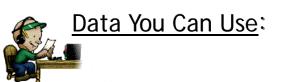


### EMERGENCY EXERCISES

This spring will bring many opportunities to practice emergency communication scenarios with multiple agencies.

On <u>Saturday, June 6, 2009</u>, Anchorage International Airport will be practicing a disaster operations exercise. Due to the size of ANC International, the airport is required to complete this exercise every 3 years as part of the recertification of the airport under Federal Aviation Regulations Part 139. This training exercise will involve a <u>simulated aircraft crash</u> on or near airport property. This training exercise will help the airport prepare for it's response to an aircraft accident.

This is a multi-agency exercise. Many agencies will be participating including client Anchorage Office of Emergency Management, AFD, APD, State Troopers, Providence Hospital, Regional Hospital, Kulis Air National Guard, USFW, USCG, Port of Anchorage as well as many other Non Government Organizations. More details about volunteer opportunities in future newsletters. There are plenty of opportunities for operators who enjoy all modes of amateur radio to get involved in your club activities.





#### **2009 Board of Directors**

President: Randy Vallee, KL7Z president at kl7aa.net Vice Pres: Heather Hasper, KL7SP vicepresident at kl7aa.net Secretary: Richard Tweet, KL2AZ secretary at kl7aa.net Treasurer: Calex Gonzalez, KL2BT treasurer at kl7aa.net Activities Chairman: Pat Wilke, WL7JA activities at kl7aa.net **Trustee:** Keith Clark, KL7MM trustee at kl7aa.net Membership Chairman: Fred Erickson, KL7FE membership at kl7aa.net

News Letter Editor: Heather Hasper, KL7SP editor at kl7aa.net

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

Michael O'Keefe, KL7MD mok at gci.net (3rd Year) Eric McIntosh - KL2FM, kl2fm at arrl.net (2nf Year) Bruce McCormick, KL7BM kl7bm at arrl.net (1st year)

#### **One Year Board Members**

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 Tom Rutigliano, NL7TZ, tomr at alaska.net Sean Jensen, KL2CO, sean.jensen at gmail.com Hugh McLaughlin, KL7HM kl7hm at arrl.net Kathleen O'Keefe, KL7KO (Past President) kok at woodscross.net

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

Homepage: Webmaster: Membership: Newsletter:

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: editor at kl7aa.net

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

Anchorage & Mat Valley Area Repeaters-a/o JAN 1 2009 KL7AA: Flattop Mountain 2,200 ft 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 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 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) KL7ION at Mt. Gordon Lyon: PARKA 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 KL7CC, Anchorage Hillside, SCRC & QCWA 146.97/.37 MHz, 30 watts, auto-patch, 103.5 Hz PL **KL7M Anchorage Hillside** 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 Winlink VHF RMS 145.190 MHZ, mode is Packet.KL7JFT-10 KL3K, 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 WL7CWE: Cliffside Amateur Radio Association WL7CWE 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 146.58 MHz Simplex IRLP - Wasilla Lake

Nets in Alaska: The following nets are active in South-Central Alaska: HF VHF



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 **Morning Road and Weather Report:** 147.27/87 103.5Hz - Daily at 9:00 AM No Name Net: 146.85/.25 repeater Sundays 8:00 PM Big City Simplex Net: 146.520, 446.0, 52.320 FM, 29.6 FM, 28.400 USB With Packet 145.01 and 147.96, Tuesdays 8:00 PM local Grandson of SSB Net: 144.20 USB Mondays 8:00 PM local Alaska VHF Up Net: 144.200 USB Saturdays 9:00 AM local Statewide LINK Net: 147.27/87 103.5Hz Sunday 8:00 PM local Echolink: KL7M

⇒ 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. AL7N or KL5T monitoring.

#### ⇒ Alaska Pacific Net:

14.292 MHz 8:00 AM M-F

ERC HF Net: 3.880 MHz – Sunday 8:30PM

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Internet Links, the favorites from our readers: AARC http://www.KL7AA.net http://www.KL7G.org SCRC http://www.kl7air.us EARS http://www.kl7jfu.com MARA Moose Horn ARC http://www.moosehornarc.com http://www.parka-kl7ion.com PARKA http://www.aresalaska.org ARES 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 Béthel Amateur Radio Klub: http://www.al7yk.org/ Yukon Amateur Radio Association: http://www.yara.ca/ **Links for Propagation** http://www.haarp.alaska.edu/ **ORP and Homebrew Links** http://www.AL7FS.us **Solar Terrestrial Activity** http://www.spaceweather.com http://www.swpc.noaa.gov/ **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>** 

#### **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 of Alaska. All amateurs welcome. Denny's on Denali Street in Anchorage. 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 gen-</u> <u>eral meeting at 3:00 PM.</u> 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: <u>KL7AIR@arrl.net</u> or <u>KL7YK@arrl.net</u>** 

**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 12:30 PM.** Call Michael O'Keefe, ANC DEC: dec@kl7aa.net HM: 243-4675 for additional information. Also check for ARES Info at: www.aresalaska.org

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>



Ted Stevens Anchorage International Airport will be conducting a full-scale disaster exercise

### on Saturday, June 6, 2009.

This training exercise will involve a <u>simulated aircraft crash</u> on or near airport property. This training exercise will help the airport prepare for it's response to an aircraft accident.

You will get an "up close" look at airport emergency response operations. You should plan on this being a full day event – beginning at 8:00 a.m. and ending at 4:00 p.m. Food and refreshments will be provided.

The goals of the exercise are:

- ✤ To practice ICS with a Unified Command structure
- ✤ To test the Disaster Family Assistance Act response of the airline and airport
- ✤ To test the Water Rescue plan for the airport

All operators MUST have a Communications neon Yellow vest and have a current ARES badge. ARES will be providing interoperability support between the Incident Command functions, the Port of Anchorage, the Red Cross, EOC and the 3 major hospitals in Anchorage.

Please remember the ABC's of radio operations.

- → Accuracy: the condition or quality of being true, correct, or exact; freedom from error or defect; precision
- → Brevity: the quality of expressing much in few words
- → Clarity: the state or quality of being clear as to perception or understanding; freedom from ambiguity

Most communications personnel will also be operating as CONTROLLERS for that location. Many of you will be issued 800 MHz radios and be the liaison to your location for the current response activities.

THAK YOU for Volunteering and support Amateur Radio Emergency Services.





**JUNE 2009** 

Volume 38, No 6

# Anchorage Amateur Radio Club Membership Application / Renewal

Membership Chairman: Fre Email: <u>membership@kl7aa.</u> Phone Number: 345-2181		ex	membershij pire on mber 31 <sup>st</sup> .	ps
Mail - In Membership Applica	ation			
		CALL S	GN:	
ADDRESS:				
CITY:	STATE:	ZIP COE	DE:	
PHONE:	E-MAIL:			
	WORK	Are you a m	ember of ARRL?	A
	MOBILE	YES		RÊR
<b>DUES:</b> Dues for the calendar year (Jan the follows:	nrough Dec) are as	NO		V
Individual Membership Full Time Student	\$12.00 (\$6.00 for each No Charge	additional member	at the same addres	ss)
Dues for <b>New</b> Members, joining the they first join to the end of the year of August, your dues for the remainded to the rema	ar at a rate of \$1 per mon			
Life Time Membership	\$250.00 (if over	65, inquire about re	educed rates)	
I am enclosing payment for:				4
Subsc	ription / Renewal for	year(s).	What year did you your first Ham	-
Total U	JS Dollars Enclosed: \$_		License?	
Please mail your payment and co	mpleted application to:			
	Anchorage Amateur R c/o: Fred Erickson, 12531 Alpine Dr Anchorage, AK 9951	KL7FE rive		

#### **THE MODULATION TIMES**

Anchorage Amateur Radio Club, Inc Post Office Box 101987 Anchorage, Alaska 99510-1987 www.kl7aa.net

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