

# Anchorage Amateur Radio Club

## GENERAL MEETING ON JANUARY 5TH

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#### AARC web page & Email contact addresses

Homepage: <http://home.gci.net/~lawson/>  
Email Reflector: [KL7AA@QTH.NET](mailto:KL7AA@QTH.NET)  
Webmaster: [lawson@gci.net](mailto:lawson@gci.net)  
President: [felix@gci.net](mailto:felix@gci.net)  
Membership: [frederickson@iname.com](mailto:frederickson@iname.com)  
Newsletter: [kl7el@arrl.net](mailto:kl7el@arrl.net)

#### News Letter Submissions, Information or corrections:

Submissions must be received 2 weeks before meeting  
Email: [KL7EL@arrl.net](mailto:KL7EL@arrl.net) Facsimile: 907-338-4791  
Mail: 7013 Trafford Ave. Anchorage 99504

#### KL7G CODE PRACTICE SCHEDULE

Schedule: 7:00am, 10:00am, 4:00pm, 7:00pm, 10:00pm  
AK time, every day Frequencies: 3575 kHz, 7075 kHz &  
145.35 MHz: Sending Speed: 7 wpm

#### Nets in Alaska:

The following nets are active in South-central Alaska:

Alaska Sniper's Net 3.920 MHz 6:00 PM daily  
Alaska Bush Net 7.093 MHz 8:00 PM daily  
Alaska Motley Net 3.933 MHz 9:00 PM daily  
Alaska Pacific Net 14.292 MHz 8:00 AM M-F  
QCWA net 146.97/.37 repeater Sundays 8:00 PM local  
850 No Name Net 146.85/.25 repeater Sundays 8:00 PM  
Son of Sideband Net 144.20 USB Mondays 9:00 PM local  
Big City Simplex Net 146.520 FM Tuesdays 8:00 PM local  
ARES net 147.30/.90 repeater Thursdays at 8:00 PM local  
PARKA net 147.30/.90 repeater Thursdays at 9:00 PM local

#### Anchorage & Mat Valley Area Repeaters

KL7AA systems at Flattop Mt., 2,200 ft  
146.94/34 MHz, 80 watts, autopatch, 100/141.3 Hz PL  
223.34/224.94, 25 watts, no patch, no PL  
444.70/449.70, 25 watts, autopatch, 100/141.3 PL  
KL7CC, Anchorage Hillside, SCRC & QCWA  
146.97/.37 MHz, 30 watts, autopatch, 103.5 Hz PL  
KL7M Anchorage Hillside  
147.21/.81 MHz, Iphone, no PL  
KL7ION at Mt. Gordon Lyon 3,940 ft  
147.30/90, MHz - 80 watts, no patch, no PL  
KL7AIR Elmendorf, EARS  
146.67/.07, 107.2 Hz PL  
KL7DJE at Grubstake Peak, 4,500 ft.  
147.09/.69 MHz, 25 watts, no patch, 100 Hz PL  
444.925/449.925, 10 watts, no patch, 141.3 Hz PL  
KL7JFU, KGB road, MARA club  
146.85/.25, autopatch, no PL  
KL7DOB, Wasilla near armory  
146.64/.04, simplex patch, no PL  
KL7AA, Mt. Alyeska, 2,400 ft.  
146.76/16 MHz, 25 watts, no patch, 141.3 Hz PL

#### South Central Area Simplex Frequencies

146.52 Mhz Calling and Emergency frequency  
147.57 / 447.57 (crossband linked) HF spotters & chat  
146.49 Mhz Anchorage area simplex chat  
146.41 Mhz Mat Valley simplex chat  
147.42MHz Peninsula simplex chat



~~~ **HOT LINKS** ~~~

Internet Web links, the favorites from our readers

AARC <http://home.gci.net/~lawson/>

SCRC <http://www.home.gci.net/~vallee/scrc.htm>

EARS <http://www.qsl.net/kl7air>

MARA <http://www.obarr.net/mara/>

Moose Horn ARC <http://www.alaksa.net/~kl7fg>

ARES <http://www.qsl.net/alaskaares>

KL7J <http://www.alaska.net/~buchholz>

Fairbanks AARC:

<http://ffdlm1mac.uafsof.alaska.edu/aarc/aarc.html>

Yukon Amateur Radio Association:

<http://www.klondike.com/yara/index.html>

HAARP Project:

<http://server5550.itd.nrl.navy.mil/projects/haarp/>

<<Amateur Radio Reference Library>>

<http://www.area-ham.org/library/libindex.html>

Hamradio: <http://www.hamrad.com/>

Solar Terrestrial Activity <http://209.130.27.95/solar/>

ARRL <http://www.arrl.org/>

Propagation Report Recording 566-1819

*Please let us know if there are other clubs pages or good starting points that should appear here*

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**ABACUS RADIO REPAIR**

Factory authorized service for: Kenwood, ICOM,

Yaesu, Alinco, Amateur radio equipment.

Call Jim Wiley, KL7CC (907) 338-0662

**Regular HAM Gatherings:**

\* **Tuesdays, 11:30 AM to 1:00 PM:** Join the gang for lunch and an eyeball QSO at the Royal Fork, "South, on Old Seward Highway.

**Saturdays, 7:30 AM:** Here is a great way to get started on the week-end come and meet with some of the locals and have a great breakfast at Phillips Restaurant, at the corner of Arctic and International. Great Fun.

**THIS MONTH'S EVENTS**

**January 2th: VE License Exam 6:30 PM,** 1st Tuesday of the month, it has been changed to **Hope Cottage** at 540 W International in the Board Room. Bring photo ID, copy of license (if any) and any certificates of completion.

**January 9th: EARS general meeting at 7:00 PM** changed to 2<sup>nd</sup> Tuesday for this month only, in the basement of Denali Hall (building 31-270) on Elmendorf AFB. Talk in on 147.67/.07 repeater.

**January 5th: AARC general meeting at 7:00 PM** 1<sup>st</sup> Friday of the month in the Carr-Gottstein Building, on the APU Campus. Talk in will be on 147.300.

**January 9th: AARC Board meeting at 7:00 PM** 2<sup>nd</sup> Tuesday of the month at **Hope Cottage** 540 W. International in the Board Room.

**January 11 & 25th: Moosehorn ARC general meeting at 7:00 PM** every other Thursday in the Soldotna Borough Offices on North Binkley. Talk in on 146.88 repeater or 147.42 simplex.

**January 12<sup>th</sup>: SCRC meeting at 7:00 PM** the 2<sup>nd</sup> Friday of the month at Denny's on Debarr & Bragaw. Talk in on 147.57 simplex.

**January 13th: VE License Exams at 2:00 PM.** 2<sup>nd</sup> Saturday of the month at Hope Cottage 540 W. International in the Board Room. Be sure to bring photo ID, copy of license (if any) and any certificates of completion.

**January 13th LEO Society meeting 11AM** lunch at SZECHWAN Restaurant, 11751 Business Blvd., Eagle River

**January 16th: Iditarod All Volunteers Meeting** Regal Hotel, time and room TBD

**January 20th: ARES Planning Committee 9:30 AM to 12:00 PM.** 3<sup>rd</sup> Saturday of the month. Will be held at Alyeska Building on Bragaw Street.

**January 20th: PARKA Meeting at 11:00 AM.** 3<sup>rd</sup> Saturday of the month at Peggy's, across from Merrill Field

**January 20th: Iditarod All Volunteers Meeting** Iditarod Headquarters in Wasilla, time TBD

**January 20<sup>th</sup> Klondike 300 Dog Race** start at Big Lake

**January 26th: MARA meeting at 7PM** the last Friday of the month at the MTA Business Office in Palmer.

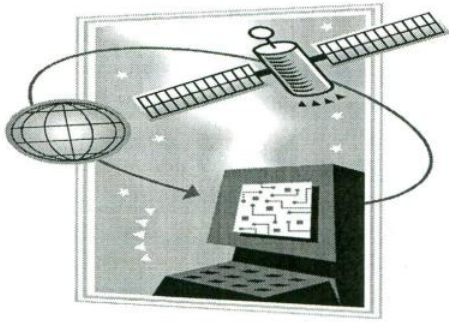
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**FOR SALE:**

Rohn 25 tower 10' top for sale. Includes: 25AG2 (with 2" ID top tube), GA25GD Guy bracket with TB25D torque bars, AS25G rotator shelf. If New \$290, Will sell for \$170. George at 376-3865 or KL7DV@arrl.net

BUY, SALE, or TRADE: Two way radios of all kinds. Other related equipment, antennas, coax, mics, etc, scanners and computers too. I do it as a hobby, NOT for profit. Call Big Dan the Radio Man ( 907 ) 373-2569 or dan@obarr.net





### Leo Society Lunch Meeting

On January 13th the LEO Society will meet at 11AM for lunch at the SZECHWAN Restaurant, 11751 Business Blvd., Eagle River (behind the Eagle River Post Office), 694-9168. The featured speaker and presenter of a formal paper will be Mike Sweeley, KL7AS, who will be presenting on his research and activities with SETI. Also present will be Ed Cole, AL7EB, Alaska State Coordinator for SETI and AMSAT. We will be making a presentation of the LEO Elmer for the year 2000 to Dan, WL7BD, and his lovely spouse, Gretchen, WL7IN. Everyone will order off the menu and pay their own tab. There will be an RSVP fee of \$6 for our honored guest's meals, something for Dan, and a copy of Mike's formal paper. Send check made out to one of the following at their address to be received no later than 1/11/01: to one of the following: John Bury, KL7QZ, 10300 Thuja Cir., Anch., 99507. 349-8754 or Tom Stuart, KL0QQ, PMB 184, 12110 Business Bvd. #6, Eagle River, 99577 696-7576 or Mike Sweeley, KL7AS, 11048 Kaskanak Dr., Eagle River, 99577. 696-2275.

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### Volunteers needed for Klondike 300 Sled Dog Race ( Or how to have an Alaska vacation FREE )

This race is a qualifier for the Iditarod Sled Dog Race and is sponsored by Aurora International. (Not to be confused with Aurora Dog Musters.) It starts on January 20th and is projected to last until the 23rd plus or minus a day or so. The start and finish is at the Klondike Inn on Big Lake as well as the headquarters. They need 12 or more Hams to help with communications. The sponsors have agreed to provide food, transport and lodging to the remote check points. This sounds like a fun opportunity if you have time. Please contact Wayne Groomer KL7HHO by phone at 376-5604, 147.300 repeater, or any way you can.

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### Volunteers needed for Klondike 400 Snow machine Race

On Feb. 10th , Aurora International will also sponsor the Klondike 400 Snow machine Race, which may also need

some volunteers. We will have more info on that one later. If you can help on either race, please contact Wayne Groomer KL7HHO by phone at 376-5604, 147.300 repeater, or any way you can.

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### QCWA Annual Dinner Craig Bledsoe, KL4E

QCWA's Northern Lights Chapter 92 hosted its annual dinner meeting at the appropriately named Northern Lights Hotel in midtown Anchorage, Alaska. We had over two dozen members and guests descend upon and devour a most excellent buffet line, with two kinds of ice cream for dessert!

Since the Northern Lights Chapter attempts to hold this meeting on the Saturday closest to Veterans' Day (in this case exactly on Veterans' Day - the 11th of November), the members traditionally use this opportunity as a fund raiser to purchase meals for homeless and recovering veterans. Chaplain (Captain) Marion Daniel, KL0UP gave a brief talk on the plight of homeless vets in subarctic Anchorage, and enough money was raised on the spot to procure twenty Thanksgiving dinners for these needy people. Chapter 92 from Chaplain Daniel on behalf of the recipients has received a certificate of appreciation, and a copy was faxed to QCWA Headquarters in Eugene.

Chapter President Jim Tvrdy, KL7CDG led a spirited discussion on potential directions for Chapter 92 in the new millennium. Chapter Vice President Jim Wiley, KL7CC briefed the assembly on the upcoming All Ham Club Consolidated Christmas Dinner and Chinese Auction, of which event QCWA is a proud sponsor. After three hours of rag chewing, eating, drinking, and making merry the members and guests of the Northern Lights Chapter of QCWA declared victory and departed the scene with fond memories of an evening of excellent fellowship among all participants.

Craig Bledsoe, KL4E  
Chapter 92 Secretary/Treasurer

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### Iridium Satellite LLC today (November 15) released the following statement:

The U.S. Bankruptcy Court for the Southern District of New York today approved the bid of Iridium Satellite LLC to purchase the operating assets of Iridium LLC and its subsidiaries.

Under the agreement, Iridium Satellite LLC will purchase all of the existing assets of Iridium LLC, including the satellite constellation, the terrestrial network, Iridium real property and intellectual property owned by Iridium LLC.







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**SB SAT @ AMSAT SANS-361.03  
AMSAT SPECIAL BULLETIN  
SILVER SPRING, MD, DECEMBER 26, 2000  
TO ALL RADIO AMATEURS**

AMSAT-DL President (and P3D Project leader) Dr. Karl Meinzer, DJ4ZC, provided ANS with additional information regarding AO-40's recent S-band transmissions on 2401.305 MHz:

Ian, ZL1AOX, has succeeded in loading IPS software and a minimal operational package into AO-40. As a consequence, AO-40 is now sending telemetry (blocks) that will enable an analysis of the status of the spacecraft.

A first (quick) look has revealed that some temperature sensors and possibly some current sensors have been lost by whatever incident caused the telemetry transmissions to stop. However, the power situation, in particular the battery voltages, look nominal.

We will now start a detailed analysis of the situation; the command stations will continue to follow a conservative philosophy with the primary target of not causing any additional damage along with retaining as much evidence as possible for the analysis of the incident.

Furthermore, command stations will now try to uplink the entire operational software package, which in particular should establish positive control over the power generation system. From there on, the communications capabilities of the spacecraft will be explored. The 2-meter transmitter is considered off limits for the time being (in case that it may have been damaged and thus might have the potential to cause the IHU to crash). The risk is too large before the Warte-Orbits and Command-Assist programs have been updated to reflect the actual capabilities of the satellite available after the incident.

In summary, we can state that the command stations have now regained control over AO-40. During the next few days we hope to learn to what extent the satellite was damaged and to what extent this will impact mission targets.

When we have further analysis, I will report again.

73's,  
Karl, DJ4ZC

Stay tuned to ANS for additional bulletins from AMSAT, the official source for information on AMSAT OSCAR-40

AMSAT-NA President Robin Haighton, VE3FRH, provided ANS with the following statement regarding AO-40's recent S-band transmissions on 2401.305 MHz:

The excellent news of contact with AO-40 through the L-band uplink and S-band downlink has been received with joy and relief by AMSAT members around the world. AMSAT-DL issued a bulletin giving the news that everyone had hoped for on Christmas day, a fantastic gift to the Amateur Radio community.

On behalf of the AMSAT-NA Board of Directors, I wish to congratulate all those concerned in the recovery effort. While we all realize that this is just the first step in many, without making this initial 2-way contact with AO-40, recovery would not be possible. The recovery procedures are a true team effort between Project Leader Karl Meinzer, DJ4ZC, the command stations and the other members of the P3D/AO-40 team.

In conclusion, I wish the team continued success, and I am sure that all of our thoughts are with them as they continue to work on behalf of AMSAT members worldwide.

73,  
Robin Haighton, VE3FRH  
President, AMSAT-NA

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**Finagling SO-35 coverage in Alaska  
Dan O'Barr , WL7BD**

December 05, 2000

Hi Dan,  
Sorry I took so long to get back to you. Yes, I have been scheduling some SO-35 passes that have coverage into Alaska. As you have previously noticed, the SunSat control team tended to schedule mostly mid-US passes with a bias (in my opinion) towards the East Coast. I made an off-hand grumble about that on the AMSAT-BB a couple months ago. Johann - ZR1CBC commented that they would be happy to have a more local co-coordinator for the various parts of the world. I can take a hint as well as the next guy so I volunteered. I plotted about a months worth of the previously scheduled passes so I could get a real feel of how they had been scheduling them (rather than just a gut feeling). What I found was what I believed before. Never was there a pass that did not cover the East Coast, but lots of them missed the West Coast. What I have tried to do is to spread them out more. There are some that are farther east than they are typically schedule, and also some are MUCH farther west. I try to schedule about 2 passes each week that have good coverage for Alaska, and a couple that are far east and schedule late enough to have coverage from the southeast into the northern part of South America. The rest are some resemblance of mid US.



Obviously I can't schedule every pass to have Alaska coverage or else I would be just as guilty of having a bias on in this case for the West Coast. It would be easier on ascending passes as they would make a SE / NW pass over the US rather than the NE / SW that they do now. Unfortunately those passes are in the middle of the night and would get very little usage.

I have every intention of continuing to have West Coast / Alaska passes. I will also attempt to slide in an extra Alaska pass now and then. I hope to hear some of you on the passes. I also would be quite willing to schedule passes for particular events. I can't guarantee that I will be able to accommodate every request (there can be conflicts), but I will if I can. Please try to get requests at least 25 days in advance. The reason for this is that I need to get each 2-week schedule to the SunSat teams at least a week before the start of that schedule. Depending on where in the 2-week schedule a request falls I need to have it to South Africa anywhere from 8 to 22 days in advance.

73, Jim Walls - K6CCC  
k6ccc@amsat.org  
<http://home.earthlink.net/~k6ccc/>  
626-302-8515 FAX 626-302-9999  
AMSAT member 32537 / WSWSS member 395

December 08, 2000

Hi Jim,

Thanks for your reply with so much information. I want you to know that we appreciate your efforts. I heard Sunsat for the first time yesterday and made 4 contacts: VE6EGN, a x9xxx in Minnesota, N7SFI, and K6YK. It was a little tough as I could hear it but it could not hear me for most of the 5 minutes or so that it rolled along the mountain peaks and was gone. VHF knife-edges over mountain peaks better than UHF. That brings me to our problem. Most of Alaska's population, including HAMS, live on the West side of high mountains. Most of the mountains to my East and North are close to 10 degrees. Anchorage is even worse. East Anchorage has mountain peaks that are as high as 45 degrees and it tapers to about 15 in West Anchorage. Yesterday's pass was only 5 degrees. Tomorrows will only be 8. Most Alaskan HAMS can't hear the Easterly passes of the LEO birds unless they are 20 degrees or higher.

Is Sunsat only able to operate its' amateur repeater on one pass per day over North America? Will we be able to get a few passes between 0200 and 0400 UTC? That would give us 30 to 90 degrees. In March the HAMS up here provide communications for The Iditarod Trail Sled Dog Race at: <http://www.iditarod.com/> that lasts about two weeks. Do think there is a possibility we could have Sunsat turned on for about 15 minutes per day on the passes that are about 0300 UTC while the footprint is over Alaska?

Thanks for corresponding with me and maybe we'll talk to you on the "Bird" tomorrow.

73, Dan O'Barr WL7BD

December 09, 2000

Hi Dan,

Short answer is I'm going to see how much flexibility I can have. If I can split the North American coverage into two segments I will do so. As for the Iditarod I am fairly familiar with it, and please remind me when we get closer to it. If it is an advantage for you to have it operational, I will give you times EVERY day of the race even if that's at the expense of coverage for the rest of North America. I can't think of a better example of amateur radio shining, and likely one of the few (and best) examples of using amateur satellites for a public service event. As to later today's SO-35 pass (since it's Saturday morning as I type this), I currently expect to be on the pass so I hope to hear you on. Not trying to put down the validity of your request, but don't forget that you guys (especially in the northern part of Alaska have coverage on UO-14, on a large percentage of the passes. And on several of those you need to share the bird with almost no one.

73, Jim Walls - K6CCC

December 09, 2000

Hi Jim,

SO-35 was only above the horizon for about three minutes on this pass and I was into quite well. Then it went behind the mountains and I couldn't get into it, but I could hear it for about the last ten minutes of the pass. I copied someone telling you that I was calling you at the beginning of the pass, which I was, however by this time it was below the mountaintops and you couldn't hear me.

Thanks & 73, Dan

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**146.52**

Or what should we do about 146.52? 146.52 MHz has been receiving a lot of press lately. It seems there are folks out there that want to drive, hike, or fly to the most remote parts of this country, get broke down or hurt. And then expect some unknown ham to be within range of their 300 milliwatt pocket mouse just standing by on 146.52 MHz waiting to help them. 146.52 MHz is probably the most miss used and ignored amateur frequency. Maybe the FCC should make it a calling and emergency channel only, like marine channel 16 and aircraft 121.5. No QSOs or idle chitchat for hours without I-D-ing. That's the main reason I don't monitor it. Hams normally use a repeater for emergencies. Let me know what you think and we'll do a bigger article. Send your comments to: dan@obarr.net 73, WL7BigDan

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## In defense of the use of 146.52 MHz

By John Lynn, KL7CY

When I first studied the frequency plans and proposed practices, I discovered that 146.52 MHz was set aside as the FM calling frequency for 2 meters. After some calling on that frequency, I discovered that it worked OK for calling, except that no one was listening. The long tone zero protocol on 146.52 was supposed to provide a way for someone in distress to get assistance, but was not much good if no one was listening. We are fortunate to have many excellent repeaters in south central Alaska and it seems to me that everyone had mostly abandoned simplex operation in favor of the repeaters.

I decided to provide some coverage on this frequency by adopting it for my own operations. I don't use it much, just to check in on the way home to see if I need to stop at the store. We also started the Tuesday night Big City Simplex Net to try to get other folks to use 146.52, or at the least, program it into their radios. We generally leave a radio at home on 146.52 all the time, since it is relatively quiet and a known place to listen for a call. I understand that the few hams around the Glennallen and Moose Pass areas also operate on this frequency. On my trips back and forth to Fairbanks, I have never found anyone on 146.52. From my home QTH, I have heard a number of visiting HAMs calling on this frequency and been able to welcome them to Alaska and guide them to the local repeaters. I feel that it is proper to use this frequency as long as it does not become excessively busy.

2 Meter Simplex operation, using a 5 watt mobile or base station with a decent antenna, easily covers all of Anchorage. I suggest that there is no good reason to fill up a repeater with local traffic that can easily go simplex. If 146.52 gets too busy, then it is easy to move to another nearby simplex. Alaska assignments use 30 KHz steps, so the valid 146 simplexes are 146.40, 146.43, 146.46, 146.49, 146.52, 146.55 and 146.58. 146.49 is often used for an Anchorage chat frequency. PSK31 and SSTV often show up on 146.55 and 146.58. The Mat Valley, long ago adopted a frequency of 146.41 for chat. This was probably just a wild number they picked not considering the 30 KHz assignment pattern. Finally, the 146.40 has been proposed nationwide as a first choice emergency frequency for working with the Red Cross.

If that is not enough, there is group of 147 FM simplex frequencies at 147.42, 147.45, 147.48, 147.51, 147.54 and 147.57. Note that the Peninsula already has adopted 147.42 for chatting and the brass ponders use 147.57 for spotting and chatting.

There is a still another group of FM simplex frequencies in the 145 area too. If the 30 KHz convention is honored, they will be 145.50, 145.53, 145.56, 145.59, 145.62, 145.65 and 145.68. It is interesting to note that 145.52 is used by the HAMs at the armory, probably as a parallel to 146.52.

I encourage everyone to use the 30 KHz frequencies mentioned here so that the same thing programmed into their radios. We have used simplex operation very effectively for a

number of events and exercises. There are lots more simplex frequencies than repeaters, so get busy and program that radio.

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### Girl Scout News

(An exchange of thoughts between Dan, WL7BD and others via email)

Hello, I am a new Ham, KL0YX, working on my general. I am also a Girl Scout leader of Jr troop 889. We are home schoolers.

In June 2001 the Girl Scouts of Alaska are having "encampment" at the fairgrounds in Palmer. This occurs once every 2 years. We expect 2400 girls from all over AK and the US. The Council is still looking for individuals or groups to share their interests with the girls. It is best if it can be a "hands-on" participatory sort of thing. I think you can require pre-registration so you know how many, age levels etc. (The girls have to be at least entering 4th grade to participate.)

KL7YF gave me your name as someone who might be able to help, or would know of someone who would be interested. This is a great opportunity to introduce Ham Radio to young women. I believe there is a conflict with Field Day, but perhaps there is a way to incorporate that?

73, Sai, KL0YX

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Hi Sai,

This sounds like something we would be interested in doing. I will put this in the MARA News. Keep us updated and maybe some time between now and then, you could come to our club meeting and give us a personal invitation. I would really like to see a better relationship between the Girl scouts and the Ham radio folks. The anti-tech Boy Scout leaders in this area have pretty much rejected us.

73, WL7BigDan <http://www.obarr.net/mara>

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Re: Ham demo/exhibit for Girl Scouts

I spoke with KLOYX about the girl scouts after the Girl Scout office passed on my name. Kent Petty recruited me to help with liaison activities with the ARRL and the GS office a few months ago. I was thrilled to see others are also enthusiastic about connecting with the girls and especially with their encampment. I have offered to go to GS meetings in Anchorage to introduce ham radio and prepare the troops to make the most of a station at the encampment. If you have any ideas or suggestions for me, please let me know.

I just wanted to introduce myself. I am not a very sophisticated ham operator (no code tech and most experience is with 2 meters)...and am now home with a one and three year old, but I have a lot of enthusiasm and elbow grease to put to good use!

Gerianne Thorsness WL7RY

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Hi Dan,



If it conflicts with Field Day, why don't we set up an HF station or two at the fairgrounds and let the kids participate under a club call sign with someone there as a control operator? We could also run on 2 meters and play around a bit throughout the area. Maybe we could have a demo on how useful 2 meters is for emergencies and have a small hands-on bunny hunt. I would love to do this. I enjoyed Field Day well enough, but I'd much rather work with the kids if it is on the same day.

I've already made some contacts with someone to be involved with a Big Lake girl scouts group who is working on a communications award. I would love to be involved! :) Heck, I'll even schedule vacation time for during this period if the club wants to participate.

Teresa, KL0WWW ([kl0ww@arrl.net](mailto:kl0ww@arrl.net))

### The 49 MHz cordless phone scourge By John Lynn, KL7CY

Have you noticed telephone conversations coming through your 2-meter ham radio? We have been tormented on several of our favorite frequencies by these phone calls. The best that I can determine these are 49 MHz cordless phones. Below is a table of the 49MHz frequency assignments with a column added. This column contains the third harmonic of the handset transmit frequency. Note that channel 2 and 3 land on commonly used simplex frequencies and that channel 7 is the receive side of a popular wide area repeater. I don't know what to do about this problem. Perhaps someone out there will have a suggestion.

| Chnl | Base TX | Handset TX | Handset TX<br>3rd Harmonic |
|------|---------|------------|----------------------------|
| 1    | 43.72   | 48.76      | 146.28                     |
| 2    | 43.74   | 48.84      | >146.52                    |
| 3    | 43.82   | 48.86      | >146.58                    |
| 4    | 43.84   | 48.92      | 146.76                     |
| 5    | 43.92   | 49.02      | 147.06                     |
| 6    | 43.96   | 49.08      | 147.24                     |
| 7    | 44.12   | 49.10      | >147.30                    |
| 8    | 44.16   | 49.16      | 147.48                     |
| 9    | 44.18   | 49.20      | 147.60                     |
| 10   | 44.20   | 49.24      | 147.72                     |
| 11   | 44.32   | 49.28      | 147.84                     |
| 12   | 44.36   | 49.36      | 148.08                     |
| 13   | 44.40   | 49.40      | 148.20                     |
| 14   | 44.46   | 49.46      | 148.38                     |
| 15   | 44.48   | 49.50      | 148.50                     |
| 16   | 46.61   | 49.67      | 149.01                     |
| 17   | 46.63   | 49.85      | 149.54                     |
| 18   | 46.67   | 49.86      | 149.58                     |
| 19   | 46.71   | 49.77      | 149.31                     |
| 20   | 46.73   | 49.86      | 149.57                     |
| 21   | 46.77   | 49.83      | 149.49                     |
| 22   | 46.83   | 49.89      | 149.67                     |

|    |       |       |        |
|----|-------|-------|--------|
| 23 | 46.87 | 49.93 | 149.79 |
| 24 | 46.93 | 49.99 | 149.97 |
| 25 | 46.97 | 49.97 | 149.91 |

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### The Man Whispered

The man whispered, "God, speak to me" and a meadowlark sang. But the man did not hear. So the man yelled "God, speak to me" And, the thunder rolled across the sky. But, the man did not listen. The man looked around and said, "God let me see you." And a star shined brightly. But the man did not notice. And, the man shouted, "God show me a miracle" And, a life was born. But, the man did not know. So, the man cried out in despair, "Touch me God, and let me know you are here" Whereupon, God reached down and touched the man. But, the man brushed the butterfly away and walked on.

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### The All HAM Christmas Party By David Stevens, KL7EB

On Friday December 8, 2000 the local HAMS gathered at the Northern Light Inn for the "All HAM" Christmas Party. There were over 75 adults and 8 children. To start things off, two name tags were provided for every attendee – the first being a "standard" tag with the person's name and call. The second name tag was put on their back. The "back" name tag was of some famous person. The game was to try and figure out who you were by asking questions that could be answered using either "yes" or "no" – as these were the only allowable responses. Kent Petty was "Groucho Marx", and I was "Helen of Troy". The greeters had a real sense of humor as they picked the names for each one at the party. Some of the names were: Bullwinke Moose, Albert Einstein, Smokey Bear, The Wizard of Oz, Vanna White, Superman, Darth Vader, Winston Churchill, Bugs Bunny, Charles Lindbergh, and even Godzilla. I heard many people laugh as they read each other's name tags. Prizes were awarded to the to the first 4 contestants who solved their secret identity.

Although Ham was not on the menu, the food was good. There was some problem keeping the food line stocked fast enough to keep the HAM appetites. There was chicken, halibut, roast beef, mashed potatoes two types of gravy, tossed salad, noodle salad, relish dish, and fruit bowl. To top the whole thing off, there was cheesecake for desert. I saw several that made multiple contacts with the line and had several deserts.

The fun had only just begun! There was the favorite, a Chinese Auction, as the highlight event of the night. There was everything from a Billy Clinton puppet, stuffed animals, and a QRP transceiver kit, to tools, pistachio nuts, marinated olives. Jimmy Tvrdy, KL7CDG MC'd the auction and the kids drew the tickets. Our special thanks to Jim Wiley, KL7CC and Randy Valley, AL7PJ, who did a great job setting the Christmas Party up. I hope every one had a Merry Christmas, and I wish all a Happy New Year.



## Station Safety Wet Cell Batteries

By Jim Wiley, KL7CC

Almost every ham station these days has a fair amount of equipment that is designed to be powered from a 12V DC "Automotive" battery. For fixed station use, most hams start out using one or more 120V AC powered "power supplies" to convert normal house current to the 12V DC that their equipment requires.

As stations grow over time and become more complex, many hams come to the conclusion that rather than buy a new power supply every time a new piece of gear is added to the station, a more cost effective solution is to install one or more 12V "car batteries" together with a "float" type charger, to supply the 12V DC power required. This is a very effective approach, because it offers several advantages over using multiple power supplies. First, since the batteries can supply several tens of amperes for relatively long periods, and can recover this draw from the charger in between transmit periods, a relatively small charger (10 ampere) can serve in a station that has a peak draw of 20 to 40 amps, but only needs perhaps 3 to 5 amps when not transmitting. Second, the batteries provide a source of energy for use during power outages – in fact they are basically a UPS (Uninterruptible Power Source) that is instantly available if the lights go out. And finally, it is a lot cheaper! A 12V battery plant, complete with float charger, batteries, DC distribution and protection systems can be assembled for less than \$200.00 – sometimes much less, depending on what you already have on hand. Compared with the cost of even one high current 12V DC power supply, the financial advantage is obvious. Most existing 12V power supplies can be converted into float chargers with minimal problems. I will be glad to assist anyone wishing to do this. Warning!! Do NOT use a "standard" power supply as a float charger unless these modifications are made!

While the combination of wet-cell batteries and a charger is an excellent solution to "the 12V problem", these batteries require some care and maintenance, and they present a few hazards that must be taken into consideration. These concerns are (briefly) hazardous gas emissions, short circuit protection, acid spills, rewatering and electrolyte testing, and disposal of units that have reached the end of their useful service life. While this sounds like a real collection of problems waiting to happen, in fact the situation is very manageable with only a few common sense precautions.

By the way, I do NOT recommend using sealed "Gel-Cell" batteries in this application, as they have a limited number of charge-recharge cycles, and they tend to fail in this type of service. Wet cell batteries, particularly the types designed for "deep cycle" use are far superior in this application. In fact, the very best types are the batteries designed for use in golf carts. These types are designed to be run flat (or nearly so) every day, and recharged overnight, for hundreds or even thousands of usage cycles. Be sure the batteries you get are the type designed to allow addition of water as needed. Typically, units labeled as "Marine/RV" batteries meet this

requirement. So called "maintenance free" batteries can fail prematurely in this type of service.

Wet cell batteries use an electrolyte that consists of solution of Sulfuric Acid and water. This solution will cause skin burns if splashed on your body, and will eat holes in most fabrics (wool being the exception). Always be extra careful when working with or rewatering these batteries. Wear safety goggles (a must!), and protective clothing if available. If you do accidentally splash yourself, wash the area with large amounts of water immediately. The acid won't eat holes in your skin at once, but will make a very annoying "burn" that becomes red and painful after several minutes.

When charging, these batteries emit small amounts of hydrogen gas, which is very explosive if allowed to build up in sufficient concentrations. Simply arranging your system so that the batteries are not in a tightly confined area will usually do the trick, but if you are uneasy about this, a small fan (such as the type used in computer power supplies) blowing a slight breeze over the tops of the batteries will disperse the hydrogen so that no hazard exists.

Batteries MUST always be fused, so that if a short circuit should occur, there can be no chance of a fire or explosion (wet cells can explode if shorted). Simply including in-line fuses of sufficient capacity (I use 50 ampere units) will prevent accidents. Install the fuses as close to the battery as possible, and fuse BOTH ends of the battery! Place plastic covers over the battery posts so nothing can touch them by accident. I use old paint can tops, and some black tape under the connecting wire and over the lid to secure it.

Place the batteries in a polyethylene plastic tub such as the ones made by Rubbermaid (about \$10). These can be found at most grocery stores, or even at Wal-Mart. The tub will keep acid spills off the carpet, and contain any small spills when adding water. Also, add only distilled water (not regular tap water) to batteries for longest life. Batteries will usually have to be checked every 3 months for water level. If batteries are allowed to run dry, they will be damaged at least, and may be completely ruined. Checking water levels is easy and takes but a couple of minutes. Set the "float" voltage from your charger to about 13.6 volts. This setting will keep the batteries fully charged while requiring minimal added water. Setting the float voltage higher will require more frequent watering, and lower voltages may not keep them fully charged. Many batteries have built-in charge indicators. These are less precise than a proper hydrometer, but they are often good enough.

When batteries have reached the end of their service life, they should be taken to the municipal waste disposal site and placed in the special container they have. Batteries disposed of in this manner do not contaminate the environment, and in fact are recycled into new units.



***TO MAKE A LONG STORY SHORT, I THOUGHT HE HOLLERED: "DIVE LOW –DIVE LOW". BUT HE REALLY SHOUTED: "DI POLE-DI POLE"... SORRY ABOUT YOUR ANTENNA! YAH GOT ANY EGGNOG TO TAKE THE COPPERCLAD TASTE FROM MY MOUTH?***