# Anchorage Amateur Radio Club

**Next Meeting March 3** 



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http://www.kl7aa.net



# So You Want to be a QRP Builder? Updated 2006 Version

By Doug Hendricks, KI6DS
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<a href="http://www.norcalqrp.org">http://www.norcalqrp.org</a>

So you want to be a builder? My name is Doug Hendricks, and I have been a ham since 1976, and an avid ORPer for most of my ham career. In 1993, the late Jim Cates, WA6GER and I started the NorCal QRP Club. The purpose of starting the club was to find 10 or 15 like-minded hams who would be interested in getting together to talk about ORP operating and also to help each other with building our own gear. Were we successful? I would say so, as we stopped counting NorCal members when we got to over 3000, from every state and 60+ foreign countries. NorCal's main purpose was and always will be to promote QRP. We had a very successful journal for 10 years, QRPp, but we stopped doing that in 2003 when it became too much for me to handle. There are 3 things that have remained constant for the club over the years, and are still being done: Club kits, monthly meetings at the California Burger, and hosting of the QRP Forum at Pacificon every October.

My favorite part of the club has always been the club kits, because I have always had a desire to build electronic equipment. When I was a boy, I remember reading Boy's Life magazine in the school library. My favorite articles were always the

ones about Ham Radio. I dreamed of being able to build my own radio someday, to be able to talk to the world!!

I am not an electronics engineer, nor do I profess to be an expert on electronics. But I am an average guy, with average ability to build. I have built a complete SSB station, as well as a complete CW station. And when I say complete station, I mean every piece. I even built my own microphone for one of my SSB homebrew rigs. I have built keyers, paddles, keys, transmitters, speakers, receivers, antennas, antenna tuners, wattmeters, etc. I take great pride in being able to say that the station here is 100% homebrew. It always gets a response like, "Even the microphone and the paddles?"

This article will appear as a series, and it will take you from being a complete novice, having never built a kit, all the way to building a multiband rig. I will be recommending projects that are easy and fun to build, and will go from projects that include complete kits to ones that are just a schematic and a parts list. You don't have to build every project in the list, and you may substitute others as you wish, but I do recommend that you build the ones on the list, as I know that they are somewhat sequential in difficulty. We will start with easy projects, and graduate to harder ones as we develop skills. These articles will be posted on the NorCal ORP Club web site, http://www.norcalgrp.org. I will be recommending club and commercial kits. Please don't think that I am the ultimate authority on this. It is just my opinion and something that I want to share with others.

This series will cover 4 main construction techniques: through hole, surface mount, manhattan pad, and dremel/bit pad. Our first 2 kits will cover through hole and surface mount construction. They are very inexpensive, and they are easily available from the NorCal QRP Club. One is a kit that has been around for years, and the other is a brand new kit. We will build the VE3DNL through hole marker generator kit, and the Surface Mount QRP

Dummy Load. The best thing about these 2 kits is that they are available with all parts included, they have solder-masked, silkscreened circuit boards, and the cost is only \$7.50 each!! If you want to get started, go to http://www.norcalqrp.org and click on the "So You Want to be a QRP Builder" Button. The first article in the series is called "So You Want to be a Builder, 2006, Part 1"

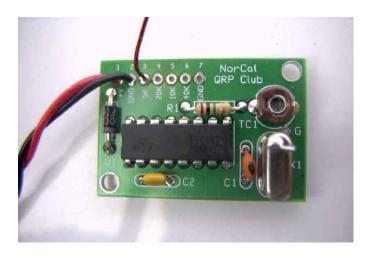
# Part 1

The first two kits that we will start with in the series will give you a taste of two of the types of construction, through hole, and smt. Both of them use a pcboard, through hole as the name implies uses parts that fit in holes predrilled on the board. SMT construction involves a type of construction that uses parts that mount on the surface.

The NorCal QRP Club sells 2 kits that are ideal for this introduction. The VE3DNL Marker Generator, and the NorCal SMT QRP Dummy Load kit. Both of these kits cost \$7.50 shipped to you, and both of them contain all the parts that you need to finish the project. \$7.50 for a kit is cheap. Not a bad investment to see if you like this part of the hobby.

One of the goals of this series is to suggest a series of projects that can be easily duplicated, fun to build, have quality manuals, and provide a useful piece of equipment. Both the VE3DNL and the NorCal SMT QRP Dummy Load meet all of those specifications.

Let's start with the old favorite, the VE3DNL Marker Generator.. It is pictured here.



As you can see it doesn't have a lot of parts and isn't very big. The board has 7 parts to mount, plus you have to supply power and output. That is it. It can be built in an evening, checked out, and even mounted in a box if you want to. The one pictured above was built by me, and I have not put it in a box yet, but plan to.

What does it do? It is a marker generator that provides a tone at various outputs and harmonics of those outputs. You use it as a signal generator, and several other uses mentioned in the manual.

I cannot believe how useful mine is, and I use it on almost every piece of equipment that I build. Check out the manual and you will see several other ways to use this piece of test equipment. The purpose of these articles is not to take you through building these kits, but to explain what they are and show you what they look like.

The next kit is the NorCal SMT QRP Dummy Load Kit. This one is so cool. It uses SMT parts, and when you finish, you will be amazed at how easily it can be done. More and more kits are using surface mount parts, and we will see even more in the future.

This kit is the perfect tool to use to see if you can build using SMT techniques, and I bet that you can. The kit comes with everything needed, all of the parts, quality board, connector, and when you finish you have a very useful piece of station equipment. And it is not just a dummy load, no this one provides a way to measure your output power too!! Here is a picture of the NorCal SMT QRP Dummy Load Kit.



The only through hole part is the connector on the left side. It is a BNC pc mount, and has been used on many, many qrp kits. As you can see there are lots of resistors to solder, plus there are just as many on the other side of the board, 44 to be exact. That is the beauty of this kit for the first time builder.

You get lots of opportunities to practice the skills that you are trying to acquire.

What do you do now? I would suggest that you go to the NorCal QRP Club's Website, <a href="http://www.norcalqrp.org">http://www.norcalqrp.org</a>, and click on the NorCal Kits button. There you will find the manuals to these two projects. Read them, and see if you think that you can build them. If so, order the kits, and jump in. Enjoy and have fun.

72, Doug, KI6DS

# So You Want to be a QRP Builder? Updated 2006 Version

# Part 2

The next series of simple projects that I am going to recommend come from three QRP Clubs. NorCal, NorTex, and 4SQRP. All of them are inexpensive, and all of them are useful tools in your ham shack. The 3 kits are the NorCal Keyer, The NorTex Accuprobe, and the 4SQRP Tenna Dipper. I suggest that you build them in that order. Each kit comes with a board and all board mounted parts. You have to provide the enclosure and connectors.

# NorCal Keyer



The NorCal Keyer is a remarkable value for the money. The price of the kit is \$16.50. NorCal has sold thousands of these kits for the past 3 or 4 years, and they continue to be an excellent value. As you can see, this kit has a few more parts than the VE3DNL, but not a lot more. It does not come with the pins that are shown in the photo. Those were

added by the builder. They are sip pins, and can be found in the Mouser catalog.

The keyer is a very useful tool for the shack. Almost everyone who sends cw uses one, because it is so much easier to send good cw with it. You get a memory keyer, with 3 programmable 40-character memories, iambic A & B mode, straight key and bug mode, 2 beacon modes, and variable speed control by either a 100K pot or the paddles themselves. The kit comes with all board mounted parts and a high quality printed circuit board with plated through holes, silkscreened legends and solder mask. You will need to add a stereo jack of your choice and a 9V battery connector, if desired. The kit comes with a 5V regulator and will take an externally-applied 7-to-18 volt power source with the regulator wired in. You may also use a 3V watch battery if you bypass the regulator.

The best part about recommending this kit is the marvelous write-up on how to build it that was done by Hall of Fame QRPer Jim Kortge, K8IQY. I asked Jim to write this article for the new builders out there, and he did a marvelous job. The article and ordering information for the NorCal Keyer Kit can be found here:

http://www.norcalqrp.org/nckeyer.htm

# NorTex QRP Club Accuprobe



Joe Everhart, N2CX is the designer of this marvelous kit. We were talking one day about a kit that would be a good one for one of the regional QRP clubs to offer, and Joe mentioned this RF

Probe design. What is unique about this design? It is the sensitivity that it has. Check out the specs below:

Specifications:

- Printed circuit board dimensions: 1.8X1.9 inches
- Power: 9 VDC at approx 1 ma using a standard 9-volt battery
- Input levels: LOW range 50 mV rms to 5V rms (usable to 20 mV) HIGH range 5 V rms to 35 V rms
- Frequency range: 100 kHz to 30 MHz (Upper end not tested but should extend to VHF)
- Outputs : DC-compensated to rms input
- LOW range 50 mV DC to 5 VDC (Uncalibrated readings to 20 mV)
- HIGH range 5 VDC to 35 VDC (1/10 RMS input)
- Output accuracy: approx. 10% of reading decreasing to 25% at 50mv

All that you will need to supply with this kit is the labor to build it, the solder, an Altoids or other suitable enclosure and a 9V battery. Building time is easily one evening. The manual is online and downloadable here:

http://www.kk5na.com/kk5na\_files/AccupManual.htm

You order the kit for \$17 US, \$21 DX from Joe Spencer of the NorTex QRP Club.

Here is the url for the ordering information: http://www.kk5na.com/kk5na\_files/accuprobe.htm

**So why an RF Probe?** You need one to measure RMS voltage in your transmitter so you can measure power out. The Accuprobe works great with the NorCal SMT QRP Dummy Load that you built in part 1. Download the manual, and check out this great kit. Believe me it is a valuable piece of test equipment, and much, much more sensitive than the old .01uF, diode RF probes.

The Tenna Dipper



# **4SQRP Tenna Dipper**

I absolutely love this kit. The 4SQRP group has sold it for 3 years, and they use the proceeds to put on Ozarkcon, a fabulous QRP Forum in Joplin, Missouri featuring some of the finest speakers in all of QRP. What is a Tenna Dipper? It is a tool that gives you an indication with an LED of when your antenna tuner is looking at a 50 ohm load.. Designed by QRP Hall of Famer Steve Weber, KD1JV, this is one of the handiest devices that you can own if you are a ham.

QRPers are well know for operating out in the field. They love to build little radios, then take them out to operate away from the home shack, and the home antennas. The Tenna Dipper will let you know that you have your antenna at 50 ohms so that you will have a good match for your transmitter.

Here is an excerpt from the manual that explains how to use this kit.

Using the "Tenna Dipper"

To prune or test an antenna:

• Select the band you expect the antenna to be resonant in with the dip switches.

Connect the antenna to the Rx input.

- Adjust the "fine tune" control until the LED goes out or gets very dim.
- Read the frequency with the counter.

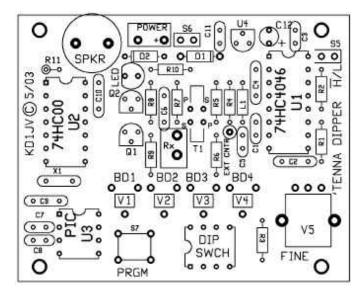
Note: since the output of the "TD" is fairly rich in harmonics, (third is the strongest) you might find a weak dip where you don't expect to see one.

To adjust an antenna tuner:

- Set the frequency to where you want the match to occur.
- Connect the ATU to the Rx input.
- Adjust the ATU until the LED goes out.
- Remove the "Tenna Dipper" and connect your rig to the ATU.

I remember the first time that I used mine. I was using a BLT tuner and a NorCal 40. I was using a NorCal Doublet antenna, and I was amazed at how quickly I was able to get the tuner adjusted. When I checked it with my MFJ Antenna Analyzer, it was spot on. Gee, a poor man's antenna analyzer. This

kit is only \$25, not more than \$200!! I then used the Tenna Dipper with a long wire and an L network. Bingo, adjustment was a snap!!



The kit is very easy to build. All of the board parts are there, and the 4SQRP group is a classy group to deal with. The manual is online at:

# http://4sqrp.com/kits/td/td.htm

Ordering instructions are there too. \$25, what a deal!! That's it for Part 2. I hope that you are enjoying this series and find it useful.

72, Doug, KI6DS

Note: For an excellent article on soldering go to:

 $S_{\text{OLDERING}} T_{\text{IPS}}$ 

by: Tom Hammond, NØSS http://www.nogaqrp.org/soldering/solder.html





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

Step #1: First point your browser to (click the link below): http://mailman.qth.net/mailman/listinfo/kl7aa

Step #2: On the web page you will see a section titled "Subscribing to KL7AA". Enter your e-mail address in the "Your email address" entry box.

Step #3: Pick a password for your account and enter it in the box marked "Pick a password" and then enter the same password in the box marked "Reenter password to confirm". This password will be used to change your settings on the list such as digest mode, etc.

Step #4: If you would like the e-mails in daily digest form click yes on the line marked "Would you like to receive list mail batched in a daily digest?"

Step #5: Click on the "Subscribe" button below the information that you just entered.

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# **Call for AARC Historical Documents**

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

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

# QST QST QST Iditarod

**Iditarod 2006** is almost upon us and we are looking for Hams to Cover the Start and Restart.

Contact: Gordon Hartlieb AL1W 243-8198 gordon@systems33.com for the **start** 

Jim Brutan KL7HJ 357-9165 hikingon@mtaonline.net for the **restart** 

Mark Kelliher KL7TQ 695-3722 kl7tq@arrl.net **for HQ** or all of the above

From: Gordon Hartlieb <gordon@systems33.com> Subject: Iditarod Start Communications

I'm still looking for more help! I have about 10 positions to fill. If you're not signed up and can help out downtown on Saturday morning March

4th, I'd love to see you! If you know another HAM that can help, please encourage them to attend. Come on down to 4th and E with a VHF HT and I'll put you to work - it's lots of fun! So much fun - in fact - that you shouldn't be getting paid. And you won't! :-)

Here's the operating guide/roster:

www.acsalaska.net/~gordon.hartlieb/gordon/iditarod/startquickguide06.htm

and the mission guide for the overall event:

 $www.acsalaska.net/\sim\!gordon.hartlieb/gordon/iditarod/startfullguide06.htm$ 

I'll be updating the web pages during the week, so check back Thursday night and Friday for updates.

Thank you for helping out! This is a great opportunity to exercise your radio skills and see the event up close and personal!

73 Gordon Hartlieb, AL1W al1w@arrl.net



# Information on Low Earth Orbit Satellites at

http://gahleos.obarr.net/

# Dog Sled Racing Next is Iditarod

Amateur radio operators combine fun and function Helpful hams

By MELODIE WRIGHT Anchorage Daily News Published: January 11, 2006

KNIK -- The noise of baying sled dogs Saturday floated like smoke over the Knik Bar, headquarters for the Knik 200 sled dog race. Inside Ray Hollenbeck's tiny trailer, the mobile radio buzzed to life.

"This is KL7DY, sled one with 12 dogs departing," came Richard Plack's voice.

"Roger that, sled one with 12 dogs," Hollenbeck replied, noting the numbers in his log.

It was the start of a long weekend for Hollenbeck and more than a dozen Matanuska Amateur Radio Association volunteers. A snowmobile team camped overnight along the Susitna River. MARA president Plack flew to Skwentna toting bags of radio gear to transmit race statistics to headquarters. And amateur radio enthusiasts provided vital backup for this race, as they do for nonprofit and official events all over Alaska.

"We would really not want to run a race without this wonderful group," wrote Knik 200 race coordinator Kit Braden via e-mail. "They are so important not only in compiling the race's current standings but they also provide a safety net for the teams."

Because Alaska has so many cell phone dead zones, amateur radio volunteers, or "hams," fill a vital niche. But as Internet and cell phone communications continue to improve, one might think the death knoll is sounding for these radio enthusiasts.

"I personally don't see (amateur radio) ever ending," said Dave Patton, the American Radio Relay League's manager of field and education services.

The Connecticut-based ARRL is the national membership association for amateur radio operators. Although the organization has seen a decline in membership over the past decade, Patton said the number of ham radio operators licensed by the Federal Communication Commission has increased. Alaska is ranked first in per capita licensees.

"The most valuable thing ham radio offers to society is to provide a tertiary communications backup. The real gem is the ability to mobilize thousands of people anywhere. If there's an emergency of some sort, hams gather up," Patton said.

As chair of the Local Emergency Planning Committee for the Matanuska-Susitna Borough, Ken Slauson is at the forefront of such gatherings in the Valley. He's a fervent disciple of ham radio and believes every Alaskan should get a license to operate amateur radio. For Slauson, it's a matter of emergency preparedness.

"Ham radio is decentralized, and that's one of the issues that impact the Internet," Slauson said. "The phone system is reasonably protected, but let's face it, there's only two or three major sites to get Outside. If you lose that, you're not calling down south."

Slauson has spread the gospel of ham radio to his friends and acquaintances that work in official capacities all over the state. Creating a network of educated hams that know their equipment and each other is key to keeping lines of communication open during a disaster, he said.

Ham radio enthusiasts are sought out by agencies like the Red Cross and Mat-Com, which provides dispatch services for the Alaska State Troopers and the city of Wasilla.

Charlie Fannon, a consultant for Mat-Com, said MARA was invited to place an antenna on a communication tower in Wasilla. During the windstorm in March 2003, which incapacitated cell phone towers in the Valley, MARA members set up a table in Wasilla's Station 61 and maintained official communication.

"These amateur radio guys are a godsend," Fannon said. "They make sure, on their own time and from their own pocket, that their systems are up and running to give them some kind of communication with the outside."

Now the FCC is easing its qualifications for hams. Licenses that are a step above the introductory technician license will no longer require a demonstrated familiarity with Morse code. Discarding what many old-time hams see as the bedrock of their hobby can be controversial.

As the son of one of its founders, Wayne Groomer has been a MARA member since the club began in

the 1970s. He said older hams believe knowledge of Morse code can only be beneficial.

"At the same time I feel that there are people who are more technically inclined but not to the point that they want to learn a new language," he said. "(The new license requirements) would let them in."

And letting new members in is something all hams encourage. Outside, land restrictions and competing interests have resulted in an aging amateur radio base. Baby boomers who grew up fiddling with walkie-talkies aren't passing on their fascination to their children in large numbers.

But the job opportunities for savvy radio technicians continue to grow. Patton said cellular companies "beg" for people to design networks and amplifiers.

While it's nice to be useful and in demand, hams will be the first to declare that there are plenty of other reasons to join their ranks. There's the lure of ever-improving equipment. Thirty years ago, radios were "the size and weight of a brick," Groomer said.

"They didn't have nearly the features as the ones today," he said, adding that radios then were about the same price as they are now.

Hams can communicate via short- or long-wave radio or over a packet (text messages relayed by radio wave via computer), use repeaters in high places that amplify signals, utilize low Earth-orbiting satellites or build their own antenna in the back yard.

They can bounce a signal off the moon or eavesdrop on astronauts orbiting the earth. They participate in "DX" contests to see how many hams in distant locations they can contact in a limited amount of time. They can talk to any licensed operator without monthly fees or limited minutes.

"There's a kind of magic that I don't need a multimillion-dollar infrastructure to communicate with somebody across the world," Patton said.

That magic was evident at the Knik 200 race headquarters. Using hand-held and mobile radios spread over 100 miles, MARA volunteers talked to each other all night long. "It's exciting to be a member of the ham community," said Hollenbeck, who, in addition to volunteering for dozens of events last year, acted as communications coordinator for the sled dog race. "(Events) give us the opportunity to play with our hobby and keep our radios up to working condition, so if there is a disaster or emergency, we're up for it."

Daily News reporter Melodie Wright may be reached at 352-6721 or <a href="mailto:mwright@adn.com">mwright@adn.com</a>.



Alaska QRP Club meets the Third Friday of every month – 7:00 PM (Some show for dinner at 6PM): Hams with QRP (low power under 5 watts) and Homebrewing interests meet for a social meeting monthly. Meet at Dennys (in the back room) on DeBarr near Bragaw. Contact is Jim Larsen,

AL7FS, <u>JimLarsen2002 at alaska.net</u> or 345-3190.

# **Anchorage Ham Makes the Team**

World Radio Team Championship

WRTC National Society Team Selections January 30, 2006

In order to honor the organizing committees of all World Radio Team Championship (WRTC) events, the WRTC-2006 Selection Criteria calls for five team leaders to be selected by the organizing committees of the five WRTC events. The criteria specify that the teams will be selected by the National Societies in the host countries. Since two WRTC events have been held in the United States, the ARRL was asked to select two teams. To maximize the honor, the two groups that organized the first and second WRTC events were asked by the ARRL to chose team captains and teammates. We are proud to announce those selections.

From the organization involved in the first-ever WRTC, Seattle in 1990, Western Washington DX

Club President Denny Bowman, W7SNH has announced the selection of Ward Silver, N0AX as their Team Captain. **Ward has in turn selected Chris Hurlbut, KL9A as his teammate.** (Chris is the son of Frank Hurlbut, KL7FH, of Anchorage)

From the organization that hosted the second WRTC in the Bay Area in1996, The Northern California Contest Club has selected Dean Straw, N6BVas Team Captain. Dean's selection for teammate is Mark Obermann, AG9A.

Congratulations to these fine contesters. We look forward to a strong competition!

Dave Sumner, K1ZZ
ARRL Chief Executive Officer



## **ARES Contact Information**

Heather Hasper, KL7SP <u>KL7SP@AARL.NET</u> Pager: 907-275-7474

Additional information on ARES can be found at the following URL:

http://www.qsl.net/aresalaska/

# **January ARRL VHF+ Contest**

Ron Keech, KL1PL

ARRL January VHF Contest By Ron Keech KL1PL

What do 6M, 1.25M, 2M, 70cm and 33cm have in common? Those were the 5 bands I worked during the January Contest.

As you have heard by now the Jan edition of the VHF Contest went really well. We had a nice rise in participation in South Central. As of this writing there are 5 logs recorded at ARRL for the contest which is more than double what ended up being submitted for the Sept Contest. I expect there will be more logs sent in yet. If you have not done so you can enter your contact info electronically via a webpage at: http://b4h.net/cabforms/.

Am happy to report contacts from the Kenai Peninsula to Fairbanks! KL7FH Frank Hurlbut worked as a rover during the contest and did quite well, I appreciate his efforts. KL7UW Ed Cole down in Nikiski was a driving force in the turnout as he kept reminding everyone of the contest during the local nets prior to the weekend of the 21st of Jan.

A couple of mile stones should be noted, first thanks to KL7DTH Lee Wareham for his continued work on rock bounce to Fairbanks. Not a new path but one that gets rediscovered every few years I'm told. During the first day of the contest KL7DTH was working KL7EDK Jerry Curry in Fairbanks on simplex 146.55. I managed an exchange of Grids with KL7EDK off the hillside over Anchorage, my furthest DX on 2m to date. That was a treat for sure!

#### What is on 900mhz?

There was another item of interest on Saturday. I worked KL7FZ Steve Tolley on 927.6 FM voice about a 40 mile contact. First such contact we are aware of in Alaska. Not a lot of traffic on 33cm's here but maybe that will change. There are no amateur rigs built for 900 megs so you have to modify commercial gear which is not exactly easy to do. If you do a little research at places like Batlabs.com or other internet sites, modification information is out there for Motorola radios and such. I personally use a Motorola GTX for 33cm, thanks to KL7FZ for his expertise on programming the radio.

Next VHF+ Contest is in June, any mode works from 6m to Daylight. Last time out I worked a dozen stations over 4 bands in 3 grids. This time due to more effort on every ones part I managed 55 contacts over 5 bands and 4 grids. My goal was to improve and I am happy to report success.

Additional remarks by participants are posted on the ARRL Contest Soapbox at:

http://www.arrl.org/contests/soapbox/?con\_id=102 Most contacts were on FM, but SSB or even AM are allowed. See the ARRL Contest site for details and rules for the contest.

Remember we also have folks getting together for an informal net on Wednesday's at 9pm working VHF/UHF+. Join us, we start off on 144.200 USB and go from there. Be sure to check out http://www.qsl.net/al7eb/avg.htm for info on the

Alaska VHF UP Group. Thanks to all who came out and participated, hope to work you in June!



This is the 6m Loop I run for mobile work. That is a inflatable boat's wooden folding motor mount, thus I have the option of flipping the loop vertical if the mood strikes me.



Setup in the Glenn Alps Parking area on Saturday morning, antenna central. Got more than one passer-by asking what the heck?



Down the hill a bit to work the rock bounce to Fairbanks, 4 el 2m using Mt. McKinley as a reflector.



Antenna's were the 4 element YAGI for 2m, 5 el Yagi for 33cm, 7 el Yagi for 70cm a ¼ wave ground plane for 1.25m all on a rotor. Truck has a 102 steel whip (HF), 6m Loop, 5/8 Wave GP for 70cm, collinear 2m vertical and a ¼ wave 2m gp for packet/APRS. Note the lean on the antennas. Quite windy at first up there.



Rotor mount, had to level the rig as the parking lot slopes. Also has to tie the thing to the truck due to the winds.



Above are the primary radios used for the contest. Motorola GTX for 33cm (top), FT-857D for VHF/UHF and a Kenwood 3220A for 1.25m. I used a standard rotor since I have a 400 watt inverter in the truck for AC power.



And let's not forget the other nut case freezing his coax off! Bruce McCormick KL7BM worked the contest and a Mountain Rescue Exercise Saturday morning.

Ron Keech, KL1PL

http://kl1pl.us



# My first CW QSO Mark J. Kelliher KL7TQ

I was a really active ham after I received my first ham license as a Novice (WL7AXH). I set up a nice station and looked at for a year. Sometimes I would do a

little world wide listening but No way was I going to touch that Key. It led to the world of the unknown. After about a year of trying to build up some courage I knew I had to do something.

I returned from work one evening at about 12:30am. My XYL was visiting her mother in DL land. I daringly walked over to the ham shack, and turned the power on. I then ran over to the fridge and had two large glasses of spoiled grapes code learner courage builder and sat down in the seat and started tuning the 20m band. I DIFINETLY was not looking for someone calling CQ-CQ. I might have to understand them! Therefore, I found a really quite place on 20 where there was no one anywhere near. I took a couple of deep breaths and punched the key. CQ CQ CQ DE WL7AXH over.

Immediately something came blaring out of my speaker, it was a bunch of dit and dahs but I couldn't understand a thing. I sat there in shock looking at my radio thinking. There isn't supposed to be anyone there. Then it came back again. A little slower, I jumped up ran around the room to find some paper and a pencil.

My heart was pounding. Sweat was squirting out my pores. Out went the code at about 3wpm. In came the code at about 1000wpm. "Please slow down", I sent, realizing that I didn't have that list of secret codes of "Q" signals. I started to copy. Here was a Russian Soldier in Afghanistan; "Please Slow Down", I had to get more paper. My pencils kept breaking. On and on we went. He had the patience of Job. At the end of two hours, I was filled with emotion, excitement over my first QSO, shame in not knowing the "Q" abbreviations, but realizing why they were created.

I finally had to say goodbye. It was very emotional for me. His reply to me filled me with hope. Congratulations, you are now copying better than 13 wpm and sending at about 15 wpm; it's time to upgrade. At that time I didn't know anything about QSL cards or good record keeping, so, as I found out later, I didn't get a good copy on his call sign. His home was Kiev. The next morning, I observed the disaster area. Notes were scattered all around the radio. One could see the excitement in the writing. I spent the next few days just reviewing and reliving this great experience. I'd recommend this sport/hobby to anyone and if you happen to be the "Russian soldier" for someone's "first", please be as gentle and caring as my first. My Elmer, Wilse Morgan KL7CQ, said I'd never forget the "first", but only now do I realize the impact of this statement.

Mark Kelliher 73's KL7TQ

# **Iditarod Ham Radio Recognition**Mark KL7TQ

Out of the Blue, Stan Hooley the Executive Director for Iditarod, asked that the four ham Clubs that support the Iditarod with Repeater Support be recognized in the Special edition race report as a **Contributing Sponsor.** 

The Anchorage Amateur Radio Club Polar Amateur Radio Klub PARKA Matanuska Amateur Radio Club and

Seward Peninsula Amateur Radio Club

73's Mark KL7TQ

# 

March 2006

ARRL International DX Contest (SSB) ... QRP Category

Mar 4, 0000z to Mar 5, 2400z

Rules: http://www.arrl.org/contests/calendar.html?year=2006

Wake-Up! QRP Sprint (CW) \*\*\* QRP Contest \*\*\*

Mar 4, 0400z to 0600z

Rules: http://www.qrp.ru/sprint\_e.htm

Adventure Radio Society - Spartan Sprint (CW) ... QRP

Contest! Mar 7, 0200z to 0400z (First Monday 9 PM EST)

Rules: http://www.arsqrp.com/

Pesky Texan Armadillo Chase (CW) \*\*\* QRP Contest \*\*\*

Mar 9, 0230z to 0400z

Rules: http://www.w5nc.org/ptac/default.htm

Elecraft QSO Party (CW/SSB/Dig) ...QRP Category

Mar 11, 1500z to Mar 12, 1500z Rules: http://www.elecraft.com

Second Class Operator's Club Marathon Sprint (CW) .. QRP

Contest! Mar 11, 1800z to 2400z

Rules: http://www.qsl.net/soc/contests.htm

NAOCC Straight Key/Bug Sprint \*\*\* ORP CONTEST! \*\*\*

EST: Mar 15, 8:30 PM to 10:30 PM

UTC: Mar 16, 0130z to 0330z Rules: http://www.arm-tek.net/~yoel/contests.html

Ten-Ten Mobile QSO Party (CW/SSB) ... QRP Category

Mar 18, 0001z to 2359z

Rules: http://www.ten-ten.org/calendar.html

RUN FOR THE BACON (CW) \*\*\* ORP CONTEST \*\*\*

EST: Mar 19, 9 PM to 11 PM UTC: Mar 20, 0200z 0400z

Rules: http://fpqrp.com

CQ World-Wide WPX Contest (SSB) ... QRP Category

Mar 25, 0000z to Mar 26, 2359z

Rules: http://www.cq-amateur-radio.com/awards.html

Kules. http://www.eq-amateur-radio.com/awards.html

Spring QRP Homebrewer Sprint (CW/PSK31) ... QRP

Contest!!!! Mar 27, 0000z to 0400z (Sunday Mar 26, 7PM to 11PM EST)

Rules: http://www.njqrp.org/data/qrphomebrewersprint.html

QRP BARBERSHOP QUARTET CONTEST (CW QRP)...

QRP Contest!

Mar 29, 9 PM to 11 PM EST

Rules: http://www.io.com/~n5fc/barbershop\_contest.htm

72 de

Ken Newman - N2CQ N2CQ@ARRL.NET

# Special offer to ARRL affiliated club members. Radio Frequency Interference

Have you wondered about Radio Frequency Interference? Exactly what is it, what causes it, and how to get rid of it?

For a limited time, we are offering ARRL affiliated club members the opportunity to participate in the Radio Frequency Interference online course at a \$15.00 discount. (Regular price, ARRL Members \$65.00 Nonmembers 95.00)

- Get tips and suggestions for dealing with RFI problems
- Various types of filters.
- Sources of RFI
- Forms of TV interference
- On-line course, accessible 24/7 during the 16-week session

## How to Register:

Go to link for the Radio Frequency Interference

http://www.arrl.org/cce/courses.html#ec006

Enter the discount code AC42306 on the registration screen. Offer expires April 23, 2006

# **QUESTIONS?**

Please send questions to Jean Wolfgang, WB3IOS at cce@arrl.org.

ARRL

The national association for AMATEUR RADIO

#### Rohn 25G tower and rotor

For Sale: Rohn 25G tower & CDE Ham III rotator. Tower has top section, 3 10-foot sections, dirt mount & all bolts. Rotator (Rated for up to 12.5 sq. ft.) includes mounting bracket, all bolts, wire & manual. \$495 for all (just about half price). Can show almost anytime. Call John, WA1ACN, 727-9056.

# Packet Radio Links



# Packet Radio?

By Ron Keech, KL1PL and Tim Comfort NL7SK

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

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

Local Nodes of Interest-

Eagle Node is NL7C-2 at 145.01 FM simplex. Valley Node is KL7JFU-2 at 147.96 FM simplex. ANCBBS is KL7AA-7 and is also on 145.01 FM simplex or via Eagle

Most nodes can talk to each other so try it, from Valley try connecting to Eagle or even ANCBBS. There are of course other systems in the area, these are the most often used.

Digi Links –

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

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

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

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

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

I wanted to touch on the Packet side as we are trying to generate interest into VHF digital modes. There is a whole world of digital possibilities in

Ham Radio. From HF PSK to Meteor Scatter on 6 meters to EME. If you have the notion try it. If you want more information contact your local club for who is using digital modes in your area.

I am far from an expert on the subject but there are folks who can do it justice, just ask.

Remember from HF weak signal work to Amateur TV and EME, the digital Ham world is yours to master. Pick your favorite and run with it!



Southcentral Alaska Packet Nodes

#### 145.0100 MHz

CALLSIGN ALIAS LOCATION

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

#### 145.050

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

#### 147.3600

KL7GG-2	EDAV	EACLEDVD	ANCHORAGE	0600 DATID
KL/GG-2	EKAK	EAGLERVK	ANCHUKAGE	9000 BAUD

#### 147.9600

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

#### 3.605 LSB

KI.7AA-10	LLCOU	CANCH	HF Side of things 300 BAUD

#### 440.0500

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

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

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

## 73!

Ron Keech, KL1PL and Tim Comfort NL7SK



# **Data You Can Use:**

Officers

President Jim Larsen, AL7FS president@kl7aa.net

Vice Pres. Judi Ramage, WL7DX vicepresident@kl7aa.net

Secretary Vacant

secretary@kl7aa.net

Treasurer Heather Hasper, KL7SP treasurer@kl7aa.net

Trustee Keith Clark, KL7MM trustee@kl7aa.net

**Activities Chairman** Vacant

News Letter Editor Jim Larsen, AL7FS Membership Chairman Fred Erickson KL7FE

membership@kl7aa.net

Past-Pres. Jim Larsen, AL7FS pastpresident@kl7aa.net

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

Jim Wiley, KL7CC jwiley at alaska.net Richard Block, KL7RLB, rlblock at arctic.net Frank Pratt, KL7RX kl7rx at arrl.net

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

Steve Jensen - KL0VZ, jensens at acsalaska.net Steve Gehring - NL7W, steveg at mtaonline.net TJ Sheffield - KL7TS. kl7ts at hotmail.com Edward Moses - KL1KL, kl1kl at ak.net Mike O'Keefe - KL7MD, mok at gci.net Mike Wood - KL1RO, kl1ro at arrl.net

Carl London - N5XLI, carlilondon at yahoo.com

David Stevens - KL7EB, kl7eb at arrl.net

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

Homepage: http://www.KL7AA.net/ Webmaster: webmaster@kl7aa.net President: president@kl7aa.net Vice President: vicepresident@kl7aa.net membership@kl7aa.net Membership: Newsletter: editor@kl7aa.net

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

Submissions must be received 2 weeks before meeting

Email: editor@kl7aa.net

Mail: 3445 Spinnaker Drive, Anchorage 99516

#### **Nets in Alaska:**

The following nets are active in South-central Alaska: Alaska Sniper's Net 3.920 MHz 6:00 PM daily Alaska Bush Net 7.093 MHz 8:00 PM daily Alaska Motley Net 3.933 MHz 9:00 PM daily Alaska Pacific Net 14.292 MHz 8:00 AM M-F ACWN (Alaska CW Net) 3534, 7042 Daily @ 0700 -1000, and 1900 - 2400 Alaska Time - AL7N or KL5T monitoring.

Net Purpose: Formal NTS traffic via CW. No Name Net 146.85/.25 repeater Sundays 8:00 PM Grandson of SSB Net 144.20 USB Mondays 8:00 PM local Big City Simplex Net 146.520, 446.0, & 52.525 FM With Packet 145.01 Tuesdays 8:00 PM local ARES net 147.27/87 103.5Hz - Thursdays at 8:00 PM local PARKA net 147.30/.90 Thursdays at 7:00 PM local ERC VHF Net 147.27/87 103.5Hz – Sunday 7:30 PM local ERC HF Net 3.880 MHz - Sunday 8:30PM local

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

# Anchorage & Mat Valley Area Repeaters-a/o Mar05

KL7AA systems at Flattop Mt., 2,200 ft

146.94/34 MHz, 80 watts, autopatch, 141.3 Hz PL (problems)

224.94/223.34, 25 watts, no patch, no PL

444.70/449.70, 25 watts, autopatch, 141.3 PL

# \*\*147.27/87 MHz, no patch, Mount Susitna 103.5 Hz

# \*\*443.3/448.3, no patch, Mount Susitna 103.5 Hz

KL7CC, Anchorage Hillside, SCRC & OCWA

146.97/.37 MHz, 30 watts, autopatch, 103.5 Hz PL

KL7M Anchorage Hillside

147.21/.81 MHz, on IRLP, 97.4 Hz PL

KL7ION at Mt. Gordon Lyon, PARKA 3,940 ft

147.30/90, MHz - 80 watts, no patch, 141.3 Hz PL

KL7AIR Elmendorf AFB, EARS

146.67/.07, 107.2 Hz PL

KL7JFU, KGB road, MARA club

146.85/.25, autopatch, no PL

Palmer IRLP

146.64/.04, simplex patch, no PL

Mile 58.3 Parks Highway IRLP

147.09/.69 MHz, 97.4 Hz PL

KL3K, Girdwood - IRLP

146.76/16 MHz, 25 watts, no patch, 97.4 Hz PL

South Anchorage IRLP 146.79/19 MHz, 100 Hz PL

Anchorage IRLP - KB8JXX

146.82/22 tone unknown

# **South Central Area Simplex Frequencies**

146.52 MHz Calling and Emergency frequency

147.57 / 447.57 (crossband linked) HF spotters & chat, 103.5 HZ PL

146.49 MHz Anchorage area simplex chat

146.43 MHz Mat Valley simplex chat

147.42 MHz Peninsula simplex chat

146.58 MHz Simplex IRLP - Wasilla Lake

# **VE Testing in the Valley**

Valley VE testing sessions will be held at the Wasilla Red Cross at 7 pm on the fourth Saturday of each month unless it is a major holiday weekend. Wasilla Red Cross is in the Westside Mall, next to Speedy Glass...it's just a click up from AIH hardware

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

**QRP and Hombrew Links** http://www.AL7FS.us

AARC http://www.KL7AA.net/ SCRC http://www.KL7G.org **EARS** http://www.qsl.net/kl7air MARA http://www.kl7jfu.com/

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

ARES http://www.qsl.net/aresalaska Practice Exams: http://www.AA9PW.com/ **Fairbanks AARC**: http://www.kl7kc.com/ **Yukon Amateur Radio Association:** http://www.klondike.com/yara/index.html **Links for Homebrewers & QRPers** http://www.amqrp.org/misc/links.html

**Solar Terrestrial Activity** http://209.130.27.95/solar/

**ARRL** http://www.arrl.org/

Propagation Report Recording 566-1819

Please let us know if there are other clubs pages or good starting points that should appear here. Report dead links or bad info to editor@kl7aa.net.

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**NEWSLETTER ARTICLES:** All articles from members and interested persons are very welcome. If you wish to submit any articles, jokes, cartoons, please have it typed or neatly handwritten. It can be submitted by mail, computer disk or E-mail to the newsletter editor at the address listed above. Submissions must be in the hands of the editor no later than the 10 days prior to the meeting or it may not be included.

# **Regular HAM Gatherings:**

Alaska QRP Club, Third Friday - 7:00 PM: Hams with QRP (low power under 5 watts) and Homebrewing interests meet for a social meeting monthly. Meet at Denny's on DeBarr & Bragaw in the back room. Hungry QRPers start showing up about 6PM. Info contact Jim Larsen, AL7FS, JimLarsen2002 at alaska.net or 345-3190.

Thursdays Brunch, 9:30 AM: Brunch NW corner of Debarr and Bragaw. A great bunch of folks attend this one.

Saturdays Breakfast, 7:30 AM: Here is a good way to get started on the weekend. Come and meet with some of the locals and have a great breakfast at Phillips Restaurant, at the corner of Arctic and International. Great Fun.

## **THIS MONTH'S EVENTS**

1st Friday each month - AARC general meeting - 7:00 PM in the Carr-Gottstein Building, on the APU Campus. Talk in will be on 147.30+ repeater.

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

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

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

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

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

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

3rd Friday each month: Alaska QRP Club. 7:00PM at Denny's on DeBarr in the back room. Info: Jim Larsen, 345-3190. Bring projects to share with the group. Some show up at 6:00PM to eat.

3<sup>rd</sup> Saturday each month: ARES General meeting 9:30AM to 12:00 PM. Call TJ Sheffield – KL7TS: kl7ts at arrl.net HM: 248-3864 for additional information. Also check for ARES Info at: http://www.gsl.net/aresalaska/

The last Friday each month: MARA meeting at 7PM Fire Station 61, located two blocks up Lucille Drive, from the Parks hwy. Talk-in help for the meeting can be acquired on either the 146.640 or 146.850 repeaters. Further details can be found by contacting Len Betts, KL7LB, lelbak at yahoo.com.

# Who Do I Contact to Join AARC Or pay membership renewals?

Fred Erickson KL7FE 12531 Alpine Dr Anchorage, AK 99516-3121 frederickson (at) iname.com **Phone number:** 345-2181

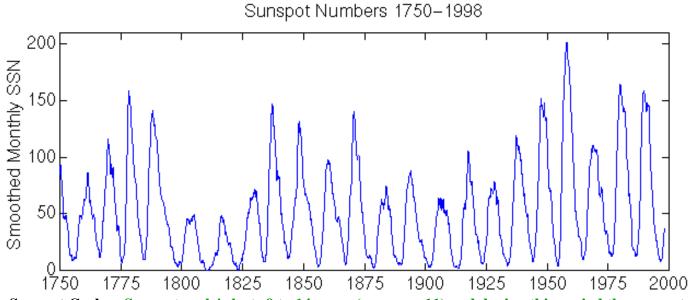
Annual Dues are \$12 (prorated as appropriate) Additional Member in same household is \$6.

Full Time Student is no charge.

Ask about Life Memberships.

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

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Sunspot Cycles - Sunspot cycle's lasts 9 to 14 years (averages 11) and during this period the sunspot numbers rise and fall.