Build A 9 dB, 70cm, Collinear Antenna From Coax
By N1HFX

Recently the RASON technical committee was hard at work at the repeater site repairing our 2 meter repeater antenna. One of the members commented to me that I should write an article about collinear arrays so that we could all build our own. While it is not always feasible to home-brew a commercial quality antenna designed to take hurricane force winds, it is very feasible to built a collinear antenna for average use. This article describes a collinear antenna made from very inexpensive RG58/U coaxial cable and encased in PVC pipe.

Before we start building we need to cover some ground about the characteristics of coaxial cable. First remember that there is something called the velocity factor for coaxial cable. For RG58/U coax it is typically .66. This means that when we calculate the length of ½ wavelength in free space we need to adjust its size by multiplying it by the velocity factory. Simply put, RF slows down by the velocity factor when traveling through coaxial cable. All that aside now, lets calculate the ½ wavelength of RG58/U coaxial cable with a frequency of 444 Megahertz:

$$\frac{1}{2} \text{ wavelength of coax} = \frac{300}{F} / 2 \times V$$

Where $F =$ Frequency in Megahertz

$V =$ Velocity factory of Coax

$300 / 444 / 2 \times .66 = .2229 \text{ meters or 223 millimeters}$

To allow for cutting the ends of our coax, we will need to add 8 millimeters to each ½ wavelength for a total of 231 millimeters.

To get started, we will need 8 half wave lengths (231 millimeters) of RG58/U coaxial cable to be cut and connected in the manner shown in Figure 1. First cut back 4 millimeters of the outer jacket, braid and dielectric exposing the center conductor as in Figure 2. Now cut back the outer jacket another 4 millimeters to expose the braid and push the braid back about a millimeter to prevent it from shorting with the center conductor. It is best to lightly tin the braid with solder at this point. Now solder each half wavelength as shown in Figure 1. Attach a few feet of RG58/U to the bottom of the array as in Figure 1 for feeding the antenna.

Now its time to add the additional elements to the top and bottom of the collinear array. First add a ¼ wave element to the top of the antenna as shown in Figure 3. Use #16 solid wire or similar and solder it to the center conductor only. The length of the ¼ wave element is calculated as follows:

$$\frac{1}{4} \text{ wavelength radiator} = \frac{300}{F} / 4$$

Where $F =$ Frequency in Megahertz

$300 / 444 / 4 = .1689 \text{ meters or 169 millimeters}$

March Program
Boretide Robotics Education Association presents the “Nano Gnats”
Alaska Lego Robotics Champions.
The program is an educational combination of Engineering, Programming, Robotics, Science, Mathematics, Research, Teamwork, and Fun FIRST LEGO League (FLL) is an exciting and fun international robotics program that ignites an enthusiasm for discovery, science, and technology in kids ages 9 to 14.
Collinear Antenna From Coax cont.

At the bottom of the array we will slide a 5/16 inch aluminum tube over the coax and crimp it to the braid of the antenna feed point only. If copper is used, it is okay to solder. The length of the tube is calculated as follows:

\[
\frac{1}{4} \text{ wavelength of tubing} = \frac{300}{F} / 4 * V
\]

Where \( F \) = Frequency in Megahertz
\( V \) = Velocity factory of Tubing. (Use .95 for 5/16" tubing)

\[
300 / 444 / 4 * .95 = 0.1604 \text{ meters or 160 millimeters}
\]

Because a collinear antenna is hot with RF along the shield of the coax, it is necessary to prevent the RF from coming back through the coax. Slide three FT50-43 or almost any similar sized toroids over the bottom end of the coax as shown in Figure 3. The toroids should be placed about ½ wave length from the bottom of the array. Use the same formula for calculating a half wave length of coax. If you prefer, apply RF to the antenna at this point and slide the toroids up and down until minimum SWR is found. Tape the toroids to the proper point on the coax using electrical tape or similar means.

After completing the basic assembly of the collinear antenna, apply a small amount of RF with the antenna on the floor or ground. Relatively low SWR should be observed at this point. The SWR will be much lower once the antenna is mounted in the air. If the SWR is greater than 2 to 1 across the entire band, a connection may separated or a short occurred. It will be necessary to correct the problem before proceeding. After good SWR is obtained, place heat shrink tubing along all connections or wrap tightly with electrical tape.

For final mounting, attach the antenna to a ¼" wooden dowel using tie wraps about every 3 inches. It may not be possible to obtain a wooden dowel for the complete length so attach two dowels together by using a 1 inch sleeve of 5/16" tubing and crimping the tubing at each end.

Check SWR again to insure that no connections have separated or shorted. Carefully insert the coax and dowel assembly into several feet of ¾" PVC pipe for final mounting. Because of the tie wraps, it is not necessary to use spacers but may be necessary if larger size piping is used. Drill a hole for the coax at the bottom end cap and place an end cap on the top of the PVC. Do not cement end caps until the SWR has been doubled checked. Cement end caps and water proof coax opening on the bottom. Use whatever type of coaxial connector is desired on the bottom of the coax end but do not use RG58/U for your complete feed line. Use a low loss coax such as RG8/U for the main feed line to the transceiver. Don’t forget to water proof all coax connectors.

If the eight ½ wave coaxial elements result in an antenna too long for your liking (over seven feet), then it is okay to use four ½ wave coaxial elements but the SWR may be slightly higher (Attach four ¼ wave vertical ground radials at the antenna feed point to help lower SWR.). If 9 dB gain is still not enough for you then increase the number of coax elements from eight to sixteen. You will probably need to attach guy lines to the antenna. Although only a 70 CM antenna was described in this article, the formulas can be easily calculated for the 6 meter, 2 meter or 1½ meter bands. Millimeters were used for many of the measurements but can be converted to inches by dividing millimeters by 25.4 for those who are not familiar with the metric system. After installing one of these antennas, be prepared to hear stations and re-
Amateur Radio has long dealt with challenges to HF operation including restrictions on antennas and poorly built consumer electronics that are highly susceptible to nearby radio signals. A new, and very challenging threat has emerged in the form of home computer networks – in particular both home computer and home entertainment distribution systems that use unshielded, "twisted pair" copper wiring or AC line wiring inside homes to transmit high speed data signals. Incredibly, these systems rely on signals in the 2 Mhz to 30 MHz range[1] running over unshielded wiring. These systems generate broadband radio frequency interference and are highly susceptible to interference from legitimate HF radio transmissions. In just 2 to 3 years, the odds are that every other house in your neighborhood may be using one of these HF-based network technologies. Hams have long dealt with interference to and from consumer devices – but in the past, the problem was typically due to fundamental signal overload problems and the inability of consumer electronics to tolerate nearby radio signals of any type. A variety of techniques have been developed to address traditional interference problems ranging from the use of high pass filters, RFI chokes and ferrite beads, shielded cabling and a variety of other simple solutions. The computer network interference problem cannot be solved through the installation of a simple filters. In fact, it may not be solvable at all since these devices are operating directly within the HF radio spectrum and are using unshielded wiring for their links. The 2 to 30 Mhz spectrum is rapidly filling with digital noisemakers. Not only do these systems emit RF noise but they are very susceptible to interference from clean and legal Amateur radio transmissions. There is no simple filtering arrangement to eliminate the interference to Amateur radio or from Amateur radio to home networks.

Where Does This Leave Amateur Radio? Legally, Amateur radio operators have Federal communications law on their side. Home networking equipment operates under Part 15 rules and must put up with any interference it receives from licensed radio services. Realistically, while the law is on the side of Amateur radio, home network and Internet users vastly outnumber Amateur radio operators. The politics of the situation do not favor Amateur radio operation on the HF bands, as we know it today.

Oddly, the ARRL continues to promote an incentive licensing scheme that puts all of the incentives in the HF bands (4 out of 5 the existing license classes are HF-centric). The ARRL is currently conducting technical tests near 5 MHz for the purpose of potentially requesting additional HF radio spectrum for Amateur Radio, and in the recent license restructuring proposals, the ARRL strongly supported retention of telegraphy proficiency (historically used most extensively at HF) requirement in the Amateur service. While these are admirable goals, the reality of the world we live in today is that HF operation is rapidly becoming impossible for most Americans in a world filled with antenna prohibitions on all new housing and where homes will soon be filled with home networks operating in the 2-30 MHz HF spectrum. Literally, Amateur Radio is potentially off limits to most Americans. Is it any wonder our numbers are decreasing?

Our Amateur Radio "product" is significantly out of step with the real world, which may explain why the ARRL recently reported the loss of 14,000 members, and the overall U.S. Amateur population declined in 1998 by 1,090 individuals. Worse, with nearly 1 in 3 Amateurs over the age of 65[3], and very few Amateurs under the age of 40, these numbers may indicate that the Amateur Radio service is literally dying. (This months newsletter has four Silent Keys) A few years back, slow Amateur radio service growth was based on poor HF radio propagation due to the bottom of solar sunspot cycle. With the sunspots now doing their thing, that theory is largely moot.

In my humble opinion, a hobby radio service that is declining in numbers may be in an extremely difficult position to defend its HF operations in the presence of vastly more home computer and digital entertainment consumers. There is a fair amount of evidence that our Amateur radio "product" needs a wholesale rethinking and a major new vision for the 21st century. I have suggested ideas for new directions in past Opinion columns, and I won’t repeat them here. The bottom line is that the ARRL[4] needs to exert a strong vision of a "new" Amateur Radio service for the 21st century, consistent with the new world that we live in. What can you do? You need to communicate your thoughts on these issues directly to your ARRL Director. ☐
**HAM RADIO CLASSES**

Anyone interested in getting their license may contact instructor@kl7aa.net for assistance and a tutor. Anyone interested in performing one-on-one tutoring may also contact us. If you are a General or Extra willing to volunteer your teaching abilities to ELMER other operators, please feel free to contact us to coordinate your schedule.

**EXTRA Course**

We would like to offer an extra class, however we are in need of instructors and mentors for this course. If you would be interested in teaching this class, facilities, materials and classroom support is available. We have several operators who would like to upgrade and just need some good classroom instruction to be successful. Please contact instructor@kl7aa.net if you are interested in volunteering for this opportunity.

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**Connector of the Month**

The **“F” series connector** is a type of RF connector commonly used for over the air terrestrial television, cable television and universally for satellite television and cable modems, and antenna applications usually with RG-6/U cable or (in older installations) with RG-59/U cable. Normally these are used at 75 ohm characteristic impedance. 3/8-32 coupling thread is standard, but push-on designs are also available.

The F connector is inexpensive, yet has good 75-ohm impedance match up to 1 GHz. One reason for its low cost is that it uses the center wire of the coaxial cable as the pin of the male connector. While lowering cost, this design drastically reduces the long-term reliability compared to other connectors, the copper wire being extremely prone to corrosion. The male connector body is typically crimped, or sometimes screwed, onto the exposed outer braid. Female connectors have a 3/8-32 thread. Most male connectors have a matching threaded connecting ring, though push-on versions are also available. Push-on F connector ends provide poor shielding against airborne signals (for example, a nearby TV transmitter will interfere with a CATV station).

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**How to fit ‘F’ connectors for Coax**

As published in "What Satellite TV" magazine.

About 25mm from the end, use a knife to cut around the outer plastic covering. Be careful not to cut the braided copper wires inside! Pull off the plastic cover. Separate the braided copper wires then twist them together in a "pigtail".

Cut off the exposed metal foil shield.

Cut off the white plastic insulation to expose the inner wire core, leaving about 3mm of white plastic insulation. This reduces the risk of the braided copper wires touching the male connector body.

Push the copper pigtail back over the outer sheath and screw an 'F' connector over it as far as it will go, holding it with a piece of cloth. Make sure that the inner wire core can not touch the braided copper wires. Cut off the exposed pigtail.

Use sharp cutters to cut the inner wire core to leave about 3mm exposed. Make this cut at a 45 degree angle to make a point. This makes it easier to push the wire into a connector without risk of damage or bending the wire. Be careful not to cut yourself on this sharp point!

Push-on adaptors are available. These screw into an 'F' connector to turn it into a push-on plug. Useful when you are using a satellite finder meter and also as an LNB selector (see below).

Right-angle adaptors are available. These can be used where space is limited - such as behind a wall plate.

Outdoor 'F' connectors outside MUST be sealed to keep water out, otherwise it will run through the cable, damaging the inside of the LNB and the satellite receiver. Water runs VERY quickly through coaxial cable by "capillary action".

Be sure to use Self Amalgamating Tape. Cut off about four inches (100mm) and peel off the plastic backing.

Wrap the tape around the cable, just below the 'F' connector, stretching it strongly as you wrap in a spiral. Overlap by at least half the width of the tape so it bonds to itself. Continue to stretch and wrap it around the cable, then the 'F' connector all the way up to the body of the LNB.

Do you have a connector that you would like to contribute? Email us the connector name and we can include it in the newsletter.
Editor’s Corner

Thank you,
editor@kl7aa.net

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Newsletter Submissions, Information or corrections:
Submissions must be received 2 weeks before meeting Email:
editor@kl7aa.net
Mail: PO BOX 101987, Anchorage, AK 99510

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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.

Mike Caughran, KL7R, SK (Feb 2, 2007) -- Well-known low-power (QRP) and homebrewing enthusiast Michael S. "Mike" Caughran, KL7R, of Juneau, Alaska, died January 22 of injuries suffered in an automobile accident in Hawaii. He was 51. Caughran may be best known as one-half of the team -- with Bill Meara, N2CQR/M0HBR -- that created and produced the weekly SolderSmoke podcast. "I think people were drawn in by Mike's friendly voice and manner," Meara commented on a memorial page for KL7R. "Even if they weren't necessarily interested in the technical stuff we were talking to, they liked listening to Mike." A member of ARRL and the Juneau Amateur Radio Club, Caughran also wrote articles for the Michigan QRP Club's T5W newsletter and he was an active ham radio contester. "Mike was one of those people who you instantly like because of his honest, straightforward and humble way of talking and expressing ideas," said Mike Hall, WB8ICN, who edits T5W. "His co-hosting of SolderSmoke provided me hours and hours of enjoyment while I drove or flew all over the East Coast doing my job. His Web site and his comments on the Sunday night QRP Conference on EchoLink has brought me back to more homebrewing projects and experimentation than ever before." Caughran was an IT professional with the State of Alaska. Survivors include his wife and son.

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.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.
Betty Mallay, KL7AP, has passed on. It seems that in early January she first developed Bell's Palsy in her face, then later found a lump on her chest, not breast, that resulted in CAT scans, etc. revealing extensive cancer everywhere. They gave her 4-6 months. She apparently tried chemo., and was allergic to it. Radiation apparently made her vomit blood. All just about as awful as it could be.

She told nobody any of this until she finally told Tom and Mary Moore (KL7P &KL7Q) last week, and then allowed them to tell us last night. She says she's now ready to go ahead and tell people. She can only speak in a whisper at the present time. They think a tumor is impacting a nerve to the larynx that causes that. She says she felt lousy for a long time, but thought she was just fat and lazy. She also said that she thinks Wilse will get a big laugh out of her dying of cancer and being overweight. She has got leave donations to cover her time up to her March 17th retirement from the FCC. Tom and Mary are up here helping her get her house ready to sell and will help drive her motor home to Houston. She was going to her Mom's house - she says she has no intention of dying in Maryland. She has multiple brothers and their assorted family there, so that will be good.

Betty Mallay KL7AP passed away approximately 8AM Sun Feb 11, 2007. She'd been diagnosed with terminal cancer in January and given 2-4 months to live. She died of an apparent aneurism in the lung which we are guessing was a complication resulting from the Chemo she'd received a few weeks earlier. Mary and I were with her this past Tues through Friday helping her get things ready to go to Houston. We gave her our hugs and temporary good bye's about 6PM Friday and returned home yesterday. We were planning to return in a few weeks to take her to Houston. Betty was employed by the FCC for over 20 years and was to retire in September but that was moved up to March when she became ill. She was the only female electronic technician to have ever worked for the FCC. For the last 10 years or so, Betty had worked at the FCC monitoring station in Columbia Maryland.

Betty was a life member of the Anchorage Amateur Radio Club having served as president in 1982. Betty had lived in Anchorage from 1977 to approximately 1995-96 where she was employed by the FCC.

When the FCC there was down sized, she moved to Maryland. Mary (ex KL7P now WX4MM) and Betty had been best friends for over 28 years, emailing each other every few days and having weekly hours long telephone conversations. Betty is survived by her 84 year old mom and three brothers from Houston TX. Services for Betty Mallay, KL7AP, will be held at St. John Vianney Catholic Church on Friday, March 2 at 11 a.m., Houston, TX.

Tom Moore (ex KL7Q, now WX4TM)

1982 (As seen in the January 1982 AARC Newsletter) AARC President Betty Rhodes, KL7AP was on hand as Matthew Manhart, a third-semester Electronics Technology Student, received the first AARC $500 scholarship on December 7th, 1982 at ACC (Alaska Community College)

Betty was also a major contributor to the YL Polar Amateur Radio Klub (PARKA) and the editor of the AARC Newsletter for several years. During her term as President of AARC, ‘Betty’s Blurbs’ were a monthly feature. She was a dedicated volunteer of amateur radio service. In 1982 she spoke of her trip to Nikolai on the Iditarod trail during her two day layover due to weather in McGrath. “The time spent on the checkpoint and in McGrath really were worth the lack of sleep and lack of conveniences one gets used to. The stories you hear from the trail whether told by mushers, checkers, pilots, veterinarians or hams are all true...
If you don’t believe it then the only way to really find out is to cover a checkpoint yourself on the IDITAROD. Have you ever heard of the “Betty Bunny-Boot Bop” in McGrath Alaska? Find out for yourself and sign up for a checkpoint on the 1983 Iditarod trail.

Do you have a copy of KL7AP or KL7CCI QSL CARDS? If so, please scan and email them to me for historical records. Thanks to these two great volunteers who brought so much to Amateur Radio in Alaska.

KL7SP@arrl.net

It was with great pleasure that I got to go on the trail this year as the ham in Nikolai. Unfortunately, the weather wasn’t cooperating so I wound up with a 2 day layover in McGrath with KL7EN, WB4WBL, and KL7EB. Rooming with the guys really wasn’t all that bad considering the rooms over the Iditarod Cafe in McGrath usually rent for $30 a bed--2 beds to a room, 4 rooms and 1 bathroom. Male chivalry was at its finest when all the Iditarod bunch turned in for the first night--10 men, 8 beds, and poor little me...you guessed it right I got the floor. Oh well, at least I did make it into my checkpoint of Nikolai on the second try --got lost the first time in--1/4 mile visibility in a Super Cub and Nikolai is only about a 1/4 mile wide.

TED CADMAN, KL7CCI

SILENT KEY

1928 - 2007

KL7CCI Receives an Award for the What Kind of HAM R U award: HONEY GLAZED at the 2006 Hamfest Banquet Dinner.

Betty Mallay (Rhodes) 1982

Ted Cadman, KL7CCI and his Wife at the 2006 HAMFEST BANQUET. Ted was a guest of honor receiving a plaque for more than 50 years of amateur radio service in Alaska. 73, KL7CCI, SK.
Ted Cadman was a member of the Anchorage Amateur Radio Club, achieving fifty years service. Some highlights during those years included the emergency communications rendered for the 1964 Good Friday Earthquake. Ted used the net for emergency assistance with local authorities, coordinated arranging a tractor trailer to haul and operate a dozer in the Turnigan sloughed area.

Phone patches was another form of service. When normal communications were interrupted the use of patching people to their family and friends through the net provided a vital link.

“Bunny Hunts” was another fun club activity in the early days. Club members would have “bunny ears” (antenna) and search for a remote transmitter flipped on to give a short signal sporadically which club members chased.

Ted helped man the World Sled Dog Races musher board the club put together. The truck was donated by Ted’s employer, Rogers and Babler Construction Co. Ted’s family helped work on the board moving musher’s to their correct check points along the race route.

Jack Reich KL7NO and Margie Reich KL7BLL were life long friends.

In coordination with the Anchorage Police Department Ted provided surveillance when Anchorage was experiencing a rash of vandalism. He would sit atop the Alaska Sales and Service roof top and call in form his mobile unit any suspicious activity. This provided a vital service to the community by giving our police department a broader reach.

Ted kept his gear and license active, often finding time to contact old friends while cruising on a family boat.

CQ, CQ, CQ, this is KL7CCI cold, chilly and icy signing off.
To the members of the KL7AA Anchorage Amateur Radio Club.
(Please forward to any RTTY operators in the club)

Purpose:
I Need an 80 meter RTTY schedule for my last RTTY state on 80 meters.
I would appreciate help with a schedule from anyone running RTTY. I had schedules about 6 years ago and the stations copied my hi-power but I could not copy their low power. I do have Alaska worked for 160 meter CW W.A.S. award in May '98.
I think the previous times I was heard on 80 meters was in the 0700~0900 UTC time range. I worked the 160 meter CW QSO around 0700 UTC. I have 49 RTTY confirmations on 80meters, all 50 on 40 meters, all 50 on 20 meters still need 10 on 15 meters and 15 on 10 meters.

My Alaska Duty:
I was a radar operator in the U.S. Air Force on Middleton Island in 1957 & 1958. Interesting "remote" duty in the 50's. There were some 20 some odd radar stations all over Alaska in the 50's Cold War era. I was processed in at Elmendorf AFB in Anchorage and dispatched out of Elmendorf AFB to Middleton Island in November '57. Came back into Elmendorf and processed back to the "lower 48" in November '58. The web site below has some very interesting information about the radar site that was de-activated in the early '60's. Did some traveling off the island on Cordova Airlines to Cordova several times during summer of '58.

A short introduction:
William (Bill) D. Price W4CZ ~ QTH: Blountville, TN
Life Member: ARRL & QCWA
E-mail: w4cz@aol.com or w4cz@earthlink.net
My web site: http://www.qsl.net/w4cz
(Past resident of Middleton Island, Alaska 1957~1958)
(U.S. Air Force 720th Aircraft Control & Warning Squadron on Middleton Island)
Middleton Island web site:
http://armandphotos.homestead.com/Middleton1.html

Thanks for any help with an RTTY schedule de Bill W4CZ

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 KL7SP (at) arrl.net or by phone at 907-275-7474

Our ham station Middleton Island, AK in the 50's might be of interest (KL7FBB).
ALASKA 2007 HAMFEST

With Summer schedules full of amateur radio projects, fishing, flying and all the summer projects that come with living in ALASKA, we are including a list of the 2007 HAM Festival's that we have been able to confirm in ALASKA. This allows all of us to plan on great attendance for these events to support your local amateur radio clubs as well as for anyone wishing to buy or sell used equipment to contact the coordinating club for more information. If you do not see your event listed, please email editor@kl7aa.net to be added.

Matanuska Amateur Radio Association

WHEN: Saturday, MAY 5, 2007
WHERE: Palmer Rail Depot
For More Information: www.kl7jfu.com

ANCHORAGE 2008 HAMFEST

WHEN: Saturday, September 15th, 2007
WHERE: Anchorage Senior Center (tentative)
EVENTS Include:
- SPEAKERS
- VE TESTING
- RAFFLE PRIZES
For More Details: www.kl7aa.net/hamfest

In an effort to attract National Vendors to Alaska, the Anchorage club has selected the dates for the 2008 HAMFEST. The feedback we have received from National Vendors and speakers is a request for more than one year in advance notice of the date of our event. The Anchorage club has chosen the weekend of June 20th thru June 23rd, 2008.

This will allow our vendors, and attendees to enjoy the many benefits of visiting Alaska during the summer months. While this will not meet everyone’s schedule due to all the amateur activities and outdoor activities for HAM’s during the summer months, it will be the best way to accommodate the National guests we hope to attract. If you are interested in helping plan this event please contact: KL7SP, Heather Hasper at KL7SP (at) arrl.net for more information.

Cool First Contact Award

What better way to commemorate a ham's first QSO than with a First Contact Certificate? If you make a contact with a ham and he/she tells you that you are his or her first contact, then send them a certificate. Send a certificate for a first contact on HF. ARRL always has First Contact Certificates available to anyone requesting them. See http://www.arrl.org/FandES/ead/award/certificate/.
Public Service

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

**THE SAGA OF A BUNNY HUNT**
*By Jimmie Tyrdy, KL7CDG*

This is a story about a friend of mine who went off on a transmitter hunt by himself. He had just purchased a new Doppler DF system and was anxious to try it out. He had trimmed the antennas to frequency, run the coax to the DF set, mounted and external speaker, but the only thing he had was a large old Bearcat Scanner for a receiver. Because of limited space in his car, he just sat the scanner on its back, laid the DF unit across the face of the scanner. After programming the scanner for the bunny’s frequency and calibrating the system, he was all ready to go. He awaited the start of the hunt with wild anticipation, for he was one of the boys, he has a Doppler System. Soon the bunny called in and stated he was ready. Everyone took off in the same general direction, but soon all hunters were separated and on their own.

My friend drove off in the direction indicated, SSW, over a bumpy road and a turn right, good signal strength and straight ahead, zero degrees. “Ah ha, no sweat”, he thought “should have that bunny soon”. --- “What’s this, the road ends up on the beach and still the DF indicates straight ahead out over the water”. A quick look at the scanner and he discovered the DF unit had bounced down on the pre-programmed keys and the scanner was tuned to the marine band!!  Finding a wide spot in the road, my friend took the scanner and DF unit a positioned them in the seat so they wouldn’t bounce around and he could still keep an eye on the scanner and watch the DF unit.

Oh well, back to the bunny frequency and there he was 180 degrees behind. Turn the car around, and dead ahead zero degrees he went. Over the bumpy road a few turns to left and then right, back on main highway. The DF indication dead ahead down the road and good signal strength. Away my friend went again, hot on the bunny’s tail. Three or four miles farther and at the next transmission of the bunny, the indication popped over to 90 degrees. OOPS, too far, next intersection and make a U-turn. There he is again, about 290 degrees, straight ahead and to the left. The next transmission shows straight ahead and to the right. Whoa, what’s going on here? Another look at the scanner and now it was tuned to the aircraft band!! Finding a wide spot in the road, my friend took the scanner and DF unit and positioned them in the seat so they wouldn’t bounce around and he could still keep an eye on the scanner and watch the DF unit.

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**IDITAROD XXXV START: March 3, 2007**
Contact: AL1W, Gordon Hartlieb
al1w@arrl.net

**Iditarod Restart  March 4, 2007**
Contact KL1IL  Ray A. Hollenbeck  373-6771
fuzz@mtaonline.net
March 2007

Anchorage Amateur Radio Club
PO BOX 101987
Anchorage, AK 99510-1987
www.KL7AA.net

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<td>SCRC: South Central Radio Club &amp; QRP club meetings held at the Denny's at Bragaw and DeBarr. Parka, meets at Peggy's restaurant, 11AM Contact: Lil Marvin NL7DL, 277-6741 EARS: R1 North, Contact: Ron Keesch: <a href="mailto:KL1PL@arrl.net">KL1PL@arrl.net</a></td>
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ARES NET: Thursday Nights 8:00 PM  147.27+  PL: 103.5 or 443.30+ PL

Schedule of Events:

2/28—3/3 Alaska World Balloon Challenge
Contact: Heather Hasper: KL7SP@arrl.net: 275-7474

3/3 IDITAROD Start (ANC)
Contact: Gordon Hartlieb, AL1W@arrl.net

3/4 Iditarod Re-Start (MARA)
Contact: Ray Hollenbeck, KL1IL: fuzz@mtaonline.net

To add to the Calendar please contact:
John Lynn at Johnlynn@gci.net

ARES NETS:
1st Thursday: HT / Portable
2nd Thursday: Mobile Madness
3rd Thursday: RED CROSS
4th Thursday: Emergency Power
5th Thursday: Emergency Operations Center
Data You Can Use:

2007 Board of Directors
President: VACANT president at kl7aa.net
Vice Pres: Jim Larsen, AL7FS vicepresident at kl7aa.net
Secretary: VACANT secretary at kl7aa.net
Treasurer: Heather Hasper, KL7SP treasurer at kl7aa.net
Activities Chairman: VACANT activities at kl7aa.net
Trustee: Keith Clark, KL7MM trustee at kl7aa.net

Membership Chairman:
Fred Erickson, KL7FE membership@kl7aa.net

Three Year Board Members
Frank Pratt, KL7RX kl7rx at arrl.net (3rd year)
Paul Spatzek, WL7BF Paul.Spatzek at acsalaska.net (2nd Year)
Michael OKeefe, KL7MD mok at gci.net (1st Year)

One Year Board Members
Richard Kotsch - WL7CPX, richardkotsch at yahoo.com
TJ Sheffield - KL7TS, kl7ts at arrl.net
Edward Moses - KL1KL, kl1kl at ak.net
Jim Wiley – KL7CC jwiley at alaska.net
Piet van Weel – KL2CR pmvw at outwardfocus.net
John Orella: KL7LL, kl7ll at arrl.net
Susan Woods: NL7NN, nl7nn4706 at arrl.net
Richard Block: KL7RLB, kl7rlb at clearwire.net

AARC web page & Email contact addresses:
Homepage: http://www.KL7AA.net/
Webmaster: webmaster at kl7aa.net
Membership: membership at kl7aa.net
Newsletter: 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 Feb 28, 2007

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

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

KL7M Anchorage Hillside
147.21 / 147.81 MHz, 25 watts, auto-patch, 103.5 Hz PL

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

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

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, 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
146.43 MHz Peninsula simplex chat
146.58 MHz Simplex IRLP - Wasilla Lake

The following nets are active in South-central Alaska:

HF
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, and 1900 - 2400 Alaska Time - AL7N or KL5T monitoring.
Net Purpose: Formal NTS traffic via CW.
Alaska Pacific Net: 14.292 MHz 8:00 AM M-F

VHF
ARES Net: 147.27/87 103.5Hz - Thursdays at 8:00 PM local
ERC HF Net: 3.880 MHz – Sunday 8:30PM 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
No Name Net: 146.85/25 repeater Sundays 8:00 PM
Statewide ARES Net: 147.27/87 103.5Hz Sunday 7:30 PM
Grandson of SSB Net: 144.20 USB Mondays 8:00 PM local
Internet Links, the favorites from our readers:
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/
Links for Homebrewers & QRPers  http://www.haarp.alaska.edu/
http://www.amqrp.org/misc/links.html
QRP and Homebrew Links  http://www.AL7FS.us
Solar Terrestrial Activity  http://209.130.27.95/solar/
ARRL  http://www.arrl.org/

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

MONTHLY 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 147.27+ repeater.

1st Tuesday each month (except for holidays):
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. Contact: Jim Wiley, KL7CC 338-0662.

2nd Friday each month: SCRC general meeting at 7:00 PM at Denny’s on Denali Street. Talk in on 147.27+.

2nd Saturday each month: PARKA Meeting at 11:00 AM at Peggy’s, across from Merrill Field.

2nd Saturday each month (except for holidays):
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. Contact: Jim Wiley, KL7CC 338-0662.

2nd Saturday of each month: EARS general meeting at 3:00 PM. Meetings are held at R1 North, next scheduled meeting is Saturday, November 11, 2006 at 1500. Contact info - PO Box 7069, Elmendorf AFB 99506 or email Ron Keech, KL1PL for information. (Home) 349-2442
Email: kl7air@qth.net or ronkeech@kl1pl.us

3rd Saturday each month: Alaska QRP Club meeting 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.

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

4th Saturday of each month: Valley VE Testing 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: 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
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
Anchorage Amateur Radio Club
Membership Application / Renewal

Membership Chairman: Fred Erickson, KL7FE
Email: membership@kl7aa.net
Phone Number: 345-2181

All annual memberships expired on December 31st.

Mail-In Membership Application

NAME: ________________________________________ CALL SIGN: ________

ADDRESS: ____________________________________________

CITY: _______________________ STATE: ______ ZIP CODE: ____________

PHONE: ___________________ E-MAIL: ________________________

HOME

WORK

MOBILE

DUES:
Dues for the calendar year are as follows:

♦ Individual Membership $12.00 ($6.00 for each additional member at the same address)
♦ Student No Charge¹
♦ Life Time Membership $250.00²

I am enclosing payment for:

Subscription / Renewal for ______ year(s).

Total US Dollars Enclosed: $__________.

Please mail your payment and completed application to:

Anchorage Amateur Radio Club
C/o: Fred Erickson, KL7FE
12531 Alpine Drive
Anchorage, AK 99516-3121

1. STUDENT is defined as any individual enrolled Full-Time at any educational institution, using the criteria of Full Time enrollment for that institution

2. If Over 65, please contact Membership Chairman for pro-rated rates.
Amateur Radio

Tales of the Trail

If you can read this, the musher fell off!

Tim Comfort 2004