One-Half Wave or "Longer"
10 Through 20 Meter Vertical Dipole
(With a novel matching method)
By John F. Reisenauer, Jr. KL7JR

We all know the horizontal dipole is one of the easiest antennas to build and is very common with new and old hams alike. The vertical dipole, also easy to build, is not real popular with hams. For me, space (I operate portable mostly) and how long it takes to install the antenna (which is most always in the dead of winter for me!) are big concerns.

Also, how many supports you want to deal with (again, time vs. frostbite!) will set the design criteria. For horizontal use, you need two supports minimum for the ends, and if the center insulator droops too much, you'll need another there. With a vertical dipole only one support is required and you don't need all that much space either.

I'm also intrigued with this antenna for other reasons, one being I like verticals anyway and the other is you don't need a ground radial system (this also got me thinking about bending the antenna and changing the orientation for a V Beam.....but that's another project for later on!). I often operate portable on the tundra and always had problems getting a good ground and tuning some bands was a nightmare because of it.

Let's build a half wave or full wave vertical dipole with a novel matching method!

These plans will help you build a vertical dipole using a coil for better matching and use tubing or thin walled pipe for the upper leg and wire for the bottom leg just to lighten things up, (or tubing also for the bottom leg if you prefer). The project is based on ideas from an article by Lew McCoy W1ICP (SK), "Let's Talk Antennas- Part III".

Do you want a half wave or full-wave?

**DIPOLE BASICS**
The dipole antenna, developed by Heinrich Rudolph Hertz around 1886, is an antenna with a center-fed driven element for transmitting or receiving radio frequency energy. These antennas are the simplest practical antennas from a theoretical point of view (1) See References below.

The vertical dipole or its electromagnetic equivalent, the monopole, could be considered one of the best antennas for land mobile radio applications. It is omni directional (in azimuth) and, if it is a half-wavelength long, has a gain of 1.64 (or G=2.15 dBi) in the horizontal plane (2). (enter the horizontal V beam which we will discuss later!) A vertical dipole antenna has constant gain in any horizontal direction, but zero gain in vertical direction (3).

Using the standard formula of 468 divided by frequency (MHz) we get the following lengths for each leg of our antenna: (going lower than 20M the lengths get unmanageable)

<table>
<thead>
<tr>
<th>Frequency</th>
<th>1/2 WL</th>
<th>1/4 WL</th>
</tr>
</thead>
<tbody>
<tr>
<td>28.500</td>
<td>16.4'</td>
<td>8.2'</td>
</tr>
<tr>
<td>24.950</td>
<td>18.8'</td>
<td>9.4'</td>
</tr>
<tr>
<td>21.300</td>
<td>22'</td>
<td>11'</td>
</tr>
<tr>
<td>18.150</td>
<td>25.8'</td>
<td>12.9'</td>
</tr>
<tr>
<td>14.250</td>
<td>32.8'</td>
<td>16.4'</td>
</tr>
</tbody>
</table>

Adding a coil to get a better match and shorten the antenna!

Let's use Lew's idea from his article (4), and add a coil in line with one half of the antenna to bring the impedance closer to 50 ohms which actually shortens the antenna about 10%!!!

**Coil Construction and placement in a half wave dipole**
♦ 5 Turns X 1" diameter X 4 inches long
♦ Turns have 1/4 inch separation
♦ Use #8 solid wire or 1/8 inch tubing

(same coil design is used for 20 thru 10 meters for the half wave antenna. Some experimentation may have to be done with the coil length for a full wave design).
The coil is installed in series with the center conductor of the feed line and the uppermost vertical radiator. Attach one side of the coil to the upper radiator and the other side of the coil to the center conductor of the feed coax. The shield side of the coax connects to the lower radiator. The upper and lower radiators are insulated from each other. Adding a 1:1 air choke at the feed point to reduce feed line radiation is your choice.

See drawing below:

Drawing 1. Feed point and coil detail. Suggested Method of mounting

There are many methods of mounting the vertical dipole and you will have to use one that fits your needs, your ingenuity, materials on hand etc. Shown above in the drawing is just one of the methods. The bottom "radiator" can be tubing or wire, your choice. The important thing is that the vertical dipole is not mounted on or near a metal mast support! The feed line should come off the antenna perpendicular (90 degrees) to it if possible but this will depend on many variables with your installation.

I learned this coil addition trick from an article in CQ Magazine by Lew McCoy W1ICP (4) (SK). We can also use stiff wire for the last 2 feet or so of the antenna (as described in article) to cut down on weight. This approach just may be what the doctor ordered for 1/2 WL construction!

Several years ago there were a dozen or so of these rigid horizontal dipoles hanging off towers in the Anchorage area (yes, I miss Alaska!), and good reports were common. The rigid dipoles were economical and easy to build and they worked DX! NL7VJ (now KL5T) and NL7TB (now KL7JR) made hundreds of DX contacts with this antenna design from Alaska and while operating portable from the Yukon Territory from 1991-1995. Quite to our amazement we found we could get multi-band use to boot (tuner required)! You can use wire for the bottom leg of the vertical dipole to make it even lighter!

With that said, I'll design a FULL WAVE vertical dipole seen in the drawing below for 21.300mhz, which should provide 10-20 meter coverage using a tuner.

From the chart below, 21 mhz is the center band. The 10% length reduction is for use with a coil.

As stated earlier, the coil dimensions may have to be adjusted accordingly for full wave operation and lowest swr and matching. The use of a good antenna analyzer will be a big bonus if you have one!

Of course you can pick your favorite band and see how far you can take it. The bottom leg should be at least 6 feet from ground for safety reasons if left hanging in free air. Multiband operation should be possible with the use of a tuner.

(Perform, above dimensions in italics are for a coil in line.)

If you just want to build a standard regular length dipole, then leave out the coil and use the lengths above.

Although I haven't built the vertical version yet, there should be no reason why one couldn't expect good results as mentioned above for the half wave version. You can use wire for the entire antenna, support from PVC or hang vertically from overhead.....

One other option...use it as a "horizontal-vertical"!

There's always next summer! Experiment and have fun!

73, John KL7JR
kl7jr@yahoo.com

<table>
<thead>
<tr>
<th>Frequency</th>
<th>1/2 WL Length total per leg</th>
<th>(minus 10%)</th>
</tr>
</thead>
<tbody>
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<td>16.4'</td>
<td>14.76' (use 14'-8&quot;)</td>
</tr>
<tr>
<td>24.950</td>
<td>18.8'</td>
<td>16.92' (use 16'-11&quot;)</td>
</tr>
<tr>
<td>21.300</td>
<td>22'</td>
<td>19.8' (use 19'-9.5&quot;)</td>
</tr>
<tr>
<td>18.150</td>
<td>25.8'</td>
<td>23.22' (use 23'-2.5&quot;)</td>
</tr>
<tr>
<td>14.250</td>
<td>32.8'</td>
<td>29.52' (use 29'-6&quot;)</td>
</tr>
</tbody>
</table>
**Motorola Buys Vertex Standard**

Motorola Inc. announced 05 Nov 2007 that they will pay $108 million to acquire 80 percent of Japan’s Vertex Standard Company. The Schaumburg, Illinois based Motorola said that Tokogiken, a closely held company controlled by the president and chief executive officer of Vertex, will acquire the other 20 percent of Vertex. Motorola reported that it would affect the buyout through a tender offer, priced at 2,214 yen, or $19.38 a share of Vertex stock. The board of directors at Vertex approved the buyout terms.

While Vertex Standard’s primary line of gear is commercial land mobile two-way radio, it is also one of the world’s leading suppliers of Amateur Radio gear. Its Yaesu line was one of the first imports to the United States in the 1970s and its popularity has remained high ever since.

Motorola is no stranger to Amateur Radio products. During the height of the FM craze in the early 1980s, its Metrum 2-meter transceiver was a highly sought-after piece of gear for mobile Amateur Radio operation and still holds a high resale value among collectors of Amateur Radio memorabilia.

— ARNewsline

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**THE OLD DXER**

The sunspots were roaring and the Old Dxer was working DX night and day. The faithful XYL had had it with his QRZing and blew her stack. "DX DX DX - that's all you ever think about!" she groaned "Why I'll bet you don't even remember our wedding date!!

"I mostly certainly do" was the immediate reply.

"It was June 14th, 1958 - That's the night I worked the XT1, the CRØ, and the AC6!! -- By AC6V

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**References:**


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**Volunteers Behind the Scenes of the KL7AA Station**

I spent a couple of hours yesterday working on the DIGIPENTER and 2 PACKET Units. I tied the KPC3 Plus's with the TM-261's and built power cables for them I verified that my cable to the TNC from the radio worked so I was able to resolve that issue. Turns out that my cable will work on the TM 261's but it will not work on the TM 271's. They're both Kenwood VHF radios but they're built differently. So I had to build a audio cable and tie it into the TNC.

After the party Ron and Don approached me about going over to the CCV to fix a problem with the IGATE. It dropped off line and had to be completely reinitiated. I took Don Bush and Tom R. over to the CCV and we got it done. So it's up and running. The program had some bugs in it but we think they're whipped. Only time will tell.

I'm working on testing 4 of the CAP's HF commercial radio's this morning to see if they work. If so then I'm going to propose at the Monday night meeting that they install one in the EARS shack as a back up for the HF communications. I also am supposed to get together with Pete around 2:30 this afternoon and find out how to get the new laptops to work with packet. Pete got to work on Friday but I couldn't get it to work on Saturday.

Well I best be getting at it. I've got to test the radio's first and then hopefully I can take the HF radio's back up to Wing HQ and work on the TNC issues. Then if I can get together with Pete I can complete that project. Only time will tell if my plan's bear fruit.
March 27, 1964 was a dark day in Alaska history. It was Good Friday and the earth was rolling and shaking. For seconds and then minutes. Four long, long minutes of devastation marched on before the earth stopped. Most wondered if the earth would ever stop. Time stood still. No one was laughing. Was this the end? Most were shaken down to their soul. The entire planet had shuddered, with the effects felt as far away as South Africa. The epicenter as we know now, was south-central Alaska. Seismologists now rate the event as the strongest in N. American history.

For those who lost their lives it was over. For others the following tsunami brought further destruction and devastation, here in Alaska and on into such far away places as California. In Prince William Sound, several villages were near totally destroyed. Valdez and Kodiak received major damage from the sea. Effects were felt down the coast to Southeast, British Columbia, Oregon and from Crescent City to Los Angeles in California.

The immediate result in Alaska of this 9.2 magnitude earthquake was the loss of the State’s major infrastructure systems. The Alaska Railroad was out. Highways were closed. Streets in Anchorage were destroyed. One whole residential subdivision was destroyed along with major sections of downtown Anchorage.

In the early part of the 1900s Washington committed major resources in building communication systems for Alaska. Now here was Alaska with the communication system lying in shambles. The word had to get out and in fact Alaska did not know the breadth and depth of damage.

Come to the rescue Ham Radio. That is the Amateur Radio Service here in Alaska. Hams began to start up their personal generators and to transmit to whoever would listen. Gradually shortwave frequencies began carrying formal traffic from government officials. Slowly the extent of damage began to dawn on the nation. Hams continued to provide this service over the days and weeks that followed as State and federal help began to funnel in.

This past fall in October, Bethel Hams formally organized over breakfast at Yolanda’s Restaurant. There the Bethel Amateur Radio Klub (BARK) adopted a constitution and set meeting times & places and elected officers. Check out the club web site at www.KL7YK.org web site.

All Hams are licensed by the Federal Communication Commission (FCC). This past Sunday the club, BARK, wrapped up its first licensing class for Technician Class Amateurs. That class meet at ME school for the last two weekends. FCC tests were given this past Sunday to all eleven students who attended along with several others who studied for higher class licenses.

Check out the BARK web site for club news and the next upcoming class to be offered sometime this coming winter/spring and get in on the fun.

Richard Dennis, an aviator and educator, writes from Bethel

Bethel students anxiously waiting to take the FCC EXAM
Bethel is slowly starting it’s first Ham Club: Bethel Amateur Radio Klub (BARK OF ALASKA).

A new web site has been open for BARK: www.AL7YK.org pictures from the Dec. 2007 Tech Class. See we as Smart has a FIRST GRADER.
The ME School allowed us to use a first grader glass room for the Tech Class. I’m not sure if the folks were to receive their CSCE or get out those little chairs. The Tech course had 10 students and 9 passed. 90%.....YES!
We meet each month on the first Wed at the CAP hanger here in Bethel.
We had two testing dates. Two of the new Techs from Sunday KL1VA and WL7BCT upgraded to General Class License. Also, one General up-grade to EXTRA.
So for the two dates we gave:
♦ 24 test in total
♦ 14 new or grades licenses

73
Ken, NL7SP
Richard, KL7IOL
Joe, AL1F

New BETHEL FCC HAM GRADUATES

Updated Contact information:
There has been a change in my e-mail address. It is not the same as the address printed in the clubs newsletter. The change was done at the isp and without even notifying me of the change. If you would be so kind, could you possibly note the change in your newsletter. The new e-mail address is:
wmears@mtaonline.net.
The isp dropped the pobox. Sorry for the inconvenience.
Thank you.
Wayne Mears, AL0E
DXCC Field QSL Card Checker.

Fore more information about the ARRL DXCC Program check out: http://www.arrl.org/awards/dxcc/
ANKCHORAGE AMATEUR RADIO CLUB
BOARD MEETING
December 18, 2007
540 WEST INTERNATIONAL ROAD
Anchorage, AK
(UNAPPROVED at Printing)

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

BOARD MEMBERS PRESENT:
President Kathleen O’Keefe KL7KO, Vice President Jim Larsen AL7FS, Treasurer Heather Hasper KL7SP, Activities Director Richard Kotsch WL7CPX, Paul Spatzek WL7BF, Michael O’Keefe KL7MD, John Orella KL7LL, Edward Moses KL1KL, Piet Van Weel KL2CR, Susan Woods NL7NN.

NON-VOTING MEMBERS PRESENT
Keith Clark KL7MM

EXCUSED
Secretary Richard Tweet KL2AZ, Jim Wiley KL7CC, Frank Pratt KL7RX, Richard Block KL7RLB, Fred Erickson KL7FE, T.J. Sheffield KL7TS

UNEXCUSED
None

REQUEST FOR AGENDA ITEMS
Heather Hasper requested the addition of Treasurer Assistant/Replacement Treasurer to the agenda.

GUESTS
Bruce McCormick KL7BM, Bill Fults KL1UK, Craig Severson KL2FN, Jeremiah Grantham KL2HO, Don Bush KL7JFT, Cornelius Eastman KL0FK, Betty Carrington KL1XL, Ron Keech KL7YK, Mike Romanello KL7BK, Sean Jensen KL2CO, Bob Ostrum KL2DI, Tom Rutigliano NL7TZ.

Jim Larsen AL7FS introduced Cornelius Eastman KL0FK who proposed a mentoring program to the AARC Board and guests to expose those interested to the basics of Electronics and Electricity. Corny suggested the Ham Shack as an area to teach the class and familiarize attendees with meters, oscilloscopes and various electronics projects. Corny proposed a 10 lesson course which would meet 2 times a month ending in May. Corny introduced Bob Ostrum, who would be assisting in teaching and would possibly be substituting when he was unavailable. Motion made Heather Hasper KL7SP, seconded Diane Olson KL1MY, that up to $1,000.00 be approved and made available to Corny to teach this electronics course. The motion carried unanimously.

Jeremiah Grantham KL2HO reported on his efforts to date to create a patch board to be displayed at Hamfest 2008, Sweepstakes, Field Day and at the AARC Ham Shack. Jeremiah is collecting communications related patches for display on this board.

SECRETARY REPORT
Previous Board meeting minutes for the November Board Meeting and December General Membership meeting minutes were presented. Motion made Diane Olson KL1MY, seconded John Orella KL7LL to accept the Board and Membership meeting minutes as written. The motion carried unanimously.

TREASURER’S REPORT
Heather Hasper presented the Treasurers report for month ending November 2007. Heather reported on the CPA’s annual review of the AARC financial records and associated accompanying notes and recommendations. Motion made Diane Olson KL1MY, seconded Richard Kotsch WL7CPX to accept the Treasurers report as written and presented. The motion carried unanimously.

VE REPORT
There is no VE report this month as Jim Wiley is unavailable as he is working on the final draft of the Extra exam this evening as relayed by Jim Larsen.

TRUSTEE REPORT
Keith Clark reported on Logbook of the World activity. Keith reported this years Sweepstakes was the second best since participation began.

MEMBERSHIP REPORT
There is no Membership report this month as Fred Erickson is unavailable.

ARES Upcoming Training
Michael O’Keefe reported that no January training is scheduled at this time, but will notify the newsletter editor when it is scheduled. 23 people attended the December ARES training at the Ham Shack and it was very well received with more training requested on the Ham Shack equipment. Additional training is temporarily suspended while a failed piece of equipment is repaired.

Are you a member of ARRL?
ARRL is the American Radio Relay League. This is the national organization that advocates on behalf of amateur radio operators to the FCC and the communications industry. KL7AA is an ARRL affiliated club with more than 50 years. Consider becoming a member of ARRL today. www.arrl.org
OLD BUSINESS

Credit Card
Heather Hasper reported that applications have not been submitted for a credit card at this time. The AARC Board was emailed a copy of an insurance policy quote, with exceptions, as quoted from Seabury Smith. This $1m Fidelity Bond would provide AARC Board/Officers coverage for $1755.00/yr. Motion made Heather Hasper KL7SP, seconded Diane Olson KL1MY, to authorize the Treasurer to purchase of the quoted coverage, not to exceed the quoted cost of $1,755.00. The motion carried unanimously.

Alarm System Installation Project
Bruce McCormick reported the CCV garage/Ham Shack alarm system is operational and complete. Bruce has requested a copy of an updated membership list to verify club membership prior to issuing Ham Shack keys. Another Ham Shack security alarm and HF/VHF/Packet training class is anticipated to be held in January. Sign up for the classes through Michael O’Keefe.

ARRL 2008 Statewide HAMFEST
Heather Hasper presented a PowerPoint presentation detailing the work of the Hamfest Planning Committee to date. This is an ARRL sponsored State Convention. Heather reported on Alaska/Yukon Club participation, volunteer efforts, planning committee meetings, registration, tours, welcome barbeque, door prize donations, speakers, entertainment, special events station, payment options, parking options, hotel info, sponsorships, shipping options, and website information. Invitations have been mailed out to 277 vendors and manufacturers. A couple of vendors have indicated they would not be attending, but would like to provide door prizes. Gordon West continues to promote the event on a national level. Several prominent licensed hams are being invited to attend and speak at the event. Motion made Diane Olson KL1MY, seconded Paul Spatzek WL7BEF, that the Anchorage Amateur Radio Club supports this event and the efforts of the volunteers putting the event together. The motion carried unanimously.

Silent Key Plaque
Diane Olson reported that the Silent Key plaque has been purchased. The plaque has room for 100 names and is quite beautiful. Susan Woods reported that she has collected 50 names with full information and has approximately 35 with partial information to date for placement. Discussion was held as to qualifications for placement on the plaque. Charter members, 20+ year members, 10+ year members etc, will have priority for placement.

GIS Development
Heather Hasper reported on the Geographic Information Systems project for ARES and Emergency Services. The program currently resides on a computer not in use at the CCV garage. Heather reported on the emergency uses for this system. Original maps have been converted to Local Emergency Planning District format. 29 LEPD districts exist in Alaska currently. Web pages are being created for each LEPD and show amateur operator density for each area. Challenges to the project were discussed including Lat/Long reliability, and updating the database.

Real Estate
Keith Clark reported that there is nothing new to present and expects activity to pick up after the holidays.

Packet Project Wasilla
Tom Rutigliano reported that the Packet Digipeater project will be soon completed and a follow up report will be given in January.

APRS Gateway Transition Status
Tom Rutigliano reported that the KL7AA-2 APRS gateway is operational at the AARC Ham Shack. Tom suggested a monitor be made available in the front room for members utilizing the Ham Shack to be able to monitor APRS activity. Kathleen O’Keefe requested a cost proposal to be presented in January to accomplish this.

NEW BUSINESS

Teleconference Bridge
Heather Hasper reported the teleconference bridge is operational with an operator controlling at the Ham Shack. This can be operated remotely when a digital phone is obtained and will allow a conference call to be initiated via dial in.

Programs for Membership Meetings
Michelle Ridgeway has not yet committed to speak at the January meeting on the Bering Sea Submarine Exploration. T.J. Sheffield will be the February speaker. Richard Kotsch would appreciate a backup speaker for the January meeting if Ms. Ridgeway is unavailable to attend. Richard can be reached by phone only at this time.

Approvals, KL7AA in the next month
None. Contact Keith if approval is required.
EARS Grant
Jim Larsen reported on a grant proposal submitted by Ron Keech for a replacement computer for the Elmendorf Amateur Radio Society. The amount requested is $500.00. Motion made Diane Olson KL1MY, seconded Richard Kotsch WL7CPX to approve the $500.00 as requested. Motion passed with no nays and 1 abstention.

Michael O'Keefe thanked Ron Keech for his technical knowledge and assistance during the AARC Packet and Digipeater projects and suggested the AARC donate 2 KPC-3 TNC’s to replace the EARS elderly models in use. Motion made Jim Larsen AL7FS, seconded Paul Spatzek WL7BF, to donate 2 ea KPC-3 TNC’s to the Elmendorf Amateur Radio Society. Kathleen O'Keefe directed it to be completed.

Treasurer Assistant/Replacement Treasurer
Heather Hasper reported on the need to recruit a replacement Treasurer for the AARC Board. Heather noted that the individual is to be one that has the time available to comply with and provide the information requested by the Board that exceeds the normal Treasurers duties as listed in the rules of procedure and bylaws. Heather requested the following be included in the minutes as legal record.

Notice to Board of Directors, AARC:
As a volunteer who has provided good service to this organization, it is my responsibility to the board to inform you when the demands of the organization exceed my abilities to perform this volunteer service.
In 2004 the Bylaws of AARC were modified to reflect that the 4 primary officers, President, Vice-President, Secretary and Treasurer be elected for a 2 year term period. This was done with the hope of offering better stability to the organization and the leaders of AARC with less turn over by our leaders. Since the inception of this rule, the Treasurer is the only current officer whose position has remained steadfast and not reverted to another individual. All other positions have had resignations, failed to be elected or welfare dismissal. As has been commented by several board members, the treasury is one of the hardest and most demanding positions to perform and maintain within AARC. Since the start of my tenure, extensive progress has been made with our records and reporting system and the annual review audits have resulted in positive comments by our professional services and CPA. While I will continue as long as possible to perform the duties I enrolled in at the time of my election by the membership to the office of treasurer, I request the board find a replacement treasurer at this time, to full fill the remainder of my 2nd term, 2nd year of volunteer service as treasurer of AARC.
Two years is a good time period for a volunteer to learn the intricacies and details required for the treasurer to perform, however, with the current and ever expanding demands required by the board of this position 4 years is a lifetime.
Thank you
Submitted by: H. Hasper, AARC Treasurer 2005-current

Kathleen O'Keefe noted that she and the Vice President have spoken and will review the membership roster to find a replacement. Discussion included the possibility of hiring a local bookkeeping firm to provide these services.

Thank You to Board and Honored Visitors
Kathleen O'Keefe presented individual plaques to members of the Board and guests as a thank you for their efforts.

Motion made Diane Olson KL1MY, seconded Edward Moses KL1KL that the meeting be adjourned. Motion passed unanimously. Meeting adjourned at approximately 9:50pm Respectfully submitted as transcribed from meeting audio recorded on 12/18/07 by Richard Tweet, KL2AZ Secretary

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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.
Officials: ham radio operators are storm’s ‘unsung heroes.’

When parts of Oregon were overwhelmed by wind and water during the recent storm, vital communication often was lacking, with trees down and across phone lines and cell coverage limited. A series of powerful storms drenched the Pacific Northwest between November 28 and December 4, 2007. The storms brought hurricane-force winds with gusts greater than 190 kilometers per hour (120 miles per hour) and drenching rain. The heavy rain caused floods and landslides that closed roads, including Interstate 5, and trapped hundreds.

Even the state police had difficulty in reaching some of their own troops.

But ham radio worked. In fact, amateur radio operators were heralded by state emergency officials as heroes. Ham radio is more than just a hobby to some. It can set up networks for government and emergency officials to communicate when other communication services fail.

“One of the problems in this is always communication,” said Oregon’s governor Tuesday. “I’m going to tell you who the heroes were from the very beginning of this...the ham radio operators. These people just came in and actually provided a tremendous communication link to us.” A network of at least 60 volunteer amateur radio operators working along the coast and inland helped from keep crucial systems such as 911 calls, American Red Cross and hospital services connected. They relayed information about patient care and relayed lists of supplies needed in areas cut off by water. In addition to getting an FCC license to operate, certain groups of operators are cleared by the federal government to work as emergency responders. The Oregon Office of Emergency Manage-

ment said the radio operators were tireless in their efforts to keep the systems connected. It was ham radio that kept New York City agencies in touch with each other after their command center was destroyed on 9-11, according to the National Association for Amateur Radio. When hurricanes like Katrina hit, amateur radio helped provide life-and-death communication services when everything else failed.

When all else fails...

ARES Training
WHEN: January 19, 2007
WHERE: CCV GARAGE Facility
5923 Rowan Street, Anchorage, AK 9957
WHAT: PACKET & APRS
We will be learning about the portable packet stations and the portable APRS kits that have recently been completed. These kits referred to as ‘ARES’ kits are designed to be used my members or AARC and ARES to be deployed as necessary to support emergency communications. We will discuss how to set up these stations, how to troubleshoot this portable asset and how this equipment would be utilized in relation to emergency communication for the agencies and organizations we support.

The KL7AA hamshack is located in the front room/office area of our CCV storage facility.

ARES NET: Thursday Nights 8:00 PM
147.27+ PL: 103.5 or 443.30+ PL 103.5

ARES District 7 Contact Information
Michael O’Keefe, KL7MD
DEC7 at kl7aa.net
Public Service

It is that time of year again when we start planning for Sled Dog Races. Time to purchase those 2008 calendars and get them pre marked with all the upcoming 2008 events. 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.

Radio operators needed for the Don Bowers Memorial Dog Sled Race. Both the Senior Division and Junior Division Races are looking for operators on Jan 25, 26 and 27, 2008. We need operators at the Willow Community Center for the start and finish of the races, plus operators along the trail at Deshka Landing for the senior race and Mile 15 and Mile 30 of the Junior Race. Please contact Hal at 733-3145 or Christine at 495-6707 for particulars.

Thanks a million for your help.
Hal Morgan (KL0WX)

The Alaska World Balloon Challenge will occur for the 2nd year in a row and has requested the communications support of Amateur Radio Emergency Services. The event is scheduled to take place February 27th thru March 1, 2008. If you are interested in volunteering please contact: Heather, KL7SP (at) arrl.net or via phone at 275-7474. For more information about the event please go to: www.awbc.info

Volunteers!

Let’s Rondy!

The Knik 200 Sled Dog Race will be held January 5-6, 2008. Contact: KL1IL, Ray A. Hollenbeck: 373-6771 fuzz@mtaonline.net

Copper Basin January 13-16, 2007
Contact: Eric Lutz elutz@crsd.k12.ak.us

Don Bowers Memorial Dog Sled Race Jan 25, 26 & 27
Contact Hal Morgan, KL0WX at 733-3145 or Christine at 495-6707

Fur Rondy Sled Dog Race February 22, 23 & 24
Contact: VOLUNTEER Needed to Coordinate

Contact KL7DY Richard Plack 745-5222 kl7dy@arrl.net

36th Annual IDITAROD START: March 1, 2007
Contact: AL1W, Gordon Hartlieb al1w@arrl.net

Iditarod Restart: March 2, 2007
Contact KL1IL Ray A. Hollenbeck 373-6771 fuzz@mtaonline.net
## Calendar for January 2008

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### Schedule of Events:

**ARES Training**: 1/19/2008

**1/5 & 1/6 Knik 200 Sled Dog Race**
Contact: Ray Hollenbeck, 373-6771
KL1IL: fuzz@mtaonline.com

**1/12 - 1/14 Copper Basin 300**
Contact: Eric Lutz elutz@crsd.k12.ak.us

**Location**: KL7AA Hamshack
5923 ROWAN Street, Anchorage, AK

**Topic**: PACKET RADIO and APRS
Learn to operate the KL7AA portable packet kits

**ARES NET**: Thursday Nights 8:00 PM 147.27+ PL: 103.5 or 443.30+ PL 103.5

**ARES District 7 & 5**
KL7AA & KL7JFU

**Contact**: Ray Hollenbeck, 373-6771
KL1IL: fuzz@mtaonline.com

**Contact**: Eric Lutz elutz@crsd.k12.ak.us

**KLAA Hamshack**
5923 ROWAN Street, Anchorage, AK

**Contact**: Lil Marvin NL7DL, 277-6741

**Emergency Operations**

**MARA Board Meeting 7PM**

**Parka meeting 11AM**

**EARS: R1 North, Contact: Ron Keesch: KL7YK@arrl.net**

QRP club meetings held at the Denny’s at Bragaw and DeBarr.

**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: EOC
January 2008  12  Volume 37, No 1

2007 Board of Directors
President: Kathleen O'Keefe, KL7KO  president at kl7aa.net
Vice Pres: Jim Larsen, AL7FS  vicepresident at kl7aa.net
Secretary: Richard Tweet, KL2AZ  secretary at kl7aa.net
Treasurer: Heather Hasper, KL7SP  treasurer at kl7aa.net

Activities Chairman:
Richard Kotsch, WL7CPX  activities at kl7aa.net

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

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

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

One Year Board Members
Diane Olson, KL1MY, oldwoman_69 at hotmail.com
TJ Shefield - 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 Orelia: KL7LL, kl7ll at arrl.net
Susan Woods: NL7NN, NL7NN4606 at yahoo.com
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

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

WL7CVF: Gruening: Hatcher Pass
4,396 ft
VHF: WL7CVF/R1 147.330 / 147.930 PL 103.5 Hz (no patch)
UHF: WL7CVF/R3 443.900 / 448.900 PL 103.5 Hz (no patch)

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

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

WL7CWE: Cliffside Amateur Radio Association

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

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

KL5E Chugiaq: 147.15/147.75, 123.0 Hz PL, auto-patch
KL7JFU, KGB road, MARA: 146.85/146.25, auto-patch, no PL
Palmer IRLP: 146.64/.04, simplex patch, no PL
Mile 58.3 Parks Highway IRLP: 147.09/.69 MHz, 97.4 Hz PL

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

KL7JX: South Anchorage IRLP - 146.79/ 146.19 MHz, 100 Hz PL

KL7AX: South Anchorage IRLP
Yellowknife Patch: 146.76/200 MHz, 80 watts, 141.3 Hz PL

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

Nets in Alaska:
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, Net Purpose: Formal NTS traffic via CW.
Alaska Pacific Net: 14.292 MHz 8:00 AM M-F
ERC HF Net: 3.880 MHz – Sunday 8:30PM local

VHF
ARES Net: 147.27/87 103.5Hz - Thursdays at 8:00 PM local
PARKA Net 147.30/90, 141.3 HZ Thursdays at 7:00 PM local
No Name Net: 146.85/25 repeater Sundays 8:00 PM and 1900 - 2400 Alaska Time - AL7N or KL5T monitoring.
Alaska VHF Up Net: 144.200 USB Saturdays 9:00 AM local
Big City Simplex Net: 146.520, 446.0, & 52.525 FM
Grandson of SSB Net: 144.20 USB Mondays 8:00 PM local
Statewide LINK ARES Net:
147.27/87 103.5Hz Sunday 8:00 PM local
Internet Links, the favorites from our readers:

AARC  http://www.KL7AA.net/
SCRC  http://www.KL7G.org
EARS  http://www.kl7air.us
MARA  http://www.kl7jfu.com
Moose Horn ARC  http://www.moosehornarc.com
ARES  http://www.qsl.net/aresalaska
Practice Exams:  http://www.AA9PW.com
Fairbanks AARC:  http://www.kl7kc.com/
ALASKA MARS:  http://www.akmars.org
Bethel Amateur Radio Klub:  http://www.al7yk.org/

Links for Propagation
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/

Propagation Report Recording 566-1819
Please let us know if there are other clubs pages or good starting points that should appear here.

Report dead links or bad info to editor@kl7aa.net

Regular HAM Gatherings:

Tuesday Lunch, 11:30 AM:  Denny’s on Denali behind Sears. Several old timers show for this and have lots of stories to share.

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

Who Do I Contact to Join AARC
Fred Erickson KL7FE
12531 Alpine Dr
Anchorage, AK 99516-3121
E-mail: membership (at) kl7aa.net
Phone number:  345-2181
Annual Dues are $12 (prorated as appropriate)
Additional Member in same household is $6.
Full Time Student is no charge.
Ask about Life Memberships

MONTHLY EVENTS

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.

SCRC general meeting has been suspended until further notice. No meetings are scheduled at this time.

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

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. Contact info - PO Box 6079, Elmendorf AFB 99506 or email Ron Keech, KL7YK for information. EARS: 552-2664 (recording); Talk in on 146.67-. Email: kl7air@qth.net or kl7yk@arrl.net

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

3rd Friday each month: Alaska QRP Club meeting 7:00 PM: Hams with QRP (low power under 5 watts) and Home-brewing interests meet for a social meeting monthly. Meet at Denny’s on DeBarr & Bragaw in the back room. Bring projects to share with the group. Hungry QRPers start showing up about 6PM. Info contact Jim Larsen, AL7FS, JimLarsen2002 at alaska.net or 345-3190.

3rd Saturday each month: ARES General meeting 9:30AM to 12:00 PM. Call Michael O’Keefe, ANC DEC: dec@kl7aa.net HM: 243-4675 for additional information. Also check for ARES Info at: 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 Tim Comfort, NL7SK, NL7SK at arrl.net.
HAMFEST 2008 Update

Our efforts to promote our event continue. If you check out this December’s issue of QST, you will find the add above on page 144. Thanks to ARRL for helping us promote our event. Look for similar advertisements over the next several months in World Radio, CQ magazine and at other hamfests across the country. Our marketing outreach over the last few months is beginning to pay off. We have had 12 people go to our website and register and 8 national vendors commit to attend.

We have been asked to provide a HAM ‘INDUSTRY’ gathering opportunity for our national attendees to provide a fun and exciting retreat where industry leaders can discuss the future of amateur radio over the next 50 years.

This month we sent advertisements and Alaska promotional material to the large Pacificom Hamfest in San Ramon California. This was very well received and with the help of Gordon West, WB6AO promoting our event several national vendors are interested in activity.

We are having bi-monthly planning meetings for those wishing to attend. The planning meetings are the first Tuesday of the month at 530PM in Anchorage at the Denny’s restaurant on Denali between Benson and Northern Lights Blvd. Then on the 3rd Sunday in Wasilla, at the Windbreak Café just off the Parks Highway at 12 Noon. We have a great team of volunteers energized and helping out. We are always hoping for more volunteers and have plenty of opportunities for everyone.

You do not need to be in Anchorage to help with this planning effort. This is an all amateur radio operators effort and all radio clubs in Alaska and the Yukon are participating.

HOW CAN YOU HELP?

♦ Are you going to any national amateur radio events in the next 6 months? If so your help in distributing information and promoting our event would be greatly appreciated.

We have committees being formed to coordinate all the responsibilities needing to be completed. Several opportunities are available and include:

♦ Registration: materials, onsite services
♦ Printing / publications:
♦ Decorations:
♦ Awards & Prizes:
♦ Marketing & Advertising:
♦ Sponsors
♦ Vendors / Exhibitor coordination

If you are interested in volunteering in any of these areas, please feel free to contact us and we can put you in touch with the right person working on those tasks.

We are looking for sponsors for our event so if you have any donations for door prizes, raffle prizes or Alaska tours and gifts that you would like to donate that you feel would attract national attendance, your donations are greatly appreciated.

We are working with a sponsor to cover the costs of shipping exhibitor displays and equipment from the lower 48 to Alaska so please remember to provide that information when marketing to national vendors.

Email is the best way, but a good snail mail letter is also great to receive. You can email myself, at KL7SP@arrl.net, Mike Romanello, KL7BK@mtaonline.net or Richard Tweet, KL2AZ@arrl.net
Mail - In Membership Application

NAME: _____________________________ CALL SIGN: ___________

ADDRESS: ______________________________________________________

CITY: _____________________________ STATE: ______ ZIP CODE: _________

PHONE:

_________________________ HOME _______________ E-MAIL:

_________________________ WORK

_________________________ MOBILE

Are you a member of ARRL?

YES ______

NO ______

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 Charge
♦ Life Time Membership $250.00

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.
"Yes I really am running just 5 watts QRP...although I suppose I do have an above average antenna system..."