

March, 2010

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Newsletter of the North Kitsap Amateur Radio Club

PO BOX 2268 -- Silverdale, WA 98383-2268

Web page: <http://www.nkarc.org>

March 2010

President's Report:

Board of Directors' Meeting

The March 2010 Board of Directors / Open Business Meeting of 12 March covered many interesting topics. A review and approval of the recent fiscal audit was completed, with consideration of its recommendations. The board tabled item 7, a property inventory, until sometime this summer. Other recommended items were minor paperwork issues, which were resolved.

2010 Field Day Event

A survey of the Green Mountain Horse Camp was conducted by Al Warner, KE7RPR, and Jim Wylder, KE6OJ, before the meeting. It was found more than adequate for our 2010 ARRL Field Day operations. There is the option of an upper parking site, near the top of the mountain to conduct Amateur operations. And there is of course for the nimble and highly active, a quarter mile trek to the top if portable operations are desired. Herb Gerhardt, KB7UVC, Tahuya Forest Watch Volunteer has offered to be our sponsor of the camp site. Herb is a member of the Mason ARC, and indicated some may join us, including himself. He will reserve the camp pavilion facility for our use during the three day event, Friday through Sunday on the last weekend in June. RVs and Campers can make it to the Horse Camp with little difficulty. We are anticipating about 7 or 8 overnight campers of such vehicles, however tent camping is almost unlimited. Toilet facilities are available (bring you own TP just in case), but bring you own potable water is a must. As always, depart the campsite with all garbage that you may bring. We now have a good start in

Field Day planning. Think about your favorite FD antenna. We have trees.

Club Project

Beyond our club being his QSL manager... Proposed and Approved by the BoD; Goal: communicate with Chris in Iraq. Al Warner has offered his property to set up a temporary club station for our members to make contact (QSL). His property offers several antenna possibilities. We are looking at both 40 and 20 meters, fixed direction of 11.3 deg true north. This is a club project, with involvement of all who wishes to participate in the working group. We hope as many of us will participate with the many design, construction and operations opportunities to contribute. As such, we plan this month, after our club breakfast on the 27th to go out to Al's and survey his property. A meeting there will be held to discuss antenna design. Again, bring you best considered antenna thoughts. This is an all hands club activity. Don't miss out.

Special Event:

Paul will be investigating with Chief Seattle Boy Scouts of America for a special event with the BSA. It will be the Scouts 100th anniversary this summer. An opportunity to expose Amateur Radio operations to our youth. The possibility of sailing on a schooner, and HAM operations, may be in the offering. Stay tuned. Other possibilities such as NASA's last shuttle flight special event may be considered. We need you input, your thoughts. As always: not only think location, location; but who can secure an operating site. Ideas must come with the wherewithal.

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Repeater committee progress.

The repeater committee will be proposing at a brief portion of March General meeting what they intend to do. A repeater has been offered for use. An adequate site has been offered for north county coverage. Controllor repairs, antenna, cans must be funded. There will be a budget revision proposal and general vote. Linking our repeaters will be tabled to a time future.

We now have several opportunities for members to get involved with varied aspect of group amateur radio activities. Establishing a station to work Iraq and each of us having the opportunity to secure QSLs from our member deployed, Chris, is a wonderful endeavor. It will be fun to see the ideas on antenna design and construction flourish. We all can get involved it construction; such as home-brew ladder-line. The later will be a wonderful project night activity. Remember, it is you club, your activities... so everyone can get involved in the aspect of your choosing.

Jim Wylder, KE6OJ
President

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2010 Dues Are Due

Time flies. Club Vice-President Al sent an e-mail last week to remind club members it's time to renew club memberships Put a check for your dues in the mail and address it to the club (Box 2268, Silverdale, WA 98383-2268) or better yet, bring it to the club meeting at Firehouse 51 in Silverdale on Saturday, 20 March Dues are \$15/year (\$12 for seniors, \$6 for students and \$10 for additional family members). You can download an application for your renewal by going to the webpage at <http://nkarc.org> and clicking on "Join NKARC" followed by "Online".

Your pre-written check will facilitate matters at the meeting and help avoid interrupting the activities. Treasurer Warren will have the club roster handy and we can check you off once paid.

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Scheduled Upcoming Events

General Club Meeting

Location: Fire Station #51 – Silverdale
Date: March 20th
Time: 10:00 AM to 12:00 PM
PSK-31 Presentation

Project Night

Location: Fire Station #51 – Silverdale
Date: Friday March 26th
Time: 6:30 PM to 9:00 PM
Minor soldering projects, Transmission line project

Club Breakfast

Location: All Star Lanes – Silverdale
Date: March 27th
Time: 09:00 AM

Board of Directors and Business Meeting

Location: Fire Station #51 – Silverdale
Date: Friday April 23rd
Time: 6:30 PM to 9:00 PM

General Club Meeting

Location: Fire Station #51 – Silverdale
Date: April 23rd
Time: 10:00 AM to 12:00 PM

Project Night

Location: Fire Station #51 – Silverdale
Date: Friday April 24th
Time: 6:30 PM to 9:00 PM
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Digital Mode-PSK31 Presntation

When my dad, W9NXP (SK) got his license in 1933, the most used mode for amateur radio was CW. Phone transmissions were on AM and the equipment costly. FM and video were in the laboratories. Nowadays, all these modes are common and the big swing is to digital. A computer with a sound card and a transceiver with SSB capabilities is all that is needed to get on the air in digital. Clint, KK7UQ, will do an hour long presentation at the club meeting on March 20th about the most popular digital mode, PSK-31. Come and learn about it.

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Repeater News:

You are familiar with the DEM repeater on 145.43. This repeater is in the Silverdale area. It has good coverage of the central part of Kitsap County but marginal coverage in the southern or northern parts of Kitsap County or on Bainbridge Island. The repeater shares the frequency with other repeaters so it cannot be moved to a higher location to improve coverage. One way to improve coverage is to link the DEM repeater to other repeaters that do have good coverage in the areas that the DEM repeater has marginal coverage. The first repeaters to link to the DEM repeater are the Bainbridge Island repeaters. In order to establish this link, a new repeater controller was necessary. The repeaters were relocated to my home and I connected the new repeater controller to the old repeaters. This took longer than I expected due to the quirks of the old repeaters but I got it done. Now, one repeater controller controls both repeaters. Then I connected a 2m radio to the new repeater controller. Once I got everything working, everything went back to the repeater site. After some additional adjustment, we were able to get it to sound good. When the 2m radio is turned on, the Bainbridge Island repeaters act like an individual user using a 2m radio. The DEM repeater is the "hub" of the linked repeater system. When other repeaters want to link into the system, they will also use a 2m radio connected to their repeater controller. Not all repeater controllers are set up to do this. To be part of a linked repeater system, each repeater needs to have a controller that has at least two "ports", one for the repeater and one for a link radio. Of course, the DEM repeater doesn't need to do anything differently or need to upgrade any equipment because it is the "hub".

For a long time, linking repeater could only be done using radio links. Today, we can also link repeaters via the Internet using WIRES, Echolink, and IRLP. All three of these systems use hardware to convert the analog voice from the repeater to digital data and send that data over the Internet. I'm not an expert on all three system but from what I know of these system, I prefer

IRLP because it can only be accessed via a radio and because of the flexibility of linking repeaters into groups. There is also a new software based repeater linking system called Asterisk. I only learned about it last year and don't know too much about it yet but it looks interesting.

All of the above is for analog voice repeaters. There are also now digital voice repeaters and they can also be linked together using the Internet. The most popular type of digital voice repeater is D-Star. What makes this better than analog voice repeaters is that in addition to voice, it can also carry data at about the same speed as Packet Radio and it can do this at the same time that voice is be transmitted. Also, there is a D-Star digital data repeater that can carry data at 128Kbps, which is about 100 times faster than Packet Radio.

I think analog voice repeaters will be around for a long time but digital is the way of the future and D-Star works well. I would like to see both an analog and digital linked repeater system here in Kitsap County. Linking the two Bainbridge Island repeaters to the DEM repeater is the first step. I'm also working on another repeater for the Poulsbo area and it will also be linked to the DEM repeater. I also have a D-Star radio and use it on the D-Star repeater on Gold Mountain. Unfortunately, this D-Star repeater does not have a connection to the Internet so it is not part of the worldwide D-Star repeater network.

Here are some links with additional information:

Info on WIRES

<http://www.yaesu.com/indexVS.cfm?cmd=DisplayPructs&ProdCatID=108&encProdID=BC1BB347F2A945F01D8663807861AAAE&DivisionID=65&isArchived=0>

Info on Echolink

<http://www.echolink.org/>

Info on IRLP

<http://www.irlp.net/>

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Info on Asterisk

<http://app-rpt.qrvc.com/node/24>

Info on D-Star

<http://www.dstarinfo.com/>

<http://en.wikipedia.org/wiki/D-STAR>

part 1 [http://www.youtube.com/watch?v=7-](http://www.youtube.com/watch?v=7-_MK_TKMfg)

[_MK_TKMfg](http://www.youtube.com/watch?v=7-_MK_TKMfg)

part 2

[http://www.youtube.com/watch?v=2S83K7LaW](http://www.youtube.com/watch?v=2S83K7LaWw8)

[w8](http://www.youtube.com/watch?v=2S83K7LaWw8)

<http://icomamerica.com/en/products/amateur/dstar/dstar/default.aspx>

10-Meter Repeaters

There are four 10-meter repeater pairs: 29.62, 29.64, 29.66, and 29.68. The repeater offset is minus 100 KHz. To my knowledge, there are no commercially made duplexers for 10-meter repeaters. This means that a single site repeater must use antenna spacing (usually vertical spacing) to achieve enough isolation between the repeater transmitter and the repeater receiver. All of the 10-meter repeaters I'm familiar with use a "split-site" to create a 10-meter repeater. A split-site repeater has the repeater transmitter and the repeater receiver at different repeater sites, often miles apart, linked by radio or landline. Today, that link can also be created via the Internet. In WWA, there are two 10-meter repeaters listed in my ARRL Repeater Directory. 10-meter repeaters have never been that popular, probably because of the difficulty of creating a split-site repeater, low gain 10-meter repeater antennas, low gain 10-meter mobile antennas, and interference from distant repeaters when 10-meters opens. There are other bands (like 222 MHz) that are much more appealing for repeater operation than 10-meters.

73, Dave

WA6PMX

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QRZ QRZ....Know any potential members? Invite them to the next meeting. Plenty of coffee and friendly greetings for all.

From the VE Team:

The March 6, 2010 VE exam session was the same day as the Puyallop Hamfest, so we thought attendance might be light. However, 9 attendees were present. New licenses earned included 1 Extra (Congratulations and Well Done to Jim Henderson!), 1 General, and 6 Technicians. The VE team was reinforced by two new VEs, Joe Matot and Al Warner, for a total of 7. We thought we might outnumber the attendees, but were surprised by the good turnout of candidates. The session went quickly, and some afterward made a quick trip to the Hamfest in Puyallop.

Horace Ory, K7ORY

RACES/ACS Net Sessions:

The Kitsap RACES/ACS net is held on Sunday nights at 7:30 PM on the 145.43 repeater (-600 offset, 179.9 PL tone). Check in and be informed on emergency communications in Kitsap County.

The packet radio net in on 145.63 Mhz at 7:00 PM. Connect to K7EK-5 and type "convers" at the prompt. If you cannot connect to K7EK-5 directly, connect to the ELYSSA node on the same frequency and then connect to K7EK-5.

If you have 10-meter capability, check into the HF Net on 28.330 Mhz USSB starting at 7:00 PM

There is a 6 meter FM net on 52.35 Mhz starting at 7:00 PM.

Connect to the various modes and verify your connectivity. Be ready and available when the need arises.

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"Off-the-Wall Net Moved:

Did you miss the "Off-theWall" net on Wednesday evening? Don't fret – the net just moved from the DEM repeater on 145.43 to the Western Washington Club repeater on 146.62. The move allows for better coverage throughout the state and gets away from the intermod problem on the DEM repeater. The day and time is still the same—Wednesday evening at 7:30 PM>

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CO CO de YI9ATX:

Last month, the feature article was about NKARC member Chris, YI9ATX, who is currently deployed to Iraq. He sent emails that he was on the air experiencing many “pile ups”. Since then, the club received a schedule of when he will be on the air. The firm schedule for him is Tuesday’s from 1100z to about 2200z He’ll be on 20m until about 1600z then he’ll be on 80m until 2200z. We are -7 from UTC (Pacific Daylight Saving Time) so that would be 0300 to 1400 PDT. You might catch him on 80m the rest of the week sometime after 1000 to 1400 PDT but that’s sketchy since he can’t guarantee those times.

Note the President’s comments about setting up a station to work Chris. Good hunting.

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WWDX Club Invitation:

If you are interested in DXing, the WWDX club is an organization where you can get information about the “sport” of DXing and how to participate. They issue a periodic newsletter listing stations operating in those rare prefix locations and about DXpeditions around the world. Hints about DXing are also included.

If you are not a member **JOIN!** Go to their web site for application and the newsletter..

Good DX, the 'spots' are improving!

Warren N7SI

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Change Address or Call Sign?

Please notify the club secretary to update the roster if you changed your address, call sign or e-mail address. Include your phone number so that you can be contacted in case of emergency or for assistance. This will insure that you will get the latest news via the club newsletter. Either notify Norm (N7ORM) at the meeting or drop a card to NKARC at PO Box 2268, Silverdale, WA 98383-2268. You can also send the changes via e-mail to Norm or Bob Tomas at bob-tomas@sprintmail.com

Time for some larnin’

Last month, you may have noticed an e-mail thread about Analog to Digital Converters – what are they and how do they work? Your editor received a few recommendations that this would be the basis of an article or two about the devices. I agree. After being involved in electronics for over 50 years, I can say I have a basic understanding of what they are and how they are used, but don’t push me to get a detailed explanation of how they work. I used them with the philosophy “This is what I’m putting in and this is what I expect to get out.”

Next month, we will start a series of articles explaining A2D devices starting with basic electronics going up to how that analog signal is converted into digital bits.

Thanks to Warren, N7SI, who put us in contact with Kris Stafford. He volunteered to put the series together. The rough draft showed material that goes from the basics of electron flow to the final description of A2D operation. It’s worth the look even to those who “KNOW IT ALL”.

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Keep Kitsap Green:

Help the environment by properly disposing of discharged household batteries. This includes alkaline, regular zinc carbide batteries, and batteries with heavy metals such as ni-cads and lithium ion.

The Solid Waste Facility on Hansville Road accepts the batteries as part of the county-wide recycling program. Ron Sefton, N7EM, reports the Poulsbo recycle center also accepts used batteries including lead acid types. The site is located immediately north of the Hwy 305/Viking way intersection. This is to the east of the "Walmart/Hwy 3 interchange". Otherwise, bring them to the meeting for transfer to the disposal site.

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