



From our Club President...

### Happy New Year!

By Robert Grinnell KD7WNV, President

*I hope you all had a joyous and restful holiday season. May 2013 bring us the blessings of peace, prosperity...and propagation!*

#### Ramping Up For Fleamarket

The first big thing on the schedule for the year is our Fleamarket on Saturday, March 9<sup>th</sup> (with setup on Friday). The proceeds are the primary source of funding for the Club's budget, and what allows us to keep dues so low. It's a big undertaking, and we really need "all hands on deck" to make it happen. There are volunteer assignments available on both days, for all levels of physical ability/exertion—from stationary sitting to walking around to setup/takedown or operating palette jacks—so there's some task you can do to help.

This year, we are managing volunteer signups through an online system called VolunteerSpot. You need an invitation email (look for one from "Michael Dinkelman, Coordinator") with the necessary links in order to sign up on this system. If you have not already received one, contact Mike (N7WA @ arrl.net). For anyone who ultimately cannot use the online system, you can sign up at the January or February meetings.

#### Awards Banquet Chair Needed

Our formal event of the year, the Awards Banquet is traditionally held between the March and April meetings. We are looking for someone to step forward and volunteer to chair this event. The primary task is to locate a suitable restaurant/facility and set the date, menu and price.

It would be great if someone who does not already have other Club responsibilities would take this on. Since it does not require extensive familiarity with membership, and there are several persons ready to offer guidance and suggestions, it is a role that could be filled by a newer member. Please contact Activities Manager George Thornton, AE7G, if you would like to help the Club with this event.

#### Dogs of Any Age, New Tricks

In his parting "Learning Curve" column in the January issue of *CQ Amateur Radio* magazine, Rich Moseson, W2VU, offers hams a message that resonates thematically with my November, 2012 column ("Expand Your Horizons"), on a broader scale. In "Becoming a Beginner (and an Expert)," he observes that no one is an expert in every facet of Ham Radio, and each of us can become a beginner again

by exploring something new to us. This is a cure both for boredom with the hobby and for thinking that what we happen to do is just what the hobby is all about. Clubs and magazines facilitate this awareness and exploration. I recommend the column for your reading.

*See you on the 19<sup>th</sup>!*

### M&K Fleamarket Updates

By Michael Dinkelman N7WA

The Mike & Key Fleamarket, our biggest fundraiser and the largest gathering of Hams in Washington State, is less than two months away. **Sadly, the number of workers we need is woefully short.** I will be bugging all of you at the club meeting or by email. Areas of concern include Announcing, Tickets, Security, and the Country Store.

I am also starting a hat list. Priorities are as follows: 1) New members that sign up as workers. 2) Signed up workers that have not previously received a hat. 3) Those with hats that are over three years old. These are hats provided by HotPress (<http://www.hotpresstshirts.com/>) so think of them when you are looking to BUY a hat or other clothing with your callsign embroidered on it.

#### IN THIS ISSUE:

<i>From our Club President – Robert KD7WNV</i>	1
<b>M&amp;K Fleamarket Updates – N7WA</b>	1
<b>M&amp;K Club Contact Information – K7LED</b>	2
<b>M&amp;K January Activities – George AE7G</b>	3
<b>M&amp;K January Door Prizes – Jim N7MU</b>	3
<b>M&amp;K Membership Cmte – Gary KG7KU, Kathy KB7QMO</b>	3
<b>M&amp;K Radio Officer Report – Hal N7NW</b>	3
<b>Celebrate Our January Members – Dave KB7PSN</b>	4
<b>Renton Offers Disaster Preparedness – Dave KB7PSN</b>	4
<b>Sad News... Paul Gilmore N7DIP, SK – Sam N7RHE</b>	4
<b>And Some Thoughts to Consider – Gary KG7KU</b>	4
<b>M&amp;K-ARC Elmer Contacts – Jim N7MU</b>	5
<b>A Personal Celebration – Mike N7WA</b>	5
<b>M&amp;K Photo's From December Meeting – Ric K7RIC</b>	6
<b>PNW – Hamfairs &amp; Events – N7CFO on Web</b>	7
<b>Ham Workshops/Classes – Bill KL7BB</b>	7
<b>A Must When an Emergency Hits! – Bob KE7UUU</b>	8
<b>M&amp;K December General Mtg Minutes– Ivy WA7IVY</b>	9
<b>M&amp;K January Board Mtg Minutes – Ivy WA7IVY</b>	10
<b>M&amp;K Reference Lending Library – Tim K7ANE</b>	11
<b>Ham Radio Nets &amp; Events – January / February / March</b>	12



The *K7LED Relay*, published monthly, is the official newsletter of the Mike & Key Amateur Radio Club. Mike & Key ARC is an ARRL-affiliated club dedicated to the growth and betterment of Amateur Radio.

The club meets at 10 A.M. the third Saturday of every month at Salvation Army Headquarters, 720 S. Tobin Street, in Renton (near the southeast corner of Renton Airport). Anyone interested in Amateur Radio is invited to participate in the Mike & Key ARC and its activities. Annual dues are \$12 for individuals and \$18 for families.



**Postal Address:**

P.O. Box 4234  
Renton, WA 98057-4234

**Web Site:**

[www.mikeandkey.org](http://www.mikeandkey.org)

**Send dues to:**

Mike & Key ARC  
P.O. Box 4234  
Renton, WA 98057-4234

**K7LED Repeaters:**

146.82 output / 146.22 input  
(PL 103.5)  
Tiger Mountain  
224.120 output / 222.520 input  
(PL 103.5)  
Tiger Mountain

**Email:**

info @ mikeandkey.org

**Send newsletter submissions to:**

Gary Bryan, *Relay* Editor  
34033 33rd Ave SW  
Federal Way, WA 98023-7724  
kg7ku @ arrl.net

**Reflector:**

<http://groups.yahoo.com/groups/mkarc>

## Club Contacts

<b>President</b>	Robert Grinnell	KD7WNV	r-grinnell @ comcast.net	425-398-1466
<b>Vice President</b>	Kathy Martin	KB7QMO	klsmartin1 @ gmail.com	253-631-5370
<b>Secretary</b>	Ivy Nelson-Groves	WA7IVY	ivy @ wa7ivy.com	425-269-3259
<b>Treasurer</b>	Dave Smith	KB7PSN	kb7psn @ yahoo.com	425-235-5095
<b>Activity Mgr</b>	George Thornton	AE7G	GTLAW @ seanet.com	206-920-7072
<b>Radio Officer</b>	Hal Goodell	N7NW	n7nw.hal @ comcast.net	253-549-4178
<b>Trustees --</b>				
<b>No. 1</b>	Michael Dinkelman	N7WA	n7wa @ arrl.net	253-631-3756
<b>No. 2</b>	Kathleen Weiss	KF7MUD	kf7mud @ live.com	425-283-6545
<b>No. 3 (CoB)</b>	Tim Kane	K7ANE	k7ane @ arrl.net	206-251-7467
<b>No. 4</b>	Gil Drynan	W7GIL	gild @ seanet.com	425-392-1668
<b>No. 5</b>	Daniel Stevens	KL7WM	KL7WM @ arrl.net	206-228-9274
<b>VE Testing</b>	Scott Robinson	AG7T	ag7t @ arrl.net	425-788-0452
<b>Logo Committee</b>	Jim Aigner Dan Humphrey & Dawn Humphrey	N7MU N7QHC KC7YYB	jimaigner @ comcast.net n7qhc @ arrl.net	253-630-2752 206-243-0163
<b>Club Library</b>	'Toku' Okumura	AD7JA	tokuzo_okumura @ msn.com	206-772-2450
<b>Webmaster</b>	Jim Etwiler	KD7BAT	kd7bat @ arrl.net	425-788-7887

### **Mike & Key Online – The following Club resources are available:**

**On the Web** – The Club's site at [www.mikeandkey.org](http://www.mikeandkey.org) includes extensive information about Club activities and events, such as: VE testing, membership, past editions of the *Relay* and more.

**Reflector** – The Club's public message board offers an easy and free way to converse with Club members. To sign up, visit: <http://groups.yahoo.com/groups/mkarc>.

**E-Relay** – Help the Club save on printing and postage, Email the *Relay* Editor: kg7ku @ arrl.net.

January 2013

## M&K Club - January Activities

By George Thornton AE7G, Activity Manager

### January meeting features Fran Underwood N7FWZ

Fran N7FWZ and Gene (W7AKA, SK) Underwood are well known to many of us. Fran and Gene have an extensive and stellar record in Public Service.

They practically pioneered the use of HAM radio support on sporting events such as bicycle events, marathon and others. They have served more than a third of a million cyclists and hundreds of thousands of runners in the Seattle Marathon. Their events have included rides that have traversed the country.

Since Gene became a silent key a little more than a year ago, Fran has continued the tradition, this year serving as the communications chair for RAMROD and the Seattle Marathon.

**Fran will be speaking to us on how to organize a public service event.** Come welcome Fran, thank her and her husband for the many decades of service... and help continue the tradition.

### The month of February will be dedicated to preparation for Fleamarket, and the March meeting program involves our annual election of Officers.

I am eligible and have agreed to serve for another term if you choose. I have plans for additional programs beginning in April. Topics include Amateur TV, HSMM-MESH and something of interest to testers.

**Last year's door prize auction program was a success,** we gave away an Elecraft KX3 and a PwrGate emergency power management device. We are starting to build our funds for the 2013 prize.

I am open to recommendations both for the monthly program and for door prizes. Let me know your thoughts.

**Welcome to 2013.**

## M&K January Door Prizes

Prize List & Photo's by Jim Aigner N7MU

Santa was good to two of our members at the annual door prize drawing, held at the December Club Meeting. **Tom Stevens KE7ZMJ won the Elecraft KX3 Transceiver.** His brother Daniel KL7M picked it up and we assume delivered it to him. **The West Mountain Radio PGS-40 power switch / battery charger was won by Jim Etwiler KD7BAT.**

**Here's the prize line-up for this month's drawing:**

- 23-Piece Screwdriver Set
- "Pair of Motorola FV300AA FRS/GMRS Radios
- "When All Else Fails" Banner
- "When All Else Fails" window sticker
- Pelican 1050 Micro Case
- Motorola External 5" Speaker (used)
- Wire Stripper Tool
- Sentry Stereo Earbuds
- ARES Vest



## K7LED Relay

## M&K Membership Committee Report

By Gary Bryan KG7KU & Kathy Martin KB7QMO, M&K-Club-VP



### The Mike & Key Club's newest Committee is under-way.

Gary Bryan KG7KU, is Chairman. The three primary areas of focus of the Committee are: 1) Greeting, 2) Provide direction to visitors and

3) Photographing new members to publish in the *Relay*. An extension of core values that the Committee has identified involve: a) Maintaining membership involvement b) Promote social activities in 2013, and c) Keep membership dues payments current through reminder Emails.

The Committee encourages each and every club member to get involved in the Membership Committee by sending emails with ideas and suggestions to the Committee on how to improve the overall member experience at Club meetings, activities and events. We also encourage you to attend one of our meetings to give us your input.

You can contact the Committee using the following email address: [mikeandkeymembers@gmail.com](mailto:mikeandkeymembers@gmail.com).

**The Committee hopes to hear from you soon!**



## M&K Radio Officer Report

By Hal Goodell N7NW

As reported last month, our Motorola repeater was repaired and reinstalled on Tiger in early December. That was very good timing as of Jan. 1, 2013, there was between 2 and 3 ft of snow on Tiger. The picture was taken on Jan. 1, which was a very bright and sunny day. There are two picnic tables in the picture and the snow is up to the bottom of the table top. Interesting in that there was a hiker up there that day and you can see him in the picture and see foot prints. The person must have had snow shoes on.

The repeater continues to operate very nicely. From time to time you might encounter some noise, but it should not last for long.

We have identified the source and will most likely have a good fix the next time we can get up there. Power has remained on. However, the internet link to Tiger is off. So we no longer have access to the on-site cameras until it comes back on-line.

**-Hal, N7NW**



## Celebrate Our January Members!

By Dave Smith KB7PSN, Treasurer

As of January 2013, these have been Mike & Key members for the number of years stated. Congratulations to all of you, and thanks for your participation & service.

Each of you makes us who we are:

John Rehnstrom	WA7HQG	42 Years*
Dick Lundstrom	WA7UEW	40 Years*
Joyce Stroehler	N7JPW	26 Years*
John Black	W7HIL	23 Years
Michael Hansen	KG7MX	22 Years
Mike Hansen	AC7UR	22 Years
Frank Henshaw	K7VMG	19 Years
Fred Lowell	N7PZ	16 Years
Mark Whitaker	KD7KUN	12 Years
Ronald B Stein	W7GAX	6 Years
Donald Cain	* No Call *	3 Years
Rich Hand	K7RFH	3 Years
Linda Jordan	* No Call *	3 Years
Timothy Mauery	WT7I	3 Years
Carl Reynolds	N7CJR	3 Years
George Thornton	AE7G	3 Years
David Burngasser	KB7DAV	2 Years
Kathleen Weiss	KF7MUD	2 Years
Larry Canaan	KF7IUO	1 Year
Mike Canaan	KF7IUP	1 Year
Renee Canaan	KF7IUQ	1 Year
Douglas Clowers	KF7REF	1 Year

\* Life member = member 25 consecutive years or more

## City of Renton Offers Disaster Preparedness Educator Course

Contributed by Dave Smith KB7PSN

Source: <http://rentonwa.gov/news/default.aspx?id=36858> .

Renton Fire Station 14  
February 2 & 3, 8:00 am - 5:30 pm

For more information contact:

**Deborah Needham**, Emergency Management Director, 425-430-7027.

**Preeti Shridhar**, Deputy Public Affairs Administrator, 425-430-6569 .

**RENTON:** Do you have a passion for disaster preparedness? Are you willing to share that passion with your family, friends, neighbors and community? If so, Renton Emergency Management needs you. The City of Renton is recruiting volunteers to take a free two-day course to become disaster preparedness educators. The city plans to establish a pool of educators who can deliver basic preparedness presentations to the public. Individuals who speak a language in addition to English are encouraged to participate.

## Some Sad News...

Contributed by Sam Sullivan N7RHE

From: Sam Sullivan <svsullivan@comcast.net>

Sent: Sunday, January 6, 2013 3:53 PM

Subject: Paul Gilmore N7DIP SK

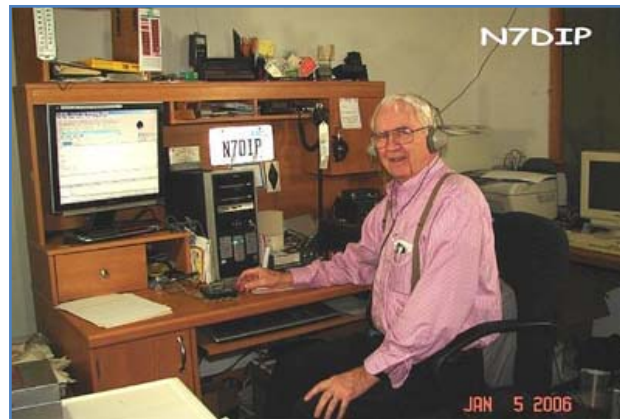
Source/Obituary full text can be found at:

<http://www.legacy.com/obituaries/seattletimes/obituary.aspx?pid=161769630#fbLoggedOut>

### Paul T. Gilmore

Paul was born in Bellevue, WA Sept 16, 1924 and died December 14, 2012, preceded in death by his only true love, Mary Gilmore (nee Strong) almost 8 years earlier after 57 years of extremely happy marriage.

He served honorably in **The Marine Corps** during WWII, and while never bragging about his heroics, was quite proud to be a Marine, and flew both Old Glory and the USMC flag every day at home, right up until the end. Both flags will remain at half-staff for a few days.



Paul Gilmore N7DIP, SK – December 14, 2012

## And Some Thoughts to Consider

By Gary Bryan KG7KU, Relay Editor

The Mike & Key Amateur Radio Club has meant so very much to me since my joining in April 2001. Perhaps more profound than being a member of this magnificent group is the people who are there... who make it the Club that it is.

If I have ANY questions about Amateur Radio, someone is there to help answer them.

During the time of my membership, I can remember vividly when I was handling the duties of our Public Service Net, and 'Little' John Rehnstrom WA7HQG would be in conversation QSO on the Club's 146.82 repeater.

It did not take long for me to sense that I would have to 'push him off' to get the Net started. Looking back, that was so cool... that I was able to see, or rather hear, how active he was and what he was up to. I considered it precious moments indeed.

Then at the last General Meeting 'Little John' approached me after the meeting and asked if I would put a short piece in the January Relay... that he had had a stroke, and that his speech, cognition and awareness was at issue.

*Mercy... does your heart not sink at hearing it?*

So take time – as much time as you can – to open conversations with your fellow members. They have stories to tell, and useful information to share that will benefit you.

Next time you see 'Little John' just give him the greatest 'hug' of appreciation you ever have. You will be giving back in a way that words cannot describe.

**Mike & Key ARC – Elmer Contacts – By Jim Aigner N7MU**

Area	Elmer Coordinator	Email	Phone	Description
<b>Stations, Equipment</b>	John Robson, AC7LK	<a href="mailto:robson.j@comcast.net">robson.j@comcast.net</a>	253-984-6709	Station setup, eq't selection, antennas, digital
<b>Beams and Towers</b>	Alan Hughes, KB7SVU	<a href="mailto:kb7svu@juno.com">kb7svu@juno.com</a>	253-840-4947	Beam antennas and towers, safety
<b>Contesting</b>	Mike Dinkelman, N7WA	<a href="mailto:mwdink@clearwire.net">mwdink@clearwire.net</a>	253-631-3756	Contest operations
<b>CW</b>	Mike Dinkelman, N7WA	<a href="mailto:mwdink@clearwire.net">mwdink@clearwire.net</a>	253-631-3756	Learn CW, operating proficiency
<b>Digital Modes</b>	Curt Black, WR5J	<a href="mailto:wr5j@westseattlearc.org">wr5j@westseattlearc.org</a>	206-755-4541	Digital modes, software, TNC's
<b>D-STAR</b>	Curt Black, WR5J	<a href="mailto:wr5j@westseattlearc.org">wr5j@westseattlearc.org</a>	206-755-4541	D-STAR technology and operation
<b>Emergency Comm</b>	Tim Kane, K7ANE	<a href="mailto:k7ane@arrl.net">k7ane@arrl.net</a>	206-251-7467	CERT, ARES, organizations & Eq't
<b>HF Operation</b>	Dale Tongue AC7NP	<a href="mailto:dale.tongue@gmail.com">dale.tongue@gmail.com</a>	425-432-4254	Eq't, Antennas, best HF operating practices
<b>New Members</b>	Dick Radford, WA7NIW	<a href="mailto:wa7niw@arrl.net">wa7niw@arrl.net</a>	425-828-9791	Getting started, Eq't selection and operation
<b>QRP</b>	Frank Qualls, AB7HA	<a href="mailto:franklin_qualls@hotmail.com">franklin_qualls@hotmail.com</a>	425-802-1837	Low power operation, design & construction
<b>VHF / UHF Operation</b>	Hal Goodell, N7NW	<a href="mailto:n7nw.hal@comcast.net">n7nw.hal@comcast.net</a>	253-549-4178	6 meters and up; moon bounce, meteor scatter

**A Personal Celebration**

By Michael Dinkelman N7WA

The new ham carefully tuned up his rig for 80 meters. The old transmitter only put out 40 watts so the 60 watt light bulb he used as a dummy load was peaked for maximum brightness before he switched over to the low dipole hanging overhead. It was just as well he didn't know how to use the SWR meter that had come with the old station - he might have been very discouraged.

As he carefully tuned the big receiver to the frequency of one of his two 80M crystals, he pondered the journey that had brought him to this point. At its earliest, it had been several years before, when a school teacher's husband had brought a Ham radio to his 5<sup>th</sup> grade class. That Amateur Radio operator had talked to other Hams all over the western Pacific. The excitement of that event had prompted many trips to the library and attempts to understand the process for getting a license which proved insurmountable for a shy eleven year old on Okinawa.

Now a 9<sup>th</sup> grader living stateside, he had seen a flyer for a Novice class to be sponsored by the BEARS at the Burien Library. In September, he began 3 months of weekly classes in theory and code lessons. Each class session included code practice. Unbeknownst to the budding Ham, the code practice was actually a sneaky way of administering the Novice code test and he was surprised when he was called up to do a sending test after one class in November. Sending was always easier than copying and with that out of the way, a theory test was scheduled for the next week. It had been a long and nervous week with lots of studying but he had passed somehow and the paperwork had gone into the FCC in late November, a couple months ago.

The first inkling of what was to come was some mail from a company back east that printed QSL cards. There it was on front; his new call sign even before the actual license arrived a week later in mid-December. Now, where to get equipment? Hmm., this part of the process hadn't been thought out too well. Over the next several weeks, a trip to Amateur Radio Supply (ARS) led to an ad on the bulletin board for an old Hallicrafters station being sold by a Ham near home - the venerable HT-40 and SX-101 now taking up every bit of space on his small bedroom desk.

The \$80 he paid out from his lawn mowing profits had been hard to give up. Fortunately, the local Ernest Hardware store had wire and coax so another trip to ARS had not been necessary. His father hadn't been too happy with him climbing over the roof and in the trees hanging that dipole either and told the neighbors that if they had any TV problems, to see his son. Now it was a more than a month since that ticket had arrived and he had been trying for several days to make his first contact.

The first page of his logbook was filled with unanswered CQ's and several unsuccessful attempts at calling others. Usually, anybody he tried to call was too far away from his transmitting frequency. (The 40 watts into that low hanging 80 meter dipole didn't help either.) This was his third night on in 3 days. This time, there was a caller near his 3.728Mhz crystal frequency. *CQ CQ CQ de WN7UVI WN7UVI WN7UVI*. Wow, that was the callsign just before his own.

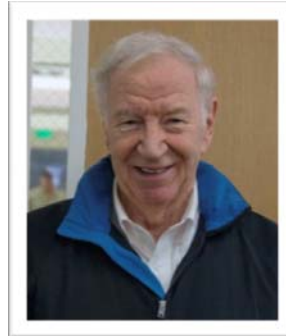
He called and was surprised to get a reply. Fifteen minutes later, the new Novice had completed his first QSO with somebody named Dave in Bremerton. He had given Dave a 599 signal report but failed to copy his own and was too scared to ask for a repeat. It had taken fifteen minutes just to get through the contact at what was probably 4 to 5 words per minute. Shaking when the ordeal was over, he shut everything down and went running through the house to announce the event which wasn't met with very much enthusiasm by anybody else in the family. He couldn't bear the thought of doing any more Ham Radio for that evening. That was January 23, 1973.

As you've probably guessed, that new Novice was me with my first callsign of WN7UVI. It's now been 40 years since that first QSO and I still have that first log book. The next day, I went on to make a second contact and my first DX (British Columbia). I can truly say that Amateur Radio has had a major effect in my life at work, play, and personal relationships. I doubt that Ham back in Okinawa ever gave too much thought as to what he started in that 5<sup>th</sup> grade class. This article is a personal celebration of how I got to this milestone and I thank you for sharing in it.

# M&K Photos From Our December General Meeting

By Ric Danielson K7RIC

## Welcome Our New Member!



Jerry Olson, WA7CCR

## Congratulations to the Annual M&K Door Prize Winners !!



Daniel Stevens KL7WM, appears to be making off with the goods, promising to 'deliver' the prize to his brother, Tom Stevens KE7ZMJ, the actual winner of the Elecraft KX3 Transceiver.



The West Mountain Radio PGS-40 power switch / battery charger was won by Jim Etwiler KD7BAT.

### Supplemental Photos by Gary KG7KU, Relay Editor...



M&K Club President, Robert Grinnell KD7WNV, presiding over the General Meeting.



Jim Aigner N7MU conducting the Annual Door Prize drawing.



Our own Michael Dinkelman N7WA presented a most interesting program on Micro-Controllers.



After the meeting, the Public Service Committee met at the Cedar River Smokehouse restaurant to discuss the 2013 Amateur Radio Information Guide, typically released in early March.

## Pacific Northwest Hamfairs & Events

Source: PNW Hamfair webpage at <http://www.n7cfo.com/amradio/hf/hf.htm>. (Used with Permission)

**February 16, 2013.** Salem Hamfair & Computer/Electronics Swapmeet. Rickreall, Oregon at the Polk County Fairgrounds. <http://www.w7sra.com> .

**March 9, 2013.** Mike & Key Swap Meet. Puyallup fairgrounds exhibition hall, Puyallup, WA. **This is an ARRL sanctioned event.** For information, contact [dmdink@yahoo.com](mailto:dmdink@yahoo.com) or [n7wa@arrl.net](mailto:n7wa@arrl.net) . <http://www.mikeandkey.org/flea.htm>

**March 23, 2013.** MicroHAMS Digital Conference. Redmond, WA. **This is an ARRL sanctioned event.** <http://www.microhams.com/softcontent.aspx?scId=9>

**March 23, 2013.** HAM Days '13, Elma, WA. Grays Harbor Amateur Radio Club. **This is an ARRL sanctioned event.** <http://gharc.org/>

**April 13, 2013.** Yakima Hamfest. Yakima, Washington. Selah Civic Center, 216 South 1st Street, Selah, WA. For information, contact Lindsay Kooser (509)965-6612 [n7rhwa@arrl.net](mailto:n7rhwa@arrl.net) . For table registration information, contact Ray, K7VAL, (206)610-3619 or (509)697-9000, [k7val@arrl.net](mailto:k7val@arrl.net) <http://w7aq.org/>

**April 13-14, 2013.** Communications Academy. Seattle, WA. **This is an ARRL sanctioned event.** <http://www.commacademy.org>

### Emails Received...

Dear Gary KG7KU, 1-6-2013

**Today, Sunday Jan 6th, 2013 was a very historical day in the Digital World of RF for the Pacific Northwest.**

Scott NS7C was able to check into the Sunday Night Digital DSTAR and DRATS net using his newly configured WRT54G Wireless routers that have been reconfigured to run on the 2.3GHz ham band and run in a High Speed Multi-Media Mesh Network configuration.

Both his Digital DRATS DATA and his Voice traffic were able to connect to the Federal Way DSTAR repeater system on 146.84MHz and pass traffic.

**To Learn more about this exciting new connectivity tool, be sure and sign-up to attend the Jan 26th 2013 all day Hands-On Mesh Networking Workshop in Auburn WA.** Classes are open to all FCC Licensed Hams.

See full details on <http://HamShare.com> .

73 de Bill KL7BB 206-400-1723

Dear Gary, 1-13-2012

### **These Classes-Workshops are open to All FCC Licensed Hams and CERT Members**

Location: Suite #380 (3<sup>rd</sup> Floor) in the Auburn Annex Building @ One East Main Street in Downtown Auburn WA. 98002 (206-400-1723) Also see: <http://HamShare.com> .

**Registration** for events : Send your: Name, Call Sign, Phone number, Email address and Class/workshop number to: [Email.Hamshare@Yahoo.com](mailto:Email.Hamshare@Yahoo.com) .

**January 26, 2013 9:00AM to 5:00PM Saturday, (Lunch 12 to 1 PM) Workshop #13501-MESH**

**NW-Mesh Networking Hands-on Workshop – This is a Real World Hands-on all day Workshop.**

**3rd Floor Suite #380: Bring your 2.4GHz Wireless Router and learn**

**Hands-on how to tweak it up for more Ham Radio Networking Fun. It can also become a Mesh-Networked Router for your EOC and EMCOMM use.**

**Radio-Mobile Software, Live! See your RF paths via this great software package. (Running All Day).**

**3rd Floor: Policy-Room (Suite#380). Coding, User-interface, Multifunction-Hacking insight.**

**2nd Floor: Conf-room #1, Basic Networking Mentoring**

**2nd Floor: Conf-room #2, Basic Unix, Linux, Admin, Mentoring.**

**Also helpful:** 1. Fully Charged Laptop / Wall Wart & Charged Spare Battery; 2. 110VAC Power Strip for your Equipment; and 3. Virus Free Thumb Drives.



**February 23, 2013 9:00AM to 5:00PM Saturday, (Lunch 12 to 1 PM) Workshop #13797-MikroTik**

**Introduction to Networking with MikroTik Routers.** -----Guest Presenter Steve Hatch WA7DAD

**This is a Real World Hands-on all day Workshop.**

The Mikrotik RB750 Series Router is used for this Workshop-Class

<http://routerboard.com/pdf/258/rb750.pdf>

The Mikrotik RB750 Router is required for this Workshop, Bring your own or purchase below.

At the end of this class, everyone should be able to communicate all across the Demo Network.

Subjects Covered: IP Addressing, Subnet Masks, Static Routing, Basic Routing Protocols, Basic DNS

Capture the DRATS Raffle Flag by posting a message at the end of the Workshop.

Each student needs to bring a PC Laptop for this Class. ( sorry this is a PC based Event ), along with a MikroTic RB-750 Router & Ethernet Cat 5 cable that is 6 to 10+ft long.

**Also helpful:** 1. Fully Charged Laptop / Wall Wart & Charged Spare Battery; 2. 110VAC Power Strip for your Equipment; 3. Virus Free Thumb Drives.

**Please Sign up by sending your:** Name, Call-Sign, Phone Number, Email Address, and Do you have a RB750 Router, and **The Class Number #13797-MikroTik** - To: [Email.Hamshare@Yahoo.com](mailto:Email.Hamshare@Yahoo.com)

If you wish to purchase a RB750 Mikrotik Router, They are available from Steve Hatch WA7DAD for \$45.00 (Includes Shipping ) Delivered to Greater Auburn & Federal Way. WA.. Call 206-497-GEEK (4335)

Also Received on Email...

Bob Rutherford KE7UUU – ke7uuu@fwarc.org

Federal Way Amateur Radio Club Vice-President; Federal Way ARES/RACES Emergency Communications Response Team; Tukwila Emergency Communications Team; Pacific County ARES/RACES Team; American Red Cross Communications Team Reserve Corps and Disaster Support Team; C.E.R.T member; NWS Skywarn Member King-51

The following was published "somewhere" on the Internet after Hurricane Sandy. This is the closest you can get to realistic, practical advice without actually having to learn these things the hard way. (Thanks to Marty Grisham for sharing this.)

A MUST WHEN AN EMERGENCY HITS!

Living through Sandy - (hurricane) ... 46 things you!! want to know

By Frantz Ostmann on Saturday, November 17, 2012 at 7:13 am ·

- 1. The excitement and coolness wears off around day 3
2. You are never really prepared to go weeks without power, heat, water etc. Never!
3. Yes it can happen to you.
4. Just because your generator runs like a top, does not mean its producing electricity.
5. If you do not have water stored up you are in trouble.
a. A couple of cases of bottled water is "NOT" water storage
6. Should have as much fuel as water:
a. Propane b. Gas c. Kerosene d. Firewood e. Fire starter, (kindling, paper, etc)
7. Even the smallest little thing that you get from the store should be stocked up.. (spark plug for the generator, BBQ lighter, etc)
8. If you are not working, chances are nobody else is either.
9. I was surprised how quickly normal social behavior goes out the window. I am not talking about someone cutting in line at the grocery store.
a. 3 people were killed at gas stations within 50 miles of my home.
b. I did not say 3 fights broke out, 3 people were killed.
10. Cash is king (all the money in your savings means nothing)
11. Stored water can taste nasty.
12. You eat a lot more food when you are cold
13. You need more food than you think if your kids are out of school for 2 weeks
14. Kids do not like washing their face in cold water.
15. Your 1972 Honda civic gets to the grocery store as well as your 2012 Escalade... but the Honda allows money left over for heat, food, water, a generator, fire wood, a backup water pump, you get the idea..
16. The electrical grid is way more fragile than I thought.
17. Think of the things that are your comfort, your escape, a cup of hot chocolate, a glass of milk and a ding dong before bed, etc. Stock up on those too. You will need that comfort after day 3.
18. You quickly become the guy in the neighborhood who knows how to wire a generator to the electrical panel, directly wire the furnace to a small generator, or get the well pump up and running on inverter power or you are the guy whose Master's degree in Accounting suddenly means nothing. (Love you Steve!)
19. A woman who can cook a fine meal by candle light over the BBQ or open fire is worth her weight in gold. And women, whose weight in gold, would not add up to much, usually die off first. Sorry skinny women.
20. It takes a lot of firewood to keep a fire going all day and into the evening for heat.
21. All the food storage in the world means nothing if your kids won't eat it.
22. You might be prepared to take care of your children and their needs, but what about when the neighborhood children start to show up at your door?
23. Some people shut down in an emergency. There is nothing that you can do about that.
24. Your town, no matter how small is entirely dependent on outside sources of everything.
a. If supply trucks stop rolling in due to road damage, gas shortages or anything else you could be without for a long time.
25. In an emergency Men stock up on food, Women stock up on toilet paper.
26. I was surprised how many things run on electricity!
27. You can never have enough matches.
28. Although neighbors can be a great resource, they can also be a huge drain on your emergency storage. You need to know how you are going to handle that. It is really easy to be Bob the guy who shares on Day 3, not so easy on Day 11. This is just reality speaking.
29. Give a man a fish he eats for that day, teach a man to fish and he will never be hungry again.. Now I get it.
30. All of the expensive clothes in the closet mean nothing if they don't keep you warm.
31. Same goes for shoes... Love you Honey!!!!
32. You cannot believe the utility companies. They are run by politicians!! Or so it seems,
33. Anything that you depend on someone else for is not avail anymore.
34. Quote "A man with a chainsaw that knows how to use it is a thing of beauty" lol
35. Most folks don't have any emergency storage. They run to Wal-Mart and get water and batteries and then fill their tubs with water. That is it. A lucky few will get a case of ramen and a box of pop tarts. That will be your neighbors supply. (Especially if you live outside of Utah)
36. Fathers, all the money you have ever made means nothing if you can't keep your kids warm.
37. Mothers, everything you have ever done for your kids is forgotten if your kids are hungry.
38. You really do not want to be the "Unprepared Parents" The kids turn on you pretty quick.
39. Small solar charging gadgets will keep you in touch. Most work pretty well it seems.
40. Most things don't take much power to operate.
a. Computers, b. Phones c. Radios d. TV e. lights
41. Some things take a ton of power to operate.
a. Fridge b. Toaster c. Freezer d. Hot plate e. Microwave
42. When it gets dark at 4:30 pm the nights are really long without power.
43. Getting out of the house is very important, even if it is cold outside. Make your home the semi warm place to come home to, and not the cold prison that you are stuck in.
44. Someone in your family must play or learn to play guitar.
45. Things that disappeared never to be seen again for a very long time.
a. Fuel, of all kinds b. Matches, lighters of any kind etc. c. Toilet paper d. Paper plates, plastic forks and knives e. Batteries, didn't really see a need for them. (How about flashlights??? I guess) f. Milk g. Charcoal h. Spark plugs (generators)
i. 2 stroke motor oil, (chainsaws) j. Anything that could be used to wire a generator to the house.
k. Extension cords l. Medicines (Tylenol, Advil, cold medicine etc)
46. There was a strange peace to knowing all I had to do each day was keep my family safe, warm, and fed, but my peace was someone else's panic.



January 2013

K7LED Relay

## M&K General Meeting Minutes

By Ivy Nelson-Groves WA7IVY, Secretary

General Meeting Agenda – 15 December 2012

Meeting was called to order at 10:00 am by the President, Robert KD7WNV.

Pledge of Allegiance.

Announcements: The Mike and Key ARC is affiliated with the ARRL, which members are encouraged to join. Everyone, including visitors, should sign the rosters. Visitors are reminded not to vote on membership matters.

The president asked for a moment of silence in memory of the victims of yesterday's shooting.

### Introductions

#### Officer Reports:

**President:** Robert KD7WNV: Robert mention the video project that was written about in the Relay. Robert also announced that Tim K7ANE will be resigning from the board in January due to commitments and deployments with the Red Cross; we will be taking nominations today and holding an election in January. We also need someone to be a member at large for the audit committee; please contact Sam N7RHE if you are interested.

**Secretary:** Ivy WA7IVY: Nothing to report.

**Treasurer:** Dave KB7PSN: The club's books are in good order.

**Activities Manager:** George AE7G: Jim mentioned that we will have the end of the year drawing and today's program will be on micro-processors; January's activity will be a discussion on how to run a public service event.

**Chairman of the Board:** Tim K7ANE: not present.

**Radio Officer:** Hal N7NW: The Motorola is back on the air with its new power supply. There is a video camera up on Tiger Mountain that is web accessible, if you are interested in weather conditions at the site. We will be making some changes to the program to announce when the repeater is on battery power. Remember that there is a 90 second timeout on the repeater.

#### Quorum present.

A motion was made to approve the minutes of the previous meeting as printed in the Relay was made by Sam N7RHE and seconded by Little John. Motion passed.

**Vice President:** Kathy KB7QMO: The following prospective member were voted on by the membership: Jerry Olson, WA7CCR. He was approved by the membership.

**Relay Editor:** Gary KG7KU: Gary thanked everyone who sent in articles for the variety. He thinks this month's is one of our best.

**Webmaster:** Jim KD7BAT: The web is up to date.

#### Standing Committee Reports:

**Strategic Planning:** Mike N7WA: no report.

**Facilities & Publicity:** Daniel KLWM: Daniel again mentioned the video project. A minute or 90 sec telling about what the club is doing.

**Education:** Tim K7ANE: not present. Upcoming classes will be posted on the website.

**Public Service:** Robert ND7WNV: The season has wrapped up. The Chilly Hilly will be the next event in February. The committee will be working on the booklet now and will meet today at the Cedar River Smokehouse after the meeting.

**Technical and Special Interest:** Gil W7GIL

#### Other Committees:

**VE Exams:** Scott AG7T: 7 people attended exams: 3 Technicians; 3 Generals; and 1 Extra were awarded.

**Logo:** Jim N7MU: nothing to report. Dave KB7PSN has the badges. Jim mentioned that there are vendors available to make logo'd apparel.

**Membership:** Gary KG7KU: Gary invited the membership to join the committee or offer suggestions on what we can do to make the club better. [mikeandkeymembers@gmail.com](mailto:mikeandkeymembers@gmail.com) is the email for any communication to the committee. Next committee meeting will be the 2<sup>nd</sup> Saturday in January at 2pm at the Fairwood Library.

**By Laws Review:** Dave KB7PSN: Next meeting will be in January.

**Awards Banquet:** We need to find a chair for next year's banquet in March/April. It is usually held between the March and April general meetings. If you are interested, please contact Robert KD7WNV or any board member as soon as possible.

**Flea Market:** Hal N7NW/Mike N7WA: Second weekend in March (10<sup>th</sup> weekend of the year). Time to sign up is now! The signups are all on line this year. We need over 100 people to put on the event. February is when they will present the Flea Market Program. Dick WA7UEW volunteered to be Ticket co-chair.

**Field Day:** Ivy WA7IVY: 188 days to Field Day setup. Nothing to report at this time, but we will start work in earnest after the beginning of the year, and kick in to higher gear after Flea Market.

#### Old Business:

**Bell ringing:** Jim KD7BAT stated that we had two sites, Fry's and Walmart, and raised over \$1000 for the Salvation Army. Many enjoyed the face-2-face QSOs at the event. This year, the folks at Fry's raised a little more than the folks at Walmart. Jim thanked everyone for their help, and will try to arrange the first weekend in December 2013. In past years, the Mike and Key has raised about 20% more for the Salvation Army than any other group. A sincere thank you to everyone who participated.

#### New Business:

**Nominations for Trustee #3:** John NU6A, Monica KLQLX, Dave KC7FSR were nominated and accepted their nominations. Election will be at the January meeting.

**Budget:** Dave KB7PSN presented the budget to the membership for their approval. Daniel KLWM made a motion to accept the budget as presented; Kathy KB7QMO seconded. The membership approved the budget for 2013.

#### Good of the Order:

**Alligator Award:** Dean N7XS still holds the alligator award.

The Salvation Army will begin adding on to the west side of the building starting in 2013. We will have more information in the next few months. We may have to move our talk-in station while they are doing construction.

The next Mike & Key Board meeting will be on the first Tuesday of the month, January 1<sup>st</sup> at 7:30 pm at the Salvation Army in Renton.

The next **Mike & Key General Membership meeting** will be on the third Saturday of the month, **January 19<sup>th</sup> at 10:00am** at the Salvation Army in Renton.

Scott AG7T made a motion to close the meeting, seconded by Michelle WA7PVE. The motion was passed. Meeting adjourned at 11:22 am.

5 guests; 58 members; 55 ARRL members

**Attested: Ivy Nelson-Groves, WA7IVY, Secretary**

# M&K Board Meeting Minutes

By Ivy Nelson-Groves WA7IVY, Secretary

Meeting Held – 01 January 2013



**Officers present**

	<i>President</i>	<i>Robert Grinnell</i>	<i>KD7WNV</i>
X	<i>Vice President</i>	<i>Kathy Martin</i>	<i>KB7QMO</i>
X	<i>Secretary</i>	<i>Ivy Nelson-Groves</i>	<i>WA7IVY</i>
X	<i>Treasurer</i>	<i>Dave Smith</i>	<i>KB7PSN</i>
X	<i>Activities Manager</i>	<i>George Thornton</i>	<i>AE7G</i>
X	<i>Radio Officer</i>	<i>Hal Goodell</i>	<i>N7NW</i>

**Trustees present**

X	<i>No. 1</i>	<i>Mike Dinkelman</i>	<i>N7WA</i>
	<i>No. 2</i>	<i>Kathleen Weiss</i>	<i>KF7MUD</i>
	<i>No. 3 CoB</i>	<i>Tim Kane</i>	<i>K7ANE</i>
X	<i>No. 4</i>	<i>Gil Drynan</i>	<i>W7GIL</i>
	<i>No. 5</i>	<i>Daniel Stevens</i>	<i>KL7WM</i>

**Other officers (non-voting)**

X	<i>Relay Editor</i>	<i>Gary Bryan</i>	<i>KG7KU</i>
X	<i>Webmaster</i>	<i>Jim Etwiler</i>	<i>KD7BAT</i>

**Visitors**

	<i>David Lee</i>	<i>KC7FSR</i>
	<i>Alan Hughes</i>	<i>KB7SVU</i>
	<i>Michael Hansen</i>	<i>KG7MX</i>
	<i>Frank Tate</i>	<i>NA7O</i>

The President called the meeting to order at 7:35 p.m.

**Minutes:** A motion was made to approve the minutes as published was made by Michael and seconded by Gil. Motion passed.

**Reports:**

**Chairman of the Board – Tim K7ANE:** not present.

**President – Robert KD7WNV:** no report.

**Vice President – Kathy KB7QMO:** Membership applications for consideration: Derek Newbern KF7VNC. He was approved by the board.

**Secretary – Ivy WA7IVY:** Picked up the mail; just junk mail from Comcast.

**Treasurer – Dave KB7PSN:** The Club's books are in order. Dave wrote a check for Hal N7NW to pay postage for the mailers. State filing fee and WWARA membership fees have been reimbursed to Hal as well. Our Insurance was paid at the end of last month. The audit for the General Ledger will be conducted right before the General Meeting in January. We need another trustee to volunteer for the audit committee. Budget and Roster updates will come out at the end of the week.

**Activity Manager – George AE7G:** The raffle fund is in good shape for the beginning of the year. Fran N7FWZ will be presenting a program this month about putting on public service events. George said that he is willing to be activity manager again this coming year.

**Radio Officer – HAL N7NW:** The repeater is up and running. There is quite a lot of snow on Tiger Mountain right now. We are having some interference issues but they aren't hindering use of the repeater profoundly.

**Relay Editor – Gary KG7KU:** Gary appreciates everyone's input into the relay. Gary mentioned that he will be experimenting with using Microsoft Publisher instead of Microsoft Word for publication of the Relay.

**Webmaster – Jim KD7BAT:** Website is up to date. Jim received several emails that he forwarded to the club.

**Standing Committees:**

**Strategic Planning – Mike N7WA:** No report. Discussion concerning the strategic planning committee.

**Facilities – Daniel KL7WM:** Not present; Daniel is sick. Jim KD7BAT reported that the Salvation Army has got their building permits and will begin remodeling the building after the beginning of the year. Jim has spoken to the SA asking about the timeline and when we need to move our equipment and what facilities will be available during this time. We may lose this meeting place temporarily for board meeting.

**Education & Training – Tim K7ANE:** not present.

**Public Service – Kathleen KF7MUD:** Robert mentioned that the booklet is underway, and we are looking at some alternate printers (we print 3000 copies). We need to have all our content ready by the end of January.

**Technical – Gil W7GIL:** No report.

**By Laws – Dave KB7PSN:** Dave scheduled 2 meetings: Jan 13<sup>th</sup> at Renton Downtown Library 3-5pm; Feb 2<sup>nd</sup> 2-4pm at the same location.

**Logo – Daniel KL7WM:** not present.

**Field Day – Ivy WA7IVY:** We need to think about a time where we can work on the tower trailer and repack the equipment trailer. George AE7G will be donating an antenna for the GOTA station once the equipment trailer is repacked. The proposal to charge a fee for use of the Wagon Wheel has been scrapped for this year.

**Flea Market – Hal N7NW and Mike N7WA:** Meeting at Mike's house next Tuesday; the flyers are going out in the mail this week and we have a co-chair for Tickets.

**Membership – Gary KG7KU:** Kathy KB7QMO stated that the next meeting will be Jan 12<sup>th</sup> at the Fairwood Library at 2pm. Kathy passed around the proposed membership form, which will not be used until after the by-laws have been changed. Pictures of new members are being taken and we will also be getting pictures of current members as well. Gary wants to establish a standing location in the Relay for the membership committee items.

**August Picnic:** Picnic reservation will be made this week for the August meeting at Gene Coulon Park.

**Awards Banquet:** The membership committee may be able to work on the awards banquet or they may be willing to assist someone who would like to volunteer to chair this activity. Discussion concerning the awards banquet and other social activities of the club. Kathy KB7QMO will clarify with the committee how much they will be able to help with.

**Old Business:**

Alan KB7SUV asked for approval to get some purchases for the generator and equipment trailer. George AE7G made a motion that Alan purchase what he needs, Robert KD7WNV seconded. Motion passed.

**New business:**

**This year's Board elections** will be in March: Robert, Dave, George, Kathy, and Ivy are willing to run again; Trustees 1, 3 and 5 will be up for election this year.

**Mike N7WA** mentioned that we may need a legal release prepared for the Country Store at the Flea Market; there was an issue about something that was thought to have been stolen. It might be more of setting expectations. George AE7G and Michael KG7MX will discuss this with the Flea Market chairs.

**Good of the Order:**

**The Secretary of State's office** has initiated a statute here the names and addresses of corporate officers and directors are published. Michael KG7MX contacted the Secretary of State's office and determined that our post office box can be used instead of a personal home address. This will be of benefit to the new board – they have the addresses of the current board already.

**Gary KG7KU** asked how we notify the club if Ham operators are needed for any emergency events. It was mentioned that most agencies require pre-registration and have required training that needs to be done. You have to volunteer in advance.

There being no further business, the COB adjourned the meeting at 8:48 pm.

**Attested: Ivy Nelson-Groves WA7IVY, Secretary** 



## M&K-K7LED Club Library

By Tim Kane – K7ANE

*Library open 8:30 AM to 11:15 AM (General Meeting)*

*M&K Library Shop open Tue. to Sat. ([www.skywaytv.net](http://www.skywaytv.net))*

*The Library is located 11818 Renton Ave So., Seattle WA, Tel. 206-772-2350*

Four new books have arrived for the Club Library. Based on suggestions from the members, we've acquired the ARRL's excellent set of three books on the basics of electronics, radio and antennas, along with the newest ARRL book on Software-Defined Radio (SDR). These four new books will be available to checkout at the general meeting in May:

- **Understanding Basic Electronics, 2<sup>nd</sup> Edition, 2010, by Walter Banzhaf, WB1ANE**
- **Basic Radio, Understanding the Key Building Blocks, 2006-12, by Joel R. Hallas, W1ZR**
- **Basic Antennas, Understanding Practical Antennas And Design, 2008-09, by Joel R. Hallas, W1ZR**
- **The ABCs of Software Defined Radio, 2012, By Martin Ewing, AA6E**

The Basic Electronics book discusses the basics of electricity, electronics, and simple circuits. Chapters cover components, DC and AC electrical circuit concepts, basic analog and digital circuits, series and parallel circuits, problem solving and applied math (by hand and calculator), frequency, active devices, semiconductors and integrated circuits. The book also takes a look back at vacuum tubes and their applications. A good glossary of electric and electronic terms is also included.

Basic Radio looks at the development of radio from the simplest crystal sets, early simple receivers through modern superheterodyne receivers. It then looks at the parallel development of transmitters, from earliest CW sets through the evolution of voice transmission from AM to SSB. Chapters also cover power amplification, wave propagation, transmitting and receiving antennas, radiolocation and radionavigation systems, and another glossary of relevant terms. The author also looks into his crystal ball to see what the future might hold. The appendix includes several build-it-yourself projects.

The third book in the series, Basic Antennas, looks at a wide range of communications antennas, starting with the venerable dipole, and continues through both verticals and horizontals, arrays, surface reflector antennas, yagis and log periodics, and loops. Also discussed are microwave and vehicle-mounted antennas. The author discusses antenna measurements and modeling, using EZNEC software. Instructions for some easy-to-build antennas are also included.

The Software Defined Radio publication is really more of a pamphlet than a book, and thus somewhat disappointing. It discusses the application of digital electronics and the road that has led to this new metamorphosis of radio and computers. However, it covers the basic concepts and suggests where the future of this new technology may take amateur radio.

We've still got some of our annual budget left for the library, and are always anxiously seeking good suggestions for editions to add to our shelves. Get in touch with me if you have a good idea. We'll order some more new books later in the year.



# Ham Nets & Events – 2013 – January / February / March

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
<b>13</b> 1700 – NWWA-LDS Net 147.34 (Weekly) 2000 – King Co. ARES Net 147.08 (Weekly) 2015 – Kids Net 145.49 (Weekly) 2200 – NW Astronomy Net 145.33 (Weekly)	<b>14</b> 0545 & 1645 – Weather Net 145.33 (M-F) 1700 – Evergreen State Traffic System Net 145.19 (Daily) 1830 – WA Emerg. HF Net- ARES 3.985 (Weekly)	<b>15</b> 2000 – Seattle Red Cross Comm Team Net 147.080 (Weekly) 2000 – Snohomish Co. ACS/RACES Net 146.92 (Weekly)	<b>16</b> 2000 –Evergreen Intertie Gen/Tech Info Net – 145.33 (Weekly) 2000 – Educational Radio Net – PSRG 146.96 (Weekly) 2100 – NWSOAR Net 146.82 (Weekly)	<b>17</b> 1900 – M&K Public Service Net 146.82 (Wkly) 2000 – Computer & Packet Net 145.33 (Wkly)	<b>18</b>	<b>19</b> 1000–M&K Club Meeting, Renton 1230– M&K Ham Radio Exams, Renton. <a href="mailto:Scott-ag7t@arrl.net">Scott-ag7t@arrl.net</a> 0900 – WA State Emerg. Net (WSEN) ARES HF Net 3.985 (Weekly)
<b>20</b>	<b>21</b> 1900 – Seattle ACS Net 146.90 (Weekly) 1930 – PSRG Net 146.96 Wkly) 2000 –YL Net 145.33 (Wkly)	<b>22</b>	<b>23</b>	<b>24</b>	<b>25</b>	<b>26</b>
<b>27</b>	<b>28</b>	<b>29</b>	<b>30</b>	<b>31</b>	<b>01</b> – FEBRUARY –	<b>02</b>
<b>03</b>	<b>04</b>	<b>05</b> M&K Board Mtg Salvation Army Bldg Renton, 7:30 pm	<b>06</b>	<b>07</b>	<b>08</b> Relay Articles Due 23:59:59	<b>09</b>
<b>10</b>	<b>11</b>	<b>12</b> Fleamarket Mtg – Dinkelman's Residence	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b> 1000–M&K Club Meeting, Renton 1230– M&K Ham Radio Exams, Renton. <a href="mailto:Scott-ag7t@arrl.net">Scott-ag7t@arrl.net</a>
<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>	<b>21</b>	<b>22</b>	<b>23</b>
<b>24</b> Public Service: Chilly Hilly Bike Ride Bainbridge Island, Contact: Craig AC7BV <a href="mailto:CraigH@Blarg.net">CraigH@Blarg.net</a>	<b>25</b>	<b>26</b>	<b>27</b>	<b>28</b>	<b>01</b> – MARCH –	<b>02</b>
<b>03</b>	<b>04</b>	<b>05</b>	<b>06</b>	<b>07</b>	<b>08</b> M&K Fleamarket - SETUP	<b>09</b> M&K Fleamarket – 9am to 3pm Puyallup Fairgrounds