



From our Club President...

Applying Some New Technologies

By Robert Grinnell KD7WNV, President

Fleamarket Video

With the Fleamarket imminent, I want to seize the opportunity to obtain content for one of the major videos I had in mind for the Club-promotional video project announced in my December column. If you happen to take video (or even still photos) at the Fleamarket, I'd like to get copies for possible inclusion in the finished video. Just bring the files to a meeting on a USB thumb-drive.

One special thing that I'm planning is to take some time-lapse video. If you have a camera with that capability, please contact me in advance so that we can coordinate our efforts.

Digital QST

Have you tried out the Digital Edition of QST? The ARRL began issuing it in January, 2012. You can view it online through your Web browser, and it is now also available for Apple iOS devices (iPhone, iPad, iPod Touch) via a new QST app. You will need an ARRL website account (which also carries other benefits).

The digital edition has additional digital-only content, including video, audio and photo slideshows. In some ways, it is more convenient and powerful than reading the printed edition. You can search for a word, print a page, and there is a button to take you to the Table of Contents, which itself is a list of links to articles—just click and it takes you right to the page.

In addition to viewing online, you can download the digital edition to your PC. It doesn't come as a PDF, but rather in something called Nxtbook digital format. The reading experience is the same as online, but you need to download the installer (around 300 MB), then run the installer and provide a one-time validation (your ARRL.org login), for each issue.

To get started, go to www.arrl.org/qst. There is an extensive FAQ available to answer your questions.

Awards Banquet

Our thanks go out to the Membership Committee for stepping up and handling the logistics of the Awards Banquet. It looks like we will enjoy an evening at the Spaghetti Factory, with a choice of three dinners, Saturday, March 23rd. [See the article elsewhere in this Relay].

See you on the 16th!

M&K FM'13: Fleamarket Update

By Michael Dinkelman N7WA

Only 4 short weeks from now, the biggest Ham Event in the State of Washington— and perhaps the Pacific Northwest— will be underway.

This is the Club's primary source of funds and a large source of our fun. Worker volunteers are running about normal. **We need more help, however.** Our primary needs are for Saturday in Announcing, Security, and Ticket-takers. I understand Registration needs a couple more helpers too. There will be an opportunity to sign up at the February Club meeting.

If you signed up by the last Club meeting, your badge will be available at the February meeting. Those who sign up or don't pick up their badge next week can pick it up at the Gold gate at the event itself. For our newer members (and those who love re-runs), we will be presenting the usual Fleamarket program at the next Club meeting. This will be your chance to ask questions and get the low-down on how the event operates. Speaking of re-runs, you'll find the annual 'Fleamarket Primer' on Page 3 of this Relay.

The first floor is totally sold out. All the commercial and information booths on the second floor are spoken for, and we are down to the last couple rows of tables. Your Fleamarket Committee has worked hard to make this a successful event. I hope you'll join in and find it an enjoyable experience.

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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

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

President	Robert Grinnell	KD7WNV	r-grinnell @ comcast.net	425-398-1466
Vice President	Kathy Martin	KB7QMO	klsmartin1 @ gmail.com	253-631-5370
Secretary	Ivy Nelson-Groves	WA7IVY	ivy @ wa7ivy.com	425-269-3259
Treasurer	Dave Smith	KB7PSN	kb7psn @ yahoo.com	425-235-5095
Activity Mgr	George Thornton	AE7G	GTLAW @ seanet.com	206-920-7072
Radio Officer	Hal Goodell	N7NW	n7nw.hal @ comcast.net	253-549-4178
Trustees --				
No. 1	Michael Dinkelman	N7WA	n7wa @ arrl.net	253-631-3756
No. 2	Kathleen Weiss	KF7MUD	kf7mud @ live.com	425-283-6545
No. 3	John Marthens	NU6A	nu6a @ arrl.net	206-444-6444
No. 4	Gil Drynan	W7GIL	gild @ seanet.com	425-392-1668
No. 5 (CoB)	Daniel Stevens	KL7WM	KL7WM @ arrl.net	206-228-9274
VE Testing	Scott Robinson	AG7T	ag7t @ arrl.net	425-788-0452
Logo Committee	Jim Aigner	N7MU	jimaigner @ comcast.net	253-630-2752
	Dan Humphrey & Dawn Humphrey	N7QHC KC7YYB	n7qhc @ arrl.net	206-243-0163
Club Library	'Toku' Okumura	AD7JA	tokuzo_okumura @ msn.com	206-772-2450
Webmaster	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 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.

M&K Club - February Activities

By George Thornton AE7G, Activity Manager

MEETING FOCUS— FLEAMARKET (March 9) & CLUB ELECTIONS ARE IN MARCH

This time of year meetings are devoted to the business and major activities of the Club.

The February meeting focuses on preparation for the Fleamarket. The March meeting will involve election of officers so there will again be no separate program.

The Salvation Army is planning to start construction shortly and the construction is slated to go for a few months. We may be using a different entry door.

Our next planned speaker meeting is in April. I am looking for ideas and have some of my own. Topics of interest include HSMM Mesh and Amateur TV. I listen to suggestions so if you have something you would like to see please let me know.

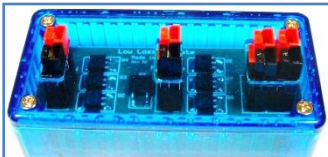
We are off to a good start for the Door Prizes and I am again planning for something special for the year-end prize. Let me know your suggestions. At this point I am contemplating doing another Elecraft KX3.

M&K February Door Prizes

Prize List & Photo's by Jim Aigner N7MU

Two additional door prizes were added at the last minute to our January drawing – an oscilloscope donated by Toku AD7JA and a leather computer case donated anonymously. They helped boost our January ticket sales well above normal. Thanks.

This month we have another fine assortment of door prize goodies. One is a smaller version of the popular WMR PWRGate.



It's called the LLPG PWRGate and provides 12V DC backup power while keeping your battery charged. Buy a ticket or two to share in the fun.

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

- "Zone of Iniquity" a Ray Tracy adventure by NOAX aka Ward Silver
- 50' of ¼" UV Resistant Rope
- Flambeau 7220 Double Satchel 34 compartment "parts case"
- (2) Pair of Grabber Air Activated Hand Warmers
- Motorola external speaker (used)
- Yellow Sport / Equipment Bag
- 59' of 450 ohm ladder line
- K10BK LLPG PWRGate, a simple backup DC power system



M&K Membership Committee Report

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

The Club is quickly moving through the year, and the Membership Committee is poised to support its meetings and events.



Meetings—Welcoming and recognizing new visitors is one important area of focus. It looks like the meeting location is undergoing some changes, so re-orienting ourselves to new entranceways is in order... and helping others find them.

Events—The Committee has stepped up to organize the Club's **Annual Awards Banquet**. This year, we will meet and eat on Saturday, **March 23rd** at the **Old Spaghetti Factory, 17100 Southcenter Pkwy, Tukwila, Washington 98188. Cost is \$10 per person.** Sign-up sheets will be available at the February General Membership meeting, February 16.

We are asking that everyone pre-pay by March 16th. There will be three entrée choices, to be announced at the February General meeting.

The next Membership Committee meeting is scheduled for March 2nd at the Kathy Martin residence, starting time is 2pm.

Remember, you can always provide input to the Committee with your ideas and suggestions to: mikeandkeymembers@gmail.com.

M&K FM'13: Registration Help Wanted

By Diane Dinkelman KB7DNE

Wanted: Person to join our happy crew and can work outdoors handing out packets to our customers at Registration.

Hours would be Friday—2pm to 4pm, with an hour break 4-5pm, then back again to Registration 5-7pm. You may be able to leave earlier if it's slow. Saturday would be 7:30 to 9am. The rest of the day you would be free to do what you want.

I may need another helper for Friday only. I will not know for sure until Feb 15. The hours would be 2-3:30pm Registration. Then next at 3:30-4:30pm Pallet Gate, then 4:30-5:30pm - break. The last shift is at 5:30-7pm Pallet Gate. You may be able to leave earlier if activity is slow.

If interested contact Diane KB7DNE (253-631-3756).

M&K FM'13—Sneaker Preview

Contributed by Bill Balzarini KL7BB



Where are all the 'Goodies?'

Celebrate Our February Members!

By Dave Smith KB7PSN, Treasurer

As of February 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:

Hal Goodell	N7NW	39 Years*
Harry Lewis	W7JWJ	39 Years*
Mary Lewis	W7QGP	39 Years*
Wayne Moddison	K6DOW	28 Years*
Dean Holtan	N7XS	23 Years
Sandra Dunkel	K7OZY	22 Years
Richard Danielson	K7RIC	19 Years
Adrian Roth	KB7BVL	17 Years
Paul Roth	N7DOH	17 Years
Brendan Burget	KD7IKV	13 Years
Curtis Hanner	N7MWC	13 Years
Dawn Hanner	N7VWH	13 Years
Paul Donnor	KD7SSD	10 Years
Chuck Richardson	N7LMT	8 Years
David Brinkmann	N7UNN	5 Years
Roger Eck	KF7GDD	3 Years
Randy Stagers	K9VD	3 Years
John Swafford, II	W7MEU	3 Years

* Life member = member 25 consecutive years or more

M&K AMATEUR RADIO CLUB

General Account – Audit Committee Report

January 19, 2013

From: Audit Committee
 To: Mike and Key Amateur Radio Club
 Subject: Audit for fiscal year 2012

On January 19, 2013, the listed members conducted an audit of the Club's financial records for the purpose of preparing this report.

REVENUE

Revenue was traced from receipt records, club meetings, etc., through recording and deposit. In addition a review was made of the monthly bank reconciliation's and the timing of deposits. No discrepancies were noted.

EXPENDITURES

In reviewing expenditures and associated disbursements we took a monthly sampling of invoices and requests for reimbursements. In each case the items were confirmed for authorization. No discrepancies were noted.

COMMENTS

It is the opinion of the undersigned that the financial records of the Mike and Key Amateur Radio Club represent a fairly accurate record of cash receipts, disbursements, and deposits for the fiscal year 2012.

Signed by Members of the Audit Committee

Sam Sullivan N7RHE Chair
 Scott Robinson AG7T
 George Thornton AEG
 Daniel Stevens, KL7WM, Trustee
 Gil Drynan, W7GIL, Trustee.

M&K Radio Officer Report

By Hal Goodell N7NW

The Club's Repeater operations and site remain nominal. There are currently no problems with the repeater.

Conditions to get up to Tiger is still— 'lots of snow.' There are no power outages and no loss of repeater usage.

No news is good news at this time.

M&K VE Team Statistics for 2012

By Scott Robinson AG7T

The VE team had another great year! I want to thank each of the VEs that helped at various sessions during the year: KE7LLC, KO7E, N7RHE, WT7I, W7GIL, WU7J, WA7NIW, KD7BAT, KD7IQL, N7QLT, NU6A, KL7WM, KF7VG, AC7UR, KG7MX, and K7ASQ. You again showed the best of amateur radio.

We had 183 people taking 208 exam elements leading to 91 Technician, 47 General, and 28 Extra class licenses awarded. The average session size was the same as 2011 with 13 people per session. Still keeps the VEs very busy!

73, Scott AG7T

M&K Member- Mike LaFerla K7JML (SK)

Contributed by Dave Smith KB7PSN

Source/Obituary full text can be found at:

http://sherman-knapp.com/fh/obituaries/obituary.cfm?o_id=1944668&fh_id=10890

James "Mike" Michael LaFerla

(October 10, 1943 - January 29, 2013)



James Michael LaFerla "Mike" of Newport, Washington died on Tuesday, January 29, 2013. Mike was born on October 10, 1943 in Queens New York to Salvatore and Anne LaFerla.

He was raised in New York and also attended schools there. After graduating from High School, Mike entered the Air Force in 1963 and became a jet engine mechanic. He was honorably discharged in 1967. He worked at various jobs until he started working for New York Telephone in early 1970. In June of 1970 Mike married Ronnie LaFerla. They had two children; Michael and Denyse. In 1978 the family moved to western Washington, as Mike was transferred with the phone company. He went from a cable splicer to a communications technician. He retired in June 2002 after 32 years. Mike was a member of Alcoholics Anonymous and received his 30 year coin last February 2012. During his sobriety, he became a ham radio operator, participating in many radio functions and was a member of several different radio clubs...

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

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

M&K FM'13: Hour by Hour Primer

By Michael Dinkelman N7WA

Realizing that new members to the club may be hesitant to jump in and support the Flea Market, or else just wonder how it works, here is your blow-by-blow description of a typical event. All you old-timers can skip this (you've probably read it before) but it's the easiest way I can think of to initiate the newbie's.

Friday, March 8, at the crack of dawn, roosters crowing: Hal N7NW will drag himself down to the Puyallup Fairgrounds and start measuring the floor for tables and power drops. At the same time, the phone crew will start hanging their wires. If you can't sleep, talk to Hal and get see if he needs some help with the tape. By the way, tables can't be set up until the wires are hung and the drops are in place.

Friday sometime between 8:30 and 9AM: You big and little brutes can arrive to start setting up. The more people that show up, the easier the work. Be sure to bring gloves and real shoes - we don't want any smashed toes or fingers. We have about 300 tables and 500 chairs to set up. With 20 people working in two-man teams, we can have both floors easily ready in a couple of hours. Remember, there's no need to park on the Fairgrounds itself unless you are bringing in setup materials. Everyone else, park out at the Gold Lot and come in through the Administration entrance just west of the Gold Gate. Badges will be available at the loading door before 2 P.M. and at the Gold Gate at all other times.

Noon: For those who just put up 300 tables, it's a good time to take lunch. The club will provide pizza and pop. In the past, we've borne the entire cost. This year, throw a couple bucks in the kitty. It'll still be cheaper than heading out to Mickey D's.

Friday 1PM: - One hour to go before we let the sellers in. Hopefully, the pallet jacks have arrived. The tables should be ready. Last-minute details abound. Put up signs. Set up announcing and the Country Store. Hang the banner out at the front gate. Test the phones. The clock ticks down. Registration ramps up.

2 to 7:30 PM: This is it. We open the gates to the selling hordes that have been lined up since morning. They come in every type of vehicle: small cars, big vans and clunkers that don't even belong on the road. Each piled with the same junk ... ah, I mean merchandise ... we have come to love and recognize from the previous years. They race through registration, afraid of losing their place in line. They load pallet upon pallet, and we pull each one to its place on the floor. The first two hours will be a madhouse - everyone running every which way. It'll eventually slow to a continuous stream, hour after hour. As the sellers get set up, they start haggling between themselves. It becomes a social event as each gets caught up on the news from last year or the previous event.

Friday 7:30PM: Finally, we start pushing everyone out the door. The gate closes and the stragglers get unloaded. By 8, we can lock the doors and think about a nice dinner and maybe a few hours of sleep ... zzzzz ...

Saturday March 9, 5 AM: *before* the crack of dawn and before any rooster in his right mind would crow - we are at the Gold Gate waiting to get in. We have a half hour before we start letting sellers in again. Just enough time to start the coffee, to unlock the loading doors and remind ourselves about how much fun we are having. *I love the smell of musty radio gear in the morning* (apologies to Robert Duvall).

Saturday 5:30AM: The loading process starts up again. Talk-in and announcing are busy, as is security. Someone needs to check electrical cords and make sure the fire extinguishers are clear. Everyone has a job to do. As 7:30 A.M. rolls around, the ticket booths are prepped and a line is already waiting at the corner.

Saturday 8 AM: We are selling tickets and the line makes its way to our front doors. Security is at the doors keeping the hoards back. Meanwhile, inside, you would think we'd already let the crowds in as the floor gets packed with sellers making last minute deals among themselves. By 8:30, we've closed the Orange Gate - one-half hour to show time. The last of the sellers are unloading and the Fire Department is making its inspection. Get those pallets out of the aisles and stack 'em outside.

9 AM to 3 PM: It's show time! What can I say? I just pick out a spot near the front doors and watch them come in. Lots of friends wave as they go by. As the buyers enter, they try to decide if their luck would be better upstairs or down. The floor is getting packed. The pallet, traffic and registration crews get to rest while others on the team are just getting started. The ticket sellers will be busy for hours while announcing and talk-in are helping the lost and confused. Next door, the VE team will be setting up to administer tests. Small fires come up here and there: a load needs moving, a seller needs tending. But, overall, it'll be another fine event.

Saturday 3PM: Most of the crowd has cleared. The last of the buyers are trying to eke out deals with the last of the sellers. The door prizes were finally all given out. Empty tables have appeared as sellers have sold out or otherwise packed and left for the day. It's been a long day and we are all tired of people and radios. Yet, the great egress is just starting. At 3 P.M. the sellers can grab pallets and start loading out. As they race to their vehicles, we take away the tables and chairs, and start restacking them. Over the next three hours, we will move out all those people it took two days to move in. Tempers will flare (but keep smiling), pallets run short, and the elevator will struggle with the load as we all sweat to move people and tables. But it'll all get done. As many of us head for a Chinese dinner, we'll rehash the past two days, stuff ourselves silly, and pat ourselves on the back and on the belly.

Finally, as we waddle our way to our cars, we'll realize we did it! Another successful Flea Market. And next year it'll be even better.

Sunday: zzzzzzz...

M&K Photos From Our January General Meeting

By Ric Danielson K7RIC



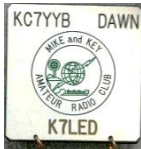
Welcome Our New Member!



Forrest Jones
KF7ZNC

Forrest Jones KF7ZNC

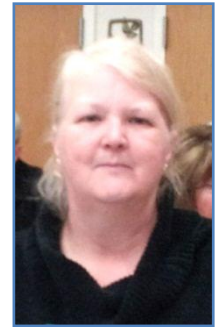
Supplemental Photos by Gary KG7KU, Relay Editor...



**Dawn KC7YYB & Dan N7QHC
Humphrey 'model' the Club's Logo on
Jackets as well as on Member
badaes.**



**Fran Underwood N7FWZ gave an outstanding
presentation on how to organize a public service event.**



**Liz Buddill N7ZXH returns as the
Communications Deputy-Vice-
Marshal (DVM) of the Seafair
Parade Marshals organization.
She is your contact for most
Parade events.**



**John Marthens NU6A was
elected to fill out the term
for Board Trustee No. 3.**



**Michael Dinkelman N7WA was available
following the meeting to answer
questions and fill in spots for volunteers
for the upcoming M&K Fleamarket.**



**Hal Goodell N7NW encouraged
support from all the members to
help with the M&K Fleamarket.**

EMBRACE EMAIL FOR ALL CLUB BUSINESS

By George Thornton AE7G

The latest news is that the Postal Service is about to eliminate Saturday delivery.

Technology can be relentless, some of us embrace it, others resist change.

The Postal Service is a sign of the changing times. Electronic mail is simply faster and more efficient than traditional or "snail mail."

I have been involved in volunteer organizations for a long time. The internet and electronic mail have made things much easier for volunteers to keep things organized.

A case in point is the registration for the RAMROD bicycle rally, which typically involves close to 2000 rider registration forms. In the mid-nineties registration was by snail mail and data on all 2000 riders had to be hand-typed into a computer database. This required the assistance of about twelve volunteers to make it happen.

By contrast, today registration occurs **online**, in fact RAMROD will no longer accept snail mail registration. The data is automatically captured and processed. Notices go out by email so there is no longer a need to manually send 2000 letters to the individual riders. Where the job previously required twelve volunteers, the work can now be done by one coordinator.

Mike and Key gives members the option of accepting the monthly newsletter by email or regular mail. Currently 50 of us choose the snail mail option. Yet at least 35 of those 50 have functioning email accounts and could receive the newsletter electronically.

THE COST OF PRINTING AND MAILING THE MONTHLY NEWSLETTER IS MORE THAN THE COST OF MEMBERSHIP.

Every penny the Club collects, whether from membership dues or from our projects, is given back to Club members in the form of services and benefits. We provide a newsletter, subsidize parties and picnics, support Field Day and do much more.

If members were to switch to getting the newsletter by email, it would free up funds that could be used to improve member services. It would also make the work of the Newsletter editor much easier.

Help us do a better job for you. If you currently get your newsletter by post, consider switching to the electronic form.

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>.

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

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

March 17, 2013. Burnaby ARC Swap Meet. Surrey, BC Community Hall from 10:00am until 1:00pm. <http://ve7bar.org/swap-meet/>

March 23, 2013. MicroHAMS Digital Conference. Redmond, WA. This is an ARRL sanctioned event.

<http://www.microhams.com/softcontent.aspx?scId=9>

April 13, 2013 Yakima Hamfest. Yakima, Washington. Selah Civic Center, 216 South 1st Street, Selah, WA. For information, contact Lindsay Kooser (509)965-6612 n7rhw@arrl.net

. For table registration information, contact Ray, K7VAL, (206)610-3619 or (509)697-9000, k7val@arrl.net <http://w7aq.org/>

April 13-14, 2013. Communications Academy. Seattle, WA. This is an ARRL sanctioned event. Registration will open in mid-February at <http://www.commacademy.org>

April 26-27-28, 2013. Idaho State Convention. Boise, ID, Voice of Idaho ARC. This is an ARRL sanctioned event. Info, Don Lynn, ND7L, (208)899-5801, don_lynn@pacbell.net. <http://www.idahostateconvention.com/>

Email Received...

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

Location: Suite #380 (3rd Floor) in the Auburn Annex Building @ One East Main Street in Downtown Auburn WA. 98002

(206-400-1723) Also see: <http://HamShare.com>.

Registration : Send your: Name, Call Sign, Phone number, Email address and Class/workshop number to: Email.Hamshare@Yahoo.com.



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 Rattler 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 MikroTik 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

Also Received on Email...

Meshapalooza 2013

"Meshapalooza" is the Second MESH Networking Hands-on Workshop presented by Hamshare.com

~9AM to 5:30PM+ on Saturday March 16th, 2013. Lunch is from 12 noon to 1pm at local Auburn WA. Cafes.
Location, One East Main Street @ the Annex Bldg in downtown Auburn WA. Suite #380 up on the 3rd floor.
Downstairs doors are open from ~8:45am to 9:00am

Program Starting off @ 9am with a One Hour Long "Show and Tell Presentation"

Subjects: (Revisions will happen)

- **Applications** to run "on and over" a Mesh Network; Neighborhood networks (What to use your WRT for)
- **VoIP / SIP** Telephony, Voice over IP on the Mesh Network
- **Video "chat"**, Video on the Mesh Network
- **Pogoplug** Ver 4 as a Linux Server
- **Pogoplug** as your DRATS Ratreflector
- **DSTAR Voice** over the Mesh Network
- **D-RATS / IRC**, DRATS Data over the Mesh Network
- **Breakout Networking Class**; Basic network infrastructure (other router types, pros/cons of devices, and cabling choices)
- **Breakout Class**; High-level; discussing the various routers available to us and pros/cons of the models; Limitations to Cat5e / Cat6 cabling, differences between switches, and hubs,,,, etc.
- **Breakout Class**; Advanced firmware (JTAG / Custom builds)
- **Breakout Class**; Linux Introduction (Bootable Linux on a 16GB+ USB 3.0 Thumb Drive)
 - Debian can be downloaded from here: <http://www.debian.org/CD/live/> and the Install instructions from here: <http://www.debian.org/releases/stable/installmanual>.
 - Ubuntu can be downloaded from here: <http://www.ubuntu.com/download/desktop>
 - How to create a USB flash media boot Linux: <http://www.pendrivelinux.com/debian-live-flash-drive-install-from-windows/>

The instructions for the USB flash media are specific for Debian but can be used with any Linux distribution.
Using the USB Flash media is a great way to try out different versions and desktop environments to find the one you like the best.
- **Breakout IRC Class**
- **Breakout Class**; Long range / Backbone discussion (antennas, routers or other devices, physical locations where hardware is or could be installed)
- **Breakout Class**, Failover routing and/or meshing cabled links for directional antennas
- **Mobile** applications (active GPS tracking?)
- **Applications** - "What if." or "Hey, what about.." Best discussed over Lunch and Dinner @ Local Cafes.

To Register and Sign-up, Please send:

- 1.- Your Name
- 2.- Your Call
- 3.- Your Phone#
- 4.- Your Email Address
- 5.- and the Workshop # **13525-MESH-P**

To: Email.Hamshare@Yahoo.com

For Maximum Fun, Bring your WRT54G and your Bullets for upgrades and tweaking.

Also Bring your Mikrotik RB750 Routers. (+ Computer & Power supply, Power Strip and CAT5 Cables)

M&K General Meeting Minutes

By Ivy Nelson-Groves WA7IVY, Secretary

General Meeting Agenda – 19 January 2013

Meeting was called to order at 10:00 am by the Club 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.

Member Introductions

Officer Reports:

President: Robert KD7WNV: Report was in the Relay. We will be holding an election for the vacant trustee position today. Kathy KB7QMO informed the Membership committee will take care of the Awards banquet. They have tentatively arranged for the dinner to be at the Old Spaghetti Factory at Southcenter. They can accommodate a maximum of 72 people.

Secretary: Ivy WA7IVY: No report.

Treasurer: Dave KB7PSN: The club's books are in good order. We have renewed the plates for the trailers. The books from 2012 have been audited and have passed. The reservation for the Picnic has also been paid.

Activities Manager: George AE7G: Today's program will be about Public Service Events.

Chairman of the Board: Tim K7ANE: resigned. An election will be held at the next Board meeting for the new COB from amongst the Trustees.

Radio Officer: Hal N7NW: The snow on Tiger Mountain is rather deep. Our repeater is doing well, although Hal has noticed some minor noise in the past couple of days. He expects that this is weather related. Hal mentioned that the 220 repeater is underutilized and encourages the membership to use it. Alan KB7SUV mentioned his last visit to the repeater facility.

Quorum present.

A motion was made to approve the minutes of the previous meeting as printed in the Relay was made by Steve KD7IQL, seconded by Sam N7RHE. Motion passed.

Vice President: Kathy KB7QMO: The following prospective member were voted on by the membership: Forrest Jones, KF7ZNC. He was approved by the membership.

Relay Editor: Gary KG7KU: Gary thanked everyone who sent in articles and encouraged others to contribute.

Webmaster: Jim KD7BAT: The web is up to date. The Elmer page has been updated recently and there are several new items on the swap page. There is also an updated form for the Country Store at Flea Market available on the website.

Standing Committee Reports:

Strategic Planning: Mike N7WA: no report.

Facilities & Publicity: Daniel KLWM: not present.

Education: Tim K7ANE: not present. If anyone knows of any licensing course opportunities, please send them to our webmaster for inclusion on the site.

Public Service: Robert ND7WNV: The Public Service booklet is progressing. The meeting will be this afternoon at the Cedar River Smokehouse.

Technical and Special Interest: Gil W7GIL: no report.

Other Committees:

VE Exams: Scott AG7T: 17 people attended exams: 13 Technicians; 2 Generals; and 1 Extra were awarded. For 2012: 183 took exams; 91 technicians were awarded, 41 Generals and 28 Extras, and 208 elements were given.

Logo: Jim N7MU: There is a new catalog for the logo apparel; if you would like to order some logoed apparel, please see Jim or Kathy KB7QMO.

Membership: Gary KG7KU: Gary asked for feedback and suggestions on what we can do to make the club better. mikeandkeymembers@gmail.com is the email for any communication to the committee. Committee meetings will be on the 2nd Saturday of the month, contact Gary or Kathy KB7QMO for location. March 23 or April 6th will be the proposed Awards banquet dates.

By Laws Review: Dave KB7PSN: The committee recently met and 75% of the changes have been reviewed. The last revision was in 2001. The next meeting will be on February 3rd, to finish it up and get it prepared for the board and then to the general membership for final approval.

Flea Market: Hal N7NW/Mike N7WA: Setup will be on March 8th, and the Flea Market will be on March 9th. We need about 120 people to help in order to put on this event, which is our fund raising event for the year. Hal spoke about the jobs that are available. Hospitality and Security really need some additional signups.

Field Day: Ivy WA7IVY: 153 days to Field Day setup. We are starting to get into gear for 2013. One position that I need to fill for this year is the Bonus Points chair. If you are interested, please contact Ivy or Richard K7MER.

Picnic: The reservation has been made (at the Renton Resident rate) at Gene Coulon Park in Renton for our August meeting.

Old Business

Election for Trustee #3: John NU6A, Monica KF7QLX, Dave KC7FSR were nominated and accepted their nominations. After a run-off and two tied votes, a motion was made by and seconded by to determine the election by coin toss. John NU6A was the winner of the coin toss and will finish out the Trustee #3 position until the election in March.

New Business:

The Audit committee met this morning and did the audit for General Books for 2012. The books were found to be in order. The next meeting of the Audit committee will in June to review the Flea Market accounts.

Good of the Order:

Alligator Award: Dean N7XS still holds the alligator award. The intended recipient was not present.

It was mentioned to the membership that an email concerning Senate Bill 5000 which has been proposed concerning towers, but it may not directly apply to ham radio operators. Michael contacted his legislator, and they responded that it was primarily geared to preventing collisions for crop-dusters.

The next Mike & Key Board meeting will be on the first Tuesday of the month, February 5th at 7:30 pm at the Salvation Army in Renton.

The next Membership committee meeting will be Saturday, February 9th at 2:00 pm at Valley View Library in Tukwila.

The next Mike & Key General Membership meeting will be on the third Saturday of the month, February 16th 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.

3 guests; 70 members; 61 ARRL members.

Attested: Ivy Nelson-Groves, WA7IVY, Secretary

M&K Board Meeting Minutes

By Ivy Nelson-Groves WA7IVY, Secretary



Meeting Held – 05 February 2013

Officers present		
X	President	Robert Grinnell KD7WNV
X	Vice President	Kathy Martin KB7QMO
X	Secretary	Ivy Nelson-Groves WA7IVY
X	Treasurer	Dave Smith KB7PSN
X	Activities Manager	George Thornton AE7G
X	Radio Officer	Hal Goodell N7NW
Trustees present		
X	No. 1	Mike Dinkelman N7WA
X	No. 2	Kathleen Weiss KF7MUD
	No. 3	John Marthens NU6A
X	No. 4	Gil Drynan W7GIL
X	No. 5	Daniel Stevens KL7WM
Other officers (non-voting)		
X	Relay Editor	Gary Bryan KG7KU
X	Webmaster	Jim Etwiler KD7BAT
Visitors		
	Michael Hansen	KG7MX

The President called the meeting to order in the absence of a Chairman of the Board at 7:30 p.m.

Minutes: A correction to the minutes to state that the President was in attendance. A motion was made to approve the minutes as amended was made by Dave and seconded by Robert KD7WNV. Motion passed.

A motion was made that Daniel KL7WM be elected chairman of the board was made by Gil W7GIL, and seconded by George AE7G. Motion passed.

Reports:

Chairman of the Board – Daniel KL7WM: We are moving the antennas and coax on Saturday afternoon. Mike took a lot of the equipment home this evening, and Hal took the radio. They will begin preliminary work as of Feb 10th and the work should take 3 months. We will have a place to meet for the board meeting next month, and the membership meeting should not be affected other than the entrance (enter on the side of the building). We probably won't have room for the Library until the construction is completed.

President – Robert KD7WNV: Robert has been approached by the Highline Club about having a joint effort working with them about any upcoming legislation about the antennas (in reference to SB 5000, which has been withdrawn). It was suggested that someone could act as our liaison with the club concerning this.

Vice President – Kathy KB7QMO: Membership applications for consideration: James (Jim) Monson KD7HLJ; James Wralstad WQ7H; Morgan Pasquier KF7YGS; and Ralph Forsgren K7BCN. They were approved.

Secretary – Ivy WA7IVY: No report.

Treasurer – Dave KB7PSN: The Club's books are in order. The IRS forms have been filed. We have the new tags for the trailers. We have received funds for three ads in the Public Service Booklet. The first quarter payment has been made for the meeting facilities. Deposit was made for the Picnic reservation. One of our cds will be rolling over in March. The insurance policy has been renewed. There will be a roster published and sent out with the February relay to the membership.

Activity Manager – George AE7G: Flea Market presentation in February and Elections will be held in May. The April meeting hasn't been finalized at this point. If anyone has any ideas please let George know.

Radio Officer – HAL N7NW: Repeaters are working. We cannot get to the site (due to the snow) and can't do anything about the intermittent noise until we can get up there. The repeater site rental needs to be paid soon.

Relay Editor – Gary KG7KU: Gary thanked everyone for their contributions to the Relay. Gary will only be sending out the membership roster to members only this month. Gary will include information about our meeting site during the construction period. Gary would like pictures of the area during construction; if anyone is available to take some, he would appreciate it. George asked how many Relays that we actually send out in the mail; it is about 45 currently. It saves the club quite a bit to send the Relay electronically instead of using the US Mail; the yearly dues don't cover the cost of mailing a year worth of the Relay. Daniel suggested that we have a sandwich board noting where the entrance will be for the meeting to direct new folks and people who come to be tested. It was also suggested that we mention this on the website as well.

Webmaster – Jim KD7BAT: The website is up to date. Jim received several emails and he forwarded them as appropriate. The list of classes has been recently updated as well.

Standing Committees:

Strategic Planning – Mike N7WA: No report.

Facilities – Daniel KL7WM: Covered earlier in discussion with the renovation of the Salvation Army.

Education & Training – John NU6A: not present. Daniel KL7WM mentioned a few other classes that are coming up in Tukwila and Ballard.
Public Service – Kathleen KF7MUD: Robert KD7 WNV mentioned that the Chilly Hilly on the last Sunday of February. Booklet preparation is proceeding and all of the data should be finalized soon. Robert is tracking down the last few ads at this point. March kicks off the first SeaFair event.

Technical – Gil W7GIL: No report.

By Laws – Dave KB7PSN: The next meeting will be Sunday, February 24th at the Kent Library at 2pm. This will be finalizing the first walk through of the proposed changes.

Membership – Kathy KB7QMO: The Membership and Banquet committees have merged. We have a reserved room at the Spaghetti Factory in Tukwila on March 23rd. The room can seat 72 people. There will be three choices of entrée. The price may be about \$10 per person, but this hasn't been determined yet. The next meeting will be at Valley View Library, February 9th, at 2:15 pm. We would probably need to bring a projection screen for the presentation.

Field Day – Ivy WA7IVY: no report.

Flea Market – HAL N7NW and Mike N7WA: Last meeting next Tuesday and the presentation at this month's meeting will be on the Flea Market. The Radio Club of Tacoma have cancelled their flea market this year. We still need help with ticket takers, security and announcing.

Logo – Jim N7MU, Dan N7QHC, Dawn KC7YYB: no report.

Old Business: No old business.

New business:

Robert KD7WNV wants to produce some video at the Flea Market and is looking for folks to help out.

Kathy KB7QMO asked about the legal ramifications of the use of the words "auction," "raffle," and "drawing" and was given a clarification by Michael KG7MX.

We will be taking nominations for the next year's officers at the February meeting. All the existing officers are willing to run again.

Good of the Order:

David KB7PSN mentioned that he attended a Citizen Preparedness Academy last weekend, to train people to present Emergency Preparedness information.

There being no further business, the Chairman of the Board adjourned the meeting at 8:50 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)

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, 2nd 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 – February / March / April

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
10 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)	11 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)	12 Fleamarket Mtg – Dinkelman's Residence 2000 – Seattle Red Cross Comm Team Net 147.080 (Weekly)	13 2000 –Evergreen Intertie Gen/Tech Info Net – 145.33 (Weekly) 2000 – Educational Radio Net – PSRG 146.96 (Weekly) 2100 – NWSOAR Net 146.82 (Weekly)	14 1900 – M&K Public Service Net 146.82 (Wkly) 2000 – Computer & Packet Net 145.33 (Wkly)	15	16 1000–M&K Club Meeting, Renton 1230– M&K Ham Radio Exams, Renton. Scott-ag7t@arrl.net 0900 – WA State Emerg. Net (WSEN) ARES HF Net 3.985 (Weekly)
17	18 1900 – Seattle ACS Net 146.90 (Weekly) 1930 – PSRG Net 146.96 Wkly) 2000 –YL Net 145.33 (Wkly)	19 2000 – Snohomish Co. ACS/RACES Net 146.92 (Weekly)	20	21	22	23
24 Public Service: Chilly Hilly Bike Ride Bainbridge Island, Contact: Craig AC7BV CraigH@Blarg.net	25	26	27	28	01 – MARCH –	02
03	04	05 M&K Board Mtg Salvation Army Bldg Renton, 7:30 pm	06 Relay Articles Due 23:59:59	07	08 M&K Fleamarket - SETUP	09 M&K Fleamarket – 9am to 3pm Puyallup Fairgrounds
10	11	12	13	14	15	16 1000–M&K Club Meeting, Renton 1230– M&K Ham Radio Exams. Scott- ag7t@arrl.net Public Service: St. Patrick's Day Parade, Seattle. Contact: Liz N7ZXH hamsignup@seafairparademarshals.org
17	18	19	20	21	22	23
24	25	26	27	28	29	30 Public Service: All Fool's Day Parade, Woodinville. Contact: Liz N7ZXH hamsignup@seafairparademarshals.org
31	01 – APRIL –	02	03	04	05	06