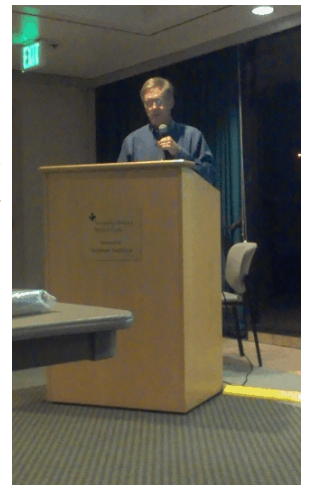


Volume 59 Number 2 March 2013

## President's QRM

I really enjoyed Dave's talk at the February meeting, especially his detailed diagrams of his station. Today HAMCON Inc., had its annual meeting, we kicked around a few idea for the convention coming up in 2015 here in Los Angeles County / Orange County. We also elected a new Board of Directors for HAMCON, and yours truly stepped into the Chair position of the corporation.



Looking forward to what Dick, N6AA our ARRL South West Director, has to tell us regarding new happenings. Dick is always a fun speaker, he can address basically anything.

We have a good team put together for stage 13 for the Baker2Vegas race coming up April 13th. If you are interested fill out the form found at [www.radiobaker2vegas.org](http://www.radiobaker2vegas.org), there are still 30 days left to submit your application.



I am waiting to hear from Don, WG6H as to when and where we will kick-off our field day meetings. That will happen something in March, so you will most likely hear either hear at the meeting or via our Wednesday night 10 meter net or the Thursday night net on 2 meter net on Magic, both at 8:00PM local.

Look forward to seeing you at the March meeting!

73  
Steve, KN6Y

Next **SFVARC Club Meeting**  
Friday, March 15  
at 7:30pm  
Northridge Hospital  
Penthouse  
18300 Roscoe Blvd,  
Northridge, CA 91325

San Fernando Valley  
Amateur Radio Club  
ARRL Affiliated Club #1684

### W6SD

ARRL Special Service Club  
P.O. Box 280517  
Northridge, CA 91328

The San Fernando Valley Amateur Radio Club, Inc (SFVARC) is an organization interested in Amateur Radio as a hobby. The SFVARC is affiliated with the American Radio Relay League and the Los Angeles Council of Amateur Radio Clubs, Inc. Members of the Club conduct licensing classes on a continuing basis. Anyone interested in Amateur Radio is invited to attend our monthly meetings.

#### Club Officers

##### President

Steve Wardlaw, KN6Y  
kn6y @ social.rr. com

##### Executive VP

Tom Peabody, K6TGP  
tpbdy @ verizon. net

##### Membership Vice President

Steve Rudolph, W6OFV  
steve-w6ofv @ lycos. com

##### Planning Vice President

John Van Egmond, K16ZS  
jve @ earthlink. net

##### Technical Vice President

Don Pettric, WG6H  
wg6h @ arrl. net

##### Secretary

Johnnie Spots, W6HTY  
n123js @ yahoo. com

##### Treasurer

Jack Eyster, KO6V  
mr.eyster @ gmail. com

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bill\_91326 @ verizon. net

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KN6Y @ ARRL .NET

##### HAMCON delegates

Steve Wardlaw , KN6Y  
KN6Y @ ARRL .NET  
Ginger Wonderling, AB6YL  
AB6YL @ earthlink .net

##### Awards Manager

WAS & VUCC card checker for ARRL  
Arnold Schwartz, WB6PJC  
usarnie1 @ sbcglobal.net  
(818) 222-7037

## POSTINGS AND NOTICES

Monthly Meetings: Third Friday of the month, 7:30 p.m. at Northridge Hospital (18300 Roscoe Blvd, Northridge). Most Club activities take place at the Fifth Floor Penthouse, but we may be assigned other rooms from time to time. Signs will be posted at the Penthouse elevator if there is such a change.

Board Meetings: The 4<sup>th</sup> Thursday of the month, 7:30 p.m., Northridge Hospital, Garden Room. These are open meetings and all members are welcome to attend!

World Wide Web Site: <http://www.w6sd.net>

# Club Nets:

- 2 meter simplex: Tuesdays, 8 p.m. on 145.570 MHz.

Net Control: The Net Control Operators are Jim Sullivan WB6TNF, Phil Reiber KJ6ZI, John Campeau AD6KT, and Johnnie Spotts W6HTY.

Net Control: Varies

- 10 meter: Wednesdays, 8 p.m. on 28.310 MHz +/- QRM in the Upper Side Band Mode

- 2 meter repeater: Thursdays, 8 p.m., on the Magic Mountain Repeater (147.735 MHz - PL100) or Duck Mountain (147.24 + MHz) if Magic is unavailable.

Net Control: The Net Control Operators are Phil Reiber, KJ6ZI, and Ted Mattock, KE6EIT.

6th District DX QSL Bureau: The 6th District DX QSL Bureau is now in Fairfax, CA. The Bureau prefers that you purchase envelopes from them (\$.64 each, including postage) Contact the Bureau at PO Box 970, Fairfax, CA 94978-0970 or visit their web page at <http://www.qslbureau.org/>

You can now follow them on Twitter.com! You will find us at @ARRL\_6\_Bureau .

Ham Exams: Held at the Northridge Hospital, on the first Saturday of February, April, June, August, October and December. **Registration begins at 8:00 a.m. and doors close at 9:00 a.m. Testing begins after registration is complete.** You do not have to be a Club member to take an examination. There is a \$4 examination fee. Also, if you are upgrading your license, please bring your original license, a copy of your license, and originals and copies of any "Certificates of Completion". For more information, call Jim Sullivan (WB6TNF) 818-348-4155. In all other months, exams are conducted by the Santa Clarita Amateur Radio Club; contact Ron Klein, K6VPV at 661-259-0948

Newsletter Contributions: Please contact Bernard Falkin, KG6FBM [kg6fbm at bflocks dot com](mailto:kg6fbm@bflocks.com) if you have anything for the newsletter.

The opinions expressed in the W6SD Carrier are solely those of the editor or other contributors and do not necessarily reflect the opinions of either the Board of Directors or membership of the SFVARC.

HSMM-MESH <http://hsmm-mesh.org/>  
Written by Jim Kinter, K5KTF  
Monday, 18 January 2010 23:34

HSMM-MESH™ is a high speed, self discovering, self configuring, fault tolerant, wireless computer network that can run for days from a fully charged car battery, or indefinitely with the addition of a modest solar array or other supplemental power source. The focus is on emergency communications.

In its current form it is built using the Linksys WRT54GL wireless router and operates on channels 1-6 of the 2.4GHz ISM band, which overlaps with the upper portion of the 13cm amateur radio band. Other platforms and bands may be supported as development resources permit.

OLSR is used for auto linking of the mesh node radios.

OpenWRT firmware tools are used for firmware development.

HSMM-MESH™ is currently being designed, developed and deployed as an amateur radio broadband communications system and being used in and around Austin, and Plano Texas, as well as other sites.

Glenn KD5MFW, David AD5OO, Bob WB5AOH and Rick NG5V are the gents spearheading the efforts, while yours truly, Jim K5KTF keeps the website up and running to provide information about the project. There is a distributed development community with users in a number of areas of the USA and other continents.

If you have questions, our forums would be a great place to research and ask questions. You will need to register and login to post to them.

<http://hsmm-mesh.org/just-starting-read-this.html>  
Starting to use HSMM-MESH™  
Written by Rick Kirchof, NG5V

So you just discovered HSMM-MESH™ and may be wondering what is going on. HSMM-MESH is the self configuring ham network. It is time to have our own Broadband-Hamnet. Hams have transferred IP data by radio for ages. This network is FAST!

Lets start with some basic concepts. We will be expanding this page so check back from time to time.

Mesh nodes were originally consumer

wireless routers but changed function when the firmware was changed

After conversion, the WAN, LAN and Wi-Fi ports are linked using special rules and no longer operate like a normal wireless router

Mesh nodes are self discovering, self configuring, self advertising and fault tolerant

Mesh nodes are a data network without the wires. Most tasks that you can do over a wired network will work on a mesh node

Mesh nodes are small, portable, low-power and inexpensive. They are easily battery powered

Mesh nodes can easily have a range of 10 miles or more using stock power and gain antennas if you have true line of sight

Mesh nodes communicate with other nodes over Wi-Fi frequencies and only talk to other mesh nodes on the wireless port

You can't use Wi-Fi to connect to a mesh node from your computer, netbook, smart phone or other wireless device

Computers connect to mesh nodes with an Ethernet cable and control them using a web browser

The web address of your mesh node is <http://localnode:8080> From here, you can jump to any other member mesh node

Mesh nodes use peer to peer connections. This means each node connect to all others, not the star configuration where all users connect to a single access point

Peer to peer connections share the same SSID (network name) That name is HSMM-MESH.

If you change the SSID, spell it wrong or change the punctuation, the mesh is broken. It must be exactly the same for all nodes

Each mesh node must have a unique node name. Normally this is your callsign with a suffix (w1aw-1, w1aw-2, w1aw-mobile...)

The SSID is the network name seen over wifi, the Node name is what you named the device (your callsign + suffix)

Mesh nodes operate on channel 1. Channels 1-6 of the 802.11B/G wireless band are completely within the 2.4ghz ham band

Mesh nodes on channels 1-6 use FCC part 97 rules instead of part 15. This allows big antennas, more power, other changes

Mesh nodes talk to other nodes using RF (Wi-Fi), to the Internet over the WAN port and to computers and devices using the LAN ports

Mesh nodes will create a network just by turning several of them on. They create high-speed data networks in minutes

Mesh nodes don't need any computer to be attached to pass data to other mesh nodes. Just plug one in, it will expand the mesh

Data is data. It can be IP Video, VOIP, LAN traffic between computers, clients to a web server/FTP/NAS/printer, keyboard chat,

hop to the Internet, etc

IP addresses exist but you interact with mesh nodes by using their name. The names can be tactical but your ham call is still beacons

Any mesh node within wireless range automatically joins the existing mesh and exchanges available routes with all others

As signals grow stronger and fade, nodes join and leave the mesh. It can happen many times as you drive around

Your path between any two mesh nodes may be single or multiple hop and can/will change with no notice or impact to you

A single node joining your mesh may add many other nodes if it can see other mesh nodes the first group can't reach

Mesh node owners from different parts of the country will join any existing mesh just by coming within range if it

Doman Name Service (DNS) is automatically provided to all mesh members, allowing them to see/interact with other mesh nodes

After initial conversion and setting the node name and password, no further changes are needed to connect with other nodes

Computer resources on your mesh node can be shared with others on the mesh. These are Advertised Services

Your mesh node can see and use advertised services on other nodes by just clicking on them in your web browser

If one mesh node has it's WAN port plugged into an Internet feed, and a config change, it can provide Internet to all mesh members

Firmware upgrades and patching are done from an internal menu (Internet or local copy of the firmware upgrade is required)

Mesh nodes can be remotely managed and the firmware or patch level upgraded by any user with the password for that node

Users on other parts of the mesh may view other mesh node status screens and even wireless devices visible to that specific node

Mesh nodes have several modes of operation and can change roles as you dictate

Having spare mesh nodes means you can deploy them for each of several roles, such as putting up a local AP for served agencies

Several mesh nodes + one experienced ham operator = a portable, quick deployment, swiss army knife of network services

## Monthly Luncheon

We all enjoyed the lunch at Golden Hunan, now we are going to the next one. I have picked Romano's Macaroni Grill, 19400 Plummer St, Northridge, CA 91324. 818-725-2620. See you March 9, at 11:30am.

Elaine

## WAS & VUCC Award Card Checking

Please bring your QSL cards and completed applicable forms to the next meeting. Awards Manager Arnie, WB6PJC, will be available to check your cards.

### Simplex Net Reminder

Two meter simplex:  
Tuesdays, 8 p.m. on  
145.570 MHz, Jim,  
WB6TNF

## 2013 W6SD PICNIC

SATURDAY, MAY 18TH

**FOOD CATEGORIES : SALADS(POTATO, GREEN, PASTA), BEANS, CHIPS & DIPS, APPETIZERS, DESSERTS  
NAME FOOD ITEM**

Contact Elaine Nolan at 818/891-8875 or 818/439-3897 and kd6plu@verizon.net or Frances Embry (she will have hard copy to sign up at club meetings.

## Northridge VE Schedule for 2013

The test session registration is from 8:00 am until 9:00 am. Anyone arriving after 9:00 will be turned away.

Time limit to take a test is 90 minutes. Exams will be held in the fifth floor Penthouse of the north building (Carol Pump building) of the Northridge Hospital. Signs will be posted if the room is changed.

**4/6/13, 6/1/13, 8/3/13, 10/5/13, and 12/7/13.**

Editor's Note- I was asked to print this exactly as it was given to me. No formatting changes.

Application For SFVARC Membership/Renewal

Date \_\_\_\_\_

Name \_\_\_\_\_ Call \_\_\_\_\_ License  
Class \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_  
State \_\_\_\_\_ Zip \_\_\_\_\_

Telephone \_\_\_\_\_ Email  
\_\_\_\_\_

ARRL member? \_\_\_\_\_

New member ? \_\_\_\_\_ Renewal ? \_\_\_\_\_

Exclude your info from printed club membership roster? Yes \_\_\_\_\_ No \_\_\_\_\_

Dues information:

Full year \$18 or if under age 18 - \$6

April – Dec \$12 & €œ \$4

August – Dec \$6 & €œ \$2

Family membership: each additional family member  
is charged the under 18 age rate

Please make checks payable to SFVARC

If mailing, address to: SanFernandoValleyARC, P.O. Box 280517, Northridge, Ca.  
91328-0517

Thank you for your interest and participation in the SFVARC



San Fernando Valley Amateur Radio Club  
 P.O. Box 280517-0517  
 Northridge, CA 91328-0517



**Next Meeting: Friday, March 15, at 7:30pm at Penthouse, Northridge Hospital**

**W6SD.NET**

**For Sale**

IC 765 with matching speaker and microphone. Original owner. Mint condition and just back from an overhaul at Turner Electronics. 250 hz CW filter.

\$1,100. Roger W6LAX 818-455-5038, w6lax @ arrl .net

Yaesu FT-1000MP Mark V. 500 hz and 250 hz CW filters. Original owner. Low hours and flawless condition. \$1,200. Roger W6LAX 818-455-5038, w6lax @ arrl .net

Ameritron HF Amp AL-1200 \$1,500. Roger W6LAX

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