



# MAPLE VALLEY HAMLINK



VOL. 16

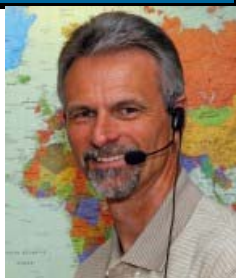
July-August 2009

NO. 7

## PRESIDENT'S CORNER

by **Scott NS7C**

As I type this article, I am listening to the real time audio playback of the Apollo 11 mission to the moon from the NASA website. This being the 40th anniversary of the first moon landing, NASA is making the recordings available in the same time line as the original mission. I find it very interesting to revisit this 40 years later. I was in junior high when Neil Armstrong stepped off the LM (and promptly fumbled his lines), but I remember being one of the 600 million people glued to the TV watching the whole thing.



The moon walk images actually came from the tracking station at the Parkes Observatory in Australia. The large CSIRO radio telescope there provided a superior signal over the other two tracking stations in California and Canberra. Fortunately, it took Armstrong and Aldrin a long time to get suited up, which gave enough time for the moon to rise far enough above the horizon for the Parkes tracking station to acquire the signal, which came online only minutes before the camera was turned on. The link to Houston included both land based microwave relay and satellite relay, which introduced an additional 300 millisecond delay for the US audience.



The CSIRO dish taken a few days before the Apollo 11 mission

The S-Band downlink was centered on a carrier fre-

Come 'an Get it! . . .

Next club meeting is the Summer Picnic at Gary Wigle's house at 6:00 p.m. on Tuesday August 4th. See details inside. Mark it on your calendar.



quency of 2282.5MHz, (which is just below the Amateur allocation of 2300-2310MHz) and used a 50MHz wide IF. The signal was split into several frequency modulated and phase modulated subcarriers containing voice, television, telemetry and biomedical information. The telemetry data was sent at the screaming data rate of 51.2 bits per second. And you were thinking 1200 baud packet radio is slow!

So much for historical trivia, back to the present day. I'm looking forward to seeing everyone at the annual club picnic on August 4th at Gary's (KB7VDG) house. This is great tradition for the club, a lot of fun, and the food is great!

And finally a big thanks to all the club members who have helped out at the various public service events over the past months. I realize this is prime vacation time here in the northwest, and it is difficult to work these activities into the schedule, so thank you for making it happen!

See you all at the picnic,

-Scott, NS7C

The Maple Valley Amateur Radio Club is a group of amateur radio enthusiasts in the greater Maple Valley area who meet and engage in activities to further the advancement of this hobby for the good of ourselves and the community. Everyone is welcome at the monthly meetings. A simplex net is held each Tuesday evening at 8:00 PM on 146.54 MHz.

<b>President:</b>	<b>Scott Currie</b>	<b>NS7C</b>	<b>ns7c@arrl.net</b>
<b>Vice President</b>	<b>Jim Aigner</b>	<b>N7MU</b>	<b>jimaigner@comcast.net</b>
<b>Secretary:</b>	<b>Larry McDonnell</b>	<b>KE7MPR</b>	<b>larrym@skynetbb.com</b>
<b>Treasurer:</b>	<b>Richard Green</b>	<b>KR7L</b>	<b>kr7l@arrl.net</b>

In the event of an emergency in the area, amateurs are encouraged to check in and or monitor at 10 minutes past even hours on 146.54 MHz simplex to provide status or ask for assistance.

MVARC, P.O. Box 488, Maple Valley, WA 98038

## SIMPLEX NET

by **Chuck, KK7CB**  
**Sto99@msn.com**

Simplex net every Tuesday night at 8:00 o'clock p.m. on 146.540 MHz.

ARES checkins as well. If any NCS has a conflict with these dates, please substitute at will, but let Chuck know at Sto99@msn.com



### Net Control Stations

July	28	Steve	WB7VAS
August	4	Picnic	Open
	11	John	N7SPN
	18	Gary	KB7VDG
	25	Richard	KR7L
Sept.	1	Peggy	KC7CLI
	8	Jim	N7MU
	15	Chuck	KK7CB
	22	Open	
	29	John	N7SPN

## COMMITTEE HEADS

ARES Team Leader:	Scott	NS7C
Education Liaison:	Peggy	KC7CLI
Event Support Coord:	Doug	N7BVT
Membership Committee:	Jim	N7MU
Newsletter Editor:	Richard	KR7L
Proof Reader	Jean	KE4NCX
Simplex Net Manager:	Chuck	KK7CB
Technical Committee:		
Scott	NS7C	Steve W7UDI
Rod	WE7X	Roger K7RXV
Phil	WA7ZWD	
Web Site Administrator:	Scott	NS7C

## COMING EVENTS

August 4th—Annual Club Picnic at Wigle's 6:00 PM

August 22nd—Crystal Mountain Bike Time Trials 9:00 AM

September 26th—Next Club Meeting 10:00 AM

Check-ins from June 23 through July 21, 2009

KK7CB	Chuck
AC7NP	Dale
K7SDE	Dale
N7VOE	Dan
K7SCD	Denise
KC7HVW	Dick
N7BVT	Doug
KF7ACL	Duke
KB7VDG	Gary
KF7BFK	Jerry
N7MU	Jim
W7WJM	Jim
N7SPN	John
W7LMK	Laura
KF7DMM	Leslie
W7MCK	Mathew
KE7WVP	Mike
KF7AOU	Mike
N7UIC	Mike
KE7OCY	Patrick
KF6MHR	Pat
W6FAT	Paul
KC7CLI	Peggy
WA7ZWD	Phil
KE7MPJ	Rich
KR7L	Richard
WB7AWO	Rick
KF7ACR	Ron
KE7MAI	Ryan
NS7C	Scott
KE7MPO	Skip
KE7OCX	Steve
WB7VAS	Steve
N7BOF	Tex

## OUR ELMER GROUP

Our Yahoo Elmer Group provides a forum for technical discussions (Elmering) and also planning for club activities. The Group can be found at:

[http://groups.yahoo.com/group/mvarc\\_elmers](http://groups.yahoo.com/group/mvarc_elmers)

To post a message, email to: [Mvarc\\_elmers@yahoogroups.com](mailto:Mvarc_elmers@yahoogroups.com)

To subscribe send email to:

[Mvarc\\_elmers-subscribe@yahoogroups.com](mailto:Mvarc_elmers-subscribe@yahoogroups.com)

To unsubscribe:

[mvarc\\_elmers-unsubscribe@yahoogroups.com](mailto:mvarc_elmers-unsubscribe@yahoogroups.com)

Questions? Contact Scott NS7C

## FIELD DAY RESULTS

Participants: 38  
 Power Source(s): Battery  
 Power Multiplier: 2X

Bonus Points:  
 100% Emergency power 200  
 Media Publicity 100  
 Set-up in Public Place 100  
 Information Booth 100  
 Site Visit by invited elected official 100  
 Site Visit by invited served agency official 100  
 Submitted via the Web 50  
 Educational activity 100  
 Total Bonus Points 850

Score Summary:  

	CW	Digi	Ph	Total
Total QSOs	17	37	242	
Total Points	34	74	242	350

 Claimed Score = 700



Photos by Rick WB6AWO

## MVARC Annual Ham Club Summer Picnic - - - Tuesday, August 4, 2009

at 6:00 PM at the home of Gary, KB7VDG and Linda. Bring your family and friends, We have 10 chairs, so you may want to bring an outdoor chair also. Plates, cups, utensils, napkins and soft drinks will be provided by Gary and Linda. Bring a main dish to barbecue for

yourself, and the following:

Last name:

A-J Salad or Vegetable & chips

K-Z Dessert

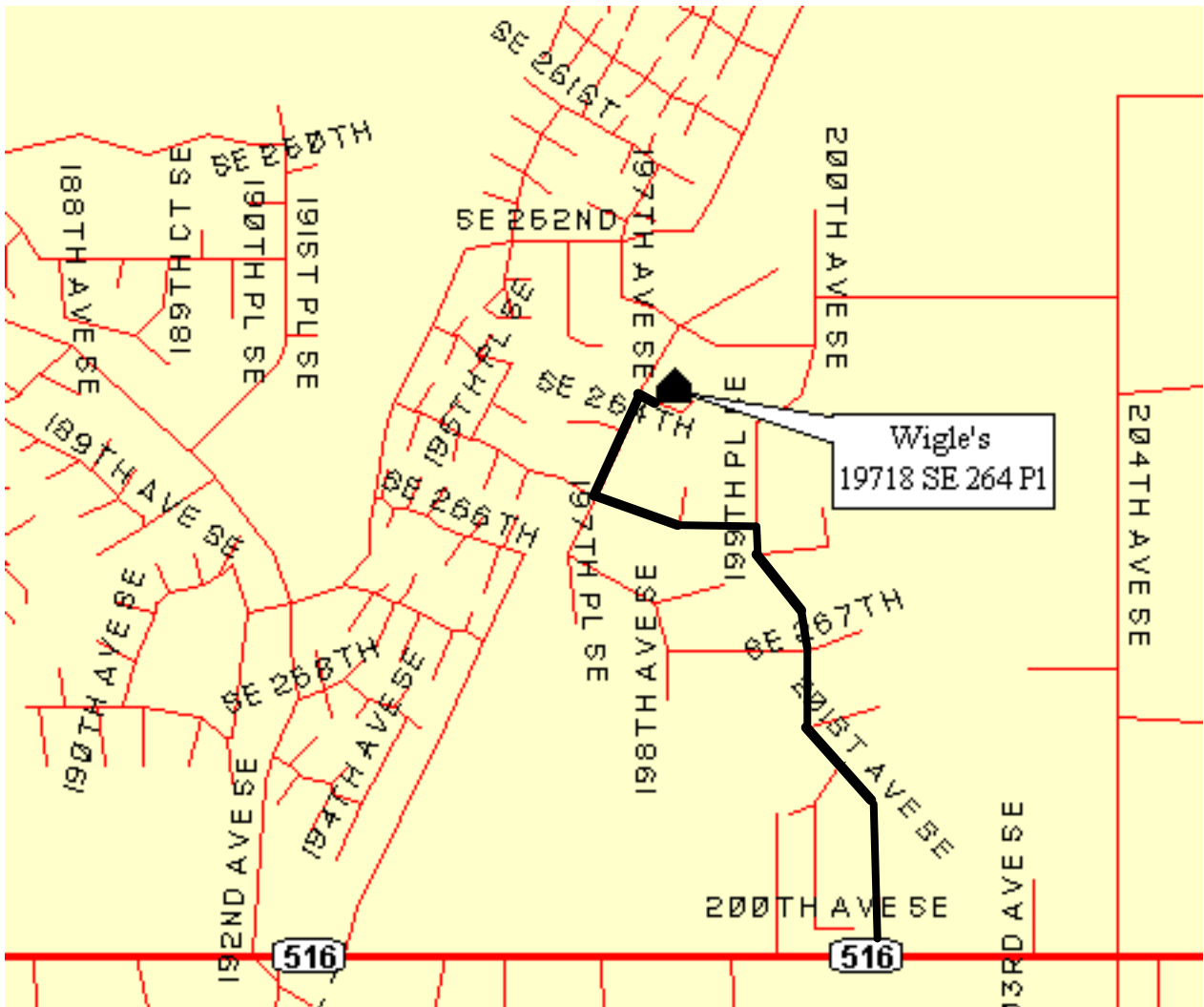
If raining, check on 146.54 MHz for instructions beginning at 5:30 PM (we may need postpone).

### Directions to Gary's

Make your way to Kent-Kangley (SR 516) and head for 201st Street. Turn onto 201st heading north off of

Kent-Kangley (you should see "Tall Timbers" signs at the entrance). Go to a 4-way stop and go straight through it (after stopping!). Go to the next left turn and turn onto 265th Street. Follow it around to another 4-way stop. Turn right onto 197th Ave. Take the next right onto 264th Place. We are the first house on the left. See the map below. We'll see everyone there!!!

Gary, KB7VDG



The crew at the Work it Out Triathlon



Volunteers at the Covington 5K



Runners at the Covington 5K

## TECHNICAL TIDBITS

by Scott, NS7C

### GPS and Ham Radio installation on my 2005 BMW K1200LT



#### PART 1

#### Project objectives:

Install a GPS unit in a convenient location for operation, and integrate the audio output to the intercom system.

Install a 2M/70CM Amateur Radio transceiver and antenna system and integrate it with the intercom system. Make provisions to be able to switch to a FRS/GRMS radio easily when needed.

Design the install to look as close as possible to a "factory" install.

#### Other changes:

The Autocom Active-7 intercom was installed by the previous owner, and connected to the stock radio/CD system. I removed the 6 CD changer and replaced it with a Dice iPod Integration kit. The Autocom was rewired to be powered from the Accessory circuit on the



bike instead of the Ignition circuit.

#### Dice iPod kit install

This was a relatively simple change. The 6-CD changer, lo-

cated in the right side case, was removed, leaving a rather large amount of connecting cable behind. I built a small sheet metal shelf in the side case, and mounted it using some of the original mounting for the CD changer. Though this does take up some space in the side case, it is much less space than was required by the CD changer. The Dice is mounted to the bottom of the shelf, and the shelf hides all the connecting cables. The iPod (a 4<sup>th</sup> generation 20GB model) is attached to the back wall of the side case using Velcro. It takes up almost no space and is controlled by the handlebar radio controls, so I do not need to access it while riding.

#### GPS install

I settled on the Garmin StreetPilot 2720 GPS unit for its size, feature set and maybe most important, the very good close-out price I paid for it. It is not a weatherproof unit, so it will need to be covered or removed and stowed during bad weather. The 2720 is similar in size to the BMW factory navigation option. After much thought, I decided the location of the factory navigation unit, on the "stingray" (the top of the fuel tank that looks a little like a stingray), was probably the best spot on the bike for this GPS. I used the extra "dash mount" that came with the GPS. I removed the upper side plastic from the bike, and then removed the stingray. I first removed the BMW emblem on the top of the stingray, this leaves a somewhat curved surface, but with

no bumps. The Garmin dash mount expects a flat surface, so I spent a bunch of time with a file matching the curve of the stingray on the mount. The double-sided sticky tape that comes with the mount is probably adequate to mount this unit, but I felt something a little more secure was needed. The mount is a two piece unit and has 4 small screws on the bottom that hold it together. I found 4 longer screws in my screw collection and then drilled 4 holes in the stingray and screwed the mount down along with the double-sided sticky tape. It's not coming off easily! This is not a locking mount, so the GPS needs to be removed and stowed when the bike is parked. It is easily removed. I stuck the BMW emblem on a piece of clear plexiglass that is cut to fit in the GPS mount, so the mount looks somewhat "finished" when the GPS is not installed. I purchased a power/audio cable for the GPS from a vendor on eBay which provides the custom Garmin connector on one end, and just the wires at the other end. I routed the cable from the battery area up along the frame to the stingray area and temporarily connected it directly to the battery. Final connections would come with the radio install. The GPS works well in this location on the K1200LT. Visibility is good as is access to the controls and it does not interfere with my view of the instrument panel.

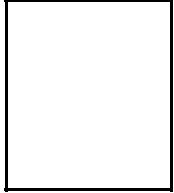
#### Ham antenna

I wanted the antenna to look like a factory installation, so I started with the factory BMW CB antenna mount. I choose a Diamond NR-770HB dual band radial-less mobile antenna. The HB model is black and has a SO-239 type mount. This antenna is a 1/2 wave on VHF and 5/8 wave on UHF, and does not require a ground plane, making it a good choice for motorcycle installation. The BMW CB mount is designed for a custom CB whip that

(Continued on page 5) **GPS and Ham Radio**



Maple Valley Amateur Radio Club  
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screws into the mount, no such attachment is available for a Ham antenna. I noted the hole in the top of the mount is about the same size as a BNC barrel, so I took a BNC male to SO-239 adapter and removed the BNC locking collar with

my Dremel tool. That left a barrel that would fit in the hole in the mount with a SO-239 connector on top. I drilled and taped two setscrew holes in the top of the mount. When screwed in, these setscrews

would catch the lip on the BNC barrel and lock it in place. I simply soldered the coax to the bottom of the adapter and covered it with heatshrink tubing. The BMW CB antenna cover will fit nicely over the NR-770HB if you cut it down just a bit. This gives the mount a finished factory look.

Next month: the Radio install.



***Ahh... Summer Time... and the  
Livin' is easy!***



108 F recorded at 301 PM

# August 2009

## Maple Valley Amateur Radio Club

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2 Xterra Black Dia- mond 8-1	3	4 Club Picnic @ Wigle's	5	6 * Frank W7FJB	7	8
9	10 * Tex N7BOF	11 Net John N7SPN	12	13	14	15
16	17	18 Net Gary KB7VDG	19	20	21	22 Crystal Mt Time Trials
23	24	25 Net Rich- ard KR7L	26	27	28	29
30	31					

PO BOX 488  
MAPLE VALLEY WA 98038

[www.kc7key.org](http://www.kc7key.org)

Tuesday night net 8:00 PM, 146.540  
MHz  
Net Control Volunteer call  
Chuck KK7CB 425-432-1119 for  
changes

\* - Happy Birthday



*An ARRL Affiliate Club*

# September 2009

## Maple Valley Amateur Radio Club

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1 Net Peggy KC7CLI	2	3	4	5
6	7	8 Net Jim N7MU	9	10	11	12
13	14 * Peggy KC7CLI	15 Net Chuck KK7CB	16	17	18	19
20	21	22 Net OPEN	23	24	25	26 Club Meeting 10 AM
27	28	29 Net John N7SPN	30			

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