



Hoodview News

Points of Interest:

- Hoodview Amateur Radio Club can be found on the web at www.wb7qiw.org
- HARC is a Special Service Club
- Email Cory with any information for the newsletter at jcschoch@frontier.net
- Feel free to join our affiliated activities: Hoodview Amateur Radio Travelers (HART) and Classy Radio Red Hatters

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General Club Meeting
on October 16th, 7:30 PM
At Mt. Hood Community College, Rm 1001
Hope to see you all there.

From The President — Shaun Harteloo, N7TNP



Happy October! It has been unseasonably warm for this time of year. I think we can attribute some of that to solar activity. Solar activity brings us good propagation. I don't know if you have heard, but I am hearing rumors of 10 meter openings. I love 10 meters, dare I say it...it is my favorite band. The fun thing about 10 meters is, when its good, its usually really good. When its bad, it stinks. That being said, all week this week, I have been hearing people talk about 10 meters being wide open. I hope some of you got in on that action. I have had some interesting QSO's of late myself. I've added 4 countries to my log, and some of the harder states to get for WAS this week. I feed some contacts for the Oceana DX and the 6QP Contest.

You may not be a contester, but contests are great to get contacts you are searching for. The stations in the contest need your contact, even if you don't submit a log. It is a great ways to pick up the rare DX, state and sometimes a county you are looking for. You can keep up on the weekly events at <http://www.hornucopia.com/contestcal/index.html>. WA7BNM has a comprehensive list of current contests, and the minimal amount of information you need to participate. These events are great ways to hone your radio operating skills, and can be fun, even if you don't take them seriously. I stumbled across an interesting contest coming soon. The Pirate QSO Party, you can find out more about it here: <http://pirateqsoparty.weebly.com/rules.html>. This seems to be one of the more complicated contests, however, it could be fun at the same time. As fall sets in, and we move towards winter, I look at this time of year as 'Radio Season.' I get the most amount of time to spin the dial in the shack. While the weather is cooperating, make sure your station is set for the winter. No one wants to brave the rain, cold, or snow to fix an antenna. Although some of the best weather for antenna raising is the rain. We live in the Northwest after all.

This month, our guest speaker will be Multnomah County Search and Rescue. I am interested to see what they have to say.

We also have a couple house cleaning things to round out 2014. The club is in need of someone to chair nominations for the 2015 board. If you are interested, please let me know!

73 my friends. Hope to see everyone soon! Shaun

Hoodview Amateur Radio Club WB7QIW

PO Box 951 | Gresham OR 97030

A non-profit organization organized exclusively for one or more of the purposes as specified in Section 501 (c) (3) of the Internal Revenue Code, Vol. 17, No. 6.

Board of Directors:

- President — Shaun Harteloo, N7TNP
- Vice President — Richard Berney, KE7AOA
- Secretary — Cory Schoch, KA7IUG
- Treasurer — George Dover, W7GEO
- Board — Mike Magnuson, N7ETA;
Scott Burrows KF7ZQO; Dave Gettman KA7WOF;
Chris Jensen, KG7ADQ, Pam Woods KC7Q

Test Your Knowledge

1. When must the station licensee make the station and its records available for FCC inspection? T1F13
 - A. At any time ten days after notification by the FCC of such an inspection
 - B. At any time upon request by an FCC representative
 - C. Only after failing to comply with an FCC notice of violation
 - D. Only when presented with a valid warrant by an FCC official or government agent

2. What is the radio horizon? T3C10
 - A. The distance over which two stations can communicate by direct path
 - B. The distance from the ground to a horizontally mounted antenna
 - C. The farthest point you can see when standing at the base of your antenna tower
 - D. The shortest distance between two points on the Earth's surface

3. What is the formula used to calculate electrical power in a DC circuit? T5C08
 - A. Power (P) equals voltage (E) multiplied by current (I)
 - B. Power (P) equals voltage (E) divided by current (I)
 - C. Power (P) equals voltage (E) minus current (I)
 - D. Power (P) equals voltage (E) plus current (I)

4. What license examinations may you administer when you are an accredited VE holding a General Class operator license? G1D02
 - A. General and Technician
 - B. General only
 - C. Technician only
 - D. Extra, General and Technician

5. Which of the following can be the result of an incorrectly adjusted speech processor? G4D03
 - A. Distorted speech
 - B. Splatter
 - C. Excessive background pickup
 - D. All of these choices are correct

6. Which of the following components should be added to an existing resistor to increase the resistance? G5C03
 - A. A resistor in parallel
 - B. A resistor in series
 - C. A capacitor in series
 - D. A capacitor in parallel

7. How does the maximum distance of ground-wave propagation change when the signal frequency is increased? E3C12
 - A. It stays the same
 - B. It increases
 - C. It decreases
 - D. It peaks at roughly 14 MHz

8. What function does a charge-coupled device (CCD) serve in a modern video camera? E6D04
 - A. It stores photo generated charges as signals corresponding to pixels
 - B. It generates the horizontal pulses needed for electron beam scanning
 - C. It focuses the light used to produce a pattern of electrical charges corresponding to the image
 - D. It combines audio and video information to produce a composite RF signal

9. How does the modulation index of a phase-modulated emission vary with RF carrier frequency (the modulated frequency)? E8B02
 - A. It increases as the RF carrier frequency increases
 - B. It decreases as the RF carrier frequency increases
 - C. It varies with the square root of the RF carrier frequency
 - D. It does not depend on the RF carrier frequency

Hoodview Happenings

Club Calendar

Oct 16—Gen Mtg: 7:30pm @ MHCC, RM 1001
 Nov 6—Brd Mtg: 7:30pm @ Mike's N7ETA
 Nov 15—VE Testing: 9:00am @ MHCC, HF1
 Nov 20—Gen Mtg: 7:30pm @ MHCC, RM 1001
 Dec 4—Brd Mtg: 7:30pm @ Shaun's N7TNP
 Dec 6—Club Banquet (see newsletter for details)
 Dec 18—Gen Mtg: 7:30pm @ MHCC, RM 1001

Happy Birthday to our Members

10/02	N7LF	Joel Harrington
10/03	KC7QAC	Judy Chatelain
10/04	KE7KAK	William Wood
10/28	KX7N	Mike Lane
11/09	K7OC	Ed Corey
11/16	N7QR	Russ Mickiewicz
11/22	KF7SKB	Shaun Harteloo
11/22	KD7HHN	Dean Wright
11/24	WB7UFJ	Denny Doolittle
11/28	KF7HOT	Tom Beinhauer
11/29	N7ETA	Mike Magnuson
12/05	K7DEB	Debra Provo
12/15	No Call	Dawne Kite
12/18	K7DSZ	Neal Penland



Club Radio Nets

CW Net on 28.130 MHz at 7:00 pm, every night
 2 M net on 147.28+ MHz, at 7:30 pm, each
 Wednesday evening. Net Control operators
 needed for the Wednesday night net. See
 George W7GEO to volunteer.



FCC Question Pool Answers:

1. B 2. A 3. A 4. C 5. D 6. B 7. C 8. A 9. D

Sunshine Committee



If you know of anyone that could use our thoughts and prayers, contact Laura K7LQT.

Breakfast Gathering

Join us for breakfast every Saturday morning at Heidi's in Gresham. Conversation and coffee starts around 7:00 am with the breakfast orders taken at 7:30.



October Program Scheduled

Multnomah County Search and Rescue

Refreshments:

October: Neal and Linda Penland
 November: Any volunteers?
 December: Board Members



Nominations

We are looking for someone who will organize the Nominations committee. As chairperson you will lead a committee to seek members to run for a one-year or two-year position. Call Shaun to volunteer for this chair position.

Nominations will be opened at the club meeting in October. The committee will be looking for members to run for President, Vice President, Secretary, Treasurer and two board positions. Dave and Scott will be leaving their positions and Chris and Pam will stay on for one more year.

During the month of November, please take time to consider your roll in the Hoodview club. Is it your turn to step forward and help guide the club in 2015? Do you have some ideas to share with the board?

You know the old saying from John F. Kennedy, 'Ask not what your club can do for you but what you can do for your club'. Okay maybe there were some other words in the quote but you know what I mean. Please consider running for the an office. Step forward and say 'I will!' when a committee person calls you.

Classes Offered

Technician Amateur Radio License Classes are planned at Mt. Hood Community College, Gresham, OR. Class will be held In Room Fisheries 1 on November 1st and November 8th, 8:30 AM to 4:00 PM. Then there will be a VE Test session will be held on November 15th, 8:30 AM. We will use Gordon West Technician as our textbook. Contact Scott Burrows at 503-473-7256 for more information or check out www.wb7qiw.org.

Mike's Tech Corner

As I promised last month, here is a simple Arduino project that everyone can use.

Have you ever wanted to see Morse code instead of just listening to it? How about you get distracted and lose part of the code so you miss the word or meaning? Or you could see what you are sending! And it will tell you how fast the CW is being sent or how fast you are sending!

This little project will help and may also help you if you don't understand "code". This is an easy to build CW decoder. It is based on DSP Goertzel code. I could easily spend a whole couple of pages trying to explain what it is. Let's just say that it is a way to decipher CW from sound.

This project has a small number of parts as all of the work is done in the program to display the characters.

Arduino	\$25.00
2 X 16 LGD	\$ 5.00
10K Resistors (2)	\$.10
220 Resistor	\$.05
100nf Capacitor	\$.10
Red LED	\$.25
10K Potentiometer	\$.15
Audio Jack	\$ 1.00
5 volt power	
Any case you prefer	

On the right is the wiring diagram for the Arduino Uno board.

The magic is in the code, it is the tone detection based on the Goertzel formula, which means that you just put in the audio on an analog pin and then the processor makes some calculations and if there is a tone you will get a magnitude value.

You can read about the Goertzel formula here:

en.wikipedia.org/wiki/goertzel_algorithm

Here is the schematic for the project.

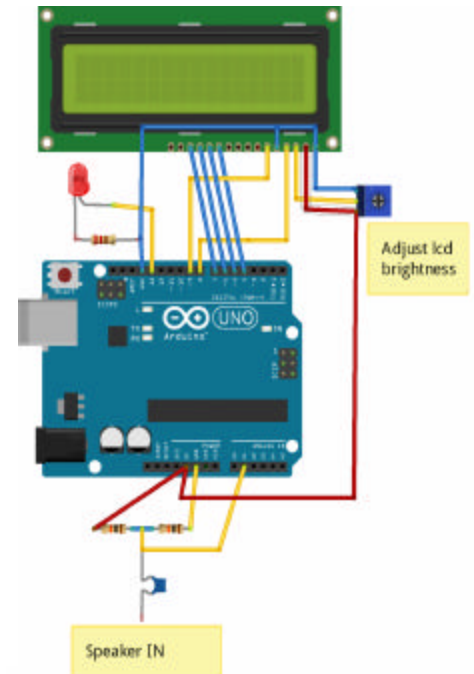
The code can take different kinds of displays 2 x 16, 4 x 16, 2 x 20 or 4 x 20. Just connect and then the code will manage when you have done the setup.

Tell the liquidcrystal library which pins you use for the display and underneath that which kind of display you have.

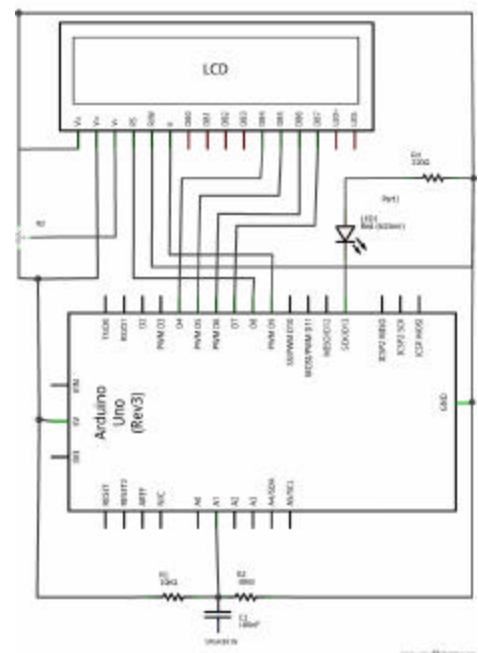
```

15
16 ////////////////////////////////////////////////////
17 // select the pins used on the LCD panel      /
18 ////////////////////////////////////////////////////
19 // LiquidCrystal lcd(RS, E, D4, D5, D6, D7) //
20 ////////////////////////////////////////////////////
21
22 LiquidCrystal lcd(12, 11, 5, 4, 3, 2);
23
24 const int columns = 20; /// have to be 16 or 20
25 const int rows = 4;  /// have to be 2 or 4
26

```



Video with Fritzing.org



Video with Fritzing.org

Then you have to set which pin you use for AudioIN and which pin you use for the Led .

```

41  byte AN_capital[8] = {000100,000000,001111
42  byte emtyblock[8] = {B00000,B00000,B00000
43
44  int audioInPin = A1;
45  int audioOutPin = 1;
46  int ledPin = 13;
47
48  float magnitude ;
49  int magnitudelimit = 100;

```

NOW YOU CAN USE THE DECODER WITHOUT ANY MORE MODIFICATIONS

But if you want another center frequency you will want to change how wide the filter shall be, you have to change the following lines also. Be aware of that you can only chose some exact frequencies and only a specified number of samples. For a start take the n=48 (testdata[48]) and then you can chose 558hz or maybe 744hz which are good for receiving.

```

69  // 128 will give you a bandwidth around 70 hz          //
70  // BUT remember that high n take a lot of time        //
71  // so you have to find the compromise - i use 48      //
72  ///////////////////////////////////////////////////////////////////
73
74  float coeff;
75  float Q1 = 0;
76  float Q2 = 0;
77  float sine;
78  float cosine;
79  float sampling_freq=8928.0;
80  float target_freq=558.0; /// adjust for your needs see above
81  float n=48.0; /// if you change her please change next line also
82  int testData[48];
83
84  ///////////////////////////////////////////////////////////////////
85  // Noise Blanker time which //
86  // shall be computed co      //

```

Now you are ready for decoding If you have trouble with the audio is too high or too weak you can try to set the 2 values for magnitude, go 50 up or 50 down with both of them at same time ... here they are 100, if you turn up the volume on the transceiver to get the decoder working then set the values down. If you get a lot of noise in when you have your volume on the preferred place then set the 2 values up with 50.

```

42  byte emtyblock[8] = {B00000,B00000,B00000,B00000,B00000,B00000,B00
43
44  int audioInPin = A1;
45  int audioOutPin = 1;
46  int ledPin = 13;
47
48  float magnitude ;
49  int magnitudelimit = 100;
50  int magnitudelimit_low = 100;
51  int realstate = LOW;
52  int realstatebefore = LOW;
53  int filteredstate = LOW;
54  int filteredstatebefore = LOW;
55
56
57  ///////////////////////////////////////////////////////////////////
58  // The sampling frq will be 8928 on a 16 mhz          //
59  // " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " //

```

Thanks to OZ1JHM site for the details. Here is where you can download the complete code:
<http://www.skovholm.com/decoder11.ino>. Next month we will look at another Arduino project!
 Thanks – N7ETA

Editor's Note: Many of you have not seen or read the Constitution for many years. Last month we covered Article One (Name) and Two (Purpose). This month I will share with you Articles Three (Membership), Four (Officers) and Five (Meetings). I hope you enjoy it.

WB7QIW—HOODVIEW AMATEUR RADIO CLUB CONSTITUTION

Originally Adopted May 27, 1976
 Revised and Adopted November 21, 1991
 Revised and Adopted June 18, 1998
 Amended and Adopted April 15, 2004

ARTICLE THREE: MEMBERSHIP

SECTION A. Definitions

1. Full Member—Member in good standing having a valid Amateur Radio License and having privileges of voting and holding office.
2. Associate Member (non-licensed) - A member in good standing having a bonafide interest in Amateur Radio, and having privileges as a full member except holding an elected office (President, Vice President, Secretary, Treasurer and Board Member).

SECTION B. Dues

1. The dues of all members shall be established annually by the Executive Board, subject to a two-thirds vote of approval by the membership present and voting at a regular or special meeting of the club, provided that the membership has been notified prior to the meeting wherein approval is requested.

ARTICLE FOUR: OFFICERS

SECTION A. Officers of the Club

1. The elective officers of this organization shall be the President, Vice President, Secretary, Treasurer and Executive Board positions one through four.
2. The Executive Board shall consist of the President, who shall be Chairperson, Vice President, Secretary, Treasurer, four full members elected by the club and the latest retiring President. The four Board positions will be designated as Position One through Four.

SECTION B. Powers and Authority

1. The president shall preside at all meetings of the club and conduct the same according to the rules adopted; shall enforce due observance of this constitution and by-laws decide all questions of order' sign all official documents that are adopted by the club; and perform all other customary duties pertaining to the office of President.
2. The Vice President shall actively assist the President in carrying out the duties of that office and shall, in the absence of the President, assume the duties of the President.
3. The Secretary shall keep a record of all meetings, keep a roster of members, carry on all correspondence, and read all pertinent communications at each meeting' and shall turn over all items belonging to the club to the next duly elected secretary.

4. The Treasurer shall receive and receipt all monies paid to the club' shall keep an accurate account of all monies received and expended. No bill shall be paid without proper authorization by the club or it's Board of Directors. The Treasurer shall maintain current balances or receipts and debts and shall submit a financial statement at the end of each month to the Board of Directors.

SECTION C. Term of Office

1. The President, Vice President, Secretary, Treasurer and latest retiring President shall hold office for one year, unless disqualified. The term of the above officers shall run concurrently, beginning at the first meeting following the annual election.
2. Board positions two and four shall hold office for two years from the date of the elections on even years.
3. Board positions one and three shall hold office for two years from the date of elections held on odd years.
4. No one member may hold more than one office at a time, nor hold the same office for more than three consecutive terms.
5. Elections of officers shall be held at a regular meeting for the month of December.

SECTION D. Vacancies of an Office

1. Any vacancies created by death, resignation, loss of amateur license, or removal from office shall be filled by a majority vote of the membership at any regular meeting.
2. The officer-elect shall fill the vacated office immediately after election.

SECTION E. Removal from Office

1. Any officer may be removed from office by a three quarters vote of attending members at any meeting.

ARTICLE FIVE: MEETINGS

SECTION A. Regular Meetings

1. Regular meetings shall be held monthly.

SECTION B. Special Meetings

1. Special meetings, experiments, or outings may be called at any time by the President or by a vote of the membership.
2. Special meetings may be closed to the public.
3. The Secretary shall notify as many members as possible of such meetings.

SECTION C. Board Meetings

1. Board meeting shall be held at such times as the President or membership may designate. These meetings may be open to all members at the discretion of the Executive Board.

SECTION D. Procedure

1. "Robert's Rules of Order" shall govern the procedure of all meetings.

HARC General Meeting Minutes

Meeting Called to Order on September 18th 2014 at 7:30 by President Shaun, N7TNP and then the Board introduced themselves.

New Member: KD7JTS George introduced himself

Program: Alternative Power prepared by Mike N7ETA and presented by Shaun N7TNP

Pre-Break Announcements:

- o 50/50 tickets - See Denny to purchase
- o Tomatoes were provided by Ed and Dawne Kite
- o Net Control Sign Up – Shaun will take it
- o Refreshment Sign Up – We need someone for November
- o Nominating Committee Chairperson – We need someone to get this started
- o Christmas Banquet – Ed Clulow is chairing. It will be on December 6th at 6 PM at Francis Xavier's.
- o VE Testing – this Saturday, September 20th.

Break:

Secretary Report: Dave KA7WOF moved and Denny WB7UFJ seconded to accept the secretary's report printed in the newsletter. Motion passed.

Treasurer Report: Dave KA7WOF moved and Denny WB7UFJ seconded to accept the treasurer's report printed in the newsletter. Motion passed.

Business:

- o Denny WB7UFJ is selling 50/50 tickets
- o Sunshine Report is that Vern KA7DCQ and Joe N7HA became silent keys.
- o Picnic report is that it was really well, fantastic, and tasty
- o There will be a VE test session on Saturday, September 20th at 9:00 am in HF1.

50/50 Drawing:

- o The pot was \$15. Richard KE7AOA winner. After it was won the winner donated his share back to the club for the repeater fund.

Meeting adjourned: 8:21 PM—Respectfully submitted by Dave Gettman KA7WOF, Acting Secretary

HARC Treasurer's Report

as reported at the October Board Meeting.



Current Balances	
General Fund	\$ 5,778.69
Restricted Funds:	
Japanese	\$ 384.64
Repeater	2,680.90
Training	93.79
Scholarship	<u>2,670.12</u>
Total Funds	\$11,608.14
Checking	\$5,988.76
Money Mkt	<u>5,619.38</u>
Total Accounts	\$11,608.14

Mark Your Calendar

HOODVIEW AMATEUR RADIO CLUB CHRISTMAS BANQUET



WHEN:

Saturday, December 6,
2014

Social Time—6:00 PM

Dinner Served—6:30 PM

WHERE:

Francis Xavier's Restaurant
1922 NE 181st Avenue,
Portland, OR 97230

**We will be taking reservations at
the November meeting.**

Hoodview Amateur Radio Club
PO Box 951
Gresham OR 97030



HOODVIEW AMATEUR RADIO CLUB MEMBERSHIP FORM

Name: _____	Call Sign/License Class: _____
Spouse Name: _____	Call Sign/License Class: _____
Address: _____	Birth Date: _____
City: _____	Spouse Birth Date: _____
State: _____ Zip: _____ Work Phone: _____	Home Phone: _____
Email: _____	Cell Phone: _____

- Change of name, address or other information
 - Regular Adult Membership (NEW) (RENEW) \$25.00/yr _____
 - Under 18 or over 65 Membership (NEW) (RENEW) \$20.00/yr _____
 - Additional Family Member (NEW) (RENEW) \$12.50/yr _____
 - Patron Donation _____
 - Repeater Donation _____
 - Scholarship Donation _____
- TOTAL _____