



# Yavapai Signal

The Yavapai Amateur Radio Club – Prescott, Arizona – DM-34 – Volume 30 – No. 10 – October 2015



Summary of Upcoming Club Events				
Date	Day of Week & Time	Event	Place	Details
10/01/15	Thursday 1900 MST	YARC General Meeting	Prescott Mile High Middle School	Program: Robert KE8DM, ARRL AZ SM
10/04/15	Sunday 1300 MST	Transmitter Hunt	Arizona State Credit Union parking lot, Prescott	Contact: Pete K6VVR or John WB9VGJ
09/26/15 to 10/17/15	Weekend Days	Event Communications	Various locations in Yavapai County	See the "Event Communications Calendar – Sept. & Oct. 2015" elsewhere in this newsletter.
10/24/15	Saturday	General Class License Examination Preparation	TBD	Contact: Frank K8FB
11/07/15	Saturday, 0900 MST	License Examinations	Jeep Posse Building, Prescott	Contact: Don WB7TPH
For further details and other events, refer to the calendar on the club's website.				

## Welcome to the Yavapai Amateur Radio Club

The Yavapai Amateur Radio Club (YARC) is an ARRL affiliate Special Service Club. The club participates in many activities in the quad-city (Prescott, Prescott Valley, Chino Valley, and Dewey-Humboldt) area by providing communications for local events, emergency communications, and promotion of the hobby throughout the community.

Membership in YARC is open to any interested amateur or non-amateur alike. Dues are \$20.00 per year (full-time students \$15). YARC meets at 1900 MST on the first Thursday of every month in the technology classroom at Prescott Mile High Middle School, 300 South Granite Street in Prescott. Vehicular access to the school parking lot is via the entry at the intersection of South Montezuma Street and Carleton Street. Programs of interest are included as part of the meeting.

[www.w7yrc.org](http://www.w7yrc.org)

YAVAPAI AMATEUR RADIO CLUB – PO BOX 11994 – PRESCOTT AZ 86304-1994

### Club Nets

Band	Mode	Frequency	PL	Night	Time
2M	FM	147.260 MHz	+103.5 Hz	Wednesday	1900 MST
2M	SSB (USB)	144.220 MHz	N/A	Wednesday	2000 MST
10M	SSB (USB)	28.440 MHz +/- QRM	N/A	Thursday	2000 MST
1¼M	FM	224.080 MHz	-156.7 Hz	Wednesday	1830 MST
Yavapai County ARES/RACES Nets					
2M	FM	147.260 MHz	+103.5 Hz	Monday	1830 MST
2M	FM	145.290 MHz	-127.3 Hz	Monday	1900 MST
Club Repeater					
2M	FM	146.880 MHz	-100.0 Hz	Open Use 24/7	Open Use 24/7

### Club Mentors (“Elmers”)

Name	Call Sign	Telephone Number
Bud Semon	N7CW	928-899-7400
Jim Zimmerman	N6KZ	928-713-0542

### Club Website Registration

Please register to get on the club's email distribution list and also gain access to the members'-only area of the website. The members'-only area contains the club roster and detailed club treasurer's reports. To register, go to [www.w7yrc.org](http://www.w7yrc.org), click “Join Us” and then select “Registration.” Fill out the requested information, and then click “Register.” The webmaster will then verify your membership and authorize your account. His response is not immediate in real time.



**From the President's Desk ...**

Jeff Hanna, WB7RFY reported to me at the meeting break that there were 96 people that he counted in attendance at the September 3, 2015 general meeting. That's a great turn out. I am sure that a good bit of the increase was the result of people getting back from summer trips. Bud - N7CW's LOTW presentation was also a good draw.

We seem to be settling well into our new digs. The new PA system seems to be a great improvement and having the use of Terry's (KB7TRE) interactive display is certainly a plus. With such a large group, I wanted to remind everyone to be respectful of the speaker and try not to chat with your neighbor while someone has the floor.

One thing that is on the Board's agenda this month is to try a breakout during the business meeting for new and beginning hams. There are lots of topics for them that we could address during the membership meetings – but so many of these things are not of great interest for more experienced hams. Many thanks go to Jim Zimmerman, N6KZ for the suggestion to try these new/beginning ham breakouts. This is in line with growing our new hams to give them the opportunity to expand their horizons. If the board approves this idea, we will give it a try. This will be a supplement to our new and beginning ham sessions that we are beginning to hold at the Jeep Posse building.

On alternating Fridays, we are planning on holding operating open houses at our club station at the Jeep Posse building. Look for these scheduled open house sessions on the Club/ Club Station page of our web site and on our Calendar.

73 – Frank Bender, K8FB

YARC:	Badges	Patches	Shirts
<b>Features:</b>	Name & Call	Club Name & Logo	With or Without Name & Call
<b>Contact Person(s):</b>	Dan Simpson AE7IH or Erica Simpson KF7MAU	David Hanson W7BJ	Pete Morrison K6VVR
<b>Cost:</b>	\$7.00 each	\$3.00 each	Without Name & Call \$20.00 each — With Name & Call \$24.00 each

**Email Address Changes**

Please notify us of email address changes. Cable One has reportedly changed their customers' email addresses again. If your email address or any other information on the club roster has changed, please let our Treasurer know. You can contact David Hanson, W7BJ at [treasurer@w7yrc.org](mailto:treasurer@w7yrc.org). A new roster is normally posted to the YARC website monthly.



W7BJ, Treasurer

<b>TREASURER'S REPORT</b>		<b>General</b>	<b>Repeater</b>
<b>August 2015</b>		<b>Fund</b>	<b>Fund</b>
<b>CASH – July 31, 2015</b>		<b>\$10,310.63</b>	<b>\$2,846.28</b>
	Dues	\$234.00	\$26.00
	50/50 Raffle	\$40.50	
	Misc. < \$50	<u>\$30.00</u>	<u>\$0.07</u>
	<b>TOTAL INCOME</b>	<b>\$304.00</b>	<b>\$26.07</b>
	Club Station Build	\$789.96	
	MFJ-259C	\$245.95	
	PA System	\$211.98	
	Annual Storage Rent	\$432.00	
	Annual Liability Insurance	\$200.00	
	Annual Webhost Fee	\$83.40	
	Annual PO Box Rent	\$80.00	
	Misc. < \$75	<u>\$133.41</u>	<u>\$0.00</u>
	<b>TOTAL EXPENSES</b>	<b>\$2,176.70</b>	<b>\$0.00</b>
<b>CASH – August 31, 2015</b>		<b>\$8,438.43</b>	<b>\$2,872.35</b>
** Detailed statements are posted on <a href="http://www.w7yrc.org">www.w7yrc.org</a>			

Yavapai Amateur Radio Club (YARC)  
Board of Directors Meeting  
Minutes August 27, 2015  
Present: K8FB, KV8TD, WB7TPH, KCØTGG, W7BJ, W6TYV, N7NGM

Meeting called to Order by K8FB at: 1800 MST.

Agenda:

Tour of the Club Station and antenna system for approximately a half hour.

Old Business:

Treasurer's Report and Meeting Minutes: August meeting minutes and July treasurer's report have been published in the September Signal. Balance: \$10,082.73; repeater fund: \$2,754.21

— Treasurer:

- Request approval: PO Box Rental - W7BJ - \$80 - Approved
- Request approval: Web Hosting Fee – W7BJ - \$83.40 – Approved
- Request approval of liability insurance - \$200 – Approved
- Yearly storage locker payment made in August - \$432

— Club Station Status:

- K7PRS donated a good bit of new RG-8 coax.
- Initial installation phase is complete.
  - Still need HF digital and VHF TNC for Winlink
  - Evaluating need for 80M and WARC bands antennas
- KB7TRE loaned a Kenwood TS-450S transceiver to replace the TS-440S
- Review Access List - Approved
- First newbie session on Friday, August 21
- Schedule Open House for general membership – Saturday, September 12 from 1100 to 1500 MST.
  - Suggestion - Get some of board members and YCJP board members together for a photo and an article in the local paper.- board deferred until open house is complete.
- Open club station for use by members - agreed
- Schedule periodic open house for members – schedule TBD after September 12
- Begin regularly scheduled newbie sessions – schedule TBD
- Board to encourage use of W7YRC call at station
  - However, K6VVR the W7YRC license trustee has agreed that any club member can use their own call at the club station as long as they stay within their operating privileges. The Board agreed.
  - Board requested that we get K6VVR permission in writing.
  - Hams who are not club members must use the W7YRC call sign and stay within their privileges, unless control op with higher privileges is present.
- Install Winlink on club station. Digital capabilities is next phase for the club station. Need separate Signalink USB for HF and TNC for VHF/UHF. ARES/RACES has an emergency exercise scheduled for November 4, 2015. N7CW has urged ARES/RACES members who don't have Winlink capabilities to come to the club station to become familiar with Winlink.

— MHMS Station/Meeting Location Status:

- Request approval: purchase of 2 Alpha Delta lightning protectors and ground rod clamp for MHMS club station antennas for approx \$150 – K8FB – Approved
- Request approval of ground rod and simple clamp for \$14.38 – K8FB - Approved
- Request approval: purchase of new PA system from WB7TPH for \$150. Tested by W7BJ, KCØTGG, and K8FB. PA system is more than adequate for our needs and audio quality is good. Have offered use of PA system to KB7TRE if needed – K8FB - Approved
- KB7TRE has acquired equipment to do live streaming for his classes. He has offered the club use of the equipment and service to broadcast meetings for members who cannot make the meetings – especially shut-ins. Club would be expected to contribute to live streaming fee, cost of which is unknown at this time.

- KB7TRE has a large interactive display which can display from the internet and can be used to display club presentations. He has offered it for use during club meetings. N7CW to try it out on August 31 with his laptop. K8FB to get brand and model of display so that we can obtain a manual, if necessary.
- Board approved offering of Ham Test Online course to MHMS radio club students for \$15. Upon obtaining his/her license the student will be refunded the \$15 and also be given a year's free membership to YARC.

— License Class Study Offerings:

- Ham Test Online is currently the club's main study effort, particularly Technician Class license.
- Other options include ARRL self study and W5YI self study materials (including audio CD).
- WB7TPH indicated that KB6UN has free Technician Class "No Nonsense Study Guide" that is free for downloading. To be added to the web site as an option.
- K8FB is registered as an ARRL registered Instructor. Once registered, can download ARRL class presentation slides and order study materials at discount.
  - o K8FB will schedule a General Class license class later in the year as one has not be done for approximately two years. One scheduled prior to November 7 would be ideal.
  - o KV8TD volunteered to assist with General Class license study class.
  - o Technician Class license study session will be scheduled at a later date.
  - o Request approval to order the "ARRL Technician and General Class Instructor's Manual" for discounted cost of \$24.95 plus shipping. Approved
- What is past approach to ordering General and Tech license manuals for class study? Generally instructor to order an estimated number and students reimburse the club for the cost.
- Board consensus was that every other month license exams would be better than quarterly since we are now doing online and self study. WB7TPH indicated this was possible and will study it further.

New Business:

- Still seeking club station manager
- Club Equipment Inventory - N6KZ and N7CW have agreed that we should inventory club and non-club loaner equipment. Inventory list would be posted on web site and in Signal and indicate whether it is available for loan or not. Loaned to person info would be maintained, but not published. K8FB will begin to establish this inventory.
- Repeaters donated by City of Prescott – Earlier in the year, Prescott donated two outdated repeaters to the club. They are currently in our storage locker. One works, while K6VVR says the receiver (or transmitter) does not work and could easily be replaced with a 2 meter transceiver. He has recommended that we sell them both. The repeaters are bulky and weren't taken to Williams Hamfest for sale. Should see about refurbish of one and taking of photos and placing for sale for local pick up.
- Annual YARC Public Service Award – Award criteria and rules drafted by ARES/RACES DEC N7CW were reviewed and approved.
- KF6SPS Walter was reported to be in the hospital.

Adjournment: K8FB adjourned the meeting at 2015 MST.

Respectfully submitted by Frank Bender K8FB, YARC president.

<b>License Examination Preparation Classes</b>
<p>The club has begun to offer online Technician courses by Ham Test Online at a special rate of \$15. Contact Dave, W7BJ (<a href="mailto:w7bj@outlook.com">w7bj@outlook.com</a>). Ham Test Online also offers General and Amateur Extra courses for \$25. If there is sufficient interest, a study class for the General Class license will be held on October 24, 2015. If interested in attending, contact Frank, K8FB (<a href="mailto:president@w7yrc.org">president@w7yrc.org</a>).</p>

Yavapai Amateur Radio Club (YARC)  
General Meeting Minutes  
September 3, 2015

Call to Order at: 1900 MST.

Pledge of Allegiance

- A new PA System has been installed and is in use. Future use by the club of livestreaming video was offered by KB7TRE, with reimbursement of small usage fee by the club.
- Introduction: N7CW – whose program tonight will be an overview of the ARRL Logbook of the World (LOTW).
- KF6SPS has been reported to be in the hospital.
- WB7TPH is back after his knee replacement surgery.
- AC6AA was at the meeting for the first time since his cancer surgery.
- Welcome visitor: K7DCT, Andy Isbell.
- Meeting minutes/ Treasurer report: Minutes for August, Treasurer report for July.  
Motion to approve by KJ6KMK, 2nd by K7PRS. The minutes and treasurer report were accepted unanimously.
- New Members: Sandra Carpenter KC7WHH and Earl Woody KD7ZXU.  
Motion to accept new members by WB9VGJ. 2nd by KD7VBG. The members were unanimously accepted.

Committee Reports:

- YARC Event Communications, KD7VBG:
  - Saturday, September 12, 2015. .... March of Dimes March for Babies.... This event this year will be held in Prescott Valley with the course to be determined.
  - Sunday, September 20, 2015. ....Skull Valley Loop Challenge.... This is a small Bike event starting in Downtown Prescott.
  - Saturday, September 26, 2015. ....Groom Creek Classic.... This is the 1/2 Marathon, 10K, 5K, and 2 Mile fun run starting at the Groom Creek Fire Station.
  - Saturday, September 26, 2015 Bradshaw Grinder has been canceled.
  - Friday and Saturday, Oct 2 & 3, 2015 will be the Prescott Road Rally. Sign up for this event will be available on the Prescott Rally website: <http://prescotttrally.com/>. Contact WB7RRQ for this event.
  - Saturday, Oct 17, 2015 .... Diabetes Walk.... WB9VGJ, is coordinating this event.
- Patches and badges can be obtained by W7BJ and AE7IH.
- Club Repeater, K6VVR – The status of the application to ARCA for the 440MHz repeater frequency pair is unknown.
- Fox Hunt: September 5 at 1300 MST. Meet at the AZ State Credit Union parking lot. Contact K6VVR or WB9VGJ.
- Elmer: N6KZ – 6 persons helped in the past month.
- Shirts are offered by K6VVR.
- School Amateur Club, KB7TRE: Lightning protection installed by N6KZ and KG6AY.
- Ham Test Online special offer for Technician Class license to MHMS radio club students was approved by the YARC board. Ham Test Online Technician Class course offered for \$15. Once the student receives the license, the club will refund their \$15 and the new ham the one free year's membership to YARC.
- VE, WB7TPH: August 7, 2015 test --all 12 passed the test. Next VE test will be Nov. 7, 2015.

Old Business:

- Club Station Status: Thanks to K7PRS for donation of new RG-8 coaxial cable. Thanks to K7SEN, N7CW, and N6KZ for installing the 40M add-on to the Cushcraft A3 tri-band Yagi. Thanks to KB7TRE for loaning the Kenwood TS-450 HF transceiver. Thanks to N7CW for loaning the Yaesu FT-8100R VHF/UHF transceiver with data port for Winlink.

- Needed: A universal power cord for Yaesu, ICOM, and Kenwood HF transceivers, plus a switched coax line for members to bring their HF transceivers to review and ask questions.
- The first phase of the station installation is complete (40/20/15/10 Meters).
- A SignalLink USB has been ordered for HF digital modes and Winmor.
- A TinyTrak4 TNC has been ordered for VHF/UHF Winlink.
- A celebratory open house will be held at the club station on Saturday, Sept. 19, 2015, 1000-1400 MST. Come and take a tour of the station and even operate.
- Planning on scheduling regular beginning ham sessions.
- Planning on scheduling bi-weekly operating open houses on Friday – late afternoon, early evening.
  - Caution – agreement with Jeep Posse is that late scheduled meetings or exercises may affect our scheduled events.
- Access List is being published on the members only web site.
- We will post a list of commonly scheduled Jeep Posse building events, where there are conflicts in using the club station.

— General Class Study Class: A free General Class license study class is scheduled for Saturday, Oct. 24, 2015, 0800-1700 MST at the Jeep Posse Building, if there is enough interest. Plans are to schedule a Technician Class license study class after that.

— K7CBK questioned why the YARC board gave approval to ARES/RACES to take over the repeater during emergencies or possibly even during emergency exercises. He felt this was an unwarranted move to deprive club members of the use of the 146.88 MHz repeater. Discussion followed with K8FB, N7CW, N7NGM and several other members offering comments:

- The usage is only during an emergency or emergency exercise when ARES/RACES feels that the use of the repeater is warranted.
- All emergency communications will be permitted to be handled on the repeater during this use, as required by the FCC.
- ARES/RACES DEC must first notify the YARC board before taking control of the repeater.
- ARES/RACES has been very generous in letting the YARC 2 Meter FM Wednesday net use the ARES/RACES 146.260 MHz repeater, which offers better coverage to our club members than does our own 146.88 MHz repeater.
- Motion to offer a vote of confidence by the members in the board regarding this matter was made by KE7SEA. 2nd by KG6AY. The motion overwhelmingly passed with one person not in favor.

New Business: Nothing at this time.

BREAK 1945 MST.

— 50/50 raffle: \$54.00. Ticket winner : AA4RE.

— Program 2000 MST: Overview of the ARRL Log Book of the World (LOTW) – N7CW. Thanks go to Bud for a well received presentation. Bud's PowerPoint presentation has been posted to the club's web site at "Club" and then "Club Program Presentations".

— Adjourn: 2055 MST.

Minutes prepared and submitted by Ron Nelson, KCØTGG, YARC Secretary:







### October 2015 General Meeting Program

Our program for October 2015 will bring back our special guest, Rev. Robert Spencer, ARRL Arizona Section Manager. Rev. Spencer has been with us before speaking on various ARRL related topics. He is sure to bring us up to date on the state of amateur radio today. Most likely he will bring a few goodies to give away as well. If you have questions relating to ARRL membership, it would be a good time to get some answers. Be sure to make it to the October meeting, 1900 MST, October 1, 2015 at Prescott Mile High Middle School.



### VE Testing

Are you looking to take that first step or to upgrade your ticket. Your next chance is Saturday, November 7, 2015 at 0900 MST at the Jeep Posse Building in Prescott. Our VE crew will be there ready to help you get that ticket. For all of you newly licensed Technicians who aren't quite ready to upgrade, we hope to have more opportunities for you in the future. We are currently exploring offering test sessions bi-monthly next year. Hold on to your study guides.

### N7GMH Special Event

Here is a belated update about this year's event honoring the fallen Granite Mountain Hotshots. Here is a breakdown of the event and the contacts: N7GMH operators amassed a total of 333 contacts. Our operators included; KV8TD, K7POF (with W7POF logging), W1DGL (with KG7LMB and N9YO assisting), W7PVA, N7CW, AE7CG, KI6AHH, and K8FB. Thanks to each of our operators. You made the day possible. To date, we have sent out 56 QSL Certificates requested by those who worked N7GMH.

### New Members, September 3, 2015 —

Name:	Call Sign:	Residence:
Sandra Marie Carpenter	KC7WHH	Prescott
Earl Woody,	KD7ZXU	Chino Valley

**Event Communications Calendar — Sept. & Oct. 2015**

Date	Day of Week	Event	Place	Course	Coordinator
09/26/15	Saturday	Groom Creek Classic	Groom Creek Fire Station	½ Marathon, 10K, 5K, 2mi. Fun run	
10/2-3/15	Friday & Saturday	Prescott Road Rally			Website: <a href="http://prescottrally.com">prescottrally.com</a>
10/03/15	Saturday	Man/Horse Race	Prescott Valley & Mingus Mts.	25 mi. & 50 mi.	Contact: Frank K8FB
10/17/15	Saturday	Diabetes Walk			John Broughton, WB9VGJ

Except as noted above, to sign up to participate in any of the above events—contact Patti Halgunseth, KD7VBG at [kd7vbg@k7yca.org](mailto:kd7vbg@k7yca.org) or visit the website [www.k7yca.org](http://www.k7yca.org), go to Calendar and sign up there. Also, sign-up sheets will be at the YARC general meetings.

**September Program: ARRL Logbook of the World (LOTW)**

Bud Semon, N7CW gave the club a presentation on the ins and outs of the increasingly popular LOTW. Bud showed how we could save a lot of money that we might currently spend on paper QSL exchanges. LOTW confirmations can be received electronically very soon after a QSO is completed. LOTW confirmations are also good for ARRL awards, such as Worked All States (WAS) and DX Century Club (DXCC). Bud's presentation is posted on our web site under the "Club" menu. Then select "Club Program Presentations". The club's kudos go to Bud for doing this presentation.

**Club Station Status Update**

As you are probably aware, we have completed initial installation of the club station. The station and antennas are currently capable of operating on SSB and CW on 40, 20, 15, and 10 meters. Hopefully before the end of September, we will have HF digital mode capabilities, as well as VHF Winlink emergency email capability that is primarily used to support ARES/RACES.

On September 18, our first regularly scheduled session for new and beginning hams was scheduled from 1800 to 2000 MST. Topics of interest will be addressed and the opportunity to get answers to questions will be offered. We intend to hold these sessions on a regular basis at the club station.

On September 19, our club station open house was scheduled from 1000 to 1400 MST. On September 25, our first operating open house from 1800 to 2000 MST is scheduled for hams to come and operated the club station.

Look on our website ([www.w7yrc.org](http://www.w7yrc.org)) at "Club" and "Club Station" for the upcoming schedules for these meetings.

**For Sale — Crank-up Tower and 6-element HF Tri-band Beam Antenna**

HDX-555 Crank-up tower with tilt-over base and raising fixture. KT34XA 10/15/20 meter 6 element beam. \$1200.00 OBO — Call Neil - K7SEN at 928-775-2158.

**YARC November 5, 2015 Election**

During the November general meeting, elections will be held for open officer and board positions for calendar year 2016. Up for election are Vice President, Secretary, and 3 board members. If you are interested in running for one of these positions, please let Don Bauer – WB7TPH know at [wb7tph@w7yrc.org](mailto:wb7tph@w7yrc.org) or Frank Bender - K8FB at [president@w7yrc.org](mailto:president@w7yrc.org).



**September 2015 Foxhunt**  
by John Broughton, WB9VGJ

The monthly foxhunt was held Sunday, September 6, 2015. Ron, KCØTGG, Jeff, WB7RFY, and I were the foxes. Ron had chosen the site, a good one. It was near the end of Butterfield Dr. above and behind the Frontier Village shopping center, just at the locked gate. He had figured there would be a strong signal at the starting point as there was a clear line of sight between there and the transmitters, but the signal would weaken and/or disappear as hunters drove up and down hills on the hunt. He was correct.

Ron left his truck parked in the shopping center as a decoy, thinking hunters would see it and think they were close to the transmitters. He was correct; at least one team did see it

There were six teams of hunters, but only two found the transmitters before the official end of the hunt at 1500 MST. Bob, WB6ODR, and Linda, KE7EEO, won. Dave, W7BJ, arrived shortly before 1500 MST and found the primary transmitter right at 1500 MST when the hunt officially closed. Talk about sneaking in under the wire!

The six teams were:

1. Bob WB6ODR and Linda KD7EEO
2. Dave W7BJ
3. Pete K6VVR and Diane KE7ODP
4. Frank KF7ANX and Dennis KF7INF
5. Clayton KJ6QJS; Lisa KK6AFC; and Forrest WH6EAL
6. Mike AD5SU and Betty KF5LDA

Results of the Hunt		
Place:	Team:	Time:
1	WB6ODR & KD7EEO	42 min.
2	W7BJ	2 hr. 57 min.
—	K6VVR & KE7ODP	Found after time ran out
—	KF7ANX & KF7INF	DNF
—	AD5SU & KF5LDA	DNF
—	KJ6QJS, KK6AFC & WH6EAL	DNF

Congratulations to Bob and Linda for winning the hunt!

We had our usual social get-together after the hunt at Prescott Junction Restaurant. Often, the camaraderie after the hunt is just as much fun as the hunt itself. It is always enjoyable.

You can see pictures of the hunt at:

<http://tinyurl.com/YARCFoxhuntSeptember2015>

We would encourage more folks to get involved in the hidden transmitter hunts. They are really fun and help develop direction-finding skills.

<b>W7YRC/R Net – 09/09/2015 – 1900 MST - 147.260 (+) MHz FM – Net Control: AE7CG, Loren</b>					
K6VVR Pete	KF7ANX Frank	KG6AY Art	W7HAM Ralph	N7NGM Rex	
KV7AC Jay	KF7PQV Dan	KG7BAM Terry	WA6AQK Ken		
KA5DWI Art	KF7WOT Joann	KG7EWD Patrick	WN7E Tom		

**September 18, 2015 – New/Beginning Ham Session**

Fourteen (14) hams and prospective hams showed up at the September 18 new/beginning ham session at club station at the Jeep Posse building. Jim Zimmerman N6KZ conducted overview sessions on basic Yagi antenna theory and lightning protection concepts. Questions were also fielded. The overviews lasted about an hour and then there was a half hour of informal breakouts. Thanks also go to Art KG6AY and Mike W1DGL for participating.

The next new/beginning ham semi-monthly session is tentatively scheduled for Friday, October 9, 2015 at 1800 MST at the Jeep Posse building on Commerce Drive. The main topic for this session will be basic operation and care of your hand-held transceiver. Also to be addressed will be programming of hand-helds using both manual and software updates. Bring your hand-held, as well as programming cable and software, if you have them.



**Lloyd Halgunseth Memorial Month: November 2015**

The Lloyd Halgunseth WA6ZZJ Memorial public service award for this year will be presented at the YARC November 5, 2015 general meeting. The recipient must be a licensed radio amateur for at least 5 years and an ARES/RACES member or participant in public service events.

The award perpetuates our memory of Lloyd Halgunseth (1936-2014), WA6ZZJ. He served for many years as the Yavapai County Emergency Communications Radio Officer with the Yavapai County Office of Emergency Management from 1998 until the time of his passing. Because of his devotion to public service and his selfless promotion of amateur radio to the general public, Lloyd was honored with a lifetime membership in the Yavapai Amateur Radio Club (YARC) in Prescott.

<b>Yavapai Amateur Radio Club — W7YRC Club Station Access List — Effective August 20, 2015</b>				
<b>Name:</b>	<b>Call:</b>	<b>Lic. Class</b>	<b>Notes:</b>	<b>Telephone:</b>
F. Bender	K8FB	E	YARC President	379-5575
P. Morrison	K6VVR	E	W7YRC Trustee	899-8555
B. Semon	N7CW	E	Elmer Group	771-8267
J. Zimmerman	N6KZ	E	Elmer Group	713-0542
A. Protas	KG6AY	E	Elmer Group	227-2954
D. Freeman	KV8TD	E	N7GMH Trustee	759-0958
D. Bauer	WB7TPH	E	VE Chair	775-4690
R. Dashiell	W6TYV	G	Dual Member	602-501-2571
J. Grimm	KD7RMV	T	Dual Member	759-0747
R. Mauldin	N7NGM	E	Rotating Member	216-2637
D. Hanson	W7BJ	E	Rotating Member	602-615-3444
M. Belanger	W1DGL	G	Rotating Member	420-0498

<b>YARC Volunteer Opportunities</b>	
Contact Frank Bender, K8FB ( <a href="mailto:president@w7yrc.org">president@w7yrc.org</a> ) if interested in helping out in any of these or other areas.	
<b>Opportunity</b>	<b>Description</b>
Buddy Mentor	We are looking for several more experienced club members to be a resource that new hams can contact with questions. You would also be a friendly face in the crowd. Here's an easy way to give back to our club and help keep the interest of newly licensed hams.
License Test Preparation Tutors	We are still looking for volunteers interested in helping out with tutoring club members who are studying for their license tests.
Assistant Webmaster	We are looking for a volunteer who has strong Word Press and associated skills who can assist the webmaster with the website work load, especially with more complicated Word Press coding concepts.
Club Station Access Members	With the installation of the new club station (W7YRC) at the Jeep Posse building, we are in need of several members who will have access to the building and the station. These members will have access for a period of time and will need to be available to be scheduled for open house operating events, as well as opening up the station upon request for the use of other club members. Please send your request with a brief rationale as to why. You should be considered to Frank Bender, K8FB or Don Bauer, WB7TPH.
Yavapai Hamfest Chair Person	The YARC Board would like to re-institute an annual hamfest in the Prescott area. We envision the hamfest being a half day or so event at a local venue, such as ERAU. The timing of the hamfest has not been determined. A hamfest in the summer would entice hams in the hotter areas of the state to come to Prescott. A spring or fall hamfest would also be an option.

## Antenna Analyzers You Can Hack

by Dan Romanchik, KB6NU

I'm a nut for antenna analyzers. I think that they are one of the most useful things a ham can own.

I've often wondered why there aren't more DIY antenna analyzer projects, though. Perhaps it's because designing measurement circuits isn't easy. An antenna analyzer has to have a signal source as well. Even so, an antenna analyzer doesn't need a whole lot of accuracy to be useful, so you would think that more builders/hackers would tackle a project like this.

I do know of one antenna analyzer kit on the market. The VK5JST Antenna Analyser Kit (<http://www.ahars.com.au/about/kits/>) costs about \$110 USD. I actually purchased this kit a year or so ago, and it looks like a great unit. The unit seems well-designed, and it comes with a plastic case, unlike many projects these days, but I haven't yet gotten around to building it.

I've also recently found out about an Arduino-based antenna analyzer project (<http://hackaday.com/2015/08/06/40-antenna-analyzer-with-arduino-and-ad9850/>). It uses an AD9850 module as the signal source. The approximate cost for all the parts is about \$40, and you can experiment with the code, if you like. If you have the time and inclination, this project might be worth taking a hack at. A photo of this project can be found at <http://www.kb6nu.com/wp-content/uploads/2015/08/analyzer.jpg>

Another antenna analyzer project from Australia is the VK3YY antenna analyzer (or "analyser" as they spell it there). It uses an Arduino Nano. The interesting thing about the blog post in which VK3YY describes the project (<https://vk3yy.wordpress.com/2014/09/29/antenna-analyser-project/>) is that you can follow his design and experimentation process.

Yet another analyzer:

While I'm talking about antenna analyzers, let me mention another one that I've just found out about: the W2NDH Antenna Analyzer (<http://www.iw2ndh.com/>). This antenna analyzer isn't a kit, but at \$175 seems to be a good deal. This unit has a frequency coverage of 2 – 160 MHz, and can be used as an antenna analyzer, signal generator, and a scalar network analyzer.

Apparently, this started out as an Arduino project. As Maximo, EA1DDO, pointed out on the radio artisan Yahoo Group, there is source code for this project on GitHub (<https://gist.github.com/jackdev23/7876502>), and a schematic is available on the Union de Radioaficionados Espanoles (URE) website (<http://www.ure.es/media/kunena/attachments/2420/Schematic.jpg>).

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When not writing about antenna analyzers, Dan, KB6NU, actually builds an antenna now and then. You can often find him on the HF bands (mostly 40m and 30m), working CW. His #1-rated amateur radio blog can be found at KB6NU.Com, and you can e-mail questions, comments, or complaints to [cwgeek@kb6nu.com](mailto:cwgeek@kb6nu.com).



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Photo provided courtesy of Art KG6AY — Jim N6KZ of the Elmers Group Hanging Out on a Rooftop



Photo provided by Art KG6AY — Frank K8FB Installing PA System at Prescott Mile High Middle School  
(with Jim N6KZ giving him advice)





