



# YAVAPAI SIGNAL



The Yavapai Amateur Radio Club • Prescott, Arizona • DM-34 • Volume 30 - No. 5 • May 2015



## From the President's Desk ...

As you will see elsewhere in this month's Signal, we have selected and reserved a Field Day operating site at Lynx Lake. Our hats go off to Randy Dashiell,

W6TYV, the Field Day committee chairperson and Doug Meyer, KF7YZJ for selecting the Eagle Ridge Group Campsite. This site is right off the Walker Road entrance to the Lynx Lake south parking lot.

Field Day, an ARRL sponsored operating event, is over the weekend of June 27 and 28. As the weather can be pretty warm at this time of the year, we are situated in the pleasant shade of a lot of tall ponderosa pines, plus there will be two ramadas with picnic tables available to us. The trees also make great wire antenna supports.

The Field Day operating period officially runs from 11:00 AM MST on Saturday through 2:00 PM on Sunday (a 27 hour period). Our operating end time could be earlier. We have reservations for the smaller site (Peregrine) for Friday and Saturday nights. The adjacent larger site (Osprey) with better picnic facilities and numerous camp sites is reserved for Saturday night. This site will be officially available at 2 PM Saturday afternoon, but possibly as early as noon.

This is a great opportunity to come out and operate either a full schedule (even overnight), just casually, or even help log contacts. For technician class licensed operators, this is a great chance to operate HF with a control operator and get a better feel for HF propagation and summer operating conditions.

Right now it looks like Randy, W6TYV is planning on having a satellite station set up to make contacts through Orbital Satellites Carrying Amateur Radio (OSCAR). Dave, W7BJ is planning on bringing out an Army MARS digital station for demonstration purposes. Other members will be operating Phone or CW on various HF and possibly VHF/UHF bands.

On Saturday, June 27 we are planning a club picnic for club members at the camp grounds while Field Day operations are going on. We are planning on scheduling the start of the club picnic for later Saturday afternoon.

More serious Field Day operators are planning on staying overnight at the camp ground on Saturday night. We will also have 5 RV camp parking spaces (no hook ups) available Saturday night. Unfortunately, there is a camp ground quiet time from 10 PM until 6 AM Sunday morning, when we would have to shut off generators. Still, if we can come up with some quiet portable power source (e.g., heavy duty batteries), we could set up a couple of CW stations or quiet phone stations with head phones to operate throughout the night.

This should be an enjoyable club activity for nearly every club member. Some members should be able to get away and do some serious operating, while others can casually operate if they wish, or just picnic and socialize. Numerous sites will be available for the setting up of stations and camp sites. More details will be forthcoming.

73 - Frank, K8FB

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## *Welcome to the Yavapai Amateur Radio Club*

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

Membership in the YARC is open to any interested amateur or non-amateur alike. Dues are \$20.00/year (Full-time students \$15). The YARC meets at 7:00 p.m. local time on the first Thursday of every month in the Technology Room 404, at the Granite Mountain Middle School, 1800 Williamson Valley Road in Prescott. It is about ½ mile north of Iron Springs road, and all amateurs and non-amateurs as well are invited. Programs of interest are included as part of the meeting.

The weekly Net is held every Wednesday at 7:00 p.m. local time on 147.260+ repeater. A PL of 103.5 is required. All amateurs are invited to participate, and visitors are always welcome.

The Yavapai County ARES/RACES Net is held on Monday nights approximately at 7:00 p.m. local time on the 145.290- repeater on Mingus Mountain. A PL of 127.3 is required.

### *Club Repeater*

The YARC 146.880- repeater is located on the hill above Willow Creek road and requires a PL of 100.0 Hz. Our deepest gratitude to Bill Kafka, W2YAV, (SK) for allowing us to acquire the original club repeater. ■

## **VE Testing**

**By Don Bauer, WB7TPH**

Our next test session is coming up Saturday, May 9<sup>th</sup>, at 9 AM. As usual we will be testing for all license classes. So if you are a new member wanting to get licensed or looking to upgrade, this is your opportunity. We already have about 10 people signed up, so visit the club website and find the pre-registration info under the "Become a Ham button". You new folks, remember that you can take a Technician level class the Saturday before the test (May 2). The class is free and you can register on the website. ■



## **Minutes of the March 26, 2015 Board of Director's Meeting**

Present at Meeting: WB7TPH, WH6EAL, W6TYD, N7NGM, KE6QZD, KF7YZJ, K8FB

Meeting called to Order by K8FB at: 1800 hrs

### **Agenda:**

#### **Old Business:**

- Treasurer's Report and Meeting Minutes:
  - o Treasury Balance: KE6QZD reported \$10,971 – Repeater \$2,594.25
  - o Treasurer's reports are complete through February
  - o Meeting Minutes – February and March still not complete
  - o Forrest, WH6EAL came to the meeting ill and turned in his resignation, effective immediately, and left the meeting early after reporting.
  - o Forrest indicated that he would complete the February and March minutes
- Trade Mark Renewal Status – Signal, Yavapai Amateur Radio Club (YARC), Yavapai Hamfest, Yavapai County Hamfest – Forrest indicated that he would still correct and resubmit the

## Trade Mark Renewal.

- 2015 Field Day – W6TYD reported on possible sites. A lot of NFS areas are still closed. Mingus area is booked up. Goldwater and Lynx Lakes are possibilities. North end of Willow Lake is still a possibility. Randy was going to try to check out Powell Springs Camp Ground near Cherry over the weekend and also check out Lynx Lake Group Camp sites.
- New Web Site Format – W6TYD reported that the cutover went well. The Board agreed to extend the member auto-cancel feature (removal from the directory) to three months after the member's renewal due date, if dues are not paid. Archive material still needs to be moved to the new format. W6TYD suggested that this could be placed in the Members Only section of the web site. W6TYD reported that only 39 members had registered so far to be included on the new YARC mailing list.
- Bylaws Modification Pending Vote – 2/3 of votes at 4/2/15 member meeting is required to pass the amended Bylaws. Written notification for the vote, as required by the Bylaws, was provided in the March meeting.
- Yaesu Repeater Status/ Repeater Donation – K8FB reported that Yaesu confirmed receipt of the club's DR1-X order. An anonymous member donated \$500 to the club to pay for the repeater. W6TYD suggested that the club buy another DR1-X repeater at the discount price as a spare. The Yaesu deal expires on 3/31/15. The board approved the purchase. Approval from the membership for this purchase "after the fact" will be sought at the 4/2/15 membership meeting. K8FB will order the second repeater after checking with K6VVR for his opinion on ordering a spare repeater and asking what happens if a repeater "dies".
- YARC Hamfest – K8FB reported no activity on this issue. K8FB noted that the Scottsdale Springfest in March was very successful and only lasted until noon.

## New Business:

- May Program – 10 Meter Dipole Build activity-Bill Noe, W7PVA/ Possible SIG Group Gatherings. WB7TPH to confirm if the activity is a build or a presentation. K8FB will plan to have SIG breakouts in the May meeting, if at all possible.
- March 20 ARCA Meeting Update at the Scottsdale Springfest
  - o HR 1301 – The Amateur Radio Parity Act of 2015
    - Federal bill would require HOAs to make reasonable accommodations for amateur radio antennas.
    - ARRL is urging letters be sent to Representatives in support of this bill. Instructions on [www.arrl.org](http://www.arrl.org) – It is suggested that letters go to ARRL to speed up delivery to congress.
  - o Williams Hamfest – On July 24, 25, 26. WB7TPH reported that the club spaces have been reserved. ARCA charges nothing for admission and relies on raffle tickets as a fund raiser.
  - o Yaesu Fusion Repeater (DR1-X) – ARRL Official Observer (OO) at the meeting indicated he had received reports of "interference" between normal FM users and C4FM users. OO reported that YAESU is working on a DR1-X update to lock out the other mode, when a mode is being used.
  - o Club History – ARC has offered to electronically archive club history. So far, there have been no takers.
- Station Craft Mini-Sessions – N6KZ has suggested the club offer short presentations or videos on beginner topics or make them available on the club web site. The board felt this was a good suggestion.
- Club Station – Jeep Posse Building – W6TYD reported on March 17 meeting at the Jeep Posse building with WB7TPH, K8FB, and Capt. Bach-

eler. The Yavapai County Jeep Posse (YCJP) is offering their building, free of charge, for YARC to set up a club station. YCJP asked YARC to contribute to additional electricity charge. Station location in the building is an issue still to be worked out. K8FB to create a Major Expenditure form for this and ask the club for permission to move forward with this agreement and authorize up to \$1,000 to set up a club station for a one year trial (the board voted to recommend this to the membership).. A Memorandum of Agreement is to be drawn up to seal the agreement. WB7TPH suggested that K8FB discuss this with Terry KB7TRE to make him understand that this does not affect the school station or the club meeting location. N7NGM suggested that the club station could also be set up as a node for IRLP if internet were available. W6TYD reported that the Jeep Posse was looking into installing internet service at the Jeep Posse building.

- New Logo Discussion – With the new website format, it has been suggested that the home page picture be used to create a new logo. W6TYD to provide a new logo sample to the board members for consideration. The new logo change would then have to be approved.
- School Library Donations – Ham Books, N6KZ suggested that the club donate a set of books (made available at a special price by ARRL) to area school and public libraries on a rotating annual basis. KF7YZJ to look into what ARRL offers and determine the cost.
- Club - College Scholarship – Discussion was deferred to a later meeting.
- Jim Jackson, NS2K – WB7TPH reported that he has learned that Jim is seriously ill from his bout with cancer and is only expected to survive several more days.

Resource: Improving Club Meetings <http://www.arrl.org/a-shot-in-the-arm>

Adjournment: K8FB adjourned the meeting at \_around 2000\_\_ hrs.

Respectfully submitted by Frank Bender, K8FB  
YARC President

## Minutes of April 2, 2015

### General Meeting

at Granite Mountain Middle School, Prescott, Arizona



The meeting was called to order by K8FB at 1900 MST, and the Pledge of Allegiance to the Flag was recited by all present. K8FB expressed a special welcome to W6CCD, who had recovered from his recent bodily injury. K8FB

also welcomed a visitor to the meeting, N9JYO.

K8FB asked for a motion to approve the treasurer's report for February 2015. K6VVR made the motion. W7HAM seconded the motion. The motion was unanimously approved by acclamation.

K8FB announced the resignation of WH6EAL as secretary and KE6QZD as treasurer, and the willingness of AE7CG to serve as secretary through 12/31/2015 and of W7BJ to serve as treasurer through 12/31/2015. K8FB asked for a motion to confirm AE7CG and W7BJ in their respective positions as members of the board for the remainder of calendar year 2015. W7HAM made the motion. WB7TPH seconded the motion. The motion was unanimously approved by acclamation.

**New Members:** The following individuals applied for membership in the Yavapai Amateur Radio Club (YARC): John Gesell, KB7JJG; Bruce Eldredge, KG7GMH; Gerald Shaw, KG7IUT; Clyde Stanton; and Scott Whitney. WB7VGJ made a motion that the applications for membership be approved. WB7TPH seconded the motion. The applications were unanimously approved by acclamation. WB7TPH also announced that each new ham had been assigned a mentor (“Elmer”).

**Condolences:** K8FB expressed the official condolences of the club to K6UWV on the passing of his wife, and N7NGM on the passing of his mother. K8FB informed the membership that club member NS2K is very seriously ill with cancer.

### **Committee Reports:**

1. **Event Communications:** KD7VBG announced the schedule of upcoming public events requiring ama-

teur radio communication volunteers: 4/24-26 Whiskey Off-road Mountain Bicycle Race; 5/2 Whiskey Row Marathon; 5/2 Chino Grinder (KC8BOB, coordinator); and 5/6 Mountain Mayhem Groom Creek Race. She had sign-up sheets available for volunteers. The autumn event schedule will start in September.

2. Badges and Patches: W7BJ announced the availability of badges for \$7 each, and patches for \$3 each.
3. Shirts: K6VVR had 4 shirts on hand for members to pick up.
4. Fox Hunt: Because of the Easter holiday, K6VVR asked the membership for a different date for the April 2015 fox hunt. Interested members suggested and agreed upon 4/12/2015 as a suitable date for the event.
5. License Class: W7JLC announced that the next license examination preparation class will be held on 5/2/2015 0900 MST at the Jeep Posse building in Prescott. It will be an all-day class. Five instructors have volunteered to teach the class, and as of 4/2/2015, 13 students had signed up to attend.
6. VEC License Test: WB7TPH announced that the next date for VEC license testing for all classes of amateur radio licenses will be on 5/9/2015. Further information is available on the club website.
7. Mentoring: N7CW affirmed that "Everything is wonderful."
8. Hotshots Memorial Operating Event: KV8TD was absent. K8FB announced that the N7GMH operating event will be on Tuesday, 6/30/2015, place to be determined.
9. Field Day: W6TYV was absent. K8FB said that sites were being considered. When the membership was queried about interest in operating, 20 members indicated their willingness. When asked about interest in staying and operating overnight, 6 members expressed their enthusiasm.
10. School Club Station: KB7TRE explained the move of K7GMG from Granite Mountain Middle School to Prescott Mile High Middle School. At the new location, a music room will be available for YARC general meetings. The room has a piano, but not a public address sound system. Folding chairs will be

made available. The last YARC general meeting to be held at Granite Mountain Middle School will be the 5/7/2015 meeting.

### Old Business:

1. Williams Hamfest, 7/24-26/2015: K8FB said that the club has spaces reserved and is accepting equipment donations. WN7E and W7HAM will be at the site overnight.
2. New Website Transition: K8FB announced that the transition to the new website was achieved on 3/15/2015. He advised all members to register on the site and thus be added to the club mailing list and for access to the "members only" portion of the website. As of 3/31/2015, only 39 members had registered. More registrations are needed. W6TYV is the webmaster. K7CBK expressed disappointment that printing out the club roster as hard copy requires twelve (12) letter-size pages, and that 212 names are located in 3 sections. WB9VGJ thought that the previous roster format was much more user-friendly and functional. W7BJ volunteered to work with W6TYV to implement desired changes to the new website. WN7E said that the club calendar on the new website did not contain current, up-to-date information, and that members could contact him by e-mail to obtain the web links to such information.
3. Club By-laws Amendments: K8FB indicated that a general membership vote is required regarding the deposit of club funds in a no-interest bank account; the treasurer maintaining the membership roster; the treasurer having discretionary spending authority for expenses of \$75 or less; and spending authorization limits. K8FB asked for a motion that the aforementioned amendments to the by-laws be approved. K7POF made the motion. K6VVR seconded the motion. The motion was unanimously approved by acclamation.

### New Business:

1. Desert Storm Rally: WB7RRQ was absent. K7POF said that the event is usually held during the Spring season in the Quartzsite area near SR-85, south of town.
2. HR 1301: K8FB said that the Amateur Radio Parity

Act of 2015 is about Homeowner Associations (HOAs) being required to make reasonable accommodation of amateur radio equipment installations, including antennas. All radio amateurs are requested to send letters to their Congressional representatives in support of the measure. Additional information is available on the ARRL website.

3. Appreciation of AC6AA's Editorship of Newsletter: On behalf of the club, K8FB expressed his deep gratitude for the exertions of Joe Oliver in editing and producing the Yavapai Signal.
4. Purchase of Second Yaesu Repeater: K8FB informed the general membership of the board's approval of the purchase of a second Yaesu repeater in response to a special manufacturer's discount that will now expire on 6/30/2015. The repeater will provide service on the 144 MHz and 440 MHz bands with both FM and C4FM modes. K8FB asked for a motion to approve the purchase. W7BNW made the motion. K6VVR seconded the motion. The motion was unanimously approved by acclamation.
5. Club Station Proposal: K8FB said that W6TYV is a member of the Jeep Posse. The proposal is for a joint YARC-Jeep Posse amateur radio station with YARC provided equipment located on Jeep Posse premises for a probationary one-year period. YARC would have access to the facility free of charge. There would be no restrictions on the types of antennas to be installed. YARC would contribute to defraying expenses for electric power and Internet access. Jeep Posse wants more of its members to become licensed radio amateurs. YARC could use the station for Hotshots Memorial operating, public events operations, and public relations open-houses. Maximum anticipated expenses are \$1000 or less, and most likely in the \$500-\$700 range. Hardware expenses would be for cabling, lightning protection, a locking desk, and the aforementioned utilities. K8FB asked for a motion to approve the establishment of this club station. N7CW made the motion. K6VVR approved the motion. The motion was unanimously approved by acclamation.
6. Request for Facebook Photos: KI6AHH asked for members to contribute photos of club activities to the W7YRC website on Facebook. He is in charge of coordinating activities on the website.

7. 50-50 Drawing: KD7VBG drew winning ticket 1012098. KG6AY was the lucky winner of \$51.
8. Program: "Voodoo Contest Group: The Saga Continues....", by Bud Semon, N7CW — Bud presented his story about his participation in the CQ Worldwide CW contest in November 2014 from a farm in Kuwait near the Iraq border. He and his cohorts spent close to a week erecting a multiplicity of antennas and reconfiguring their host's station for efficient contest operation. In addition to Bud, another esteemed contester who took part in the adventure was Bob Vallio, W6RGG, ARRL Pacific Division Director. Bud explained the contest scoring system, and how and why contacts with Europe were the most desirable. Other interesting highlights of the presentation included anecdotes about Kuwaiti food, social customs, hospitality, and graciousness.
9. Ham of the Month Presentation: K8FB presented the Ham of the Month award (a pink-color toy stuffed animal) to N7CW.

The meeting was adjourned at 2110 MST.

Respectfully submitted by  
Loren Singh, AE7CG  
YARC Secretary

## Moving Reminder

Our last meeting at Granite Mountain Middle School is planned for May. The current plan is for the June meeting to be held on June 4<sup>th</sup> at the Mile High Middle School (MHMS). MHMS is located on Carleton Street. Heading south out of downtown Prescott on Montezuma, turn right on Carleton and head into the school.

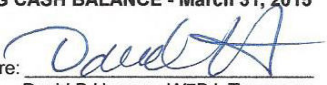


Stay tuned for announcements with additional details and requests for assistance in moving the school's club station.



**Yavapai Amateur Radio Club  
PO Box 11994  
Prescott, AZ 86304-1994**

TREASURER'S REPORT March 2015		General Fund	Repeater Fund
<b>BEGINNING CASH BALANCE - February 28, 2015</b>		<b>10,738.57</b>	<b>2,594.43</b>
Dues - Dottie Akers	KG7RGG new	18.00	2.00
Dues - Peter Iannone Jr	none new	18.00	2.00
Dues - Douglas Askerman	KG7PAQ new	18.00	2.00
Dues - Scott Whitney	none new	18.00	2.00
Dues - Michael Harris (Whitney)	none new	0.00	0.00
Dues - Clyde Stanton	none new	18.00	2.00
Dues - Jerald Shaw	KG7IUT new	18.00	2.00
Dues - Bruce Eldredge	KG7GMH new	18.00	2.00
Dues - Ken Severance	WA6AQK	18.00	2.00
Dues - Loraine Severance	KD6FDA	0.00	0.00
Dues - Cheryl Severance	KD6FCZ	18.00	2.00
Dues - John Dibble - 2 yr	NJCD	36.00	4.00
Dues - Connie Dibble	KF7IZX	0.00	0.00
Dues - Tim Wiederaenders	KG7IUR	18.00	2.00
Dues - Tracy Wiederaenders	KG7GLH	0.00	0.00
Dues - Phillip Barnow	KC6KRY	18.00	2.00
Dues - Fred Fichman	WA6YVA	18.00	2.00
Dues - John Smith	KG7IUS	18.00	2.00
Dues - Andre Doyon	KF7FSK	18.00	2.00
Dues - Jim Clark	N5RO	18.00	2.00
Dues - Rose Clark	KE7DTY	0.00	0.00
Dues - Jim Zimmerman	N6KZ	18.00	2.00
Dues - John Marsh - 2 yr	KC5DKN	36.00	4.00
Dues - Ray Tyrrell	N6MY	18.00	2.00
Dues - Lee Cunningham	K7CBK	18.00	2.00
Dues - Joe Lupo	KG7DKF	18.00	2.00
Dues - David Drown	WN7L	18.00	2.00
Dues - Sue Drown	KF7ANT	0.00	0.00
Dues - Jeff Hanna	WB7RFY	18.00	2.00
Dues - Jack Garner	KB7HH	18.00	2.00
Dues - Don Colozze	WB2MZI	18.00	2.00
Dues - John Conrad	NO7N	18.00	2.00
Dues - Jim Jackson	NS2K	18.00	2.00
Dues - Pete Morrison	K6VVR Cert 02	0.00	0.00
Donation - Anonymous	xxx		500.00
Donation - Douglas Askerman	KG7PAQ		5.00
Donation - John Smith	KG7IUS		30.00
Donation - Jim Clark	N5RO		5.00
ARRL - Tom Griswold	WN7E	39.00	
ARRL - Ken Severance	WA6AQK	55.00	
50/50 Raffle		96.00	
50/50 Raffle - Dan Simpson	AE7IH	(48.00)	
US Postal - Postage - Paul Compton		(2.32)	
March Receipts Deposited in April		(14.00)	
Unreconciled Difference		(28.50)	
Interest Income			0.07
<b>TOTAL INCOME</b>		<b>619.18</b>	<b>598.07</b>
UPS Store - 60 Copies Bylaws	Dr Cd	22.12	
Terry Pemberton - Statehood Food/Sup	1240	47.38	
Lee Cunningham - Statehood Doughnuts	1241	19.48	
Joe Oliver - Postage	1242	9.80	
ARCA - Williams Hamfest Space Rent	1243	80.00	
ARRL - Voided	1244	0.00	
US Postal - Postage - Yaesu	Dr Cd	5.75	
<b>TOTAL EXPENSES</b>		<b>184.53</b>	<b>0.00</b>
<b>ENDING CASH BALANCE - March 31, 2015</b>		<b>11,173.22</b>	<b>3,192.50</b>

Signature:   
David B Hanson, W7BJ, Treasurer

Date: 4/7/2015

## HR 1301 – The Amateur Radio Parity Act of 2015

The ARRL is urging all radio amateur licensees to write their Congressman to urge them to become co-sponsors of HR 1301 – The Amateur Radio Parity Act of 2015. Because of what amateur radio offers in the way of emergency capabilities, Homeowner Associations (HOAs) and other land use contracts would be required by law to make reasonable accommodations to amateur radio licensees in putting up antennas on their properties.



Go to [www.ARRL.org](http://www.ARRL.org) and on their home page you will see a rotating banner about HR 1301. Sample letters are offered on the site. ARRL asks that letters be sent to them so that they can get them to your Congressman quicker. ■



### Additional Yaesu DR1-X Repeater Ordered

At the April meeting, the membership approved the purchase by the Board of an additional dual band Yaesu DR1-X repeater. The repeater can be used as a spare or as a 2 meter repeater on Mt. Union, when a frequency pair opens up. The club has now ordered two of these repeaters, which are on a backorder of about two months. The first repeater will be installed on Mt. Union on 440 MHz. ■

## Updated Club Bylaws

The membership overwhelmingly voted to amend the Club's bylaws at the April meeting.

- An interest bearing checking account is no longer required to be maintained.
- The Treasurer now maintains the membership roster instead of the Secretary (this practice has been taking place for some time).
- Finally, spending authorization limits were established. One addition was made to the spending authorizations – the Treasurer may authorize expenditures up to \$75 . The new Club bylaws are now posted on the website.



You are invited to Amateur Radio Roundtable, a new series of W5KUB.com live weekly webcasts. The webcast is every Tuesday night at 8:00 PM CDT (0100 UTC Wednesdays) at [W5KUB.com](http://W5KUB.com) .

Amateur Radio Roundtable is an informal discussion of all aspects of ham radio with the intent of allowing viewers to watch this live webcast at [W5KUB.com](http://W5KUB.com). A question and answer session with viewers will follow each topic.

The show covers all aspects of ham radio; such as, balloon launches, Satellite, go-kits, emergency communications, SDR, digital modes, DXing, home brewing, and much more. This week's guests include Steve Webster, M1ERS, from England, Paul Huff, N8XMS, president of North American QRP CW Club, and Glen Popiel, KW5GP, author of the book "Arduino for Ham Radio".

To watch Amateur Radio Roundtable go to W5KUB.com, click on Live Events and sign in with your existing User Name and Password. If you don't have a user name and password, just enter your call or name, leave the password blank and hit sign in.

During the last half of the roundtable, viewers are invited to be a guest and make a virtual appearance on the show. Guests will need a Google+ account, microphone, and camera. A link allowing you to join will be provided during the show. This part of the show is very informal; you can just pop in to say hello, or stay a while and join in on a wide range of topics. Google Hangout will allow up to 10 people at a time.

We need your help with topics. If you have a specific subject that you would like to present in a future show, send an email to [tom@W5KUB.com](mailto:tom@W5KUB.com).

Join us for fun and interesting ham radio discussions. We'll see you on the webcast! ■

Tom Medlin, W5KUB



## Yavapai Amateur Radio Club to Conduct Free Ham Radio License Course

**May 2, 2015**

**By Jack Crabtree, W7JLC**

The Yavapai Amateur Radio Club will conduct a free, one day, amateur radio course for those wishing to obtain their entry level ham radio license. This Technician Class License course will be on Saturday, May 2, 2015. No Morse code is required.

The class will be conducted at the Jeep Posse Bldg. in Pioneer Park off Commerce Drive behind the outdoor hockey rink in Prescott, AZ.

The course will start at 8:00 A.M. and will conclude about 4:30 P.M. There will be a half hour lunch break at about noon. Students should bring a sack lunch.

Preregistration is requested for the class. Contact Jack Crabtree at [classes@w7yrc.org](mailto:classes@w7yrc.org).

Once registered, you will be provided additional information including ordering a recommended but optional license study manual at a group discount rate.

This class will be followed by an examination session the next Saturday, May 9, 2015 at the same location. For additional information on the exam, see [http://www.w7yrc.org/ve\\_testing.htm](http://www.w7yrc.org/ve_testing.htm).

### Badges and Patches

Members can purchase a club badge with their name and call from our Treasurer, Tracy, KE6QZD for \$7. Club patches can be purchased for \$3 each.

### Shirts

Club shirts with the member's name and call can be purchased from Pete, K6VVR for \$24. Shirts without the name and call can be purchased for \$20.

### YARC Officers for 2015

#### President

Frank Bender, K8FB  
[president@w7yrc.org](mailto:president@w7yrc.org)

#### Vice President

Rex Mauldin, N7NGM  
[vice.president@w7yrc.org](mailto:vice.president@w7yrc.org)

#### Secretary

Loren Singh, AE7CG  
[secretary@w7yrc.org](mailto:secretary@w7yrc.org)

#### Treasurer

David Hanson, W7BJ  
[treasurer@w7yrc.org](mailto:treasurer@w7yrc.org)

#### Board of Directors (includes Club Officers)

Don Bauer -- WB7TPH

Doug Freeman -- KV8TD

Doug Meyer -- KF7YZJ

Randy Dashiell -- W6TYV

**Newsletter Editor:** Joe Oliver, AC6AA  
[newsletter@w7yrc.org](mailto:newsletter@w7yrc.org)

## Need a Hand?

If you need assistance, we want to help you. If you are just starting out in ham radio, or simply have run across something that you could use a hand with... technical assistance or answers to questions about the Yavapai Amateur Radio Club, are available from knowledgeable club members.



**Don't Hesitate to Ask for Help!!**

**CALL:**

**Bud Semon, N7CW at: (928) 899-7400**

**or**

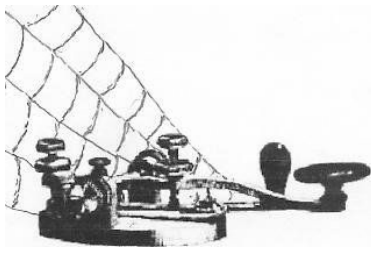
**Jim Zimmerman, N6KZ at (928) 713- 0542**

## Need Cards Checked for ARRL Operating Awards?

Jim Zimmerman, N6KZ can check your QSL cards for DXCC, WAS, VUCC, WAC, etc.

For information contact Jim at: (928) 713-0542.

Jim's QTH is at: 778 Grapevine Lane,  
Prescott, AZ 86305.



## Jim Jackson, NS2K Silent Key

Jim Jackson, NS2K passed away about 8 AM on Easter morning, April 8th. Jim had undergone surgery in January for brain cancer, and appeared to be doing well but easily tired. He visited Don WB7TPH in March, and was very excited about the future. Unfortunately, he took a turn for the worse in late March. Jim joined YARC in February of 2014 after retiring and moving to the area from New Jersey.

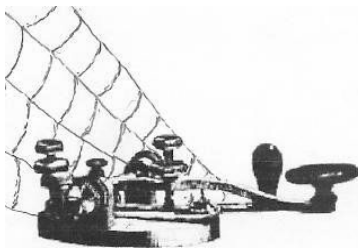
Jim's brother Paul is residing at Jim's home in Prescott Valley for the time being and will be establishing a Memorial Service for Jim at a future date. There will also be a service in New York.

Sympathy cards may be sent to Paul Gael Jackson, 8320 E. Marrow Road, Prescott Valley, AZ 86315.

Jim will be missed by those of us who knew him.

The Celebration for Life in memory of Jim will be held at the First Congregational Church United Church of Christ on Gurley Street at 11 am on Saturday, 4/25.

Jim's Obituary appears in the Daily Courier at <http://tinyurl.com/klrc5cd>.



## Eve Oppedisano, N6XEX Silent Key

By Rex Mauldin, N7NGM

I noticed something in the latest QST magazine that I thought I would bring to everyone's attention, especially those of you somewhat new to the club. Eve Oppedisano,

N6XEX is now a silent key. She and her husband Vince were once long time members of YARC and for awhile at least, members of the Williams club. I am pretty sure they were members of VVARA as well. Before moving north to Page Arizona, they lived in the northeast portion of Prescott Valley. Vince was often working the Hualapai repeaters on both 2 meters and 1 1/4 meters when a CONDOR 220 box was on the mountain in the Kingman area.

I was once stranded in the California desert near Newberry Springs when Vince and Eve came to my rescue. It was Eve who figured out the road that I was on so that they could pick me up. I am sorry to see that she had passed away. I lost touch with both of them after they moved away and am now sorry I never made the trip to Page to visit with them.

That is how life can be. ■

# April Program Presentation and Ham of the Month Award

By Frank Bender, K8FB

Bud Semon, N7CW, garbed in native head gear, presented the April program about his participation in the November DXpedition to Kuwait for the 2014 CQ Worldwide CW contest. Bud was part of the Voodoo DX club group that operated the 9K2HN station. An all time scoring record for the Asia Multi/Multi contest category was set by 9K2HN in this, the premiere DX contest. Bud's presentation covered his hosts, some of the countryside, cultural aspects and traditions of Kuwait, setting up antennas, modifying the station for contesting, the actual contest operating, and also celebrating Thanksgiving in Kuwait.

Bud was awarded Ham of the Month for his presentation.

Congratulations to Bud and all of the members of the Voodoo DX club on another successful DXpedition, and especially for setting the all time Asia Multi operator/Multi station category contest scoring record. What an achievement!

Frank – K8FB

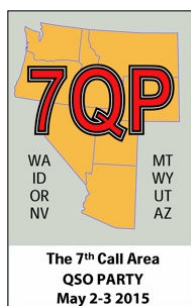


**Bud Semon, N7CW presented with the April Ham of the Month Award**



## 7<sup>th</sup> Area QSO Party

By Bud Semon, N7CW



There are 2 HF contests during the year where the rest of the world chases stations in Arizona. The AZ QSO Party is in October - the 7<sup>th</sup> Area QSO Party (or 7QP) is coming up on May 2. It is a short contest, running from 1300Z May 2 to 0700Z May 3 (6 AM to Midnight, local time, May 2).

The exchange is fairly simple - 7<sup>th</sup> area stations send a signal report and their state abbreviation (AZ in our case) and their county (Yavapai in our case). On CW this is AZYVP, and on SSB you just say “Yavapai County, Arizona” (and be prepared to spell Yankee Victor Papa when they ask for the abbreviation). Other 7QP stations will send you their state and county. Stations outside the 7<sup>th</sup> call area will send their state, province or “DX”, unless they are participating in their own QSO party.

To make the whole process more confusing, there are 3 other area QSO parties that run during the 7QP: Indiana, Delaware and New England. And their exchanges are not standardized. But N1MM+ contest logging software to the rescue - if you enter the information they send into N1MM+, it will figure out what they mean and score it appropriately.

You can find the detailed rules (there are several different categories you might enter) at [www.7qp.org](http://www.7qp.org). You can find N1MM+ at: <http://n1mm.hamdocs.com/tiki-index.php>.

Check the website for the recommended frequencies and get on the air and be Mr. or Ms. Popular! Just remember to stay off MY frequency! ■

### Equipment Donations Requested

Clean out your shack and bring your unwanted radio items to the club meetings for sale at the Williams Hamfest, scheduled for July 24, 25, and 26. Donated items will be sold for the club. The club will also sell your ham radio related items on consignment. Give your items to Frank, K8FB or Don, WB7TPH.

## Possible New Club Station

By Frank Bender, K8FB

Our club is currently in negotiations with the Yavapai County Jeep Posse (YCJP) to set up a club station at the Posse building on Commerce



Drive in Prescott. YCJP offered an area in the building free to YARC, only asking that we contribute to our part of the electric bill. A limited number of club members would have access to the Posse building and club station. YARC members could operate the station during open operating periods, special operating events, contests, or when members can get members with access to open the station. Operating must work around Posse and other events that are scheduled at the Posse building, which is owned by the County.

At the April meeting, the membership authorized the Board to pursue an agreement with YCJP to set up the club station for a one year trial period. The radio would be a loaner provided by the club's Elmer group. The membership also authorized spending of up to \$1,000 to set up the station (e.g., table, desk, or cabinet. Also cables, lightning protection, and a possible tower base).

Please note that this new location is only for a club station. This agreement in no way impacts where the club meets. Our support for the school's club and club station remains unchanged. ■

### Club Website Registration Reminder

If you haven't already done so, please register to get on the email distribution list and also gain access to the members' only area of the website. The members' only area contains the club roster. To register, go to [www.w7yrc.org](http://www.w7yrc.org), click on “Join Us” and then select “Registration”. Fill out the information and when completed, click “Register”. It may take some time for the Webmaster to get to the request to verify your membership and authorize your account.

Please do this as soon as possible, so that you will get on the club's email distribution list and have access to the members' only area of our website. ■

# Field Day 2015

By Frank Bender, K8FB

Field Day (FD) is June 27 and 28. YARC has reserved group campsites at the Eagle Ridge Group Campground at Lynx Lake off Walker Road for our club's FD operations. You can find Eagle Ridge Group Campground information at: <http://www.fs.usda.gov/recarea/prescott/recreation/recarea/?recid=75329&actid=33>. The club will also conduct a club picnic later Saturday afternoon (June 27) at the Eagle Ridge Group Campground.



Station and operator assignment sign ups can be found on the club's website home page. Randy Dashiell, W6TYV is the club's FD committee chair person. Randy can be reached at [W6TYV@W7YRC.org](mailto:W6TYV@W7YRC.org) if you have any questions.

We are looking for someone to coordinate the club's picnic on June 27 at the Eagle Ridge Group Campground. If you would be interested in volunteering to become the picnic coordinator, please contact Frank, K8FB at [president@W7YRC.org](mailto:president@W7YRC.org).

Mark your calendars if you wish to participate in FD, just observe FD, or enjoy our club picnic. ■



# April 2015 Foxhunt

By John Broughton, WB9VGJ

The monthly foxhunt was held Sunday, April 12<sup>th</sup>. It was postponed one week due to Easter. The foxes were Forrest, WH6EAL, Brian, KK6PGR, and Clayton, KJ6QJS.



We had three teams of hunters:

1. Jeff, WB7RFY, and I.
2. Pete, K6VVR, Dave, W7BJ, and Patrick, KG7EWD.
3. Al, AF6ZR, and Ron, KC0TGG.

The foxes created a challenging hunt, hiding the transmitters on a dead-end street, Bar-Circle-A Rd., in Yavapai Hills subdivision above the north side of Walmart on Rt. 69 and Prescott Lakes Parkway. During the hunt, the foxes were relaxing on In-N-Out Burger's patio where they could keep a watch on hunters as they closed in on the transmitters on the high ridge behind the store.

WB7RFY and I were fortunate to be the winners of the hunt, finding the primary transmitter 14 minutes quicker than the second place team, AF6ZR and KC0TGG, in times of 1 hr., 16 m. and 1 hr., 30 min., respectively. The third team, K6VVR, W7BJ and KG7EWD did not complete the hunt as they arrived at Walmart with too little time left to find the transmitters. They were sitting on the patio at In-N-Out Burger when we drove down to there after finishing the hunt.

The foxes were very creative in hiding the secondary transmitter, as you can see in the pictures using the link below. There was an excavator parked along the street where the primary transmitter was hidden. The secondary transmitter was attached via magnet under the cab of the excavator. It gave Jeff and me fits as we knew we were close to it, and the strongest signal was right at the cab, but it took some time before we thought to look at the underside of the cab; we were looking all around in the tracks on both sides of the vehicle. It made for a very challenging search.

We had our usual social get-together after the hunt, this

time at In-N-Out Burger as it was so convenient and half the guys were already there. It was another fun Sunday in beautiful, sunny Arizona.

You can see pictures of the hunt at:

<http://tinyurl.com/YARCFoxhuntApril2015>

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

73,  
John, WB9VGJ

## May Program

Art Jackson, KA5DWI

Art Jackson, KA5DWI, recently retired from 35 plus years in banking and education fields. He relocated from Dallas/Fort Worth Texas to Yavapai County in late July. Since the early '60s, Art has been an avid Shortwave Listener, TV/FMBC DXer, and admittedly a CBER KBA-5229 before the craze of the early '70s.



Art became a Ham (Novice) in 1979 during the peak of Cycle 21 and soon put his experience and some of his CB equipment to use on 10-Meters. Art has always enjoyed 10-Meters and the opportunities it provides. As a hobby within this hobby, in 2004 Art began to data mine 10-Meter formatted PSK31 packets and other transmissions with PropNET, an ad-hoc 2-way RF-based digital communication network whose activity is reported on the Internet. As participating stations periodically ID and exchange data, they report their activity to an Internet data-collection hub for presentation (real time maps) on the group's web site. Art will share with you his findings on a Ham band that is misunderstood and actually can be productive and fun. ■

### Membership Count:

1st Thurs. in March.....	209
Gain/Loss.....	0
1st Thurs. in April.....	209



# DAYTON HAMVENTION®

## May 15 - 17, 2015

By Joe, AC6AA

Dayton Hamvention®, touted as the world's largest amateur radio gathering, returns to Hara to celebrate its 60th show on May 15 - 17, 2015. There are Approximately 500 indoor exhibits and a flea market with over 2,500 outdoor exhibits. Here is where you can find the latest amateur radio equipment, technology, computer software and hardware, as well as hard-to-find parts and equipment.

If you have never been to a Hamvention, it is quite an experience. In 2001, never having attended a Hamfest, I thought why not go to the biggest Hamfest first.

My friend Cliff, W6HDO and I were planning to meet up in Dayton and share a hotel room. 10 minutes before leaving for the Phoenix airport, I received a phone call that Cliff had a heart attack and was in a California hospital. With that bad news, I went ahead and flew to Dayton, Ohio, arriving on the day before the Hamvention opening. It had stopped raining an hour before arrival.

The next day the rain continued. I arrived at the Hara arena, checked in and was amazed by the size of this facility -- the place is huge! Hara is a large complex that includes many buildings that are interconnected. Most of the largest exhibits are on the main area floor, but with many buildings, you need a map or be willing to walk and walk. I wandered around trying to grasp the layout of various exhibits and location of forums. It was very hot, humid, and crowded. Hundreds of people had come in from the outside flea market to avoid the rain.

Our trip plan had included a visit to the United States Air Force Museum, so I decided that this might be an ideal time to get away from the heat and congestion of Hara. There weren't any buses from the Hamvention to the Museum scheduled at that time, so I took a taxi instead.

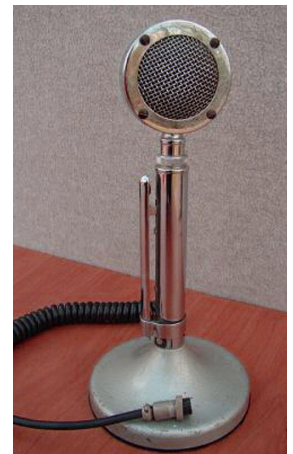
The Museum contains 10 acres of indoor exhibits featuring over 300 aircraft and missiles, plus thousands of artifacts including photos, memorabilia, etc. The facility also includes an IMAX® theater, which was showing "Storm Chasers". The Museum is a place that you don't

want to miss while in Dayton

After spending a most enjoyable day at the Museum, sheltered from the rain and heat, I took a bus back to my hotel.

The following day, I arrived early at Hara. The weather was cloudy, but no rain. This time the buildings were pleasantly cool, and the flea market was teeming with hundreds of people mulling around outside. Inside the main buildings, I attended an excellent DX Forum, with several presentations on K5K, Kingman Reef, D68C, Comoros, PW0S, St.Peter & St. Paul and YK9A, Syria. Also visited several exhibits to check out the latest equipment. If you plan to buy a new radio, antenna, or other ham related item, Dayton is the place to do it. Prices were discounted off what you can find online or elsewhere.

In the afternoon, I walked for about a mile around the vast flea market. The parking lot at Hara Arena is huge and vendors from all over the country set up tables and booths to sell their "treasures". You never know what you are going to see or find in the swap meet outside in the parking lot. There were all sorts of tempting buys, but with limited airline baggage I felt proud of myself when able to resist all the "great buys" and end up only buying a D-104 microphone.



**D-104 Microphone**

After attending a couple more Forums, and totally exhausted, I felt it was time to head back to the hotel and then return home.

The Dayton Hamvention® is a ham radio adventure that every radio enthusiast should attend at least once in their life...if you can afford it. Rubbing shoulders with thousands of fellow amateurs is a unique experience. The attendance in 2001 was 26,151.

For more information or for a full forum schedule, visit the Dayton Hamvention® website [hamvention.org](http://hamvention.org). Admission is \$20.00 in advance and \$25.00 the days of the show. ■

## Computer Corner

### No. 173: Defragmenting the Registry

By Stan Kaplan, WB9RQR

*Reprinted from the Ozaukee Radio Club Newsletter*

This is yet another topic suggested by Ed (AA9W). First, what the heck is the Registry? It is a huge database listing configuration data for: 1. All the **hardware** in your machine, including the necessary device drivers. 2. All the **software** programs you have installed, 3. All of the **personal** settings you have made (such as desktop icons, or preferences in many programs). In other words, the Registry contains almost everything about your machine! Each and every operation of your machine either adds to or removes from or at least accesses information in the Registry. This happens more than a hundred times per second when your machine is on! Organized in several chunks called hives, it is truly the heart and brain of your computer. And, it resides entirely in memory when your computer is on.

When you uninstall a really well - written program, the registry entries are removed. However, most programs simply do not clean up the mess left when you uninstall them. Therefore, irrelevant information is left behind in the Registry, and with time the database gets bigger and bigger. Even when registry entries are properly removed, empty areas are left behind, so the Registry still gets bigger and bigger with the addition of new programs, and fragmentation can result. All of this – the Registry getting bigger and bigger AND the fragmentation of information that is present – can slow down your machine over time.

Therefore, maintaining a clean and compact Registry is really a two - part task. 1) Cleaning out the un-used or incorrect entries, and 2) Defragmenting and compacting the whole database. That is a daunting task if one were to do it manually, and it would require knowledge much beyond the average user' capabilities, besides being somewhat dangerous. But there are tools out there to do it for you.

The first is CCleaner <http://www.piriform.com/ccleaner> (a.k.a. Crap Cleaner, but they don't use that moniker anymore because it is socially inappropriate). I have written about it before – it is probably the most widely used utility program on the planet, and it is free. The first item

in CCleaner is the general cleaner, which you should run first. The second is the registry cleaner, which you should run second. That cleans out all sorts of Registry errors – right in the Registry itself. Missing shared DLLs, unused file extensions, ActiveX and class Issues, and at least a dozen more categories that can contain errors.

So now your general junk and Registry errors are dealt with. But what about Defragmentation? CCleaner does not defragment the Registry. There are a number of free Registry defragmenters out there, but the stand-alone one I like best is Auslogics Registry Defrag, which you can get here: <http://www.auslogics.com/en/software/registry-defrag/>.

This company makes good software and this package will do the job. Give yourself time when you run it and prepare to let it reboot during the process, a step that is necessary to do the job correctly. Be patient when it reboots you may think you have the “blue screen of death” for a few moments, but it will start eventually and do the job. It will probably wish to do a quick reboot again when it is finished. This will be something you want to do only once every 3 - 6 months or so, not a weekly task! But it will result in a cleaner, meaner, faster machine.

There you have it. A Registry with no errors and minimal fragmentation! Happy Computing! ■

### 2<sup>nd</sup> Annual Hotshots Memorial Special Event:

By Don Bauer, WB7TPH

June 30th, we will conduct the second special event to remember the “Granite Mountain Hotshots” who lost their battle with the Yarnell Hill fire on that date in 2013. Some details have not yet been finalized for the event, but we are looking for operators now. If you want to work a specific band from your home QTH, or come together with other club members using the club station, there will be a sign-up sheet at the May and June meetings. Or contact Doug Freeman KV8TD or Don Bauer WB7TPH to sign-up. Operation under the **N7GMH** special callsign, will begin at 8 AM and continue to about 5 PM. ■



## Club contacts - At a Glance

President - K8FB	<a href="mailto:president@w7yrc.org">president@w7yrc.org</a>
Vice President - N7NGM	<a href="mailto:vice.president@w7yrc.org">vice.president@w7yrc.org</a>
Secretary - AE7CG	<a href="mailto:secretary@w7yrc.org">secretary@w7yrc.org</a>
Treasurer - W7BJ	<a href="mailto:treasurer@w7yrc.org">treasurer@w7yrc.org</a>
Board Member - WB7TPH	<a href="mailto:wb7tph@w7yrc.org">wb7tph@w7yrc.org</a>
Board Member - KV8TD	<a href="mailto:kv8td@w7yrc.org">kv8td@w7yrc.org</a>
Board Member - KF7YZJ	<a href="mailto:kf7yzj@w7yrc.org">kf7yzj@w7yrc.org</a>
Board Member - W6TYV	<a href="mailto:w6tyv@w7yrc.org">w6tyv@w7yrc.org</a>
Arizona WAC Administrator	<a href="mailto:az.wac@w7yrc.org">az.wac@w7yrc.org</a>
Ask Elmer for Help	<a href="mailto:ask.elmer@w7yrc.org">ask.elmer@w7yrc.org</a>
Badges	<a href="mailto:badges@w7yrc.org">badges@w7yrc.org</a>
Calendar	<a href="mailto:calendar@w7yrc.org">calendar@w7yrc.org</a>
Events	<a href="mailto:events@w7yrc.org">events@w7yrc.org</a>
Field Day Chairman	<a href="mailto:field.day@w7yrc.org">field.day@w7yrc.org</a>
Fox Hunts	<a href="mailto:fox.hunt@w7yrc.org">fox.hunt@w7yrc.org</a>
Information	<a href="mailto:info@w7yrc.org">info@w7yrc.org</a>
License Classes	<a href="mailto:classes@w7yrc.org">classes@w7yrc.org</a>
Mail List	<a href="mailto:yarc_mail@w7yrc.org">yarc_mail@w7yrc.org</a>
Mentors	<a href="mailto:mentor@w7yrc.org">mentor@w7yrc.org</a>
Membership Application	<a href="mailto:membership@w7yrc.org">membership@w7yrc.org</a>
Newsletter Editor	<a href="mailto:newsletter@w7yrc.org">newsletter@w7yrc.org</a>
Nominations	<a href="mailto:nominations@w7yrc.org">nominations@w7yrc.org</a>
Program Inputs	<a href="mailto:programs@w7yrc.org">programs@w7yrc.org</a>
Public Information Officer	<a href="mailto:pio@w7yrc.org">pio@w7yrc.org</a>
Public Service	<a href="mailto:public.service@w7yrc.org">public.service@w7yrc.org</a>
Repeater Trustee	<a href="mailto:repeater@w7yrc.org">repeater@w7yrc.org</a>
School Clubs	<a href="mailto:school.clubs@w7yrc.org">school.clubs@w7yrc.org</a>
Vendors	<a href="mailto:vendors@W7yrc.org">vendors@W7yrc.org</a>
VE Test Liaison	<a href="mailto:testing@w7yrc.org">testing@w7yrc.org</a>
YARC Party Coordinator	<a href="mailto:yarc.party@w7yrc.org">yarc.party@w7yrc.org</a>
Webmaster	<a href="mailto:webmaster@w7yrc.org">webmaster@w7yrc.org</a>
Weekly Nets	<a href="http://www.w7yrc.org/weekly_net.htm">www.w7yrc.org/ weekly_net.htm</a>

The children were lined up in the cafeteria of a Catholic elementary school for lunch. At the head of the table was a large pile of apples.



The nun made a note, and posted on the apple tray: 'Take only ONE . God is watching.'

Moving further along the lunch line, at the other end of the table was a large pile of chocolate chip cookies.

A child had written a note: 'Take all you want. God is watching the apples!'

## Summary of Upcoming Club Events

Following is a summary of upcoming club events. For further details and other events, refer to the calendar on the club's website.



**Club Meeting** – Thursday, May 7 at 7:00 PM – Program: 10 Meter SIG Presentation, Bill Noe, W7PVA

**Transmitter Hunt** – 1 PM, Sunday May 10. Meet at Arizona State Credit Union parking lot on Gail Gardner Way near Willow Creek Road. Contact: Pete Morrison, K6VVR or John Broughton, WB9VGJ.

**Public Service Events** – Contact Patti Halgunseth, KD7VBG

- Whiskey Row Marathon – May 2
- Chino Grinder – May 2 – Contact Bob, KC8BOB
- Mountain Mayhem Bike Event – May 16

**License Classes** – Free Technician Class license preparation class is being offered on May 2d.

**License Tests** – The next license exams are scheduled for May 9<sup>th</sup>.

**ARRL Field Day** – June 26, 27, 28

**Hotshots Memorial Special Event** - June 30

**Williams Hamfest** – July 24, 25, and 26 in Williams Arizona

- The club is currently accepting donations of equipment that will be sold at the hamfest.
- The club will also sell members' equipment at the hamfest on consignment.

**Weekly Nets** – All licensed radio amateur operators are welcome to participate in these nets. Reference the Weekly Nets tab on the club website for further details.

- 2 Meter FM Net – Wednesdays at 1900 on 147.260+, PL 103.5 Hz
- 2 Meter SSB Net – Wednesday at 2000 on 144.220 USB
- 10 Meter SSB Net – Thursdays at 2000 on 28.444 +/- QRM USB
- 220 MHz FM Net – Wednesdays at 1830 on 224.080-, PL 156.7 Hz

## Everybody's S-Meter is Correct

by [Don Keith N4KC](#)  
[www.n4kc.com](http://www.n4kc.com)

What is the first bit of information we typically glean or give when we begin an on-air conversation with another amateur radio station? The signal report, of course. Later, we talk about the weather, brag about our stations, decry the lousy lack of sunspots, but first, we want to know what kind of signal we are getting to the other guy's radio. And we want to make sure we give the other op an accurate idea of how well we are receiving his or her transmission as well.

It's a courtesy, of course, but it also helps us get an idea of how the band is behaving so we can gauge if we can [continue](#) the chat. It can certainly help each operator involved in knowing how well his station is performing. And in some [cases](#), it gives us a chance to inform the other guy of a problem with audio, keying, or other aspects of the signal he is putting out there on the air.

Fortunately, there are a couple of standardized ways of letting a station know how well his signal is making the haul from his place to yours—the “RST” system and that dancing little back-lit indicator there on the front of your whizbang new radio...the S-meter.

“RST” originated way back in the early days of telegraphy as a way to quickly and concisely inform a station how well he was being heard. It is a 3-digit number with the [numbers](#) standing in [order](#) for “readability,” “signal strength,” and “tone.” Readability is a five-number scale while the other two parameters are nine digits. The scale, according to the American Radio Relay League, is:

### **Readability:**

- 1 - Unreadable
- 2 - Barely readable, occasional words distinguishable
- 3 - Readable with considerable difficulty
- 4 - Readable with practically no difficulty
- 5 - Perfectly readable

### **Signal strength:**

- 1 - Faint signals, barely perceptible
- 2 - Very weak signals

- 3 - Weak signals
- 4 - Fair signals
- 5 - Fairly [good](#) signals
- 6 - Good signals
- 7 - Moderately strong signals
- 8 - Strong signals
- 9 - Extremely strong signals


### **Tone (CW only):**

- 1 - Sixty-cycle AC or less, very rough and broad
- 2 - Very rough AC, harsh and broad
- 3 - Rough AC tone, rectified but not filtered
- 4 - Rough note, some trace of filtering
- 5 - Filtered rectified AC but strongly ripple-modulated
- 6 - Filtered tone, definite trace of ripple modulation
- 7 - Near pure tone, trace of ripple modulation
- 8 - Near perfect tone, slight trace of modulation
- 9 - Perfect tone, no trace of ripple or modulation of any kind

Operators can also add a “C” if there is a chirp on the keying or a “K” to denote the presence of key clicks. There's also a quaint “X” indicator that can be included if the station's signal demonstrates the frequency stability of being “crystal-controlled.” And of course, the “Tone” number is not used for voice communications, though I think I could make a strong argument for making some kind of audio evaluation a third number for voice reports.

The obvious problem with this method—even a system that has stood the test of time for almost a hundred years—is that it is totally subjective. What exactly is the difference between a signal that is “barely readable” and one that is “readable with considerable difficulty?” And how do you bring yourself to give a guy a “4”—readable with practically no difficulty—when it's so close to being a “5”—perfectly readable? Oh, and how many of you could describe what a “rough AC tone, rectified but not filtered” actually sounds like?

One thing that prompted this article was hearing a station the other day give another ham a signal report of “Five by two!” I suppose it is possible to be perfectly readable with a very weak signal, given a quiet band, but hardly likely, and especially considering the conditions that particular day. I also have a QSL I received that has a



CW signal report of “3-8-9.” Maybe it was my fist that made me difficult to read despite my strong signal with a perfect tone!

Of course, I am almost always “5-9-9” or “5-9” to DX stations in pileups, even if they have to ask me to repeat my call a dozen times or insist on calling me “K4NC,” so I’m obligated to give them the same report right back, right?

And I hesitate to even bring up those QSOs in which one station’s audio is so distorted or hum-ridden that he can hardly be understood and the fellow on the other end of the circuit doesn’t even mention it to him. I’ve even heard such accolades as, “Good audio!” when the offending station was using so much compression I could hear pots and pans rattling in the kitchen and he sounded as if he was talking through a pillow. He certainly should have been smothered by somebody! But is it his fault if nobody tells him he sounds like loud, distorted mush? If this overly diplomatic reporter told him how good he sounded?

So, thank goodness, we have another way to give honest signal reports, one that is totally accurate, unbiased, the same no matter what the make of the rig or the disposition of the operator. I speak of the S-meter. It is the ubiquitous little device available on most every commercially made piece of ham gear or SWL receiver, and since it is—by definition—a meter, it has to be correct. And since all the operator has to do is say where its needle points when giving a signal evaluation, it removes all prejudice from the resulting report.

Another thing that prompted this article was a discussion on the Yahoo Kenwood TS-2000 reflector—one that crops up on a semi-regular basis. Inevitably, someone will do an A/B check of different radios, using the same antenna, listening to the same station at about the same point in time. The result in the latest round of give-and-take was that the TS-2000’s S-meter seemed to read considerably less than the other radio’s. Was it possible that the 2K’s receiver was that much worse? Maybe. But the station being sampled was just as readable on both radios. In some cases, the S-meter read nothing at all on the 2K and S-3 or S-4 on the other rig, yet again the station was equally readable on both.

Dang quirky radios! How is that possible?

Let’s take a quick look at what an S-meter is. In actual-

ity, most S-meters measure the voltage across the radio’s automatic gain control (AGC) circuit, though that is hardly universal. Few are—dare I say it?—accurately calibrated. Likewise, few are linear across their entire scales either. They are actually designed to give the user a RELATIVE measure of signal strengths arriving at the receiver. More on the meaning of RELATIVE momentarily.

“S” stands for “signal strength.” Thank goodness! I’m still miffed that “E” means “voltage” and “I” is “current!” The markings on the scale of the meter—the “S” units—are based on our old friend, the “RST” system above. Things were pretty wild and wooly in the old days of the S-meter, but back in the early 1980s, the International Amateur Radio Union agreed to recommend that an S-9 reading on an S-meter, indicating “extremely strong signals,” would be defined as -73 dBm, or a level of 50 micro-volts at the antenna input to the receiver if the impedance presented there is 50 ohms. That’s for HF frequencies. The recommended standard is different for VHF, but let’s leave that alone for this article.

Furthermore, the IARU suggested that each S-unit gradient represented a difference of 6 dB. That is a power ratio of four.

So, since the IARU came up with a recommendation for a standard, the S-meter Police must guarantee that all S-meters everywhere work exactly the same way and are completely accurate devices. You know the answer to that! Without getting technical—and primarily because I don’t understand it all either—suffice it to say that the manner in which most S-meters work makes them anything but accurate, rarely linear so that each unit on the meter equals a 6 dB difference, and almost completely inconsistent from one radio to another.

Also, the accuracy of a signal report, including an S-meter reading, is still dependent on the operator and his setup. Is my signal really 40 over S-9 when I hear that wonderful report, or does the guy just need a QSL from Alabama? Is that an average of the peaks or a momentary peak on that rapidly dancing little meter? If I’m not even moving the meter, could it be that the op over yonder runs with his pre-amp off, the way I usually do on 160 through 40, or does my signal really suck? And we haven’t even gotten into other parameters that affect my signal strength at his place. Minor little things like antennas and

propagation!

What the S-meter can do just fine is give a RELATIVE indication of strength between two or more incoming signals. "Don, you are peaking about S-9, but your buddy down the street...running the same power and about the same audio setup...is 20-over. You may want to do some antenna work!"

Your meter may be inaccurate and nowhere near the IARU's hopeful standard and dismally without linearity, but it is inaccurate and non-standard and non-linear for everybody. Just don't try to compare the S-meter reading on your Goshdarn 3000 Plus with your buddy's Heckfire Pro IV. They won't be the same...necessarily.


So here is the good news. Everybody's S-meter is completely accurate! Accurate as long as he is using it to give RELATIVE signal strength reports.

Permit me a brief illustrative fable. When I was a youngster, I was helping my dad (SK WA4AZJ) with a carpentry job. He asked me to cut him a 2X4. I asked him how long it needed to be. He answered, "About as long as a piece of rope." I stood there perplexed, saw in hand, for a bit, trying to figure out where to start cutting, until he finally let me off the hook and gave me the exact measurement for the board he needed. Lots of things in life are relative.

Maybe I can apply that same bit of whimsy next time I begin a QSO.

"What is my signal there, old man?"

"Oh, you're peaking about two inches with peaks to the screw-head on the old S-meter. You even got up to the 'n' in 'Kenwood' a couple of times. Good signal! Now about that QSL I need..." ■



**Standard General Affiliate Acquires 1,743 RadioShack Stores**

In partnership with Sprint, the stores will feature emerging technologies to enhance traditional accessories, including Do It Yourself (DIY) electronics. 1440 stores will be co-branded with Sprint.

The unique co-branding partnership will promote the company's strategy of engaging the "mobile first" generation. ■

## Multi-band Expandable Antenna System

From "Tenna Topics" by Vic Black, AB6SO

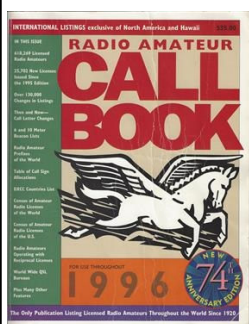
If you live in an antenna unfriendly environment, consider using Hamstick-style mobile antennas for your home installation.

The big problem is getting access to the antennas when changing bands. Fear no more! Mount several antennas in parallel and feed them with only one feed line. When you transmit, your signal finds the best impedance match for the band of operation and radiates from the correct antenna. This is somewhat analogous to the Hustler mobile system with different radiators for each band.

Mount as many Hamstick or Iron Horse single band antennas as you need onto a single mounting plate. Later attach more as needed. Attach them in parallel and feed with one feed line.

Mount them on a metal plate above a conductive surface, such as the top of a mobile home, a building with a steel roof, a steel balcony or onto a metal plate with at least one resonant (quarter wave long) counterpoise for each band. Your signal will find the antenna with the best impedance match and radiate from that one. ■

## How to Find Old Amateur Radio Call Signs.



Looking for an old call sign or name of an old-time Ham Radio operator can be a challenging task. Perhaps you only know the name of a person, and would like to learn his call sign. Radio Amateur Call Books, such as shown above, usually list hams in alphabetical order by call sign, followed by their name and address.

Until recently, there has been no easy way to search these Call Books by name or address. Now, however, some of these Books have been scanned and are available on line.

The website, <http://w0is.com/oldcallsigns/oldcalls.html> provides a wealth of information that can help you with your search. ■

## Some Area Repeaters



### Get Together for Breakfast

**Wed. Morning Breakfast:**  
7:30 a.m. at the Manzanita  
Grille (Prescott Golf Course).

*informal – all are invited*

**Breakfast at Masonic Lodge:**  
3rd Saturday of each Month  
at 9:00 a.m.

(1280 Willow Creek Road, 2<sup>nd</sup>  
Floor; above Bank of America)  
*informal – all are invited*

Freq.	PL	Location	Owner/ Club	Auto- Patch	Links	Vo IP	Notes:
52.560-	100.0	Mt. Union	N7NGM			IRLP	Node 3301
144.390	Simplex						APRS- www.aprs.fi
145.290-	127.3	Mingus Mtn.	K7YCA				ARES/RACES
145.350-	162.2	Wildflower	W7QHC				Dawn
146.620-	162.2	Yarnell Hill	N7YKT				H.A.R.K.
146.760-	131.8	Hayden Peak	N7SKO				WECOM INC
146.780-	91.5	Bill Williams Mtn.	K7NAZ			IRLP	BWMRC LITZ, 3178
146.880-	100.0	Prescott Heights	W7YRC				YARC
146.920-	162.2	Mount Ord	W7MDY				ARA
146.980-	162.2	Mt. Elden	W7ARA				ARA
147.000+	162.2	Mingus Mtn.	K7MRG				MMRG
147.140+	162.2	Mt. Elden	W7ARA				ARA
147.220+	162.2	Mingus Mtn	W7EI				VVARA LITZ
147.260+	103.5	Mt. Union	K7YCA				ARES/RACES
147.260+	127.3	Mt. Francis	K7YCA				ARES/RACES
147.360+	162.2	Mt. Ord	W7MDY				ARA
224.080-	156.7	Mingus Mtn.	KI6FH				
442.150+	100.0	Mingus Mtn	K7MRG				MMRG
446.025	Simplex		N7NGM			Echo	
448.475-	100	Mt. Elden	W7ARA				ARA
448.875-	100.0	Mt. Elden	W7ARA				ARA
449.250-	192.8	Chino Valley	K7POF				
449.7250-	107.2	Mingus Mtn	K6DLP				
927.0875-	151.4	Mingus Mtn	WB7BYV				
927.3875-	151.4	Prescott	WB7BYV			Echo	ARA

### Area Packet Node Station Frequencies.

See [http://www.k7yca.org/  
packet\\_radio.htm](http://www.k7yca.org/packet_radio.htm) for a list of  
Winlink nodes and gateways "

**YARC 7p.m. Wednesday  
Night Net**

147.260+ with a PL of 103.5 Hz.



### T-Hunt Frequencies:

**Primary - 145.100 MHz**  
**Secondary - 146.565 MHz**

For more Repeater Information & Listings refer  
to: ● [www.w7ara.org/Web/](http://www.w7ara.org/Web/)  
● [www.azrepeaters.net](http://www.azrepeaters.net)

## YAVAPAI AMATEUR RADIO CLUB

P.O. BOX 11994

PRESCOTT, AZ 86304

Visit us on the web at <http://www.w7yrc.org>

Many thanks to Randy Dashiell, W6TYV, our Webmaster

