



YAVAPAI SIGNAL



The Yavapai Amateur Radio Club • Prescott, Arizona • DM-34 • Volume 23 – No.2 • February 2008

YARC Post-Holiday Party was a Grand Success

Thanks to the efforts of Bob, WB7RRQ and Judy, KC7MTY Rosevear, Erika, Schiltneck, KI7JZ, and others who contributed prizes, this year's Post-Holiday Party was the best ever. Seventy one (71) people attended, and we nearly filled the large St. Michael's dining room. The buffet lunch included several entrees and the food was really delicious. Karen and Ron Sampson provided background music, with Ron playing various saxophones and accompanied by Karen on the keyboard.

There were plenty of prizes to go around, so each person received at least one item. The prizes were wrapped, so everyone had an equal chance for a better selection.

Those who attended, overwhelmingly approved of St. Michael's Hotel as their first choice for next year's party.

For more photos, go on-line to: <http://tinyurl.com/3c4hjs> (John, WB9VGJ's) and <http://tinyurl.com/29qunp> (Joan, AB7KE's website). Pictures are also available from Joan at ab7ke@cableone.net, if you are unable to download them on-line. ■



YARC Officers for 2008	
President	Vice President
Terry Pemberton, KB7TRE kb7tre@cableone.net	Jack Ragen, W3IVQ ragen@cableone.net
Secretary	Treasurer
Jeff Hanna, WB7RFY jeff668@commspeed.net	Patti Halgunseth, KD7VBG kd7vbg@cableone.net
Board of Directors (includes Club Officers)	
John Broughton – WB9VGJ	
Tom Griswold -- N6LSA	
Richard Bozeat – KE7DTR	
Walter Schumann – KF6SPS	
Newsletter Editor: Joe Oliver, AC6AA	



Karen and Ron Sampson

Table Setting



Lots of Prizes for Everyone

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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 146.880-repeater. 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. If you hear a 1400 Hz pulsing tone, the repeater is on backup battery power and usage should be limited to necessary communications. Our deepest gratitude to Bill Kafka, W2YAV for allowing us to acquire this repeater. ■

Membership Count:



1st Thurs. in Dec.....**144**
Gain/Loss.....0
1st Thurs. in Jan.....**144***

* Includes 13ea 3-month memberships

Minutes of January 3, 2008 Board Meeting



Board Meeting was called to order by KB7TRE at 1822hrs. Also in attendance WB9VGJ, KE7DTR, N7LSA, W3IVQ, WB7RFY, and AB7NK.

After Holiday party was discussed. Property contract requires 75 plates and so far only about 50 are confirmed. Will stress during membership meeting. Gift ideas were solicited.

WB9VGJ has certificates of Appreciation prepared as requested by the Board and can be presented tonight. Many thanks earned and given to John for efforts.

Meeting programs were discussed. President requested a committee to help secure speakers and topics. N7LSA will chair with KE7DTR volunteering to assist. February will be photo presentation by KD7MTJ: March presentation by KE7NAP on sight-impaired operating.

Field Day planning underway with site confirmed. WB9VGJ noted that the Incident Command System will be activated concurrently this year. KB7TRE to poll VVARA as to FD activities.

We will distribute a sign-up sheet for year 2008 Net Control Operators tonight and until filled.

Chain of Command procedures discussed in case of Board/Officer absence. Vice-President is now designated contact person to coordinate; preferred notification is via phone, as early as possible prior to meetings.

2nd Annual Hamfest date questioned;

referred to Hamfest committee (WA6AQK & KD7VBG) for discussion at February meeting.

ARCA affiliation renewal is due; membership vote at tonight's meeting.

Adjourned at 1855hrs.

Respectfully submitted,
Jeff Hanna, WB7RFY
YARC Secretary

Minutes of January 3, 2008 General Meeting

Meeting called to order at 1906 MST by the President, KB7TRE. Following Pledge of Allegiance introductions were made.

Attendance: 61 of whom 34 signed in.

Visitors: Pat Lewis, XYL of W6KHN, and it was noted and applauded that they are celebrating their 50th wedding anniversary.

New Members: No new members to start the year, but several renewals processed.

Meeting Minutes of December 06, 2008 were approved as published. Motion WB9VGJ; Second KE7DTZ; no dissenting votes.

Treasurers Report: In absence of KD7VBG, AB7NK reported a beginning balance of \$1616.72, ending balance of 1312.70, and repeater fund balance of -\$269.08. Report accepted on Motion of KE7DTZ; Second KV8TD; no dissenting votes.

Committee Reports:

ARES/RACES/Public Service: KB7CBK reports on the upcoming

schedule of events already planned, including Whiskey off road bicycle event April 19 & 20; Wild Fire Expo April 12 (preliminary date); Whiskey Row Marathon May 3; Field Day June 28 & 29; Groom Creek Classic in September; Tour de PV; March of Dimes Walk America; Prescott Forest Road Rally October 3 & 4; Prescott Walk & Run for Diabetes October 18; Rails to Trails November 15; County Fair; PV World Art Fair; and more...

Recommends all involved in ARES register on the database at AZ.ARRL.org, a secure site. 56 percent are currently in the database. ARES training dates in February, May, August and November.

IRLP: W7JLC reports all working well, back on Glassford Hill Repeater 442.350+ 100Hz and being utilized.

VE Testing: AB7NK will schedule sessions to coordinate with class schedule.

CLASSES: W7JLC polled those present who wanted a General Class. Some, but minimal interest at this time. Need at least 4 students to conduct a successful class. Planning for an Extra class February 9 & 16, then General class possibly in March. Next planned Technician not until September, unless there is a lot of interest.

ELMERING: KA7JAS reported all needs fulfilled.

SHIRTS: W6CCD said new shirts are now available. AB7YR was wearing first example.

PATCHES: Embroidered club patches are available from the Treasurer for just \$3.00.

SCHOOL CLUBS: KB7TRE reports delivery confirmations coming back from holiday radiograms Granite Mountain group sent as a service. KV8TD would like club members to offer their QSL cards for the school station wall -- will spur discussion and wonder. N5RO

needs equipment, particularly HF for recently formed Bradshaw Club. They are currently using all borrowed equipment for demos and activities. Acknowledged donation of a 35 foot tower and 3 element beam to the school, but they may not be able to utilize on school property.

REFRESHMENTS: Committee Chairman K6UWV noted selection of treats and drinks available, and encouraged all to recycle aluminum cans.

YOUNG HAM NET: KE7DTX reports for KI6AHH that all is going well on Sunday evening net, 1900 hrs 147.22 162.2 Hz, and encourages all young hams in Yavapai County to participate and all hams are welcome. Encouraged youth mentors to help facilitate getting young people active through club stations. YHYC website in development and coming soon. Kids' day activity scheduled on Saturday, January 5th by K7AAC and KD7TRQ.

OLD BUSINESS:

AFTER CHRISTMAS PARTY: WB7RRQ reminds all that the Party starts at Noon with food at 1:PM. Need at least 75 persons to attend and currently only have about 50 confirmed, so please consider participating and bringing guests -- will be a lot of fun. Ron & Karen Sampson will be providing Musical entertainment. Hall is suitable for dancing and event has been a favorite every year. KI7JZ has provided several gifts and on motion of WB9VGJ, Second of WA6AQK and no dissenting votes, an additional budget of \$150.00 was approved for additional party gifts. Amended on Motion of KV8TD, Second of W7JLZ, and no dissenting votes, to only expend this budget once the contract minimum with Hotel St Michael is resolved.

AWARDS: Recognition awards were presented to many club members in ap-

preciation of outstanding service. Certificates were presented to:

W6CCD....Dick Hughes.. Service as Vice-President and coordinating club shirts.

K7DUC.....Pat Oliver.. Service as Secretary 2006 & 2007

AC6AA.....Joe Oliver.. Newsletter Editor and Computer assistance to Secretary

WA6AQK..Ken Severance.. Service as Board Member and Hamfest assistance

AB7NK.....Mary Vince.. Leadership of VE Team

WB7RRQ...Bob Rosevear.. Prescott Road Rally Communications Coordinator

KC7BOB...Bob Thompson.. Co-Chair County Fair Booth and Road Rally coordinator assistance

N5RO.....Jim Clark.. Service to Youth via Ham Club for Kids

KA7JAS....Neal Vince.. Technical Assistance to projects and membership

KV8TD.....Doug Freeman.. Co-Chair County Fair booth

KB7CRK...Lee Cunningham.. ARES/RACES & Public Service accomplishments

W7JLC.....Jack Crabtree.. Providing Amateur Radio License Classes, IRLP access & encouraging youth to enter Amateur Radio

W5VJH....John Gross.. Chair 2007 Club Picnic Committee

K6UWV....David Passell.. Outstanding efforts providing refreshments at every meeting.

KI6AHH...Tony Jackson.. Activating Young Hams Net and activities

PROGRAMS: February, Al Crook, KD7MTJ on travels through Southern Utah. March, Ellis Rackoff will present on operating with the visually impaired. No additional months filled as yet. Solicited ideas of what membership would like to have. Among suggestions was medical/first aid preparedness,

N7CW has access to professionally developed DXpedition recent videos which were immediately sought. Forward additional ideas/contacts to N7LSA or KE7DTX who will be coordinating programs and speakers from here on.

PUBLIC INFORMATION: Excellent feature article appeared in the Daily Courier Newspaper on December 13, 2007 extolling VHF/UHF/IRLP, youth in radio, service to community, and the Yavapai Amateur Radio Club and members. Special thanks to KE7NSB.

CLUB NET: Wednesday, 7:00pm on club repeater 146.88. WB9VGJ spoke on the skills and fun of checking in and opportunity to improve skills by being a Net Control Station.

Openings are available in 2008 and sign-up sheet was passed. A few months are still open and will be available at February meeting, if still available.

ARCA affiliation is due. On Motion of WB7RRQ, Second WA6AQK, and no dissenting votes, Officers will submit forms/\$35.00 fee to maintain our affiliation in 2008.

VIDEO: Last year we approved development and are ready to move forward. Please see KB7CBK with ideas and offers of assistance.

TAX DONATIONS: KB7TRE reminded all, of the State's program allowing taxpayers credit for donations

to public or private schools, and encouraged all to consider. He has pre-filled forms to assist those interested.

NEW BUSINESS:

ARRL: Addressing membership concerns, those attending were polled by show of hands who was an ARRL member...nearly all indicated they were. Importance of individual/family membership in ARRL was stressed. The Secretary has ARRL forms for those who wish to join, and please join through the club as it provides benefit to the club treasury and Special Service Club status we hold.

DEMO: Prescott Astronomy Club on Saturday April 19 (daytime at Prescott Library) especially as related to Space and space activities (AMSAT, ARISS, etc). IRLP and general radio interest as well. WB6ODR already contacted, KB7TRE to assist, others please volunteer.

RECYCLING: Costco and Habitat recycles public electronic waste responsibly. N5RO announced online asset at freecycleprescott on Yahoo groups as a resource for free to give free to get recycling option.

50/50 RAFFLE: \$45.50 was won by John Gross, W5VJH.

ANNOUNCEMENTS: Additional 2008 Gunsite Calendars, via Buz Mills K7GST, last month's speaker are available for members.

Tonight's Program: Jack, W7JLC and Terry, KB7TRE will present on the ARNC Balloon Projects.

Motion to adjourn the business meeting by W3IVQ, Second KB7OCR; with no dissenting votes, meeting adjourned at 1955 MST.

Respectfully Submitted,
Jeff, WB7RFY
YARC Secretary

Need a Ride?


Are you without wheels and need a ride to a YARC club meeting?



Check into the Wednesday night net on 146.880 at 7:00 p.m., prior to the first Thursday of the month.

There is a good chance that someone will offer you a ride.

Program Speakers



February: Al, KD7MTJ will give a photo presentation on Utah and Northern Arizona.

March: Ellis, KE7NAP will have a presentation on the visually impaired.

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.

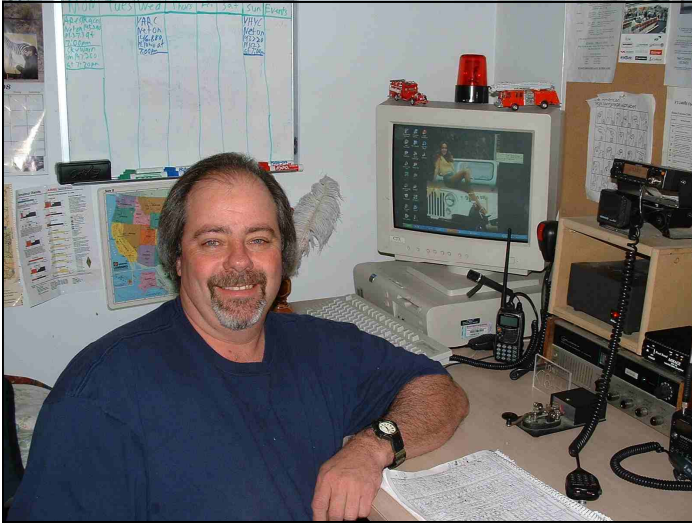
Don't Hesitate to Ask for Help!!

Call **Neil Vince**, KA7JAS at:

(928) 775-2158 or
ka7jas@arrl.net

This Month's Featured Hams

By Pat Oliver, K7DUC



Marty Goyette, KF6BTV



Tony Jackson, KI6AHH

This month we interviewed another duo, a father and son: Marty Goyette, KF6BTV and Tony Jackson, KI6AHH.

Marty first got his license in 1997, after being encouraged by a good friend who was a long time ham. Tony, after having been on CB for a while, got interested in a young people's net in Southern California and talked on that net third party. A friend in high school then helped him to study for his license. He received his license on August 5, 2005. Both plan to study for their General tickets soon.

Both Marty and Tony like voice communications. Tony, of course, very much likes IRLP and Echolink. Tony is really enjoying meeting new friends on IRLP. So far he has worked England, Australia, Sri Lanka, and Sweden. He also works on 2 meters, 70 cm, and 6 meters FM. Marty works 2 meters and 70 cm., and will be doing more on IRLP shortly. They both would like to study CW.

Marty's most memorable experience was when he first listened to the IRLP and found it amazing. Tony's most memorable contact was with Sid in England on IRLP.

Marty has set up a couple of antennas and would like to build some J-Poles. Tony is interested in building wire antennas.

Marty's most memorable radio related mail was getting his license. Tony has received 5 QSL cards to date, including one from Canada and another from San Diego.

Both father and son have been quite active in club activities. They have helped in two Road Rallies and the County

Fair, among others. Tony has started the Young Ham's Net and is in contact with the Southern California Young Ham's Net and with a group in Washington. He would like to encourage kids to be less microphone shy. His local net has been in operation for over a year so far, and has very good potential for expansion.

Marty would like to see the club progress as it is, with more events. He would like to be active in emergency communications, but has many work and family commitments which take up his time for now.

Tony would, of course, like more kids in the club and would like more kids on the Young Ham's Net on Sunday at 7:00 p.m. on 147.220. He would also like to see more contests.

Marty works at Performance Accessories and is a CNC machinist. Tony is caring for his mom now, but when she is well, he will be looking for work. Their family is originally from Southern California and moved into the area 3 years ago.

Their ham shack is full of awards and Tony's ship and pirate collection. They have an assortment of radios, including a Radio Shack HTX420, an IC-T90A, Kenwood TM241A, Yaesu FT2400 and F6A, President HR2600, and Radio Shack HTX202. Marty's mobile station includes a Kenwood TM-G707, an ICOM O2AT, and an Alinco DJ-S11.

We are fortunate to have this duo in our club. They are accomplishing much and will continue to do more in the future. ■



By Lloyd, WA6ZZJ

ARES/RACES.....

2008 TRAINING MEETINGS SCHEDULED.....

The quarterly training meeting dates and topics for 2008 are as follows:

- **Saturday, March 8, 2008** (Location to be determined to see if we can accommodate all members as much as possible). This will be a 'back to basics' training meeting concentrating on the ICS-213 message form and voice message handling procedures.
- **Saturday, June 7, 2008** (Once again, location yet to be determined). This will be a meeting on "Go-Kits". We had this meeting a couple of years back, but with several new members since then it is time to once again go over this topic. It will be a suggested equipment list and 'bring your go-kit' and 'share ideas with others' type of meeting.
- **Saturday, August 2, 2008** (Location, county wide). This will be a deployment exercise to evaluate what happens if the repeaters and internet go away during a major emergency (there may be some dry run practice on this topic before the training date).
- **Saturday, November 1, 2008** (Once again, location could be countywide). This meeting will be a continuing meeting on exercising all of our available means of communications within the county. It will involve an incident in the South part of Yavapai County to evaluate our communications needs and response methods.

The above topics are subject to change if ARES/RACES Staff and/or the Yavapai County Office of Emergency Management see the need for other training.

WHY BASIC TRAINING IS IMPORTANT.....

Education and training is what supplies the knowledge to help you build confidence in your ability to execute the required steps in the shortest amount of time and with the minimum amount of wasted motion. Hesitancy and indecisiveness will quickly tire you, as you are expending more mental energy than required, and that would soon dull your senses. Thus you educate yourself and train before the skills are needed. Education and training helps you function as part of a team.

Emergency communicators are part of an adaptive team that can rely on and support one another. All members must function as a cohesive unit. Individuals may possess great operating skills, but will perform inadequately if they cannot work as part of a team.

WILDFIRE EXERCISE.....

Yavapai County ARES/RACES will be involved in a multi-agency Wildfire Exercise on Friday, March 28, 2008. The drill will be comprised of a Functional component to be held at the Prescott Fire Center, 2400 Melville Dr. and a full scale component consisting of evacuation training in the field. Both parts of the exercise will be run concurrently. This is a yearly event and ARES/RACES have a permanent amateur dual band and public safety radio installation at this location.

SPECIAL EVENT COMMUNICATIONS.....

Our special event communications could begin as early as mid April this year. Some of the earlier events will be:

- **Saturday, April 26, 2008 - Whiskey Off Road Bicycle Race.** (Communications for this event are still awaiting more information from the event coordinators)
- **Saturday, May 3, 2008 - Whiskey Row Marathon.** (Sign up will begin at the February YARC meeting)
- **Saturday & Sunday, June 28 & 29, 2008. Field Day.** To be held this year at Watson Lake Park in Prescott. More information as the date gets closer.

AMATEUR RADIO SPECIAL EVENT COMMUNICATIONS.....

1. The role Amateur Radio serves in special event communications.....

- Provides a community reserve of operators and technicians that are trained and equipped in the art of ra-

dio communications.

- Sometimes provides communications where no cellular, wire line or wireless phone service exists.
- Advances the general welfare of the community and public interest by volunteering in support of a larger cause.
- **Visible community service by amateur radio volunteers within the community. The amateur radio organization providing Public Service Communications often has its name acknowledged in the credits of the event.**

2. Similarities to Emergency Communications

- Often uses the same equipment (mobile, portable and foot-mobile stations).
- Often uses the same operating techniques (controlled nets, informal and formal nets).
- Usually involves deployment and operations at multiple locations.
- Provides an excellent simulation of conditions and techniques found in emergency communications situations.

3. Differences with Emergency Communications

- It is scheduled, as opposed to an unscheduled emergency event.
- Does not require activation by an emergency management agency.
- Does not exercise an activation tree and the related deployment.
- In contrast to emergency events and emergency management agencies, usually does not require reporting to and coordinating with more than one lead organization. There may be many organizations participating in the event, but the sponsoring organization usually has the key, lead role.
- Often, amateur radio operations takes operator sign-ups several days in advance, assigns them to operating locations, and provides the master list to the sponsoring agency for their records/actions. This does not happen during emergencies.
- May not require wearing a visible ID badge.

Lloyd, WA6ZZJ

VE Tidbits



by Mary Vince – AB7NK

Prescott Area 2008 VE Testing Dates

Saturday, February 23, 2008 9:00 A.M. SHARP
Saturday, April 5, 2008 9:00 A.M. SHARP

Other dates to be announced as needed.

Testing to be held at:

Embry Riddle University
3700 Willow Creek Road
King engineering & Technology Center (KETC)
Bldg 72 -Room 132
Prescott, AZ 86301-3720

PLEASE COME PREPARED THE DAY OF TESTING

Items needed:

Photo ID

Original License and 1 photocopy

Original CSCE and 1 photocopy (if applicable)
scratch paper & calculator (if planning to use one)

two #2 pencils & a pen

\$14.00 – make checks payable to ARRL – VEC

Pre-registration is not required, however an
e-mail would be appreciated – ab7nk@arrl.net

All license classes will be given & walk-ins are always
welcome.

Good luck to all.

Mary – AB7NK

VE Team Leader

Treasurer's Financial Reporting Sheet



Club / Group Name: YARC
Reporting Date: January 2008

Patti Halgunseth, KD7VBG
Treasurer

Members Name	Dues Paid	Repeater Fund	Donations	Prize Money Paid Out	Net Cash In per Member
Jim Clark/R-N5RO	\$18.00	\$2.00			\$20.00
Rose Clark/R-KE7DTY	\$0.00				\$0.00
Jack Ragen/R-W3IVQ	\$18.00	\$2.00			\$20.00
John McArthur/R-KB2WPN	\$18.00	\$2.00			\$20.00
Henry Dye/R-KE7DTW	\$18.00	\$2.00			\$20.00
James Grimm/R-KD7RMV	\$18.00	\$2.00			\$20.00
Eric Nelson/R-KE7JKT	\$18.00	\$2.00			\$20.00
Meagan Nelson/R-KE7NAW	\$0.00				\$0.00
Kenneth Line/R-W7MHW	\$18.00	\$4.00			\$22.00
Caitlin Line/R-KE7ODI	\$0.00				\$0.00
Jeff Hanna/R-WB7RFY	\$18.00	\$2.00			\$20.00
Michael Ritter/R-AC7FH	\$18.00	\$2.00			\$20.00
George Imburia/T-Shirt	\$21.00				\$21.00
2 Patches	\$6.00				\$6.00
50/50	\$91.00				\$91.00
John Gross-W5VJH				\$45.50	(\$45.50)
Total:	\$280.00	\$20.00	\$0.00	\$45.50	\$254.50

Miscellaneous Club Expenses	Cash Out	Check Number
Dick Hughes=T-Shirts	\$115.50	985
ARCA=Renewal	\$35.00	986
David Passell=Refreshments	\$26.49	987
Insty Prints=Newsletter	\$27.49	988
Repeater Fund	\$20.00	Cash
Total:	\$224.48	

Club Funds Summary	Totals
Starting Balance	\$1,312.70
Net Expenses	\$224.48
Net Income	\$254.50
	<u>\$1,342.72</u>
Repeater Fund	(\$249.08)
Cash Flow:	\$30.02



Aphorisms

We should make things as simple as possible, but not simpler.
- A. Einstein

No amount of experimentation can ever prove me right; a single experiment can prove me wrong.
- A. Einstein

By working faithfully eight hours a day, you may get to be a boss and work twelve hours a day.
- R. Frost

Tubes and RF Amplifiers

Reprinted with permission from David Bower, K4PZT

d.bower@ieee.org

Remembering the RF power vacuum tubes that illuminated our shacks and the ionosphere with RF brings back lots of fond memories. I suppose the tube I think about the most often is the 6146 type. This octal base tube was good for about 75 watts input and how good efficiency up through six meters. It was an easy and forgiving tube to work with, although it did require neutralization for operation at the higher frequencies. Other more larger tubes included the 829B, 4-65A and 4-125A. These tubes required larger bases and were more expensive and somewhat more difficult to work with. Other popular tubes included the 3-500Z and 3-1000Z. The latter was good for 2KW on the HF bands. The old reliable 811A was used in the 1950s, and is still popular today, some 50 years later. Its use in a grounded grid configuration certainly worked well, and was very dependable. It was available surplus, or new if you had more bucks.

WW-II was not the only source of tubes for RF amplifiers. Television receiver sweep tubes such as the 6KD6 were very popular, and low in cost. If you really wanted to go for some power, the 4-1000A sure did the trick. But it required 7.5 volts and about 21 amps for the filament. No small matter, since a fairly hefty transformer was required. Later tubes such as 4X150A and 4CX250B were very popular, and much smaller in size. For most of the larger RF power tubes, a blower was in order to keep things cool.

Building a good linear amplifier took lots of elbow grease with all the metal work and required fabrication. The designs commonly used were fairly straightforward, and required good layout engineering of the various components for proper operation. And it was part talent and art, perhaps. A nicely constructed linear amplifier was a beauty to behold with all the big custom wound coils, tuning condensers, transformers and other components supporting the central vacuum tube (or tubes).

For those interested in microwave frequencies, the type 2C39 "lighthouse" tube was very popular, and low in cost on the surplus market. It derived its name because it resembled a light house.

In building an RF amplifier, layout really played an important part in the operation and stability of the unit. Proper shielding reduced TVI and other external interference. Short lead lengths on components such as bypass capacitors were very important. Stabilizing an RF ampli-



fier required neutralization to prevent "unwanted" oscillation of the circuit (remember, it was designed as an amplifier; not an oscillator). Several popular methods included screen grid neutralization, capacitive neutralization and inductive neutralization.

Grounded grid operation, popular with triodes such as the 811A mentioned above, did not require neutralization. As a result, the 811A was a popular configuration for HF amplifiers.

Amplifiers frequently produced parasitic oscillations at undesired frequencies. Amplifiers would have a parasitic suppressor attached to the plate cap of the tube to minimize this problem. This was nothing more than a few turns of wire wound over a low value resistor. RF was kept out of the high voltage power supply with an RF choke such as the Ohmite Z-50 (for six meter operation) and Ohmite Z-144 for two meters.

Frequency multipliers for RF were sometimes used by combining two tubes in a push-pull circuit. This worked well for even harmonics, but not at the fundamental or odd harmonics (a very desirable characteristic).

In the age of solid state electronics, vacuum tube RF amplifiers are still widely used. Such companies as Ten-Tec and MFJ/Ameritron are examples. Vacuum tubes, for high power, are efficient and stable and will probably be around well into this century. ■

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with permission from Robert Beasley, K6BJH



That's my house---They won't let me put up an external antenna, so I modified the roof to accept an attic dipole.

The Fourth Annual Yuma Hamfest and Electronics Expo

The Yuma Amateur Radio Hamfest Organization (YARHO) will again be sponsoring a hamfest in Yuma on February 15 and 16, 2008 at the Yuma County Fairgrounds.

This year there will be a "Country Store", a consignment sales area. If you only have a few items to sell and do not want to pay the tailgating fee or stand around all day trying to sell what you have, put your gear in the Country Store and your items will be sold for a nominal 10% fee.

There also will be an expanded seminar list this year which includes such subjects as ARES Database, D-Star Systems, Software Defined Radios, and Ham Radio and Lasers. The full schedule is available at www.yumahamexpo.com/seminars.html.

For more information, please check the following website: www.yumahamexpo.com

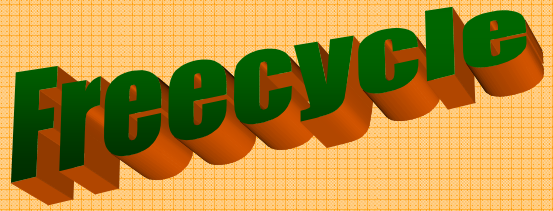
Two-day General Class License Course

A free, two-day General Class amateur radio license preparation course will be conducted on Saturday, February 9 and Saturday, February 16, 2008. The course will start at 8:00 A.M. on both days and will last about 6 and a half hours (including a half hour for lunch). The course location will be at Embry-Riddle Aeronautical University in the King Engineering and Technology Center room 132 (KETC 132) in Prescott, Arizona.

This course is sponsored by the Yavapai Amateur Radio Club and Embry-Riddle's Eagle Amateur Radio Club.

Students are requested to register for this course by sending an email to Jack Crabtree at jskra@cableone.net. Additional information and course location maps will be provided as required. The recommended textbook for this course is the ARRL General Class License Manual. A group discount buy (\$20.00) will be made on January 30th for those who indicate they wish one. Books will be available at the first day of the course.

For additional information contact Jack Crabtree, W7JLC at jskra@cableone.net or 928-771-2344.



By Dick Hughes, W6CCD

The Freecycle network was developed by Deron Beal in Tucson Arizona on May 1, 2003. Its purpose is to prevent perfectly useable items from being thrown away in a landfill when they could be put to use by someone else. Since that small beginning in 2003, the network has grown to 4,212 groups with 4,292,000 members in 75 countries around the world. The local Freecycle network in Prescott has 1,627 members. The concept is changing the world one gift at a time, and its members are currently keeping 300 tons of "stuff" out of the landfills every day!

The Freecycle Network is incorporated as a non-profit organization in the State of Arizona. A 501(c)3 ruling was approved by the IRS in November 2006, and any donations made are tax deductible retroactively back to July 2004.

The rules are simple. You can give stuff away, or ask for something, but the exchange has to be absolutely free. This means no bartering either. After you join, you must list something to give away before you can post a wanted item. The local network is run through Yahoo Groups at <http://www.freecycle.org/group/United%20States/Arizona/Prescott>. This is a moderated group so everything has to be approved by the moderator before it is sent to the members. This means you won't be receiving any spam in the process.

I have belonged to the group for several months, and have given away a number of items. The recipients are always very grateful to receive something they needed. You won't believe the stuff people give away, from ponies and ferrets to baby food and computer monitors. Give Freecycle a try. It is a very worthwhile activity.

73, Dick – W6CCD

Signs

Anesthesiologist business card:

When you care enough to sleep with the very best.

Sign over a Gynecologist's Office:

'Dr. Jones, at your cervix.'

In a Podiatrist's office:

'Time wounds all heels.'

On a Septic Tank Truck:

Yesterday's Meals on Wheels

At a Proctologist's door:

'To expedite your visit please back in.'

On a Plumber's truck:

'We repair what your husband fixed.'

On another Plumber's truck:

'Don't sleep with a drip. Call your plumber..'

On a Church's Billboard:

'7 days without God makes one weak.'

At a Tire Shop in Milwaukee :

'Invite us to your next blowout.'

At a Towing company:

'We don't charge an arm and a leg. We want tows.'

On an Electrician's truck:

'Let us remove your shorts.'

In a Nonsmoking Area:

'If we see smoke, we will assume you are on fire and take appropriate action.'

On a Maternity Room door:

'Push. Push. Push.'

At an Optometrist's Office:

'If you don't see what you're looking for, you've come to the right place.'

On a Taxidermist's window:

'We really know our stuff.'

On a Fence:

'Salesmen welcome! Dog food is expensive!'

At a Car Dealership:

'The best way to get back on your feet - miss a car payment.'

Outside a Muffler Shop:

'No appointment necessary. We hear you coming.'

In a Veterinarian's waiting room:

'Be back in 5 minutes. Sit! Stay!'

At the Electric Company

'We would be delighted if you send in your payment.

However, if you don't, you will be.'

In a Restaurant window:

'Don't stand there and be hungry, Come on in and get fed up.'

In the front yard of a Funeral Home:

'Drive carefully. We'll wait.'

At a Propane Filling Station:

'Thank heaven for little grills.'

And don't forget the sign at a Chicago Radiator Shop:

'Best place in town to take a leak

Weekly Breakfasts



Tues. Morning Breakfast –

7:00 a.m. at

Back Burner Cafe

8400 E. Long Mesa Drive

& N. Robert Road

Informal – all are invited.

Wed. Morning Breakfasts:

7:00 a.m. at

Iron Horse Restaurant

(Hwy 89 in Chino Valley)

(N 34°43'56.5" W112°27'15.4")*

informal – all are invited

8:00 a.m.

Masonic Lodge

(1280 Willow Creek Road,

2nd Floor; above Bank of America)

informal – all are invited

* Location data (per WGS84) provided

by Fred Zimmermann, N7PJM

Area Repeaters

Frequency	PL	Location	Owner/Club	Auto-Patch	Rem. BaseOr Linked	Vo IP	Notes:
52.560-	100.0	Mt. Union	N7NGM			Echo	-500KHz Offset
53.040-	None	Prescott Airport	WB7BYV				-1MHz Offset
145.290-	127.3	Mingus Mtn.	ARES/RACES				
146.780-	91.5	Williams Mtn.	BWARC			IRLP	
146.880-	100.0	Prescott	YARC				
146.980-	162.2	Flagstaff	CARC				
147.000+	162.2	Mingus Mtn	MMRG				
147.040+	100.0	Prescott Heights	W2YAV				
147.140+	162.2	Flagstaff/-Mt. Elden	ARA		Linked to Mt. Ord 147.360-		
147.220+	162.2	Mingus Mtn	VVARA				
147.260+	103.5	Mt. Union	ARES/RACES				
442.150+	100.0	Mingus Mtn	W1OQ/Northlink				
442.350+	100.0	Glassford Hill	N7KPU			IRLP	
445.300-	100.0	Prescott	WINSYSTEM		Node 3727	IRLP	
448.475-	100.0	Flagstaff-Elden	ARA	Yes			
448.500-	100.0	Prescott	K6JSI				
448.875-	100.0	Flagstaff-Elden	Northlink		Linked		
449.175-	100.0	Towers Mountain	Northlink		Linked		
449.675-	88.50	Prescott Airport	WB7BYV		Linked to P Mtn. 927.3875		
927.3875-	151.4	Prescott	WB7BYV	Yes	Yes	Echo	Be Nice

Y.A.R.C. IRLP NODE

Node Number 3182

442.350+ MHz with a
PL Tone of 100.0 Hz

For more Repeater Information & Listings refer to:

- www.w7ara.org/Web/
- www.azrepeaters.net
- www.azfreqcoord.org/listings.htm

YAVAPAI AMATEUR RADIO CLUB

P.O. BOX 11994

PRESCOTT, AZ 86304

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

Many thanks to Bob Smith, WB6ODR, our Webmaster

