



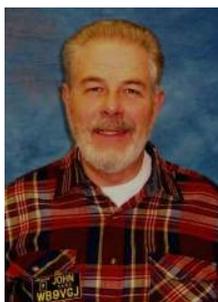
YAVAPAI SIGNAL



The Yavapai Amateur Radio Club • Prescott, Arizona • DM-34 • Volume 20–No.12 • December 2005

Season's Greetings

From the Desk of the President



2005 is nearing its end. YARC has had a good year. We have had two successful license class sessions resulting in more amateur radio operators and more club members. We have had several successful public service communications events, adding a new one, the first annual Run for the Red, a fund-raising race for the American Red Cross (AMC) sponsored by the Groom Creek Fire Department. We participated for the first time in the Prescott Valley World Arts Festival, having a booth set up for the two-day event. It was successful in spreading information about the hobby and the club to the general public. We will be invited back next year. Several members of the club were on the teams of Yavapai County ARES/RACES members who provided communications for the AMC at Veterans Memorial Coliseum in Phoenix when evacuees from Hurricane Katrina were housed there. We launched an IRLP node. The pre-Field Day event at the Prescott library helped spread the word of our club and the hobby. We gained the honor of having YARC obtain ARRL Special Service Club status, an honor few clubs achieve. This, and all the other club accomplishments, is due to the active participation of members who are dedicated to the hobby and to the club. I would like to thank each and every club member who has been involved in club events this past year. It is you who make the club what it is.

A committee looking into the possibility of a club repeater issued its finding and conclusion that the time is not right for another underutilized repeater in the area. One item the report noted was that the club should be more 'radio-active.' I think this is a very good idea. I and the board are asking members to do some brainstorming and come up with some ideas of things they'd like to see the club do that it isn't currently doing. We'd also like ideas on how the club might be able to do some things differently to improve them. The key to a viable club is to have active members who get involved in various club functions. I think we have started down this path, as demonstrated by the accomplishments made this year. I also think we have opportunities to do even more.

We are presently working with N7KPU testing the linkage of his 440 MHz repeater on Glassford Hill with our simplex IRLP node. If all goes well, we will have much better access to the IRLP node through this repeater to allow better coverage for more hams.

The Prescott Library has moved temporarily to Gateway Mall. Rex, N7NGM, has offered to head up holding the pre-Field day operation at the temporary location in 2006 and to hold it again in 2007. Being at the mall will provide a much greater exposure for the club to the general public. I hope to get more participation in this event in 2006, as it is such a good opportunity for the club.

We held the election at the November

meeting to elect new officers and board members. Congratulations to the new Vice-President, Dick, W6CCD, Secretary, Pat, KE7DUC, board members Ken, WA6AQK, Richard, KE7DTR, and Walter, KF6SPS, who will be serving a second term. My thanks to the outgoing officers and board members for their excellent service this past year: Vice-President, Bob, WB7RRQ, Secretary, Joe, AC6AA, and board members Jack, W3IVQ, and Terry, KB7TRE.

However, one significant area for improvement in the club is finding more members willing to serve as officers and board members. KB7TRE and WB7RRQ worked hard and diligently as the election committee to come up with a slate of candidates for election. They were unable to find a club member willing to run for the office of Secretary, having personally contacted many members. I thank Pat very much for stepping up at the meeting and agreeing to take that office. In a club of this size it is somewhat a shame that it is so difficult to find members willing to serve as officers. I would hope that all members, new and old, who have not served as a club officer, give serious consideration to doing so in the future. Next year we have to elect a new president and treasurer along with three at-large board members.

The club is planning a post holiday party in January. Bob, WB7RRQ should have more details about date, time, location and cost at the December meeting.

73, John, WB9VGJ

**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. 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 1/2 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 6:45 p.m. local time on the 147.220+ repeater on Mingus Mountain. A PL of 162.2 is required

Club Repeater

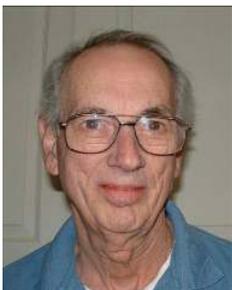
The local 146.880- repeater is the official adopted repeater for the YARC. It is located on the hill above Willow Creek road and requires a PL of 100.0 Hz. If you hear a 1400 Hz pulsing tone, the repeater is on backup battery power and usage should be limited to necessary communications.

Many thanks to Bill Kafka, W2YAV. ■

YARC Officers for 2005	
President John Broughton, WB9VGJ wb9vgj@arrl.org	Vice President Bob Rosevear, WB7RRQ rosevear520@cableone.net
Secretary Joe Oliver, AC6AA joliver@commspeed.net	Treasurer David Passell, K6UWV davidrex@northlink.com
YARC Board of Directors (includes Club Officers)	
Rex Mauldin – N7NGM	
Terry Pemberton – KB7TRE	
Jack Ragen – W3IVQ	
Walter Schumann – KF6SPS	
Newsletter Editor: Joe Oliver, AC6AA	



Minutes of November 3, 2005 General Meeting



John, WB9VGJ called the meeting to order at 1900. The Pledge of Allegiance was recited and members introduced themselves.

Visitors: Vi Hughes; Ruth Collins; Will Lachance, N7UJ; Tony Jackson, KI6AHH; Marty Goyette, KF6BTV; Jack Garner, KB7HH and Gene Harrelson, W7FSX.

New Members: Allan Collins, KD6WQE and Steve Crumley, WB7BYV were voted in on a motion from Lloyd, WA6ZZJ and seconded by Richard, KE7DTR. Bob Thompson, KC8BOB was voted in on a motion by bob, WB6ODR and seconded by Terry, KB7TRE.

Meeting Minutes: A motion to approve minutes of the October 6, 2005 Board meeting was made by Terry, KB7TRE and seconded by Walter, KF6SPS. A motion to approve the General meeting minutes was made by Lloyd, WA6ZZJ and seconded by Terry, KB7TRE. Both were unanimously approved by membership.

Treasurer's Report: Dave, K6UWV reported a balance of \$2022.07.

Committee Reports:

- **ARES/RACES/Public Service events:**
 - Lloyd, WA6ZZJ reported on three successful ARES/RACES/Public Service events in October. The next ARES/RACES training meeting will be held in Cottonwood on Saturday, November 5th. A thank you from the Diabetes Assoc. appeared in the Courier for ARES/RACES' part in the Walk for Diabetes.

- Bob, WB7RRQ thanked participants in the Road Rally and indicated he received many kudos for their participation. Next year will be a national rally.

- **Newsletter:** Joe, AC6AA thanked all members that submitted various articles and pictures for October's newsletter.
- **IRLP:** Jack, W7JLC plans to move the club's IRLP to the Glassford Hill 440 repeater. He will notify members when switchover occurs.
- **Club Repeater:** John, WB9VGJ read the Committee's report on the feasibility of owning our own repeater. The committee concluded that it was not the right time. Other recommendations were made to initiate new committees to investigate methods of funding for new projects and to figure out ways to make the club more radio-active. John asked members to submit suggestions for the next meeting on ways to improve our club.
- **Club Brochures:** Jim, N5RO received 250 updated brochures from InstyPrints. As Public Information Officer, Jim reported that local newspapers have agreed to include club articles. He also is contacting Scout leaders to encourage Boy Scout Radio Merit Badges.
- **Patches/Badges/Shirts:** Dave, K6UWV has club patches for \$3.00; Bob, WB6ODR has badges for \$5.60; Dick, W6CCD can order regular club shirts for \$21.00. Dick was authorized to purchase six shirts to have on hand so members will not have to wait for a minimum order to be filled.

YAVAPAI SIGNAL – DECEMBER 2005

- *License Class:* Mary, AB7NK reported that VE testing will be held on November 12th beginning at 10:00 a.m. at the Jeep Posse Bldg at Pioneer Park.

Old Business:

- *YARC Net Control for December:* Joe, AC6AA volunteered to handle the net for this period.
- *YARC Website:* A motion to pay \$75, requested by Bob, WB6ODR, for upkeep of the website, was made by Terry, KB7TRE and seconded by David, K6UWV. Motion was approved.
- *November Election of Officers:* A motion was made by Bob, WB6ODR, seconded by Terry, KB7TRE, and approved to elect Dick, W6CCD Vice-President, Pat, KE7DUC Secretary, and Board Members as follows: Ken, WA6AQK, Richard, KE7DTR, and Walter, KF6SPS.

New Business:

- *Annual Post Holiday Party:* Members discussed various restaurants. Bob, WB7RRQ will report on price and accommodations for suitable restaurants. Party tentatively scheduled for Saturday, January 21, 2006.
- *Ham TV Transmitter:* Lee, K6ADA donated a 10W Amateur TV Transmitter to the club. Terry, KB7TRE presented a need for such a transmitter at his school. Members agreed to let Terry use it, with the understanding that it would revert back to the club if it was not what the school needed. Dave, K6UWV made a motion to accept the donation and to put the transmitter to use in the school ham radio club. The motion was seconded by Bob, WB6ODR and approved.

Announcements:

- *Tonight's Program:* Lee, K6ADA is the speaker for tonight's program.

A motion was made by Terry, KB7TRE and seconded by Ken, WA6AQK to adjourn the business portion of the meeting at 1952. The motion carried and there was a break for refreshments.

Drawing: Pat, KE7DUC won \$25.00 in the 50/50 drawing.

Program: Lee, K6ADA gave a very entertaining account of his experiences in ham radio and broadcasting. The Program ended at 2045.

Respectfully,

Joe, AC6AA

Secretary



Minutes of Board Meeting on November 3, 2005

A Board meeting was held at 1825 on October 6, 2005. Present were John, WB9VGJ; Joe, AC6AA; Dave, K6UWV; Bob, WB7RRQ; Terry, KB7TRE and Walter, KF6SPS.

Lee Shoblom, K6ADA donated a 10 watt amateur TV transmitter to the club. The Board recommends that it be given to Granite Mountain Middle School. Terry will propose this recommendation to the club members.

Election of officers and board members was discussed. Still need secretary position filled.

Members will be asked to come up with ideas of things they would like to see the club do.

It was decided that a donation from the Road Rally Chairman will be returned, since it can be construed as an indirect payment for the club's support of this public service.

The board will recommend that the price of the club T-shirts be rounded up to the next even dollar, to facilitate transfer of money. Also recommended, is the purchase of six shirts to have on hand, to avoid delays due to a minimum order.

Bob, WB7RRQ will investigate a suitable restaurant for the January club party. Date and place will be discussed with members.

The meeting adjourned at 1850.

Respectfully,

Joe, AC6AA
Secretary



FOR SALE

Mosley TA-53M heavy duty 4-element beam on 10-12-15-17-20M. Assembled weight 55#. Longest element 26' 8". Wind load 6.7 sq.ft. In very good condition. Up only 4 years before move. Asking **\$300 OBO**.

Tailtwister Rotator with lower mast support. Factory serviced in 2002 and not used since. Asking **\$300 OBO**.

Also have Extra **Tailtwister Rotator** (no control box). Asking **\$100 OBO**.

Call Rich, N9CEX at (928) 771-1614, or e-mail at rncaps@netzero.com



YARC TREASURER'S REPORT for November 2005

**David Passell, K6UWV
Treasurer**

INCOME

New Members (see applications for additional information)

Steve Crumley	WB7BYV	11//06	10/26/05	cash	20.00
Allan Collins	KD6WQE	11//06	11/03/05	cash	20.00
Bob Thompson	KC8BOB	11//06	11/03/05	cash	20.00
Doreen Freeman	K7DRV	08//06	(see Doug Freeman below)		

Renewals (Update Roster)

Doug Freeman	KV8TD	08//06	11/03/05	cash	20.00
Robert Smith	WB6ODR	12//06	10/29/05	1112	20.00

ARRL Renewals
none

Other

50/50 Drawing	25 tickets sold	11/03/05	cash	50.00
Richard Bozeat	T-shirt	11/03/05	"	21.00
	1 Patch	11/03/05	"	3.00
Richard Diddams	Donation for phone patch	11/03/05	4909	25.00

Total Income \$199.00

EXPENSES

Pat Oliver	50/50 winner	11/03/05	cash	25.00
Insty Print	250 Brochures	10/31/05	828	39.01
Insty Print	Nov. Newsletter	10/31/05	829	37.76
Richard Hughes	T-shirts	11/03/05	830	121.46
David Passell	Ice, coke, cookies	11/03/05	831	16.27
Joe Oliver	Stamps	11/03/05	832	37.00
Robert Smith	Tiger Website	11/03/05	833	75.00

Total Expenses \$351.50

Cash Flow (Income - Expenses).....(\$152.50)

Deposits 11/10 /05 ..\$174.00

PREVIOUS REPORTED CHECKBOOK BALANCE\$2022.07

CURRENT CHECKBOOK BALANCE..... \$1869.57



ARRL 1926 Handbook - 1st Edition

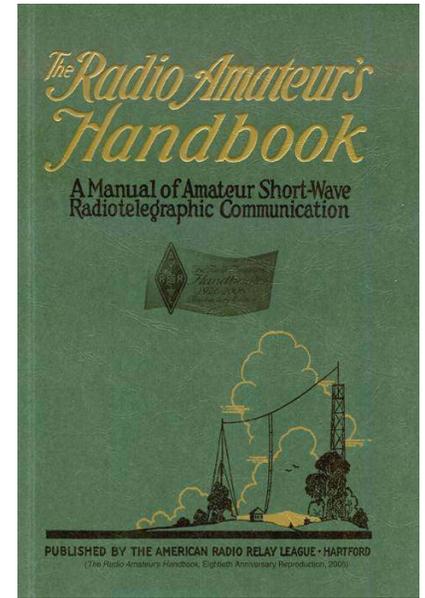
By Joe, AC6AA

Just received the ARRL 2006 Handbook with CD-ROM, which also included a bonus reproduction of the 1926, First Edition of "The Radio Amateur's Handbook".

Browsing through the pages of this First Edition, you can find lots of information on building your own station. There are practical circuits for constructing a regenerative receiver, a wave-meter, a Hartley oscillator sending set, and a Hertz antenna.

For some of you "real" old-timers, you might recognize some of the terminology used in describing the equipment – words such as: condenser, B-Battery eliminator, mercury arc rectifier, grid leak, Fahnstock clip, Kenotron, and electrolytic rectifier.

The late Francis Edward Handy, W1BDI authored the Handbook. The reproduction is a facsimile of the author's signed, personal copy, with minor handwritten notes.



GENUINE

Kenotron Rectifying Tubes
Model UV-216

THESE Tubes are the GENUINE R.C.A. Kenotron Rectifying tubes. Filament voltage 7½ volts and will safely stand A.C. input of 750 volts. These Rectifying tubes will pass plenty of current and voltage for your TRANS-MITTER and are also very efficient for use in "B" ELIMINATORS.

STANDARD BASE. EVERY TUBE BRAND NEW AND PACKED IN ORIGINAL CARTONS.
List price \$7.50 ea.—**Extra Special \$1.85 ea.**

POWER RHEOSTATS
Model PR-535

For controlling filaments of U. V. 202, 216, U. X. 210 and 216 B. Tubes. Each Rheostat has two windings giving four different resistance values from 1.5 to 6 ohms, and has a large rated current carrying capacity up to 2.5 amps.
LIST PRICE \$2.75 Ea. **SPECIAL PRICE, 65c Ea.**

GENUINE BAKELITE PANELS
1/4" THICK

First Grade. Highly Polished on Both Sides.

Size	Regular Price	SPECIAL PRICE
9 1/2 x 11 1/8"	\$2.63 ea.	\$1.00 ea.
10 1/16 x 14 1/16"	3.43 ea.	1.50 ea.
14 9/16 x 17 15/32"	6.33 ea.	2.50 ea.
14 9/16 x 17 1/2"	6.43 ea.	2.60 ea.
15 1/4 x 17 1/8"	6.43 ea.	2.60 ea.
15 1/8 x 16 13/16"	6.38 ea.	2.50 ea.

Make your TRANSMITTER and RECEIVER efficient and neat with these High Grade Panels.

MICA TRANSMITTING CONDENSERS
.002 MFD. 6000 VOLTS

Manufactured by Connecticut Telephone & Electric Co. Used As Grid, Radio Frequency By-Pass and Plate Blocking Condenser
EXTRA SPECIAL PRICE \$2.00 Each

RADIO SPARK TRANSMITTERS (75 WATT PORTABLE)

Made for U. S. Army Aeroplanes

This is a tuned spark coil transmitter, with a wave length of 100-300 meters. The set is made of the finest of materials and the essential parts are the spiral tuning inductance, the induction coil, sending condenser and spark gap. Average range about 25 miles more or less. Just what you want for making a Spark Coil—C.W. transmitter.

Brand new, in original cartons.
ORIGINAL GOVERNMENT COST, \$47 EACH
OUR PRICE \$4.75 EACH

LAST MINUTE SPECIAL
U. V. 217, High Voltage R.C.A. Kenotron Rectifying Tubes, A. C. input 1500 Volts, Filament 10 Volts.
Brand New, List \$28.50, **SPECIAL \$12.50 Each**

AMERICAN SALES CO., 21 Warren St., New York City

An Example of an Ad Appearing in the Handbook

2005 YARC Survey Form

Your Board of Directors has asked members for ideas and suggestions on how to improve our club. Please complete the following brief survey so that we may better know which direction to lead our club in 2006.

Bring your completed form to the next meeting, or mail it in if you are not able to attend.

What was the reason(s) that you joined YARC? (Check all that apply)

- Amateur Radio Education
- Participation in YARC activities
- Social interaction with other hams
- To support amateur radio
- Other _____

Activity Interest Level: (Circle one number for each question)

4 = Very Interested 3 = I'm Interested 2 = I'm Not Interested 1 = No Opinion

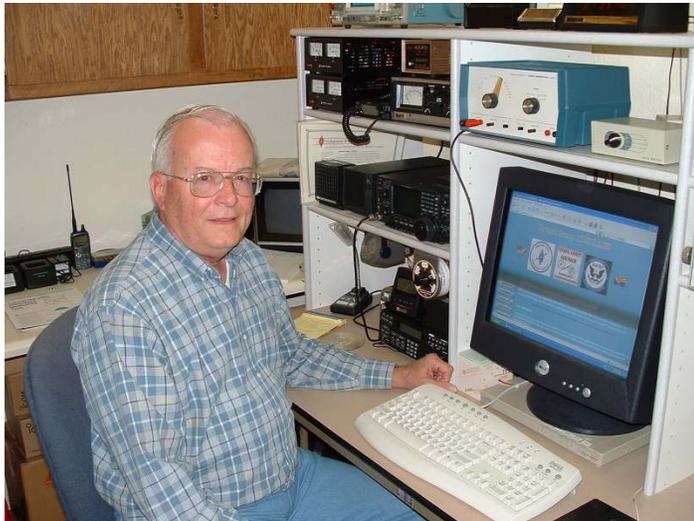
Field Day (operating event).....	4	3	2	1
Holiday Party.....	4	3	2	1
Breakfast Meetings.....	4	3	2	1
Annual Club Picnic.....	4	3	2	
Licensing and Amateur Radio Classes.....	4	3	2	1
VE Testing and VE Training.....	4	3	2	1
Elmer (Helping other Hams).....	4	3	2	1
Club Construction Projects.....	4	3	2	1
Weekly Wednesday Night Net.....	4	3	2	1
Emergency Services (ARES/RACES).....	4	3	2	1
Public Service Events.....	4	3	2	1
Contesting.....	4	3	2	1
DX.....	4	3	2	1
CW.....	4	3	2	1
APRS.....	4	3	2	1
ATV.....	4	3	2	1
HF.....	4	3	2	1
Digital Modes (PSK-31, etc.).....	4	3	2	1
VHF/UHF.....	4	3	2	1
IRLP.....	4	3	2	1
Echolink.....	4	3	2	1
Fox (Transmitter) Hunts.....	4	3	2	1
Satellites.....	4	3	2	1

Suggestions for Improving Your Club

What other comments, observations, or ideas would you like to share with us?

This Month's Featured Ham

By Pat Oliver, KE7DUC



December's interesting Ham of the Month is Dick Hughes, W6CCD.

When Dick was 10 years old, a friend of his family returned from WWII with a BC-610. Dick was fascinated hearing his friend talking to people around the world. In high school, Dick took a class in radio operating and obtained his Novice license in 1951, as WN6CCD; he operated on CW for a year and then received his General in 1952. He ultimately earned his Advanced ticket in 1971 and his Extra Class in 2000.

At this time Dick mainly operates on 2 meters and 70 centimeters – preferring mobile operation. He has been active in ARES/RACES since 1975 and he is now an Administrative Assistant Emergency Coordinator under Mary, AB7NK. He has completed Level 3 of the ARRL Amateur Radio Emergency Communications Course. Dick's "other" hobby is the Internet. He is the Webmaster for the ARES/RACES website.

He also enjoys public service activities and has worked all the club activities except the road rally.

Dick has built all sorts of equipment over the years, mainly for mobile use. His ham shack equipment includes his main radio, an ICOM 746, and several other pieces of equipment, such as a GPS Standard Time Receiver, 200MHz Scope, and HP 5328 Counter.

His most memorable contacts have been with Don Wallace, W6AM in Rolling Hills, CA. Don had 13 Rhombics of multi-wire curtain design on 120 acres, overlooking the Pacific Ocean. Another memorable contact was with CR5SP, considered a rare DX contact in the 1960's.

His military service was with the Air Force starting in 1953, where he was flying on the B-36D aircraft at Fairchild AFB. His first civilian job was with General Dynamics in Pomona. Dick graduated from Pepperdine University in 1975 and held

many positions after that time, mainly in the aerospace industry and usually in upper management.

Dick would like to see young people join the club and become active. Since there were quite a few young people in the last Technician Class, he just might get his wish.

We found Dick to be a very interesting and active member of our organization. ■

Reward Offered

Submitted by Dick, W7QHE

A reward of 500 microfarads is offered for information leading to the arrest of the desperate criminal Hop-A-Long Capacity.

This unrectified criminal escaped from a primary cell where he had been clamped in ions, awaiting the gauss chamber.

He is charged with the induction of an 18 turn coil named Millihenry, who was found choked and robbed of valuable joules. He is armed with a carbon rod and is a potential killer.

Capacity is also charged with driving a dc motor over a Wheatstone bridge and refusing to let the band pass. If encountered, he may offer resistance. The electro-motive force spent the night searching for him in a magnetic field, where he went to ground. They had no success and believe he returned ohm via a short circuit.

He was last seen riding a megacycle with his friend Eddy Current, who was playing a harmonic.

December Program Speaker



For our December Program Speaker, we are pleased to welcome back Lee Shoblom, K6ADA, for a return engagement.

Lee will share more of his colorful experiences in broadcasting and ham radio...some of his experiences with Peter Jennings, some funny early day ham radio events, etc.

For those of you who did not attend the November meeting, be sure not to miss Lee's presentation.

Lee is compiling ideas for a book he is writing on stealth antennas, entitled "Sneaky Antennas".

For more background on this interesting radio veteran, click on <http://tinyurl.com/dul2s>. ■

ARES/RACES...



The last ARES/RACES training meeting of the year was held on November 5, 2005 at the Cottonwood Public Safety Building. There were 23 members and 1 visitor in attendance. For training meeting attendance this was about average, but considering we have a database of over 75 members it was far from what we would like to see.

Training is a very important part of your ARES/RACES commitment. We have all probably heard some ham say 'I'm not interested in preparedness or training meetings, but if an emergency occurs I'll be there to help'.... What would our emergency response be like if all of our members took this attitude? Let me tell you, it would probably be nothing short of 'unorganized chaos'.. How long would it take to set up a communications network? What agencies would you communicate for? Who within these agencies would you contact? What type of net would be operated? What message forms would you use? How many would know how to use these forms? How many could hold up under the stress of operating under emergency conditions? The list could go on and on. Operating in an emergency network is very different from our every day ham radio operations. There is protocol that needs to be followed with our different served agencies and certain message forms to be used.

Topics covered at this training meeting were:

- Net Control Operations
- Message Handling and Message Forms

Both were very important topics and we try to cover them at least once per year. An amateur operator does not sit down at a radio and control an emergency net and handle message traffic without some form of training beforehand.

The people attending this training meeting learned the proper methods of operating as a net control in a 'controlled net' environment, the different types of nets that could be in operation, the forms they would be using in their operations, and how to use these forms. They learned that they could be using one or more of three different message forms and how to properly fill out and handle each one. How many of our members not attending could do this if an emergency were to occur?

The ARES/RACES Staff is in the process of setting up the four quarterly training meetings for 2006. We will carefully select the topics that we think are important to be covered. Is two or three hours of your time, four times a year, too much to ask for? If you are dedicated to your commitment to

ARES/RACES, I don't think it is. Let's all make a serious attempt to become more active in 2006.

The above doesn't necessarily pertain to just ARES/RACES members. All Amateur Radio operators should consider becoming trained in emergency communications whether you belong to ARES/RACES or not. The events of this past year with the hurricanes and tornados have opened the eyes of many emergency agencies to the capability of Amateur Radio in providing communications when other means have failed. In Mississippi there are areas where Amateur Radio is still the only means of communications following the hurricanes. We are being written into more and more Federal, State, County and City emergency plans than ever before.

In Yavapai County, ARES/RACES is becoming involved with more agencies all the time and the need for more trained operators is ever present. If a major emergency were to happen here the few dedicated members we have could easily become stretched very thin and we would not be able to provide the level of communications to our many served agencies that would be needed. This would not speak well for the Amateur Radio service as a whole.

Training topics can be found on the ARES/RACES website at: www.k7yca.org and click on training. This is not the same as attending the meetings and having the topics explained by the presenters and is not meant as an alternative to attending the meetings.

Lloyd Halgunseth WA6ZZJ
Yavapai County ARES/RACES
DEC/Radio Officer
wa6zzj@arrl.net

YAGIS FOR SALE

Cushcraft A50-5S, 5-element beam. **\$50.** **Mosley Classic-33**, tri-band beam. **\$100.** Both good condition. Current Prices are \$180 and \$660 respectively, plus tax and shipping.

Dick Hughes –W6CCD
rhughes@cableone.net

ARIZONA SECTION NEWS

November 2005

This month we have three clubs that were approved to be Special Service Clubs (SSC). Congratulations to Green Valley ARC, Yavapai ARC and Cochise Amateur Radio Association. They join the other two SSC's Catalina Radio Club and the Carl Hayden High School ARC.

CQ DX de YARC – DECEMBER 2005

By Dick Diddams, W7QHE

DATE		DXCC ENTITY	CALL	QSL VIA	REPORTED BY	INFORMATION
START	END					
NOW	2005 Dec01	Tonga	A35BO	HB9FBO Direct	HB9FBO 20050706	HB9FBO; 80-10m, perhaps 160m; SSB CW PSK31; verticals
NOW	2005 Dec07	Mayotte	TX0P	F6AUS	F8DQZ 20051020	F6AUS fm AF-027
NOW	2005 Dec02	Seychelles	S79WU	F6HWU	F5NQL 20051021	F6HWU fm Praslin Is (AF-024); CW only
NOW	2005 Dec03	Bhutan	A52	F9DK	F5NQL 20050919	F2VX F9DK G0LMX F5LMJ
NOW	2005 Dec14	Surinam	PZ5C	PA7FM	OPDX 20051003	160-10m; CW SSB RTTY; QRV in CQWW CW + ARRL 10m
NOW	2005 Dec18	Tanzania	5H1CM	DL7CM	DL7CM 20051101	160-6m; CW SSB RTTY; also fm Zanzibar
NOW	2005 Dec16	Sri Lanka	4S7PAG	F5PAC	F5NQL 20050927	QRV Dec 9-11 fm Barberyn Is (AS-171)
NOW	2005 Dec07	St Martin	FS	K9EL	K9EL 20051107	By K9EL; 80-10m; holiday style operation
2005 Dec01	2005 Dec12	Netherlands Antilles	PJ	HME Call	OH1VR 20051010	SSB RTTY; also fm PJ2 and PJ4 as PJx/ home call
2005 Dec03	2005 Dec04	Falkland Islands	VP8LGT	VP8ON	425DXN 20051105	Cape Pembroke LH on SA-002
2005 Dec05	2005 Dec31	Thailand	HS0ZFI	SM5GMZ	SM5GMZ 20050825	CW SSB PSK31 RTTY; spare time operation
2005 Dec11	2005 Dec22	Namibia	V5	IK1RAE	425DXN 20051022	Local evenings ± 14270 18160 21270 7070 28470 24970 kHz
2005 Dec23	2006 Jan01	Bahamas	C6AYM	K9GY	K9GY 20050525	Fm Nassau & Paradise Islands; 40-2m; focus on QRP CW
2005 Dec28	2005 Dec31	Micronesia	V63O	JK1FNL	425DXN 20051022	Fm Pohnpei (OC-010) 80-6m; CW SSB RTTY
2005 Dec28	2006 Jan01	Cayman Islands	ZF2CJ	AB2RF	AB2RF 20051009	Focus on low bands and digital modes

**--- MONTHLY HIGHLIGHTS ---
ISLAND OF SOLOMON (H40) & TEMOTU PROVINCE ISLAND (H44)**

Last month, celebrating the 50th anniversary of KARL (Korea Amateur Radio League), six people ran more radio stations from Island of Solomon (H40) and Temotu Province Island (H44). The island area is 926 sq. km. and has a population 16,000 with the highest point being 923 m. The Provincial Capital is Lata. H40 has been as high as number 6 on the 100 Most Wanted. Currently, it is listed number 69.

BHUTAN (A52)

Members of the Clipperton DX Club plan to return to Bhutan for activity from November 18th to December 3rd. This was the same team that put on the A52FH (2000) and A52CDX (2004) operations. The guys will be at the Ham Center in Thimphu from November 18th to 28th and then from Bunthang and Paro valley. Team members will be F2VX, F9DK, G0LMX and F5LMJ. This "ham radio project" will be to promote the growth of Amateur Radio in Bhutan. To continue their project with the Bhutan Telcom Authority they will take radios for the creation of new radio clubs in eastern Bhutan. A52 has been as high as number 2 on the 100 Most Wanted. Currently, it is not on the list.

V.E. Testing

By Mary, AB7NK

The Nov. 12th VE testing was very successful. Out of 16 applicants we ended up with 3 general class, 1 extra class (who traveled 175 miles to take the exam) and 10 technicians. Those are excellent results and congratulations to all!

Thanks to Chuck, K7QO, for holding the ham classes, Jim, N5RO, for making sure the Posse Bldg was open when needed, and lastly, to all the members of the VE team for their time.

The next VE testing will be the Saturday after the last upcoming ham class. Watch for dates and time.

Anyone wanting information regarding the next ham class can contact Jim N5RO at n5ro@arrl.net. If you'd like to become a VE or would like more information regarding VE testing, contact Mary AB7NK at ab7nk@arrl.net

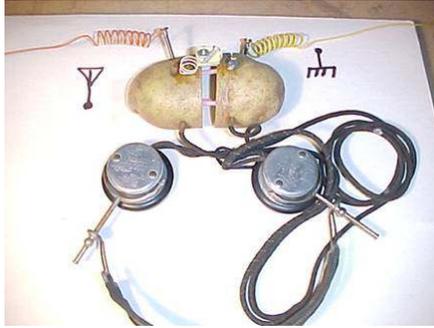


Radio Nostalgia Stories Part 1

by Paul, N6DMV

Paul is president of the International Hungarian Amateur Radio Club with nearly 200 members in 19 countries. This series of articles relates his experience as a lad in Hungary, with stories involving radio during World War II.

The Potato Radio



I cut [yes, cut!] my first radio at the ripe age of 7. It was a potato -- believe it, or not. A re-created version is described here with pictures.

The 'potadio' used a galena [PbS] crystal rectifier

diode. The galena is securely anchored in a metal wire cup, the other electrode is a springy wire gently touching one of the facets of the crystal by virtue of the gravitational force (see Fig. 1.). Rectification takes place right there. It works, given the right ingredients of the recipe: a long, high antenna and good ground arrangement, a powerful transmitter close enough to overcome the inefficiencies of the potato as a radio. But, it works under these circumstances. Not very well, but you can hear the program[s]. Yes, any strong stations transmitting simultaneously, the most democratic set you can own coupled with the law of the jungle. No discrimination here, all eligible stations are received simultaneously, but the stronger one has the last word; also, the first. The idea for the potato as a radio is to move the galena crystal 'knee' curve up toward the more conductive area by the ionic potentials developing between the different metal electrodes, hence increasing efficiency, see Picture 3. The conductive juice – the electrolyte – of the potato provides the necessary environment for the different metals to develop the electromotive potentials. At the time, however, I was not quite aware of this technical (actually electro-chemical) aspect, just copied someone's idea. The list below shows some of the potentials for different metals in volts; the farther the potentials are one from another, the more voltage you can extract from the system, hopefully moving the crystal's working point to a higher, more efficient region.

Al+++ 1.700, Fe+++ 0.045, Ni++ 0.231, Sn++ 0.136,
Pb++ 0.122, Cu++ -0.344, Cu+ -0.470.

Among the metals listed here, the Al++ → Cu+ combination provides the largest potential difference: $[1.700 + (-0.470)] = 2.170$ volts.

Since I was living just about 50 miles from a 120 KW medium wave transmitter with a 314 meter (100π!, HI!, 1030 feet) tall antenna in Hungary transmitting on a frequency of 536 KHz, the arrangement worked fine. I was told that at that time this antenna was the tallest in the world. Radio Budapest started transmitting each morning at 6 o'clock, but

Radio Vienna, Austria, which was at a larger distance, transmitting on 545 KHz was on the air already by that time.

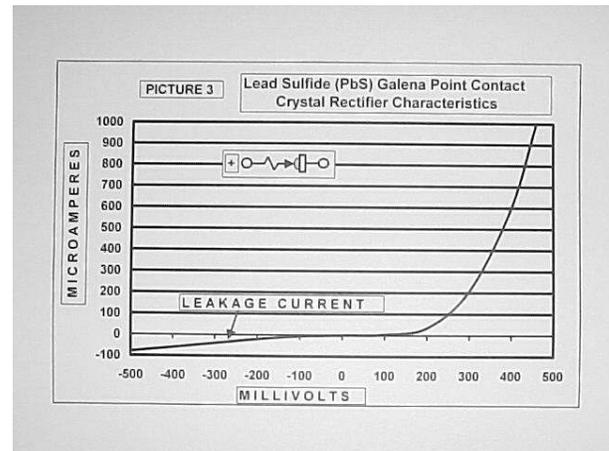
In Europe, the broadcast stations are separated by 9 KHz, not by 10, as in the U.S. Due to the low Q (Q~1) of the setup, I could listen and switch (actually, they did the switching) automatically between 2 stations!

A more detailed description of this radio is available from N6DMV. ■

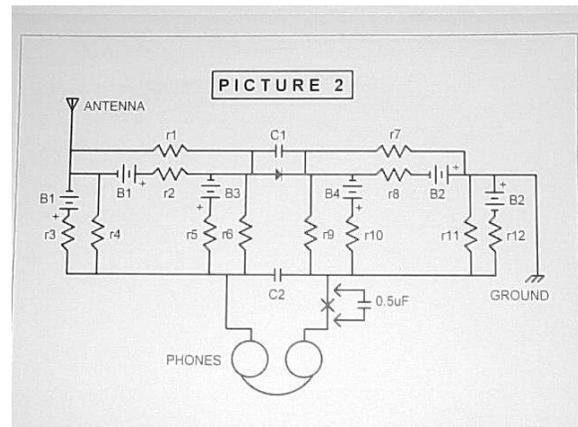


Figure 1.

Note the “variable-force gravity-assisted” point-contact rectifier detector arrangement. No factory-made electronic parts were used.



The galena crystal electrical characteristics curve



Equivalent Electrical Schematic

Area Repeaters

Weekly Breakfasts



Tues. & Thurs. Morning Breakfast –7:00 a.m. at Michael’s Restaurant
(In the Safeway Shopping Ctr., Hwy 69 Prescott Valley)
 (N 34°35’13.33” W112°19’44.6”)*
Informal – all are invited.

Wed. Morning Breakfasts: 7:00 a.m.
Iron Horse Restaurant
(S. 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, N7PJN

Frequency	PL	Location	Owner/Club	Auto Patch	Rem. Base Or Linked	Vo IP	Notes:
52.560-	100.0	Mt. Union	N7NGM				-500KHz Offset
53.040-	None	Prescott Airport	WB7BYV				-1MHz Offset
146.780-	91.5	Williams Mtn.	BWARC			IRLP	
146.880-	100.0	Prescott	W2YAV/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				
448.475-	100.0	Flagstaff-Elden	ARA	Yes			
448.500-	100.0	Prescott	KB6TWC	Yes	RB to White Tank 146.940		E-mail owner for instructions
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
146.480 MHz Simplex
123 Hz Access Tone

For more Repeater Information & Listings refer to:

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

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

Many thanks to Bob Smith, WB6ODR, our Webmaster

