AARCOVER

Bulletin of Austin Amateur Radio Clubs
Austin Amateur Radio Club
Austin Amateur Television Club
Austin Repeater Organization

ISSN 1067-0262

January 2004 | **HAPPY NEW YEAR!** | **Issue 1-2004**

Winterize Your Antenna System

Stuart Rohre, K5KVH

Most of the North American ham world sees this time of year as a time to operate indoors, and avoid winter weather. We live on a different schedule. The time the Northern hams use in the summer to work on home antennas is far too hot for us to do the same. Our spring can be quite windy, also not a safe time to be up a tower, or trying to raise something much heavier than a kite. May is our stormy month, often too wet to do much antenna work, and you should not work in possible lightning conditions.

June is getting hot, and Field Day is on our minds, and July to August only gets hotter; that is why the indoors Summerfest ham convention is such a nice respite in Aug. Mid to late September, it may get to be reasonable weather outside for antenna work. We take off to Belton in October, and the Austin Radio Round Up in Nov., but probably are beginning to realize we need to work on that antenna before bad weather of winter sets in.

Thus, our window of opportunity is often the late fall days, especially after the first light cold weather, to do serious antenna renovation. But, you might say, my antenna is only one year old! Well, you should check your antennas several times a year. The typical problems are rapid limb growth into your wires or towers or masts after the spring rains. Hot August and September days deteriorate synthetic lines used as guys. Winds loosen guy clamps, U bolts, and antenna traps or sections. Feeders can be damaged by wind and rain and sunlight, as well as wind. Long unsupported runs of coax or parallel line can be beat about by rain loosening connections or tearing insulation. Ground connections to masts and towers come unbolted; or summer mowing cuts the leads to ground conductors. Masts towers and hardware rusts or cracks or corrodes.

(Continued on page 3)

2004 DUES DUE!

Periodic Events

Sun	6:45 p.m., Bastrop ARES net	145.35-(114.8)/443.75 + MHz
Sun	7:30 p.m., Travis ARES net	147.36 MHz + (131.8)
Sun	8:00 p.m., Travis ARES Packet	145.73 MHz -
Sun	8:00 p.m., Williamson ARES net	145.13 MHz -
Sun	9:00 p.m., ARO Swapnet	146.94 MHz -
Sun	(After Swapnet) Newsline	146.94 MHz -
Mon	6:45 p.m., Hays ARES net	147.10 MHz -
Wed	8:00 p.m. Code Pracice	146.78 MHz
Wed	11:30 a.m.-1p.m., Travis County ARES lunch @ Jim's 183 & Burnet Rd. 837-1119	
Thu	11:30 a.m. - 12:30p.m.,lunch, Waterloo Ice House	444.1 MHz+
Sat	7:00 - 8:30a.m., breakfast, Waterloo Ice House, 8600 Burnet	444.1 MHz +
Sat	9:00 a.m., Chapter 67 QCWA QSO Net.	3.920 MHz LSB
Daily	CTTN Central Texas Traffic Net, 6:30 p.m.	147.14MHz+

Inside this issue:

Christmas Party a Success!

John Suchyta, KG5O, Roger Wines, W5WIA

The annual Austin Amateur Radio Club Christmas Party was held on Tuesday, December 9, 2003 at Fiesta Gardens on Town Lake. The setup started around 5pm, and folks started showing up around 6pm. There were plenty of munchies - veggies, dips, chips, and nuts. A good number of folks brought desserts, many homemade, including cookies, brownies, cakes and pies.

The dinner started out with a minor disaster. The vendor, Mueller's BBQ, had a family emergency and closed the shop without notifying us. Frantic calls were made to local caterers at 7pm. Stubb's Barbecue came through with plenty of brisket, sausage, beans, potato salad, and their award-winning sauce! Thanks to Mitch London, KD5HCV, and Alan Russell, no call, for getting the grub.

The Texas Star Chorus once again entertained us with a couple of sets of classic and some not-so-classic Christmas tunes. The QLF contest had 5 entries. First place was taken by Hugh Brown, NT5O. Hugh won a newly created trophy which will be passed on to each year's winner. Rick Herndon, K5FNI, placed second. Lew Thompson, W5IFQ, Jeff Schmidt, N5MNW, and Rod Moag W5NDS, rounded out the scoring.

The Tabletop Decoration contest was won by Stuart Rohre, K5KVH, with his QSL tree. Second place went to Dan Poggemiller, KB5TWO, with his J-pole in the pine tree. The only other entry was a hastily built "Star of Bethlehem over US Grid Squares" (don't ask) by Dan Cronch, N5RVS. There were 3 50/50 drawings. Jeff, N5MNW, won $2.50 in the 25¢ 50/50. Jeri Wines, Roger's XYL, won $5.00 in the 50¢ 50/50 pot. Joe Fisher, K5EJL, won $7.50 in the $1.00 50/50 pot.

Mitch London, KD5HCV, was pretty much responsible for most of the arrangements for the party again this year. Mitch gathered almost $1800 worth of door prizes, and appeared to be having fun giving them away while his 2 lovely young assistants drew tickets. Thanks to Mitch for another fabulous party!

The main door prize, a top of the line Interstate Optima Series Red Top Battery, was won by Tami Friedman, KD5RJU. The grand prize, a Yaesu FT-1500 2 meter mobile radio, was won by Rick Kirchhof, KD5ABM.

2004 DUES DUE!

Ham Radio Volunteer Exam Results

ARRL VEC – The following is a summary of the ARRL VE test session held at Murchison Middle School on December 6th, 2003:

Technician Class Licenses Processed
Anonymous Jerry Sivin Jean-Philippe Sugarbroad

General Class Licenses Processed
Anonymous

Extra Class Licenses Processed
Jeffrey B. Lacey, N5FYY Jonathan D. Phelps, W5JDP

Element 3 Credit Processed
Gerry R. Rapp, KD5QHX

Examiners Participating in this Test Session
Mike Blanchard, N5KDY Milt Cram, W8NUE
Howard Glueck, K5ZUA Larry Gunter, WB5BEK
Joe Makeever, W5HS Tom Nevue, W2MN
Herb Nolen, W5HMN Joe Thiel, N5SMN

Next Two ARRL VE Test Sessions - Murchison M.S.
January 10th, 2004 - February 7th, 2004

W5YI-VEC – December 20th

Although no new or upgraded license applications were processed, two applicants did earn element credit at the December 20th South Austin W5YI VE Session.

Our volunteer examiner were:
Hugh Brown, NT5O Jimmy Mercer, N5WDH
John Fisher, W5JHF Sam Mihalik, KM5MY
Lloyd Goehring, N5TO Bill Montgomery, K5ZSI
Jim Greenwood, AB5EK Dennis Murphy, W5KQF
Tony Lyon, KJ5XF Roger Pfluger, AC5IP
Rick Trommer, W5RHT

Next two sessions: January 17th and February 21st, 2004.

Good news! No exam fee increase for 2004. The exam fee for 2004 will stay at $ 12. Information contact:Jim, AB5EK at 327-6184 or by e-mail at hamradioexams@hotmail.com
Our web page: http://texasparadise.com/w5yi-austin/

Exam fee is $12.00.
Please bring two forms of Identification plus your social security number.
Sessions are accessible to handicapped applicants.
No pre-registration is required.
Walk-ins are welcomed.

Join the Austinhams Yahoo! Group

http://groups.yahoo.com/group/austinhams/
You can chat with others, send e-mail to the group, upload photos, get e-mail about important items, participate in polls and much more. This is a private group so not just anyone can join, you must be a member of the AARC or ARO to join.

(Continued from page 1) Winterize Your Antenna

After a few years in Texas heat and wet; guy lines may be obviously fraying. Or you may have one rub a tree limb in a windstorm and saw itself in two. Resist the quick fix of splicing the line. Instead, inspect all the guys, and if others are sun discolored or frayed, and if knots have gotten too tight to work, then go get new limber guy material and rework all your guys before more serious damage ensues. If one guy line breaks, and then you have some of the wind gusts we have had in last month or so, you may find your antenna or its support mast bent over from inadequate support some morning. Light gauge materials in supports may rust, decay, and fail when you least are thinking about antenna repair or upkeep. Even the best of materials will eventually give way.

After some years of service, the joints in aluminum tubing will oxidize if you did not use some conductive grease at assembly or if it dries out. Trap covers of beams will split and blow off, water will enter traps, bugs will take up housekeeping and your SWR may go very low or broad, rather than peaking at one part of the band you tuned the antenna to at assembly. When you rework guys, you should inspect other parts and if your antenna has been up five or ten years, expect major replacement of aging material like coax or guy lines, or possibly other insulators depending on the quality and sun resistance. Check solder joints used outdoors, they can decay as well. Waterproofing tapes even if the high quality Scotch 3M brand, eventually fray and lose stiction to the protected materials. (Don't even think about using electrical tape less than Scotch 33 plus in quality, i.e. no import or drug store tape).

Plastic dipole insulators of the last few years will craze and crack and become gray after sun and rain exposure. Might be time to replace them, or upgrade them to ceramic ones, (NOS, new old stock), which are found at swap meets. In a pinch, white vitamin pill bottles make adequate insulators, but they may need more frequent replacement than "real" insulators. At least they are "free". Grey pipe conduit fittings make useable end and center dipole insulators. The darker color on plastics usually resists ultraviolet effects better than un colored plastic or white PVC. Plastic cable ties may only last a couple of years, by the way. (ALL PVC plastics from the Home centers electrical and plumbing pipe parts pass the dielectric loss test of not overheating when sharing a 750-watt microwave oven with a cup of water being boiled.)

The finish on painted masts or the plating may fail, leaving them open to rust and weakening in subsequent storms. Watch out for steel mast material that has no place to drain accumulated rain or condensation collection. That will rust the bottom of the mast sitting directly in the ground, and it will one day keel over. Drill a side drain hole, as the mast end will gradually sink into the ground and compact the end material too tight to drain moisture. Use true mast materials for heavy or tall applications; do not rely on water pipe, or TV masts unless a temporary installation. (Truly temporary, see below).

The ham antenna sometimes is considered by us to be temporary, but then has a way of being left in place beyond the lifetime of some components chosen for the quick or temporary set up. If you do not look closely at your skyhook from time to time, even things like birds roosting on your wires may cause damage. Not only corrosion but also, larger birds peck at stranded wires or insulation and will cut copper strands in two. Penny wise and pound-foolish they say, and it is true. If you neglect your antenna, it may not be there when you need it for some emergency communications support. Other critters in your yard may attack antenna and feeders so do not overlook a complete end-to-end inspection, and the cables in your attic as well.

Everything said about your home antenna also applies to mobile antenna and power installations. The vibration from the engine and road can do damage along with the wind and elements to the usual car installation that sits out much of the year as ours are prone to do. Even hitting the garage door sill can eventually damage or loosen your whip antennas. Oil and grime can damage insulations under the hood. Road tar can get into base feeds of HF antennas or even larger VHF ones. Sand and grit gets under the mag mounts and scratches the auto paint. Sometimes using Saran wrap under the magnet helps prevent this, but replace it every few months.

When you put up and tune up a new antenna, mobile or fixed, keep good records of SWR values vs. frequency, how sharp the SWR response was, and anything that might aid in your troubleshooting the installation as it ages. Date everything, and keep in your logbook or on the back of log pages for a permanent record. Another place to keep such information is to have a file folder of your rig instruction manuals and the assembly info for the antennas. Keep calculation pages if you make your own antenna and it will be simpler to repair or test at a later time, sometimes years later. Your memory will not retain accurate details that may be the difference between adequate operation and no contacts.

(Continued on page 4)

(Continued from page 3) Winterize Your Antenna

Keep records, at least for a while, about signal strengths you typically receive and reports you get on a certain antenna. This will help you know when its performance has deteriorated. Record the broadband noise floor of each antenna by the S meter of your rig, or estimate it by comparison to signals off air. If no S meter, as on FM rigs, you can possibly use the "S meter test" of your transmit signal through your antenna to certain of the local repeaters. This is really a discriminator quieting signal but it will give you a measure of strength of your signal at that point in time. Note the time of day and any other special weather conditions when doing antenna testing, as well as record the date. Propagation tends to be better on some bands at differing times of day or year. Noise on HF is naturally higher in summer or when solar conditions are unsettled or we have Solar storms. The band may sound dead, and you may think your antenna fell down, but it might only persist for a few hours to a day. Some bands regularly go dead at certain times, like 10m after dark.

A good idea is to have some back up antennas already made, like simple dipoles for your favorite bands and then you can unroll them and put up a temporary sloper, or horizontal dipole at a convenient height until your main antenna is repaired; if there is unexpected failure or damage. Have a way to loft the end of a line into a tall tree, and you can pull up a vertical dipole. If fed with parallel line, you can load a shortened one on some of the lower bands as well as its resonant band and above with use of your tuner on HF. Even for VHF/UHF, the vertical dipole packs a good advantage for such use.

We have not gone into much detail on beams and the mechanical issues of rotors, rotor cables, thrust bearings, tower upkeep and the like, but as we all age as hams, the use of a folding or crank up or motorized tower makes safe antenna upkeep all that much easier. Many of the contest stations rotate the whole tower to make repair of the rotor located at the bottom a quicker process. Use of the Hazer elevator system allows you to bring your beam down to roof top level for safer access and upkeep. This also will drop a family of dipoles slung off the tower and allow you to repair the feed point problems that eventually get a dipole. Placing a high value resistor jumpered across your center dipole insulator, like a 100,000 ohms will let you inspect the connection integrity of your feeder by simple use of the ohmmeter at the shack end of the feeder cable. If the resistance is not seen across the pair of conductors, you have a broken feed point connection on at least one of the sides.

We have had some nice antenna fixing weather so far, and we should take this time to see that our antennas are really ready for the cold winter nights when the bands are in great shape and you would rather be inside operating.

QUICK ANTENNA TIP OF THE MONTH:

Do you know your received and transmitted signal is stronger in the direction of each radial of a quarter wave vertical? And did you know that the electrical performance of the radials addition does not increase very fast after you have sixteen radials? For HF, you need fewer radials as a practical matter than the 120 often quoted, which is actually the AM Broadcast Band standard for commercial towers. ■

Something Odd

Glenn Currie, KD5MFW

Several people have asked about the "odd" and "tiny" connectors used on some of the 802.11b / HSMM wireless networking cards and access points. Here is a URL that has photos and connector terminology for some of the most often used connectors for 802.11b equipment.

Note: the FCC wanted the manufactures to make it "hard" for Part 15 users to easily add high gain external antennas - so they came up with the "Reverse Polarity" versions of the SMA and TNC connector. If you look at the shell of these RP connectors you will find the "guts" have the reverse gender expected.

The irony of all this is that since the 802.11x equipment is selling in the millions of units, these "reverse" versions of the SMA and TNC probably far outnumber the "standard" versions of these connectors in the field.

The RP-SMA and RP-TNC are used on the Access Points and Bridge units that are typically in a small box with a wall wart power supply. The other connectors are for the little credit card sized PC Bus / PCMCIA cards that plug in the side of a laptop PC - space is a real problem, thus the need for tiny connectors. The cards have an "internal" antenna that is simply a circuit board etch covered by plastic that extends out the side of the Laptop. There are a few other types of connectors found on the 802.11x equipment but this is a good start and there are pictures.

Adapter cables from the "odd" connectors to something standard like an "N" connector are referred to as "pigtails" so search on the net for <specific equipment name> pigtail to find an adapter cable for whatever brand of equipment you are trying to link up with.

http://www.hyperlinktech.com/web/re05u.php

(Lots of other places sell this stuff as well, these guys happened to have photos.)
Pass on to others that might find this useful.

Austin Amateur Radio Club, Inc., PO BOX 4739, AUSTIN TX 78765-4739, Web site: http://www.austinhams.org

President	John Suchyta	KG5O	261-4931	kg5o@arrl.net
Vice President	Jerry Jackson	N5UJ	832-5663	jerry@gaj.com
Treasurer	Roger Wines	W5WIA	453-2193	w5wia@arrl.net
Secretary	Lee Cooper	W5LHC	260-7757	w5lhc@arrl.net
Activity Manager	Stuart Rohre	K5KVH	255-2932	k5kvh@arrl.net
Editor, AARCOVER	Mitch London	KD5HCV	472-2843	kd5hcv@arrl.net
Technical (Repeater Contact)	Ed Golla	K3AHS	255-4818	edgolla@hotpop.com
ARRL Travis Co. Emer. Coord.	Lee Cooper	W5LHC	260-7757	w5lhc@arrl.net
ARRL Public Information Officer	Roger Wines	W5WIA	453-2193	w5wia@arrl.net

Austin Repeater Organization, PO BOX 4739, AUSTIN TX 78765-4739 Web site: http://www.austinhams.org

President	Jeff Schmidt	N5MNW	255-6753	n5mnw@arrl.net
Vice President	Rick Kirchhof	KD5ABM	454-4306	rick@kirchhof.com
Secretary	John Suchyta	KG5O	261-4931	kg5o@arrl.net
Treasurer	Roger Wines	W5WIA	453-2193	w5wia@arrl.net
Editor, AARCOVER	Mitch London	KD5HCV	472-2843	kd5hcv@arrl.net
Director	Mitch London	KD5HCV	472-2843	kd5hcv@arrl.net
Director	Nick Broline	W5FUA	929-4314	nick.broline@baesystems.com
Director	Lee Cooper	W5LHC	260-7757	w5lhc@arrl.net
Director	Stuart Rohre	K5KVH	255-2932	k5kvh@arrl.net
Director	Fred Neuenschwander	W5FQR	345-2145	Fred_Neuenschwander@amat.com
Transmitter Hunt Coord.	Mickey McInnis	WX5U	339-0344	mcinnis@austin.ibm.com
Technical (Repeater Contact)	Jon Dahm	WB5PCV	328-6662	jon.dahm@motorola.com

Please contact a club officer, attend a meeting, or mail us to join either or both organizations.

The Austin Amateur Radio Club, Inc. and The Austin Repeater Organization have combined membership dues of $20.00/ calendar year ($30.00 family to the same address)

The Austin Amateur Radio Club, Inc. AARC maintains a repeater with an open autopatch and emergency power on 146.78 MHz and an emergency HF/VHF station at the American Red Cross building. Persons residing or working within the coverage area are expected to join the club, if they use the autopatch. Non-residents on short visits are welcome to use this autopatch.

The Austin Repeater Organization ARO maintains the following repeaters: 146.88MHz (-600) with autopatch; 146.94 MHz (-600) used for Weather Net when called, and Travis County ARES. It is also used for Swapnet and Newsline @ 9p.m. Sunday; 224.80 MHz (-1.600); 444.10 MHz (+5); & 145.01 <Hz packet NetROM node (KB5PM-1 or alias AUS). Persons residing or working within the coverage area are expected to join the club, if they use the autopatch. Non-residents on short visits are welcome to use this autopatch. **The 146.78 and 146.88 repeaters have open autopatches.** Please transmit your call **before** sing the phone patch. Press * and dial the phone number to place a call. Do not unkey after the *. When finished, press # to hang up the phone. Dial 911 (no * needed) for emergency services.

AARCOVER Information

ISSN 1067-0262, CODEN AAOVE3. ©Austin Amateur Radio Club, Inc. and/or the Austin Repeater Organization. Published monthly by the Austin Amateur Radio Club, Inc.

Viewpoints expressed in the AARCOVER do not necessarily reflect those of any club, or of its members, directors, or officers. Material quoted from the ARRL Letter is supplied by the American Radio Relay League, Inc.

Members and other readers are encouraged to submit material for publication. Call Mitch London, if mailed submissions are required. Electronic files are encouraged! Submissions may be edited for publication. **Deadline is the 15th of the month.** Material may be used in a later issue. Unless otherwise noted, permission is granted to reprint AARCOVER articles, provided you credit the author and the AARCOVER.

"N0UJR and His Friends" is reprinted with permission by Greg Trook, Trook Enterprises. Cartoons may not be reprinted without written permission. For information: http://incolor.inebraska.com/n0ujr.

Thanks to Smokey Wiley, K5RDJ, and his wife, Betty Wiley, KD5DTC, who mail the AARCOVER each month!

For Changes in your ADDRESS, PHONE NUMBER or CALL SIGN:
See Roger Wines, W5WIA (512) 453-2193 w5wia@arrl.net
Roger handles all changes for AARCOVER mailing labels & membership information & roster questions.

CLUB MINUTES

ARO Meeting, December 2, 2003

The meeting was called to order at 7:10pm by President Jeff Schmidt, N5MNW, at the Marimont Cafeteria on 38th at Guadalupe.

Visitors: Carolyn, XYL of Joe Canfield, N5HPC joined us tonight.

Monthly Drawing Winner: Glenn Currie, KD5MFW, won the main door prize, an auto compass.

Alternate door prizes, CDs of the Amateur Radio Today presentation by Walter Cronkite, were won by John Suchyta, KG5O, and Bill Tracey, KD5TFD. The CDs were courtesy of Curt Goodson, W4QBU.

Minutes: The November 2003 ARO meeting minutes were approved as published in the AARCOVER.

Treasury Report: Treasurer Roger Wines, W5WIA, reported a bank balance of $3397.33. President Schmidt reported that the November Austin Radio Roundup swap meet netted about $650. We had over 400 attendees.

Technical Committee: Nothing to report.

Old Business: None.

New Business: None.

Web Site: Get information to Lee Cooper, W5LHC, or Mitch London, KD5HCV, for posting on the AustinHams.org web site.

Ham of the Month: President Schmidt named Lori Schmidt, KM5MQ, and Roger Wines, W5WIA, as Hams of the Month. Lori and Roger put in countless hours to make the club's first Radio Roundup a great success.

Equipment Loaner Program: The club's MFJ259B antenna analyzer is available along with a Yaesu FT530 dual band HT and Kenwood TS120 HF rig from the estate of James Levine. Contact Lori Schmidt, KM5MQ, to reserve equipment and make suggestions for new equipment.

Announcements: President Schmidt showed the times and locations for all of the regular ham radio meetings. Jeff reminded all about the annual AARC party on Dec 9. BBQ turkey is on the menu. Beer will be available for a donation.

Smokey Wiley, K5RDJ, announced that he had dish antennas in his truck that were free for the taking after the meeting.

Lee Cooper, W5LHC, announced the Skywarn Recognition Days on Dec 5 & 6 at the National Weather Service office in New Braunfels. Hams must sign up beforehand, for security purposes.

Roger Wines, W5WIA, announced that the annual Trail of Lights will need ham and non-ham volunteers. The ToL will run from 12/14 through 12/23. Roger has a sign-up list.

Jeff Schmidt announced that on 12/24 there will be a Cajun rendition of "The Night Before Christmas" on 3.870MHz at 7:30pm.

Dan Cronch, N5RVS, said that the 3M Half Marathon will be held January 25 and will need volunteers.

Mitch London, KD5HCV, editor of the AARCOVER asked all to consider submitting articles.

Roger Wines announced that Jerry Jackson, N5UJ, is the new school coordinator for the Big Project.

Mike Lay, N5PTN, announced that the MS150 will be in mid April and could involve a free hotel stay for those who work both days.

The business meeting was adjourned at 7:45pm.

Program: The December program was "High Speed Multi Media Radio" by Glenn Currie, KD5MFW. The HSMM effort is one of the working groups of the ARRL Technology Task Force. He referenced the April 2003 QST article on the subject. The HSMM effort is based on the 802.11b wireless networking standard and focuses on the usage of the equipment in the ham band which is shared with the ISM service. Glenn said that the 11Mbps data rate is adequate for live video. While non-hams have to abide by the FCC part 15 rules, hams can run more power and modify antennas under part 97 rules. This opens up a huge area for hams to experiment with. Glenn pointed out that there is so much 802.11b equipment available now that the costs are very low. He is fond of the Linksys WAP11 wireless access point for experimentation. Glenn demonstrated some of the equipment that is readily available and some modifications of that equipment for ham use. If interested, please see the article in the April 2003 QST or go to arrl.org/hsmm.

Submitted by John Suchyta, KG5O

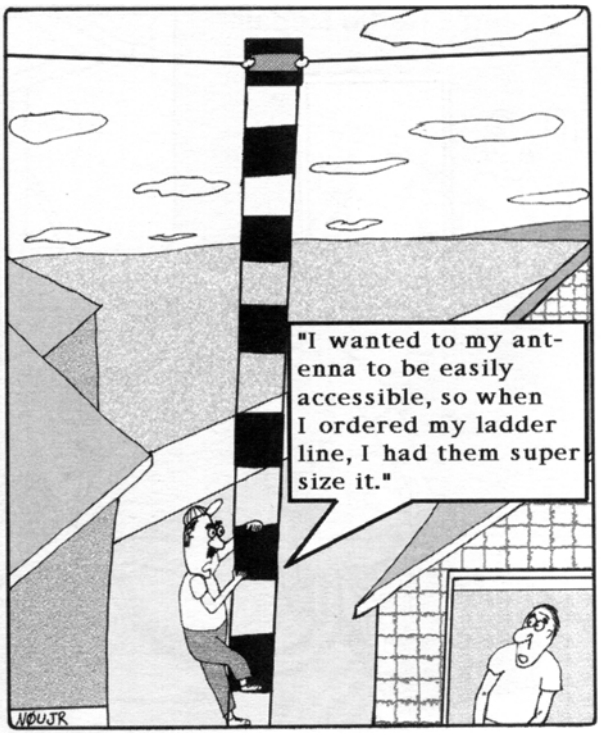
ARO Secretary

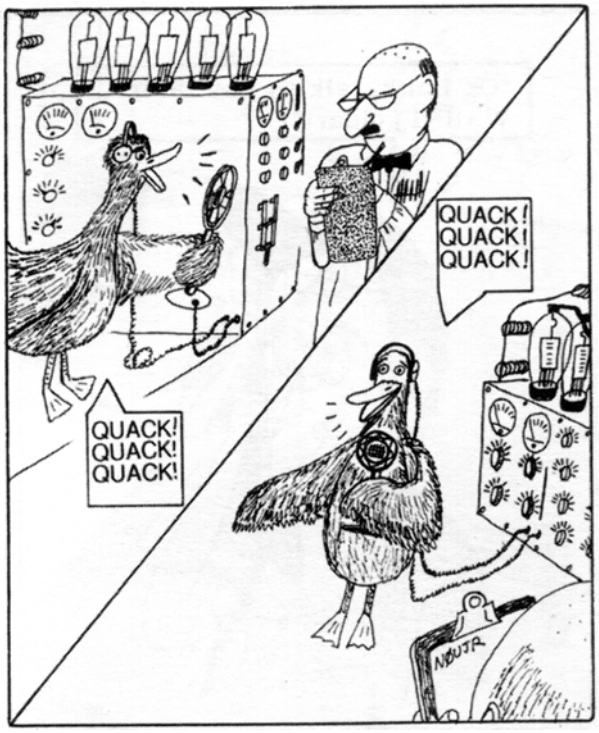
AARC Meeting - Dec. 9th, 2003

The AARC meeting was the annual Christmas party. See page 2 for details of the party.

2004 DUES DUE!

NØUJR and His Friends By Greg Trook, NØUJR





Initial attempts at developing SSB communications began with AM transmitters, and ducks...

Smokey's Korner

By Smokey Wiley, K5RDJ

I have been saving my old call plates off my vehicles for many years and it never occurred to me that others were not doing the same. I was talking to Bob McCord W5ATA at lunch the other day that I would like to trade license plates with him. He told me I would have to wait eight years.

Eight years is how long the state expects them to last. So I said, you mean you don't have any left over from previous years, he said no, that he threw the old ones away. I was aghast because it had never occurred to me to throw them away. I have a stack almost one foot tall and would like to trade one of my plates for one of yours. My telephone number is 512-259-1436. If you have too many I think it would be neat if you would put your plates on display in places like Catfish Parlor, Cracker Barrel, Castaways, ETC.
It would bring additional awareness of amateur radio to the public in general.
73 Smokey K5RDJ

ARO/AARC Meeting Info.

Austin Repeater Organization

January 6 - Planning for 2004 presentations and training. Rick Kirchhof, V.P. of the ARO will be joined by Jeff Schmidt in hosting a discussion of what the group would like to see in future meetings.

Austin Amateur Radio Club

January 13 - Gerald Youngblood, AC5OG, will discuss Flex Radio, a software based radio program.

Upcoming Amateur Exams

ARRL VEC- January 10 & February 7
9a.m. at Murchison Middle School on North Hills Drive Contact Joe Makeever, W5HS (345-0800) or Joe Thiel, N5SMN (832-0450) for information. $12 examination fee.

W5YI VEC- January 17 & February 21
2p.m. in room 109, Fleck Hall, St. Edwards University. Contact Jim Greenwood, AB5EK@arrl.net, (327-6184) http://texasparadise.com/w5yi-austin for more information. $12 examination fee.

DUES ARE DUE!!!

$20 single / $30 family. See Roger Wines

Calendar of Events

Jan 10 San Antonio Swapfest04 Country Gold 7405 Old Pearsall Rd. Royce KA5OHJ swapfest04@juno.com

Jan 17 Wintercom- Arlington

Jan 25 3M Half Marathon and Relay- 5:30AM to 11:00AM Volunteers may sign up on-line at www.3m.com/races/volunteer.html Contact Dan Cronch at N5RVS@arrl.net or 984-3882

Feb 1 Georgetown Superbowl Sunday Swapmeet San Gabriel Park San Gabriel Park Community Center, George town TX Exams- 8:30A.M. Setup-10AM, open 12noon-3PM Lori km5mq@arrl.net 255-6753 or Rick w5rht@arrl.net 863-2428 Talk-in on 146.64(-)

Feb 14 LZ (Helicopter Landing Zone) Class 9AM Shoreline Christian Ctr 15201 Burnet Road www.mset-tx.org Talk-in on 146.88 Dan KC5SWU Motorcycle Special Event Team contact@mset-tx.org (512) 892-0875

Jan.	Feb.	Austin Meetings/Happenings	
6	3	ARO Meeting, Marimont Cafeteria	7:00p.m.
10	14	Austin QRP Club, Owens on I-35 N	11:30 a.m.
13	10	AARC Meeting, ARL Auditorium *	7:00 p.m.
20	17	ATV Club Meeting, Marimont	7:00 p.m.
17	21	QCWA Meeting Owens Restaurant	11:30a.m.
26	23	Travis County REACT	7:00 p.m.
No	No	Travis County A.R.E.S., ARL Aud.*	7:00 p.m.

* These Clubs meet at ARL Auditorium.
Visitors are welcome whether they are licensed hams or not. Other meetings or activities are listed under the headings for Calendar and for Periodic Events.

AARCOVER
Austin Amateur Radio Club
Box 4739
Austin, TX 78765-4739
January 2004
Return Service Requested

Non-Profit Organization
U.S. Postage Paid
Austin, TX
Permit No. 2942
Time Value Newsletter