

AARC OVER

Bulletin of Austin Amateur Radio Clubs

Austin Amateur Radio Club
Austin Amateur Television Club
Austin Repeater Organization

ISSN 1067-0262

May 2004

Issue 5-2004

An Effective D/C noise filter for your Mobile Rig

Rick Kirchhof, KD5ABM

Many of us have experienced a whine or buzz in the audio of our rig while in a QSO. More often we are reminded that we are sending such a noise with each transmission. Normally this noise will track the engine RPM, and goes away entirely when the engine is off. This occurs because the power source in your vehicle is not that compatible with amplifiers and audio circuits. With the engine running, power originates in a 3-phase alternator driven by the engine. This makes A/C voltages of varying frequency depending on the engine speed. Internally this power (through 6 rectifiers) becomes D/C and is regulated within a voltage range depending on electrical demand and battery or alternator temperature. Even after rectification and control by the regulator, this power source is still quite noisy. The remaining differences in voltage (usually including a amount of A/C riding on the D/C) can be a real challenge.

Other devices in the car can cause problems as well. Fan motors, some under-dash components and electric fuel pumps are frequent sources of hash or interference in the power on your car. It is always important to determine if the noise is entering with the power wires is RF in nature. Removing and shorting the transceiver antenna connection while you listen is helpful. Be sure not to transmit, and securely replace the coax. RF noise usually disappears while power supply noise remains. With the engine stopped and the key off, most systems are disabled and power comes as pure D/C directly from the battery. In many cases you don't hear the problem on receive but your transmissions have noise on them. Ask others when the problem is present as you change conditions.

Historically, different approaches have been used on power supply noise with varying degrees of success. Electronics stores sell filter kits usually containing chokes and/or capacitors. These usually help to some degree. Experience has shown that if a small filter doesn't completely solve the problem a larger one usually has a greater effect. The high-end

(Continued on page 9)

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:

Exam Results	2
Club Minutes	4
Crackin' Wall Warts	6
Thanks!	7
Smokey's Korner	8
NØUJR & His Friends	11

ARRL Requests Filing Deadline Extension In BPL Proceeding

The ARRL Letter
Vol. 23, No. 16
April 16, 2004

The ARRL has asked the FCC to extend the deadline for comments and reply comments by 45 days in the Broadband over Power Line (BPL) Notice of Proposed Rule Making (NPRM) in ET Docket 04-37. Comments now are due by May 3 and reply comments by June 1. Although the FCC does not routinely grant such time extensions, the League said it wants to allow time for the National Telecommunications and Information Administration (NTIA) <http://www.ntia.doc.gov/> to conclude its study at BPL field trial locations. The ARRL said it anticipates the NTIA study to go public very soon, allowing only a couple of weeks at best to evaluate its conclusions and incorporate them into comments in the proceeding.

"This proceeding stands to have a profound effect on the Amateur Radio Service, and a full and complete opportunity to evaluate the results of the NTIA study is critical to the ability of ARRL to respond in a meaningful manner to the proposals in the instant Notice," ARRL said in filing its request April 9. "At the same time, there is no need for any rush to judgment in this proceeding, since BPL trial sites are only now commencing operation."

If the FCC okays the request, the comment date would move to June 14, and the reply comment deadline would become July 16. Granting the request, the ARRL contended, "will have no adverse effect on any interested party to this proceeding."

The League said the new deadlines would provide everyone with approximately 60 days to review and evaluate the NTIA's study before having to file comments. "Should the NTIA report be substantially delayed in its public release, ARRL reserves the right to request additional time as necessary," the League said.

Earlier this year, FCC Chairman Michael Powell turned down a request by US Rep Greg Walden, W7EQI (ex-WB7OCE), who--as a member of the House Subcommittee on Telecommunications and the Internet--had asked the chairman to delay further action on the BPL proceeding until the NTIA study had been completed and stakeholders had had a chance to evaluate it before commenting. Powell assured Walden February 3 that the FCC would give "thorough consideration" to all BPL studies before it takes any final action in the proceeding.

For more information on BPL, visit the "Broadband Over Power Line (BPL) and Amateur Radio" <http://www.arrl.org/bpl/> page on the ARRL Web site.

Ham Radio Volunteer Exam Results

ARRL VEC – The following is a summary of the ARRL VE test session held at Murchison Middle School on April 3rd, 2004:

Technician Class Licenses Processed

Jerry Loden
Steven A. Nolin

Extra Class License Processed

Roger Banks, KE5AQO

Element 3 (General Class written) CSCE Processed

Bill A. Goff, N5WCB

Examiners Participating in this Test Session

Bill Brewer, K5KNC
Gene Hinkle, K5PA
Jerry Jackson, N5UJ
Joe Makeever, W5HS
John Stott, AC5ZT
Joe Thiel, N5SMN
Rick Trommer, W5RHT

Next Two Sessions - Murchison Middle School

May 1st & June 5th

TNX ES 73 DE W5HS
Joe

W5YI-VEC – Not available at press time.

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.**

Advertise!

For as little as \$10 per month you can advertise in the AARCOVER! Let people know you're there! Call Mitch London at 326-3096 for more information!

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
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 Newline @ 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.

“NOUJR 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

AARC Meeting, April 13th, 2004

The meeting was called to order at 7:15 pm by President John Suchyta, KG5O, at the ARL Labs on 10000 N. Burnet Road, Austin Texas

Visitors: Bill Eastman, KE5ASU came to the meeting as a visitor and left as our newest member. Welcome Bill!

Monthly Drawing Winner: Due to an oversight by our club president for the second month there was no monthly prize to win, but that means next month there will be THREE winners chosen. Three times the chance to win, so be sure to attend the May meeting.

Minutes: The March 2004 ARO meeting minutes were approved as published in the AARCOVER. The motion to approve was made by Lew Thompson, W5IFQ and seconded by Jerry Jackson, N5UJ.

Treasury Report: No treasury report this month.

Technical Committee: Nothing to report.

Committee Reports: Jerry Jackson, N5UJ, reports that LBJ High school will be kicking off its SERT program this week. The SERT program is similar to the CERT program many of our members are taking except that it is focused on students at the local high schools so they may be prepared to assist in the event of an MCI or major event at their school.

Joe Fisher, K5EJL, reports that there have been some HF antennas acquired for LBJ High School's radio club and that he is working on getting them installed soon.

Announcements: Rick Kirchhof, KD5ABMm asked for suggestions for meeting programs folks would like to see, or even better offer to do a program for us.

Jeff Schmidt, N5MNW, asked if anyone else had noticed problems with the 146.780 autopatch. There

have been reports of noisy connections with it. He asked that folks be more prompt in reporting problems to the technical committee when observed so they do not go for weeks without being reported.

Jeff also reports that the membership committee is contacting newly licensed amateurs and inviting them to join the clubs.

Stuart Rohre, K5KVH, reports that plans for Field Day (June 26th and 27th) reported on the status of plans. He is need of some folks to captain teams for the various HF bands, for overnight security, for power management and for computer logging. Please con tact Stuart ASAP if you can help.

Stuart also reviewed the rules for setting up a GOTA bonus station again this year. The rules indicate that new hams or non-active hams would be targeted to operate this station for the 100 bonus points. Stuart needs someone to champion this station.

He also indicated that they would have whiteboards at each station and ask folks to signup to operate. IF there is a line waiting he asks that folks only operate in one hour blocks and let others have a chance at the active bands.

Mike Lay, N5PTN, asked for volunteers for this weekends MS-150 race and passed out a signup sheet and volunteer insurance forms. The MS-150 is the 17th and 18th of April.

John Meaker, KR4AH, announced that on Sunday the 25th of April there will be Hands on GPS training and potluck BBQ at Garrison Park in South Austin. See Swapnet on austinhams.org for details.

Mitch London, KD5HCV, needs articles for the newsletter. Write! Submit! Be heard and inform. You can do it!

Old Business: None

New Business: None

Web Site: The website, austinhams.org, has current

(Continued on page 5)

(Continued from page 4)

information, the latest Swapnet and the current AARC/over online. Check us out

Program: Rick Kirchhof, KD5ABM, presented a program on Time Domain Reflectometers, or TDR's. A TDR is a unique piece of test equipment that shoots a "Doppler" signals down a piece of coax or cable and will show where the match is not perfect, and how bad it is. It can be used to identify damaged cable or connectors and where along the cable the problem exists. Unlike an SWR meter this will let you know that a crimp or fault occurs at 35 feet into a 100 foot roll of cable so that you have a much better idea where, and what, problem exists. Rick showed us several types of connectors and cables and how they look on the TDR.

ARO Meeting, April 6, 2004

The meeting was called to order at 7:14pm by President Jeff Schmidt, N5MNW, at the Marimont Cafeteria on 38th at Guadalupe.

Visitors: Galen Barnaby, NY1T, former Austinite, dropped in for a visit. Other visitors included Paul Kinney, KD5VRU, Steve Johnson, N5OAK, and Rick, KM5MQ's brother.

Monthly Drawing Winner: Don Judd, W5MMJ, won the door prize, a nice portfolio.

Minutes: The March 2004 ARO meeting minutes were approved as published in the AARCOVER.

Treasury Report: Treasurer Roger Wines, W5WIA, reported a bank balance of \$3084.72. Roger mentioned that it's time for printing of the annual club roster and that many former members are not included due to delinquent dues. He passed around the current roster for all to check for accuracy. He also passed around a "Not Paid" list for members to see if we can get previous members to re-join the club.

Technical Committee: Nothing to report.

Old Business: None.

New Business: None.

Web Site: The repeater listing on the web site has new 2 meter repeater information. Get new information to Lee Cooper, W5LHC, or Mitch London, KD5HCV, for posting on the AustinHams.org web site.

Ham of the Month: President Schmidt named John Suchyta, KG5O, as Ham of the Month for participating in an article concerning Broadband over Power Line (BPL) in the April 5 Austin American-Statesman.

Equipment Loaner Program: The club's MFJ259B antenna analyzer is available. Contact Lori Schmidt, KM5MQ, to reserve equipment and make suggestions for new equipment.

Announcements: Rick Kirchhof, KD5ABM, announced that the next "Hands-on Hamming" program at the April 13 AARC meeting will feature a Time Domain Reflectometer (TDR). This specialized piece of equipment can look down a cable to determine faults. Rick asked members to bring their coax, adapters, and antenna switches to measure with this machine.

Jerry Jackson, N5UJ, announced that Bob Allen, KK5MI, donated a Heathkit SB104, some microphones, and assorted gear to the LBJ High School radio project.

Stuart Rohre, K5KVH, gave a quick overview of the 2004 Field Day. Stu said that we need someone to replace Joe Canfield, N5HPC, as power manager. The power manager is responsible for generators, gas, oil, extension cords, light stands, etc. Stu would like to use quiet generators, like the small Honda machines, this year.

President Schmidt gave a short presentation on the route and positioning for this year's MS150 bike race. Additionally, Mike Lay, N5PTN, and Mike Hardwick, N5VCX, gave details on the activities that will occur in Austin on Sunday, April 18. Volunteers need to fill out a form to cover insurance.

John Meaker, KR4AH, asked if anyone was

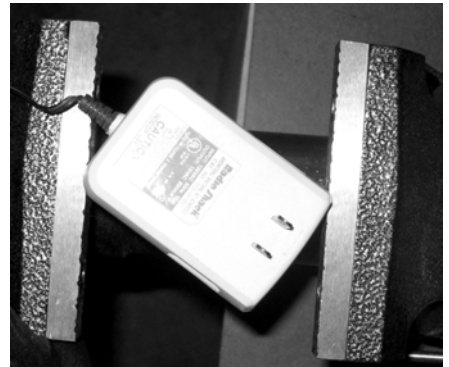
(Continued on page 6)

CRACKIN' WALL WARTS

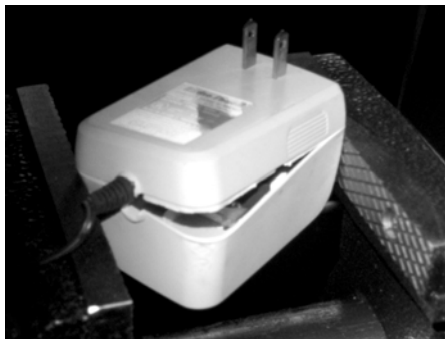
A How-to Tip

By Curt Goodson, W4QBU

All of us have several wall-warts around the shack to power those HT's and/or recharge battery packs. When they quit working most often it is due to a broken wire in the DC lead. If the break is near the plug end of the wire, no problem; just to cut off the plug and solder on a new one. But all too often the break is where the lead exits the wall-wart, and there is not enough slack to make a decent splice, so we have the choice



of buying a new wall-wart, or opening the old one. In times past I have attacked the wall-wart with a hacksaw, but that pretty well eliminates reusing the case. Somewhere I read of a better method, and since it seems to be largely unknown, I want to pass it along. Usually a wall-wart can be cracked open without damaging the case. Simply clamp it in a vise, corner to diagonally opposite corner, AC pins up, with the plastic base above the vise jaws. Then begin tightening the vise until you hear it crack or pop. Loosen the vise,



turn the wall-wart ninety degrees to the other corners, and repeat. At this point, the base and the cover should have separated. If not, return to the first position and try again. With the cover removed it is a simple matter to replace the broken lead, or even to replace a shorted diode or capacitor. After the repair, the cover can be glued back on, but I prefer to use plastic tape so that future repairs will be even easier. Wish I could remember where I read this tip and give proper source credit.



73, Curt W4QBU

(Continued from page 5)

interested in doing real locating with GPS. Many hams responded. John plans to have a hands-on GPS session and picnic some time in May in South Austin.

Roger Wines mentioned that about 15 hams participated in the early morning weather net that was called after severe storms rolled into the Central Texas area Tuesday, April 6. These hams began net duties before 4:00am as the storms approached Austin.

The business meeting was adjourned at 8:18pm.

Program: Lee Cooper, W5LHC, gave an overview of the Emergency Management Conference that several local hams attended in Waco last month. Lee showed some of the information and goodies he picked up there, including some self-heating meal packages. He said that emergency management

officials from around the state, professionals, students, and DPS officials attended. Many ARES & RACES groups attended. There were many classes available, including Disaster Recovery, Hazard Mitigation, and CERT Management.

The contingent's booth consisted of representatives from TC ARES and TC REACT. They had an ARCHES jump kit, HF radio, APRS tracker, and the Walter Cronkite video showing at the booth.

Lee ran through the presentation he gave at the conference. This presentation detailed amateur radio support to many served agencies. It also gave details on our local ARES, RACES, ARCES, linked systems, EchoLink, Skywart, APRS, and CERT involvement.

Submitted by John Suchyta, KG5O
ARO Secretary

Thanks!

Story and Photos by Mitch London, KD5HCV

A humongous thank you goes out to all those involved in this years Capitol 10,000. Many volunteers arose during the wee hours of the morning, made their way to the Taco Cabana parking lot where t-shirts and assignments were handed out. As people started to take their positions along the race course, excitement was in the air, along with the 2 or 3 advertising airplanes offering great deals at a local car dealership.



The first off where the wheelchair racers, only a few of them this year but each one determined to have a go at it. As the last of them made it past Mile Marker 2, the start of the footrace was announced and the cheers could be heard for miles around.

The runners were on their way, and as each Mile Marker announced the lead runners crossing their position, your mind would start to wonder how could they possibly keep up that pace? As I stood on the west end of the Enfield bridge I started to see runners making their way down the hill. A sight that is commonly photographed, but what is not captured by film is the thunderous sounds of hundreds of people running across the bridge.



The only thing I miss was the sheer number of costumed runners, sure, there were some, but not near the number there have been in years passed.

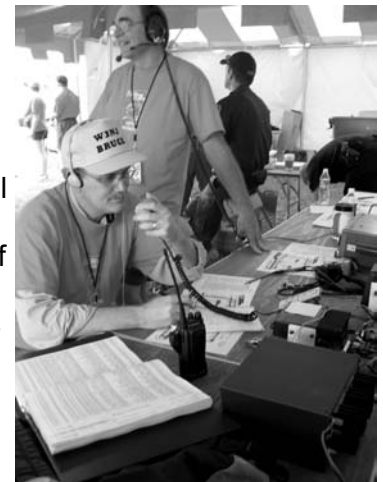
Having lived along the race route of the Capitol 10,000 for more than 20 years, one thing remains the same. Little cups crushed beneath the feet of the runners as they make their way through a well needed water station. Yet even though thousands upon thousands of cups were strewn all along the race course, the city managed to clean them up shortly after the race, a feat in and of itself.

Ever since the birth of Run-Tex and its marriage to the Capitol 10,000, the race has grown and grown. I for get the actual numbers but the first few races were popular with the local runners and that was about it. Now, the Capitol 10,000 draws in people from all over the world and in the past has had up to 28,000 participants! It takes a lot of people to be able to each year, and with the volunteers, the few that came up were professionally and They were able to get information to the net who passed on that to the proper people.



The volunteers who numerous to list here, every one of them, the

pull that off help of the incidences handled quickly. the control information



participated in this years event are too but suffice it to say that with each and race would not have been the same.

S m o k e y ' s K o r n e r

Since Memorial Day occurs this month, I have an e-mail I received a year or two ago that would be fitting. It's about how "Taps" got its words. I don't know it's source so I can't give credit. We in the United States have all heard the haunting song "Taps". It's the song that gives us that lump in our throats and usually tears in our eyes. But, do you know the story behind the song? If not, I think you will be interested to find out about it's humble beginnings.

Reportedly it all began in 1862 during the civil war, when union army captain Robert Ellicombe was with his men near Harrison's Landing in Virginia. The Confederate army was on the other side of the narrow strip of land.

During the night, Captain Ellicombe heard the moans of a soldier who lay severely wounded on the field. Not knowing if it was a Union or Confederate soldier, the Captain decided to risk his life and bring the stricken man back for medical attention.

Crawling on his stomach through the gun fire, the Captain reached the stricken soldier and began pulling him toward his encampment. When the Captain finally reached his own lines, he discovered it was actually a Confederate soldier, but the soldier was dead. The Captain lit a lantern and suddenly caught his breath and went numb with shock.

In the dim light, he saw the face of the soldier. It was his own son. The boy had been studying music in the south when the war broke out. Without telling his father, the boy enlisted in the Confederate army.

The following morning, heart-broken, the father asked permission of his superiors to give his son a full military burial, despite his enemy status. His request was only partially granted. The Captain had asked if he could have a group of army band members play a funeral dirge for his son at the funeral.

The request was turned down since the soldier was a Confederate. But, out of respect for the father, they did say they could give him only one musician. The Captain chose a bugler. He ask the bugler to play a series of musical notes he had found on a piece of paper in the pocket of the dead youth's uniform—this wish was granted.

The haunting melody we now know as "Taps" ---used at military funerals was born.

The words are-----
Day is done----Gone the sun----From the lakes----
From the hills----From the sky----All is well-----
Safely rest-----God is nigh----Fading light----
Dims the sight-----And a star---Gems the sky---
Gleaming bright----From afar-----Drawing nigh---
Falls the night----Thanks and praise---For our days ----
Neath the sun---Neath the stars-----Neath the sky---
As we go----- This we know----God is nigh.



I hope you enjoyed this 73 Smokey

(Continued from page 1)

audio folks really believe in this. Extra filters and large caps are the rule with expensive audio systems in mobile installations. Values of one Farad or more are sometimes seen on the supply lines for these systems. Heavy gauge power and ground cables provide a low impedance path back through the electrical system. You can use this same technique to filter input power to your rig. Extremely large value capacitors are both expensive and quite large physically.

Fortunately, the manufacturer of your vehicle has provided a low cost alternative. People don't always recognize this capacitor since we call it the battery. A low impedance, secure connection to a battery in good condition will do more filtering than most of the filters you can easily buy or make. This happens routinely when things are new and secure. As the connection corrodes, the battery loses electrolyte, or becomes sulfated it becomes electrically "smaller". Sealed "maintenance free" batteries are some of the worst problems because they can't be supplemented by adding electrolyte. As more of the plates inside are exposed to the air, they fail to conduct. The remaining battery plate area may still be enough to start your car, but its electrical effect in the system is dramatically different than it was when it was new. This change reduces both its stored energy supply and to its ability to filter power variations and absorb A/C and RF components present in the wiring harness.

Required maintenance has been decreasing on cars for many years. 50-60,000 miles for spark plugs, 40,000 miles or more for automatic transmission service, and engines with no distributor cap at all are common now. Owners believe they don't have to do much to keep the car on the road. The laws of chemistry have not been repealed with respect to oxidation and corrosion of storage batteries. Routine battery cable service was a part of the old "tune up" but is now forgotten. For your battery to do its job as a power filter, you must provide a low resistance AND low impedance connection between the battery and electrical system. Resistance and impedance have different effects in the electrical system. To discharge RF present near the engine and drain away any charge differences, woven ground straps are used instead of wires. The goal here is low impedance. Crawl around under the car and spot these connections between the frame and body, engine and frame, and hood or trunk and the body. Battery ground cables

of the past were flat woven straps. Now mostly round wire is seen, but are usually supplemented by low impedance grounds elsewhere. When servicing the battery, clean and tighten all ends of all battery cables. If necessary use lots of baking soda to neutralize acid present, then buff the contact surface before reattaching the cable. The separate engine to body or engine to frame ground is a part of your negative circuit from the alternator to the battery. With the alternator bolted to the engine, you must ground the engine to the frame and the battery as well.

When wiring your rig, choose adequate size conductors and securely attach them to the power source. There is quite a bit of extra noise (and less voltage) at the end of small wires under the dash. These are poor choices for power and make good antennas for any impulse noise present. With the engine running, the power source is the alternator. However, the battery is a much "cleaner" power supply due to the massive filtering effect. When investigating audio whine or noise complaints, consider starting with battery and cable service. The battery should be load tested if it is over 2 years old and you are seeing noise problems. I have seen or heard of at least 5 alternators replaced in the last year as "bad" when the real problem was either a poorly connected battery or a defective battery. Frequently it is much easier to service the battery and cables on your car than it is to test the power wires, rework the antenna, and wonder what step to take next when the noise remains.

Note that this process will NOT resolve radiated noise from spark plug wires or defective electrical components. Fuel pumps sometimes fall into this category. The best part about this diagnostic routine is that you don't spend money on things that won't help, and you can often prevent a breakdown due to battery or cable problems.

73 es gud DX
KD5ABM



IARU Marks World Amateur Radio Day April 18

The ARRL Letter
Vol. 23, No. 16
April 16, 2004

Sunday, April 18, marks World Amateur Radio Day--the 79th anniversary of the founding of the International Amateur Radio Union (IARU). As it begins its 80th year, the IARU is recognizing radio amateurs worldwide as "Pioneers in Bridging Barriers to World Understanding."

The IARU's inaugural meeting took place in Paris on April 18, 1925, when exploration of "the short waves" was just beginning. "Radio amateurs were well ahead of their commercial counterparts in exploiting the long-distance capabilities of this unique part of the radio spectrum," the IARU notes. "The technical contributions of the amateurs were very important to subsequent telecommunication development, and remain so today."

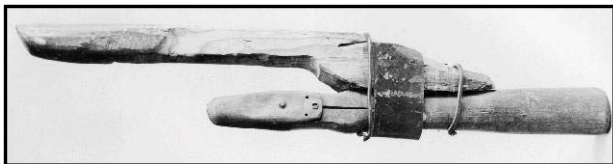
Equally significant are the personal relationships that have developed between amateurs, often across geographical, political, cultural, and other barriers. Today there are nearly three million amateur licensees in nearly every country of the world. Radio amateurs continue to build and maintain personal ties in a world that is in ever greater need of mutual understanding.

A worldwide federation of national Amateur Radio organizations representing radio amateurs in 159 countries, the IARU is a Sector Member of the International Telecommunication Union

<http://www.itu.int/home/index.html>

and is the recognized representative of the Amateur and Amateur-Satellite Services at the ITU. For more information, visit the IARU Web site

<http://www.iaru.org>.



Missed an Issue???

Text (only) version of the current issue can be found on the Web at ...

<http://www.austinhams.org>

You will also find a section called **AARCOVERFLOW**. It is there to put in news and articles that just missed the AARCOVER deadline. Check it out!

Using Echolink

by Bill Eastman, KE5ASU

Echolink is a FREE program, available at <http://www.echolink.org> which allows licensed Amateur Radio stations to communicate with one another over the Internet, using voice-over-IP (VoIP) technology. It requires Microsoft Windows 95 or above, Microsoft Internet Explorer, version 4.0 or above, and an internet connection (dialup modem V.90 or broadband connections work best). There are a couple of ways this can be used. One is computer to computer and the other is computer to radio. During the BP MS 150 on April 18, 2004 the Houston Command Post used Echolink to monitor the race and stay in contact with the Austin Finish Line and all the break points. For more information about VoIP programs such as EchoLink, see QST February, 2003, page 44, or download the PDF from the ARRL Web site, <http://www.arrl.org/qst/2003/02/VoIp.pdf>. The author of Echolink, Jonathan Taylor, K1RFD has written a new book for ARRL, "VoIP: Internet Linking for Radio Amateurs", available for purchase at <http://www.arrl.org/catalog/?item=9264> (ISBN: 0-87259-926-4) #9264

Over the WWWaves

A collection of interesting websites found and submitted. This month, the links may not be ham related but are still quite interesting.

<http://yoshi.us/forums/index.php?showtopic=5328> Disposable computers?

<http://www.utexas.edu/admin/utpd/atm.html> A new way to steal information from your PIN and ATM cards

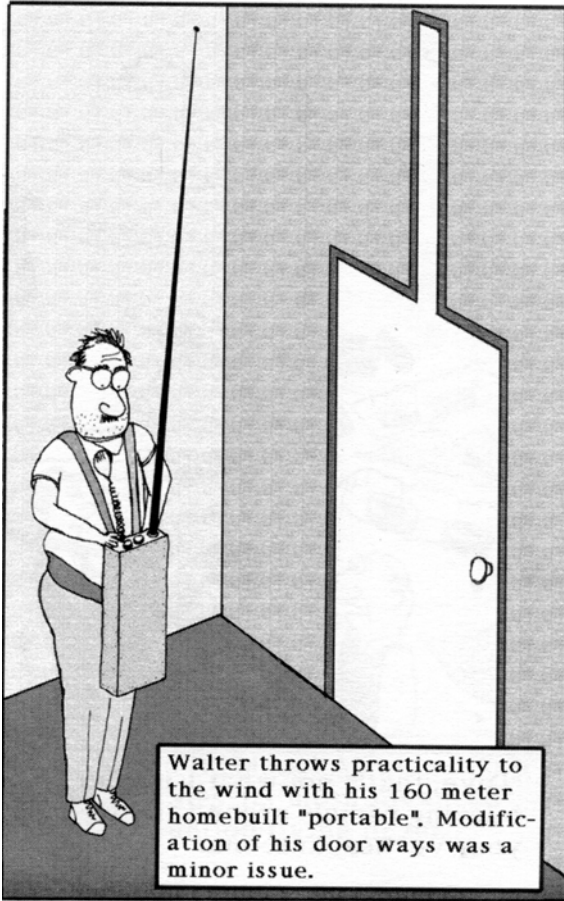
<http://www.arrl.org/news/features/2004/03/19/1/?nc=1> For all OMs and OFs, here is the current skinny on what rules.

<http://www.lpl.arizona.edu/impacteffects/> Meteor Impact Crater Calculator

<http://www.angelfire.com/extreme4/kiddofspeed/> This link contains a photo essay about riding a motorcycle through the abandoned area near the former Chernobyl nuclear plant.

NØUJR and His Friends

By Greg Trook, NØUJR



Greg finds his obsession with hand-held radios finally brings about the downfall of his pants



Storm spotter group photo, June 1999

ARO/AARC Meeting Info.

Austin Repeater Organization

May 4th - No information was available at press time, be sure to check the Website for the latest information.

Austin Amateur Radio Club

May 11th - No information was available at press time, be sure to check the Website for the latest information.

Upcoming Amateur Exams

ARRL VEC- May 1 & June 5

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- May 15 & June 19

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.



Calendar of Events

May 1 7290 Picnic Riverbend Park, Smithville

May 1-2 Key City ARC Swapfest- Abilene, TX www.qsl.net/kcarc/hamfest.html Peggy KA4UPA@cox.net 325-672-8889

May 12-16th Dayton Hamvention www.hamvention.org/

May 22 Belton Ham Expo - Mike LeFan, W5EQQ

254-773-3590 hamexpo@tarc.org Register on the website!
www.tarc.org

Jun 3-6th Republic of Texas Biker Rally at Travis County Expo Center MSET-TX looking for volunteers to help with comms, handle traffic w/EMS, Security, and event staff
ray@mset-tx.org

Jun 18-19 Arlington Ham-Com West Gulf Division

www.hamcom.org Barry WA5KXX chairman@hamcom.org
214-361-7574 or 972-596-4669

Jun 25-27 Field Day setup and operating weekend

May	Jun.	Austin Meetings/Happenings	
4	1	ARO Meeting, Marimont Cafeteria	7:00p.m.
8	12	Austin QRP Club, Owens on I-35 N	11:30 a.m.
11	8	AARC Meeting, ARL Auditorium	7:00 p.m.
18	15	ATV Club Meeting, Marimont	7:00 p.m.
15	19	QCWA Meeting Owens Restaurant	11:30a.m.
24	28	Travis Co. REACT Denny's on Burnet	7:00 p.m.
25	No	Travis County A.R.E.S., Marimont	7:00 p.m.

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.

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

ARCOVER
Austin Amateur Radio Club
Box 4739
Austin, TX 78765-4739
May 2004
Return Service Requested