



WASHRAG™

www.washarc.org



Volume 3 Issue 7

July 2001

N3SH
WA3SH

Wireless Association of South Hills

WASH Field Day 2001: Wow!

N3SH had 619 phone QSOs in 66 out of 81 sections, 46 states. This 2A station beat our (CW and Phone) 3A entry of last year by 51 QSOs! Congrats and a big thank you to the many phone ops and loggers, including NØPEU, W4ZE, N3ZEL, N3ZNI, KB3FZU, KB3GMU, NØVLR, W3SRL, N3KFD, & N3BSQ.

WA3SH, our digital/CW entry had 452 CW, 1 RTTY and 9 Phone(!) QSOs in 71 out of 81 sections and 45 states, thanks to W3WH, K3VX, N3KFD & W9UK.

Was the improvement due to excellent antennas? Of course. Jeff W3JAF brought his 3 man slingshot which cleared the trees easily. The 3 ladder line dipoles (from W3WH) worked flawlessly on multiple bands with various tuners. The Hex beam was great on 20 Meters.



Bill W3WH logging & Jack W9UK listening at the WA3SH CW/Digital station. Photo courtesy Tippi Comden WA3JPP

Was the improvement due to 3 excellent rigs? Of course. And they were in use almost continuously.

Was the improvement due to 3 computers aiding the logging? Of course.

Was the improvement due to excellent food and plenty of it? You bet. Thanks to KB3GMN, N3SBF and their helpers.

Above all, the improvement came from the TEAMWORK and ENTHUSIASM during setup, take down and all parts of the operating activities. You'll see the digital photos from W3HND and WA3JPP in the WASHRag and at the meeting. Copies are available.

Please forgive me if you weren't mentioned directly.

All this makes your FD Chairman want to do it again in 2002.*

73, Larry Comden K3VX Chairman
WASH Field Day 2001

*OK Larry, you're re-appointed for next year! — WN3VAW

Next Meeting: July 12th, 2001

The next monthly meeting of the Wireless Association of South Hills, Inc. will be Thursday, July 12th, at the **John McMillan Presbyterian Church**, 875 Clifton Road, Bethel Park, starting at 7:00 PM.

At press time, the program hadn't been set. We'll be going over Field Day and talking about Fall plans — but keep an eye on the Reflector for the latest news.

Talk-in on the 146.955(-) N3RNX/R and 443.650(+) N3FFP/R Repeaters (131.8 PL). All members, guests and interested parties invited!

2001 Pittsburgh Vintage Grand Prix



The 19th annual Pittsburgh Vintage Grand Prix will be held July 21st & 22nd in Schenley Park. As always, Amateur Radio operators from Allegheny, Beaver,

Washington, Westmoreland Counties, and surrounding counties and states, are being asked to help provide race course and other related communications during the event.

Amateurs have participated in every Vintage Grand Prix since the first event in 1983. Officially recognized in the PVGP Program as the "Vintage Wireless Connection," Amateurs on course relay information from Able (Race Control) to the Corner Captains and back. This enables Able to know the condition of the track and of the race cars (and yes, they really do race those cars!) at all times so that the workers can signal cars that are in mechanical trouble, tell Able when a car has stopped on or even left the course, and even stop the race if needed (and it has happened!).

If you're interested in participating in this year's event, either for the first time or as a returning volunteer, please contact Corky Bennett N3MJP, freqy@msn.com or call 724-850-7833.

— Information courtesy Mark Stabryla N3RDV and Corky Bennett N3MJP

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July 2001

• WASH FM Net
9:00 PM ET
Sunday Nights
on the
146.955
and 443.650
Repeaters

NCS Schedule:

- July 1 WN3BOJ
- July 8 W3WH
- July 15 KB3GMO
- July 22 TBA
- July 29 WN3VAW
- WASH Digital Net, 9:30 PM Sunday Nights 28.105 MHz RTTY & PSK31

LOOKING AHEAD:

- WASHFest 2002, February 24th, 2002

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1 Canada Day Canada Day Contest Ellwood City ARA Meeting QCWA Pittsburgh Net South One ARES Net WASH FM Net	2 Breezeshooters Net Beaver Co Public Srvc Net 2 Rivers ARC Net Triple "A" ARC Net	3 Butler Co ARA Meeting SHBP&M Meeting Skyview RS Meeting North Hills ARC Club Net SATERN Net	4th of July Uniontown ARC Meeting Steel City ARC Social Allegheny Co SkyWarn Allegheny Co ARES Net Westmoreland Co ARES	5 WACOM Meeting RA Erie Meeting	6 Elco RS Meeting	7 RA Erie VE Test Hilltoppers VE Test Nittany ARC Coffee Call North Hills ARC Elmer Net
8 North Hills ARC Hamfest QCWA Pittsburgh Net South One ARES Net WASH FM Net WASH Digital Net	9 ARL Lawrence Co Meeting Bum of the Month Lunch Breezeshooters Net Beaver Co Public Srvc Net 2 Rivers ARC Net Triple "A" ARC Net	10 Foothills ARC Meeting Nittany ARC Meeting Coke Center ARC Meeting Punxsatawny Area ARC North Hills ARC Club Net SATERN Net GPVHFS SwapnShop Net	11 North Hills ARC Meeting Steel City ARC Social Allegheny Co ARES Net Westmoreland Co ARES	12 WASH Meeting Beaver Valley ARA Meeting Horseshoe ARC Meeting	13	14 IARU HF Championship 2 Rivers ARC Ham'nEggs Tri-County CW VE Test Skyview RS VE Test North Hills ARC Breakfast North Hills ARC Elmer Net
15 IARU HF Championship Elk County ARC Meeting QCWA Pittsburgh Net South One ARES Net WASH FM Net WASH Digital Net	16 Breezeshooters Net Beaver Co Public Srvc Net 2 Rivers ARC Net Triple "A" ARC Net	17 Steel City ARC Meeting Tri-County CW ARC Meeting McKean Co ARC Meeting Pymatung ARC Meeting Juniata Valley ARC Meeting North Hills ARC Club Net SATERN Net GPVHFS SwapnShop Net	18 Huntington Co ARC Meeting Allegheny Co SkyWarn Allegheny Co ARES Net Westmoreland Co ARES	19 WASH VE Test Steel City ARC Dinner Greene Co ARC Meeting Somerset Co ARC Meeting	20 2 Rivers ARC Meeting PVGP Amateur Radio Ops Meeting, 7 PM, Schenley Park	21 PVGP NOARS Hamfest Nittany ARC Coffee Call North Hills ARC Elmer Net
22 PVGP Race Day QCWA Pittsburgh Net South One ARES Net WASH FM Net WASH Digital Net	23 Breezeshooters Net Beaver Co Public Srvc Net 2 Rivers ARC Net Triple "A" ARC Net	24 Triangle ARC Meeting North Hills ARC Club Net SATERN Net GPVHFS SwapnShop Net	25 Apollo XI Ft. Armstrong WA Meeting North Hills ARC Club Net Allegheny Co ARES Net Westmoreland Co ARES	26 WACOM Board Meeting	27 Westmoreland County Air Show	28 WASH Breakfast RSGB IOTA Contest Westmoreland Co Air Show North Hills ARC Elmer Net
29 The Great Ride BRATS Timonium Hamfest Westmoreland Co Air Show QCWA Pittsburgh Net South One ARES Net WASH FM Net WASH Digital Net	30 Breezeshooters Net Beaver Co Public Srvc Net 2 Rivers ARC Net Triple "A" ARC Net	31 North Hills ARC Club Net SATERN Net GPVHFS SwapnShop Net	8/1 Uniontown ARC Meeting Steel City ARC Social Allegheny Co SkyWarn Allegheny Co ARES Net Westmoreland Co ARES	8/2 WACOM Meeting RA Erie Meeting	8/3 Elco RS Meeting	8/4 RA Erie VE Test Hilltoppers/BVARA VE Test Nittany ARC Coffee Call North Hills ARC Elmer Net

WASH 2001 OFFICERS

Executive Committee:

President Ron Notarius WN3VAW
VP/Secretary Paul Lusardi NØVLR
VP/Treasurer Mark Stabryla N3RDV

And We Couldn't Do It Without:

N3SH / WA3SH Trustee Steve Lane W3SRL
N3SH / WA3SH QSL Manager Paul Lusardi NØVLR
VE Team Liaison Jacqué Gosselin N3ZEL
Webmaster Bob Sanford AA3FI
Quartermaster Harold Rosenberger KB3CPI
N3SH/WA3SH WASH Net Managers
FM Net (2 Meter & 70 cm) Bryan Beyer K3OL
Digital (10 Meter) Mike Serowik N3BSQ
WASHFest 2002 Co-Chairman Steve Lane W3SRL
(South Hills Hamfest) Bill Hill W3WH
Operating Events Chairman Bill Hill W3WH
Field Day 2002 Chairman Larry Comden K3VX
Ways & Means Carol Danko KB3GMN
Media Communications Kevin DeRose N3KFD

Club-Affiliated Repeaters:

Mt. Lebanon	N3RNX/R	146.955 -	PL 131.8
Mt. Lebanon	W3SRL/R	442.550 +	PL 131.8
Canonsburg	N3FFP/R	443.650 +	PL 131.8

N3SH/WA3SH WASHNet, the weekly on-air net of WASH, meets every Sunday Night, 9:00 PM ET, on the 146.955 & 443.650 repeaters. The **10 Meter Digital N3SH/WA3SH WASHNet** meets on **28.105 MHz at 9:30 PM ET following the conclusion of the FM net. (Frequency is +/- QRM)** All radio amateurs, WASH members or not, are welcome to join!

THE LEGAL STUFF

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The **Wireless Association of South Hills, Inc.** was founded in 1993 as the original **South Hills Amateur Radio Club**, and operated under that name through 1998. WASH was also known briefly in late 1998 as the **N3SH Amateur Radio Club**. It is not in any way affiliated with the "South Hills Amateur Radio Club, Inc." and is not responsible for that group, it's members, or it's actions in any way shape or form.

As always, special thanks to the owners of both the N3RNX/R Repeater System and the N3FFP/R Repeater System for permitting the **Wireless Association of South Hills, Inc.** and it's members to use their repeaters for club purposes.

WASH Amateur Radio Club News Briefs

Next WASH VE Test July 19th!

Our Next VE exam sessions will be **Thursday, July 19th, 2001**, at **7:00 PM**, at the *John McMillan Presbyterian Church*, 875 Clifton Road, Bethel Park, PA. Talk-in on 146.955 MHz. All examiners are ARRL VEC affiliated.

Walk-ins are always welcome, but if you plan on attending the test session, please contact VE Team Liason Jacqué Gosselin N3ZEL: Telephone (724)-746-9235 or E-Mail: n3zel@fyi.net

Please bring the following to your test session:

Picture ID or other suitable identification (2 forms of ID required)

Pen / Pencil / Calculator

Original FCC license plus a copy of license (if upgrading)

Original CSCE plus a copy of CSCE (if upgrading)

Check or Cash in the amount of \$10.00 (payable to: ARRL VEC)

Astronaut Susan Helms KC7NHZ had a unique Field Day, operating from NA1SS, 1A Battery, onboard the International Space Station! The NA1SS operation is the first ever Field Day from space and will be considered in a class by itself — but it doesn't count for bonus points since the ISS isn't an Amateur Radio satellite.

It's been awhile now since I last mentioned it folks, but I finally have come up with a good, basic kit suitable for building in a single session by a total beginner. Allow me to introduce the Pixie II and its big cousin the Tixie.

In a nutshell these are two teeny tiny little crystal-controlled 40-meter CW transceivers that put out under a half a watt. This is more than enough power to make contacts hundreds or even a thousand miles or more away, uses very basic circuitry and have a low parts count. The Pixie II uses a single crystal for transmit and receive, has no CW sidetone or keyer and is built on a board measuring about 1 ½ by 2 ½ inches. The Tixie on the other hand has sidetone, a TiCK keyer chip and is slightly larger at 3 inches square, making it somewhat easier to build and modify. They are both built using a 7.040 crystal, the QRP CW calling frequency. This is not only a fun little kit to build, but allows us to explore a basic transceiver's circuits and learn some basic soldering skills. From here, I can envision some more advanced kits, a bring-your-own kit night and more. This is just to get us started.

If you are interested in getting your feet wet in soldering, and having some fun in the process, this is an excellent opportunity. Either of these kits can be built in a single evening, using a 15-watt soldering iron and simple hand tools. It will be up to you to finish the kit at home with your choice of enclosure and accessories. Please contact Steve, W3SRL at w3srl@yahoo.com ASAP to reserve your kit. I will be placing a parts order soon and will need to have a good idea how many folks will be interested.

The **WASH Breakfast Gang** got together on a wet and rainy morning on June 30th for our monthly get-together, at Dietz's Restaurant in the Caste Village Shops, Baptist at Grove. Present this month were K3VX, KB3CPI, KB3FNM, N3RNX, W3HND, W3SRL, W3VFA, W3WHL & WN3VAW. Coffee flowed freely as Ed proudly displayed a book full of his photos of classic and restored aircraft from various air shows, Field Day success stories were swapped, and Steve & Pete got a lot of pats on the back for the good state right now of the repeaters, among many other topics. At the end, when asked where we should go next month, consensus was to stay put until someone could come up with someplace better. Don't be left out of the good times! Remember, our next Club Breakfast will be Saturday, July 28th, at Dietz's Restaurant in the Caste Village Shops, Baptist Road at Grove Road. Hope you can make it!

Apologies are in order to Bob W3RWS who did join us last month for breakfast but accidentally got left out of the column. Whoops!

It's a Mystery! We have an unidentified person in one of the Field Day photos taken by Dave W3HND over on Page 7. Can you identify who is standing there in the back by the center of the antenna, opposite Dick N3QMV? We'll come up with a suitable gag prize once someone can figure out who that is... honest, we didn't mean to exclude anyone, but no one who saw the photo at Breakfast could figure out who is standing there!

Speaking of mysteries, one thought for the next Islands contest will be to operate this time from the island in the middle of the lake at Moraine State Park. Anyone know the name of that island? If so, or even if you're just interested in operating, please contact Bill W3WH or Steve W3SRL. Prefer to go back to Washington's Landing again? If we have enough interest and ops, we can always run two operations, one under each call sign...

Fall Classes. As mentioned in the minutes, we have been contacted about whether or not we will be holding New License classes this fall; we hope to have the details nailed down soon. We have also had inquiries from club members and other amateurs about the possibility of teaching code and/or upgrade classes too. Are you, or is someone you know, interested in taking classes? Let Ron WN3VAW know. How about helping to teach them? Tentative work schedule for the fall makes it possible that WN3VAW will not be available to teach every upcoming class each week, so help will be needed and appreciated!

Don't be a stranger! Have you noticed that just about every club meeting, we have 2 or 3 or more folks show up who we've never seen before? Some you may know only as rush-hour voices on the repeaters, or as a long time ham becoming active again, and very often a brand new ham to the area (or brand new period!). And to be honest, we must be doing something right, because quite a few of these new guys end up joining, which is a real compliment to all of us. So if you don't recognize the person sitting next to you or in front of you, next meeting, don't wait — introduce yourself! Be an unofficial "club greeter" for our guests. Trust me, they'll appreciate it.

According to the calendar, It's only a little over 3½ months until the PA QSO Party. Yes, it's time to start thinking about what we're going to do & where we're going to do it! More at the meeting!

Join the WASH Reflector & stay up to date! n3sh-subscribe@yahoogroups.com

Minutes, June 14th Meeting

Paul Lusardi NØVLR, VP/Secretary WASH

The meeting was called to order at 19:12 by WN3VAW. There were 19 members and 6 guests present.

A moment of silence was observed for recent Silent Key's and other deserving persons.

Introductions were then made all around, as is our custom.

A motion was made to accept the minutes of the May meeting as published in the newsletter was made by Steve W3SRL and seconded by Shawn NØPEU and carried.

Committee Reports:

Treasurer (N3RDV): Read and accepted.

Secretary (NØVLR): No report

VE Team (N3ZEL): Next WASH exam July 19th.

Repeaters (W3SRL/N3RNX): 146.955 & 442.55 repeaters appear to be fully operational at their new location now.

EM Net (K3OL): No report. WN3VAW mentioned that NCS stations always needed.

Digital Net (NØVLR): Not much activity lately.

Activities (W3SRL): Inquired as to any interest in August activities including another Island expedition. September VHF contest coming up (Mt. Davis) or another mini-expedition — interest? See Bill W3WH. Reminder that PA QSO is coming up soon.

Public Service (N3RDV): Upcoming events in July and August include the MS 150, Vintage Grand Prix, Beaver County and Westmoreland County Air Shows.

Contests: Field Day (K3VX): Lengthy discussion of various items and details related to FD activity concerning equipment, antennas, operators.

Newsletter (WN3VAW): No report.

President (WN3VAW): N3ZEL and N3ZNI had been contacted by the manager of the Brentwood Radio Shack, Dave N8LGU, who wanted to know if we would be sponsoring Technician classes again (he has many interested customers!). Rich N3SBF will see if we can get a room at the Brentwood church again for a Fall class starting after Labor Day. Short discussion related to whether or not the club should pay the room rental charge or charge a small fee to recoup; consensus was to pay the rent as an investment in the future.

Old Business: Steve W3SRL purchased a dual band HT at Dayton for the 911 EOC as per our agreement. He moved that the club reimburse him the \$200 expenditure. Second by Bob W3RWS. Short discussion, motion carried unanimously.

New Business: None.

Good of the Order: N3SBF & KB3GMN asked if the club would consider holding the annual picnic in September instead of August as we have done the last few years. N3IDH mentioned that AA3GM was in Puerto Rico and available for QSO's. NØVLR asked if there was any interest in a group order on Belden 9913 coax, if so, please see him after the meeting.

Motion to adjourn made by Carol KB3GMN, seconded by Pete N3RNX and carried. Meeting adjourned at 20:15

Upcoming Area ARES events

Pittsburgh Vintage Grand Prix, July 21-22
Contact Corky N3MJP, freqy@msn.com or call
724-850-7833

The Great Ride, July 29, contact Carla N3VXW
Westmoreland County Air Show, July 27 - 29,
contact Sam Sarraf, docsam@pulsenet.com
— Mark Stabryla N3RDV n3rdv@arrl.net



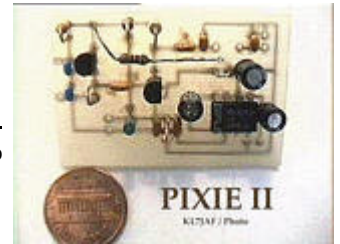
Repeater News

Steve Lane W3SRL

I'd like to acknowledge one of our newest members, Dave, N8DPW for his extremely generous contribution of an entire commercial-grade Motorola MSF-5000 UHF repeater system. Folks, this is an entire 100-watt, continuous duty system, including the duplexer, that is entirely synthesized and self-contained. We're working on getting the programming cables, software and manuals for it to be able to tune it up and put it into service.

Plans for this system are far from complete, but some ideas that have been tossed around have been: A second entirely separate UHF repeater system, a remote receiver system for the 442.550 machine, using this unit to replace the 442.550 entirely, and a whole host of other suggestions. Please give it some thought, and by all means give Dave your thanks next time you see or talk to him.

There was no room left for it on Page 3, so here is a picture of the Pixie II QRP kit mentioned in Steve's article on kit building projects — WN3VAW



Monthly WASH Breakfast Saturday, July 28th



Please join us for the next WASH Breakfast! We're going to get together on the LAST Saturday of every month for a chance to informally sit down, shoot the breeze, compare notes, and just have a good time together!



We'll be rotating the location until we find one that suits most everyone. This month, we'll again be at **Dietz's Restaurant**, Baptist and Grove Roads in the Caste Village Shops. Start time is about 8 AM until whenever. Monitor 146.955 for talk-in or any last minute changes. All are welcome, WASH members or not, amateurs or not! Hope to see you there!

Wireless Association of South Hills Membership

AA3FI	KB3ERQ	N3MJQ	N3YPB	W3WH
AA3JS	KB3FGO	N3QMV	N3YQY	W4ZE
K3BZW	KB3FNM	N3RDV	N3ZCG	WA3JPP
K3LIE	KB3FQT	N3RHT	N3ZEG	WB3BPH
K3OL	KB3FZU	N3RNX	N3ZEH	WB3GTL
K3VX	KB3GMN	N3SBF	N3ZEL	WN3BOJ
K3WR	KB3GMO	N3TBK	N3ZNI	WN3VAW
KA3PPH	KB3GMP	N3TES	N4MIS	Dan Mohr
KA3TFB	KD3JV	N3UE	N8DPW	JoAnn Cottrill
KA3TWI	KE3XB	N3UIW	NP2JF	Marilyn Nizinski
KA3UPY	KQ3DX	N3VEH	W3GEL	
KA3WZO	NØPEU	N3VVL	W3HND	K3EED (SK)
KB3ANH	NØVLR	N3VWF	W3JAF	N3KEH (SK)
KB3CPI	NØWPV	N3WPT	W3RJM	N3OBD (SK)
KB3DCO	N2QIV	N3XFE	W3SRL	W3ZLK (SK)
KB3DSB	N3BSQ	N3XI	W3VFA	
KB3ECD	N3CCC			
KB3ENX	N3CZZ			
KB3EPC	N3IDH			
KB3EPI	N3KFD			

Through June 30th, 2001
List compiled by
Mark Stabryla N3RDV
Vice President/Treasurer

Hollow State Ramblings : Restoration Topics

Don Merz N3RHT

This month I am going to just run through some random thoughts based on conversations I've had about restoring boatanchors over the last several months. Restoration is not an exact science. Even the Smithsonian folks will admit it. So just about any technique has its sponsors and detractors. What follows are simply things that have been valuable to me and so I have adopted them as my own. But I really just picked them up somewhere and there is nothing original here at all.

Capacitors

Has ANY electronic component EVER stirred up more discussion than capacitors? Here's some of my thinking on capacitors used in restoration work.

They don't make wax-coated, paper tubular caps any more – for good reason! But Mylar, polyester film and dipped silver mica caps today serve the role that wax paper caps once filled. All these modern types are much better quality than the older designs. Wax paper tubular "condensers", as they were originally called weren't commonly available to ordinary people. Instead, they were mainly used in the factories for consumer product manufacturing because they were cheap. If you got your radio or tube TV fixed in those days, and the guy replaced a cap - you generally got a plastic-jacketed tubular, such as a Mallory "Plasti-Cap," or Sprague "Black Beauty." Even the servicemen of the day did not use them.

Disc caps are fine for coupling and bypassing, but are generally the least accurate on value. Don't substitute one for a mica or RF ceramic in a critical application such as a tuned circuit, however, unless you have an NPO cap. They won't drift with temperature. Regular Z50 and Y5M disc caps can be used as temperature sensors - but the NPOs will stay quite stable.

I prefer Sprague orange drops for RF and precision applications. BUT I also watch for old square micas caps being sold at hamfests and such - I grab them every time I see them and very seldom find a bad one. In modern terminology, both the Orange Drops and the old square mica caps have excellent ESR, ESI, and drift characteristics.

Vibrators

(Okay, cut the wise cracks...). Vibrators were often used to generate low-current high voltages for mobile or portable receivers with only 6 VDC or 12 VDC batteries to draw on for power. Exercising them using 120 VAC line current through a 40 Watt incandescent lamp can often revive vibrators. This is documented in Hints & Kinks, Vol. 6 (1959) page 100. For four pin vibrators, connect pins 2, 3, and 4 to the lamp. Pin 1 and the other side of the lamp goes to the 120-volt line. 7 pin synchronous vibrators are a bit more complicated, and the LV and HV contacts should probably be cleared separately. For the LV contacts, connect pins 1, 3, 4, and 6 to the lamp. For the HV contacts, connect pins 2, 3, 4, and 5 to the lamp. Pin 7 and the other side of the lamp goes to the line in both cases. This takes care of both series and shunt driven vibrators. Another point is that there were many adapters made to permit vibrators to be tested in common tube testers—be on the lookout for those.

Three-Wire Grounding

Most boatanchors that use AC power come with two-wire AC Line cords. For the receivers, I am pretty fastidious about replacing these with three-wire grounded plugs, properly fused and switched in the radio. However, a three-wire cord on a ham transmitter is somewhat of a silly convenience. First of all, a transmitter needs low impedance, high current ground. The low impedance ground is required for RF

control in the shack while the high current ground is required in event of a lightning strike, and last but not least, for operator safety. A three-wire cord fails miserably on all three counts. A robust grounding stud on the transmitter's chassis attaching the transmitter via a heavy conductor to a properly designed and constructed station ground system is what is required. The only feeble excuse for a three-wire cord is that it can be used to assure an earth ground for the transmitter when it's on the workbench. But then a three-wire cord won't keep you from killing yourself when you touch high voltage while clinging to your D-104 with the other hand. So you have guard against a false sense of safety just because a transmitter has a three-wire line cord.

Restoration Parts Sources On the Web

Here are the best that I know of, in no particular order:

ALLTRONICS ELECTRONIC COMPONENT SUPPLY

www.alltronics.com/
www.olderadioparts.com/
www.mouser.com/
www.agtannenbaum.com/
www.digikey.com/
www.sciplus.com/
www.fairradio.com/
www.tubesandmore.com/
www.herbach.com/
www.radiodaze.com
www.oselectronics.com/
www.surplussales.com/
www.meco.com/

www.rsrelectronics.com/srp-indx.htm

TOTAL ELECTRONICS (Boatanchor Matching Paints)

www.nctotalelectronics.com
www.sovtek.com

NEW SENSOR (not just for tubes)

ROCK-SEA ENTERPRISES

<http://members.aol.com/RockSeaEnt/>

RF PARTS

STF ELECTRONICS

www.rfparts.com

www.stf-electronics.com

Problems With The AVC Bus Or "Why Doesn't My Tuning Eye Work Right?"

Tuning eye tubes are driven off of the AVC bus in a receiver. Sometimes a restorer will discover that by bridging the AVC bus at certain points, he can restore normal tuning eye operation. BUT it should never be necessary to modify the AVC circuit to get the AVC (as evidenced by the action of the tuning eye tube) to work acceptably well at normal signal levels. THIS IS ALMOST ALWAYS ANOTHER CASE OF THE LEAKY CAP SYNDROME!

This relatively simple tip applies to almost all tube receivers: Audio distortion on moderately strong signals is almost always an AVC problem. To check the AVC circuit: Disconnect the AVC bus to the RF and IF amplifiers from the detector diode load resistor. On a receiver with an AVC on/off switch this could probably be done at that switch. Check the resistance of this bus to ground with a good VTVM or DVM. It should be INFINITE! Ten megohms is trouble. One megohm is a disaster.

The problem can usually be traced to leaky filter caps, and you can watch the resistance climb as you replace each one. Occasionally you'll find a set with a resistor from AVC bus to ground at the far end. (The R-390 comes to mind) Lift this resistor and then test.

Going back to the discussion about wax paper caps at the beginning of this column, problems like this one have driven many restorers to do wholesale replacement of paper caps at the first sign of any leakage. It's a case of pay me now or pay me later.

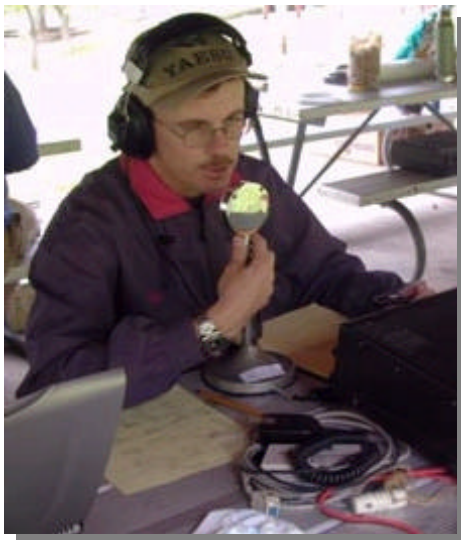
N3SH / WA3SH



Left: They Also Operate!
Tippi WA3JPP, Larry K3VX



Above: Frank KB3FZU listens, Lori KB3GMU observes.
Left: Ted W4ZE smiles as he hears his new rig operate on a "real" antenna for a change!



Left: Nighttime at Field Day



Above: Steve W3SRL at the mike
Below: John KA3PPH at the log



I was at this year's Field Day from start to finish. The few hours of sleep I got in the back of the car were more than made up on Sunday night! I had a great time! It was nice being able to put names, call signs, and faces together. The food was great. The weather was fine. There were no bugs and it was not too hot. We had to have a little rain, or else it would not be Field Day.

Having been at other Field Day operations, WASH members, the organizers, officers, and all the operators are to be commended for a great job! Can't wait till next year.

— John Seiler KA3PPH

Field Day 2001



Top: John KA3PPH, Paul NØVLR (where's the golf clubs Paul?)

I'd like to thank the Mid-Atlantic ARC W3NWA and especially W3JY, WT3P and N3AO for their hospitality during Field Day. It was very nice to operate for a few hours after the wedding reception — and it didn't hurt that the FD site was only about 3 miles from the Hotel (and that the route was NOT under construction).
— Ron WN3VAW



Top: Now you adjust WHAT where?
Steve W3SRL, Jeff W3JAF, Dick N3QMV



As required under Federal ADA regulations, Shawn NØPEU was assigned the task of hamburger cook & flipper. As complaint forms had to be filed with three different agencies in quintuplicate, everyone thought the burgers were excellent...



Top: Battery Changing: Mark N3RDV, Bob W3RWS, Larry K3VX



Upper Right: That was WHO? Ted W4ZE, Bob W3RWS

Bottom: Antenna Raising, Left to Right: Jeff W3JAF, Dick N3QMV, An Unidentified Person, Larry K3VX, Steve W3SRL, John KA3PPH



Behind every good cook... and this was just a small sampling of the feast!
Carol KB3GMN and Rich N3SBF

Short Takes

The FCC Office of Engineering and Technology is looking for engineers to work on technical telecommunications issues. Examples include digital television, electromagnetic spectrum, and network technologies--particularly the Internet. Jobs in the Network Technology Division are in downtown Washington, DC. Positions at the FCC's laboratory in Columbia, Maryland, involve laboratory studies to determine the interference and performance potential of new communications technologies, evaluating and testing equipment, and examining applications related to equipment authorization. Applicants must have a degree in engineering. Pay ranges start at \$27,778 and top out at \$114,224. To obtain vacancy announcements, visit the FCC Web site, or call 202-418-0130.

The *Ham Radio Online* email distribution list is intentionally used infrequently (6 to 12 times per year) only for important announcements regarding Amateur Radio. It has been maintained at the ListBot service, but ListBot is discontinuing its distribution list services. As of August 6, 2001, the existing email list will be discontinued. If you wish to join or remain on the *Ham Radio Online* mailing list, you must send a blank email message to:
hamradioonline-subscribe@yahoogroups.com

— Ed KF7VY

With just over six weeks to go to the International Lighthouse/ship Weekend 18/19 August 2001, 142 stations at a lighthouse, lightship or maritime beacon have confirmed their participation from 30 countries.

The full list can be found at www.vk2ce.com/ILLW/2001.htm

So if you are still thinking about joining us in the fun, come and join us, establish a station at a lighthouse, lightship or maritime beacon. The more the merrier.

If you are not on the list and are joining us from a lighthouse, lightship or maritime beacon could you let me know the callsign you will use, QTH and QSL information.

— Mike GM4SUC

Silent Keys



Gary Cotrell WM3V, Conneaut Lake, PA (formerly of Pittsburgh), June 22nd.

Jim Ellis, Harmony, PA, co-creator of USENet, June 28th.

Certified Guitar Player & Country Music legend Chet Atkins W4CGP (ex WA4CZD), June 30th.

DX News Briefs



Amateurs worldwide were surprised by the sudden appearance of **T5X** and **T5W** going QRV on June 14th with no prior warning. These are among the first licenses issued by the Transitional

Government in Somalia. In addition, WD4NGB reports that he had received a license for **T5DX**, valid July 1 2001 through July 1 2002, and was initially planning a September or October expedition. QSL T5X via DJ6SI, T5W via DL1QW —GØOIL, WD4NGB, DJ9ZB

Need Crete? Look for **SV9/WB2GAI/P** who plans to be QRV June 29 through August 12th. Look for Ron on the IOTA & QRP CW frequencies. QSL via WB2GAI (CBA) — KF2TI

The Sir Francis Drake Report:

"**VR8D**" popped up on June 18th on 20 meter CW. This pirate has been QRV on and off for years. He claimed to be "John" from Ducie Island in the Pitcairn's, but seemed unaware that the VR prefix now belongs to Hong Kong (China) and Pitcairn is now VP6. He has been on in the past as **ZL9A** and **ZL9RV** amongst many others. Be aware that VR8D was at one time a valid call, used by the Colvins on a YASME DXpedition. — W7BX, W9SZ, N6JM

A station signing **VK9MO** popped up on June 27th. The call is assigned to JA1LET for use on Mellish Reef. Masa is currently in Tokyo and has not been using the call — W4UR via 425 DX News

There continue to be packet spots for **VU7** stations. These are either pirates or busted calls, there is no activity from there — VU2JOS

QSL Routes:

3C1TR via K8JP — K5OVC

BQ9P via KU9C — KU9C

OHØYLS via OH1MK — N4GN

J28NU via F6FNU — W9IXX

VK9CXW via G3SXW — WK6I

8Q7QY via JA1JQY — WK6I

VK9ML via VK4APG — WK6I

5U2K, **5U5A**, and **5U3T** are all via I2YSB — N7HIY

NA1SS (Field Day) via KB1DCO c/o ARRL — N1ND, ARRL Letter

3V8BT via I5JHW — RA3SL

V73E via WF5T — WF5T

RIØZKR via RAØZD — RW4NM

VP2E via N5AU — KI4RU

TT8JE via F6FNU — KI4RU

YJ2AD via YT1AD — N7HIY

SY2A via SV2ASP — N7HIY

K4ANA, ex. KZ5RQ, WA4WKY, C9RJJ, C91J and KH2/K4ANA is now living and working in Kyrgyzstan. He has been on the air signing as **EX/K4ANA**. Anyone needing John's card from EX can QSL via the bureau to K4ANA or W2PS, or direct to W2PS — W2PS

"I expect the **BQ9P** QSL card to find it's way to my doorstep on or about July 13. However, due to some family commitments, I'm going to be a bit slower than normal in getting these out, as I have some things scheduled in July that will keep me away from the QSL cards (family vacation). I will begin processing the cards immediately, but as I have some 6500 envelopes to fill, I don't anticipate having the cards out completely before mid-August." — KU9C

The 2001 Argentine call book is now available on the QSL.NET server at <http://www.qsl.net/lu8dze> — LU2DKN

Look for *Daily DX* Editor & QST *How's DX* Columnist W3UR QRV as **W3UR/OHØ** from Brando Island (EU-002) in the Aland Islands July 7th – 10th. QSL via W3UR — W3UR/The Daily DX, 425 DX News

For years, the only way to get a **5A1A** QSL was to send green stamps via registered mail. Unfortunately, Abubaker now reports that postal workers are stealing the money, so he is asking amateurs to mail cards on his behalf. — WØJS & others

Thanks to the NJDXA *DX Reflector*, *425 DX News*, *OPDX News*, & *ARRL DX Bulletins* for our *DX News* information. Thanks also to W3UR/*The Daily DX* for confirmations & additional information.

July 1 Morse Code Exam Changes

Bart Jahnke W9JJ, Manager, ARRL VEC

NEWINGTON, CT, June 15th, 2001 — New Morse code exam standards must be in place by all VE teams with all VECs. These new Morse code exam standards will include:

- ◆ A Farnsworth character speed in the 13 – 15 WPM range for routine Morse code exams is required (rather than the 18 wpm characters ARRL VEC has used since 1989). Standard 5 wpm messages with 5 wpm characters are available as an accommodation. Standard (non-Farnsworth) speed messages are available upon special request from the ARRL VEC for ARRL VE teams. Consistent with the new standards, ARRL VEC is using 15 WPM characters as its Farnsworth setting — be sure to update your Morse Academy software for a 15 WPM character speed setting.
- ◆ Fill-in-the-blanks is the only acceptable 10-question quiz format starting July 1st. ALL VE teams of all VECs will no longer be able to use multiple-choice code quizzes starting July 1st.
- ◆ A reminder that every Morse code examinee has two (2) means to pass a code test. They are by either getting 7 of 10 fill-in-the-blanks answers correct, or by getting 25-character-count in a row solid copy. Either review can be conducted first, but if the first review is failed the second review must be conducted.
- ◆ The Morse exam audio frequency range will be within 700 – 1000 Hz for routine exams. ARRL VEC will be using 750 Hz.



These standards were adopted by the National Conference of VECs at their June 2000 Annual Meeting in Gettysburg PA.

ARRL stocked VE teams will be receiving via priority mail new 5 WPM Morse exam message cassettes or CD (and their associated printed hardcopy fill-in-the-blank exams and answer key forms) during the latter part of the week of June 23rd [if you are an ARRL VE and you were expecting new code supplies, but have not received them, please call us toll free at 800-927-7583].

Please destroy after July 1st (they can be thrown away in the garbage) all earlier ARRL/VEC-supplied Morse exam messages (these include all 1989, 1991, 1995 and 1998 series messages). Do not use the old messages as practice tests or for training — the audio frequency and character speed are incorrect.

The next exam changes you can expect will occur with Extra tests changing in July 1, 2002, Technician changing July 1, 2003, and General changing July 1, 2004.

FYI Networks

For Your Information needs

FYI Networks, an Internet Service Provider in Pittsburgh and surrounding areas since 1995, is offering all members of WASH their Basic Internet account for only \$18/month. This includes one e-mail box, 3 MB of disk space, web page hosting, Telnet & FTP access, and in some areas Toll-Free 500 Area Code service. Call FYI toll-free at 1-877-FYI-4NET, or e-mail them at sales@fyi.net, for more details or to sign up. You must mention that you are a member of the Wireless Association of South Hills to get the discount rate.

Many thanks to FYI Networks for making this special offer available to us for the past three years!

FCC News

ARRL Web Extra courtesy American Radio Relay League

NEWINGTON, CT, June 21st, 2001 — Never say that FCC Special Counsel for Amateur Radio Enforcement Riley Hollingsworth lacks creative flair in applying enforcement sanctions. Acting in two ongoing cases, Hollingsworth this month notified two Technician licensees that they must stay off all repeaters on the 144, 222, and/or 440 MHz bands for the next three years. Hollingsworth invoked §97.27 of the FCC's Amateur Service rules to modify the licenses of Ted R. Sorensen III, KC6PQW, of Agoura Hills, California, and Joseph Mattern, KG4NGG, of Orlando, Florida. Both licensees have been the subject of repeater-related enforcement inquiries.



Sorensen's restriction was among other actions recently taken in conjunction with the Los Angeles-area W6NUT repeater. In February, the FCC asked Sorensen and Gregory S. Cook, ex-KC6USO, of Chico, California, to respond to allegations that they conspired in making late-night one-way transmissions on W6NUT that originated from Sorensen's station.

In March the FCC accepted Cook's voluntarily surrendered license. For his part, Sorensen, who did not dispute the allegations, wrote the FCC offering to accept a year's banishment from the W6NUT 147.435 repeater "as fair punishment." Instead, the Commission imposed a ban on the use of all repeaters on the three most popular repeater bands for the next three years.

"Your radio operation on those dates was in serious contradiction to the basis and purpose of Amateur Radio as set forth in Section 97.1 of the Commission's rules," Hollingsworth wrote Sorensen on June 5. He said the operation also violated prohibitions against one-way transmissions, broadcasting and the transmission of music and failed to comply with station identification rules. Hollingsworth reminded Sorensen that further violations of Amateur Radio rules could result in additional enforcement action, up to and including license revocation.

Mattern, who formerly held the vanity call sign WW4WJD as a Tech Plus, was called for retesting last September after the FCC received allegations that the licensee had been using amateur repeaters in his area to solicit traffic reports for his employer, a company that markets the reports. In a reply to the FCC, Mattern characterized his traffic-reporting activities as "a hobby" that earned him very little money. He also agreed to abide by the wishes of repeater control operators who had asked him to stay off their machines.

Mattern failed all elements of last year's retest, but he passed the Technician exam earlier this year, and was granted KG4NGG on May 3. Within two weeks, the Wireless Telecommunications Bureau--in reaction to numerous additional complaints from Central Florida amateurs--set aside the KG4NGG license grant until the Enforcement Bureau could investigate. Mattern's application was granted on June 8 with the repeater restriction imposed.

The restrictions on Sorensen's and Mattern's licenses are set to expire on June 10, 2004.

The Enforcement Bureau meanwhile continues to evaluate the response of W6NUT repeater trustee Kathryn Tucker, AA6TK, to Hollingsworth's February inquiry into the repeater's operation. The repeater, which has attracted a following of what some observers call "nontraditional" amateur users, also was said to have been radio home of Richard Burton, ex-WB6JAC, sentenced earlier this year to prison for unlicensed operation.



16th Annual North Hills ARC Hamfest
Sunday, July 8th, 8:00 AM until 3:00 PM
Northland Public Library
300 Cumberland Road, Wexford PA



Free Admission — Free Parking

Paved Tailgating! First Space Free, Additional Spaces \$5 Each

Handicapped Accessible

A Real Old Fashioned Hamfest

Talk-in on the W3EXW/R 147.090 Repeater North Hills ARC Club Repeater

Main Prizes (need not be present to win):

1st IC-706MKIIG HF, 6M, 2M, 70cm Mobile

2nd IC-T7H Dual Band Hand Held

Plus Hourly Prizes (must be present to win Hourly Prizes)

For More Information on the Hamfest, Please Contact Milt Moratis W3XX at mmoratis@juno.com or (412) 364-0639

Or visit the NHARC Web Site, www.nharc.pgh.pa.us



Butler Hamfest & Computer Show
WPA ARRL Section Convnetion
Sunday, September 8th, 8:00 AM until 4:00 PM
Butler Farm Show Grounds at Roe Airport



Sponsored by the Butler County Amateur Radio Association, Inc.

\$5 Donation for Admission — Includes All Prizes, Children Under 12 FREE

Free Parking — Room for 2500 Cars

Overnight Campers \$10 — Handicapped Accessible

Outside Flea Market \$5.00 Per Vehicle/set-up

Indoor Flea Market — Vendor's Space \$15.00 per 8 Foot Table

To Reserve Indoor Tables Contact Kevin Berry KF4RMA, 380 Three Degree Road, Renfrew, PA 16053

Telephone (724) 586-1182 E-Mail KF4RMA@arrrl.net

Talk-in on the W3UDX/R 147.360 Repeater

Mobile Check-In until Noon on 146.52 Simplex

Main Prizes — Drawn at 4:00 PM (need not be present to win):

1st Yaesu FT-817 5 Watts HF, 6M, 2M, 70cm SSB/AM/FM

2nd Alinco DX-70TH Compact HF & 6 Meters Mobile Transceiver

3rd IC-718 HF Transceiver / SW Receiver

4th IC-2800H 50 W 2M / 35W 70cm Dual Band Receiver w/9600Baud

5th IC-T7H 6 W 2M / 70cm Hand Held

Special Events: ARRL Representatives from Headquarters, Atlantic Division, Western PA Section and ARES/RACES

QSL Card Checking at the Hamfest for DXCC, WAS, VHF & UHF Awards

Forums on a wide range of Amateur Radio Topics

Hamfest Coordinator Gerald Wetzel W3DMB, 784 Mercer Road, Butler PA 16001 (724) 282-6777

www.qsl.net/w3udx



WIRELESS ASSOCIATION OF SOUTH HILLS, INC.

Membership Application/Renewal for 2001



I would like to join WASH!. I am interested in the following type of membership: **New Membership** **Membership Renewal**

(check quarter →)
(check one ↓)

1st Qtr **2nd Qtr** **3rd Qtr** **4th Qtr**
Jan-Mar **Apr-Jun** **Jul-Sept** **Oct-Dec**

(F1) Full Membership: \$20.00 \$15.00 \$10.00 \$5.00

(F2) Full Membership < 18 or > 65 yrs of age: \$10.00 \$7.50 \$5.00 \$2.50

(A1) Associate Membership: \$10.00 \$7.50 \$5.00 \$2.50

(FM1) Family Membership (F1 or F2 or A1 dues x 20% x No. of household family members): \$ _____

Name(s): _____

Name: _____ Call Sign: _____

Address: _____ License Class: _____

City, State: _____ Expires On: _____

Home Phone: _____ Work Phone: _____

Email Address: _____ Birthday: _____

New Members Only:

I do NOT want to be added to the Club E-Mail Reflector

I do NOT want to be added to the Electronic Newsletter Mailing List

[If you have an Email address, you Will be added to both lists UNLESS you choose to Opt-Out]

ARRL Member? Yes No Family ARRL Member? Yes No

Date: _____

Amount Enclosed: \$ _____

Signature: _____

Please make your check or money order payable to the club treasurer, Mark Stabryla.
The Wireless Association of South Hills, Inc. reserves the right to accept or reject new memberships or renewals.
Please return completed membership form along with check/money order to the club treasurer or mail to:
Wireless Association of South Hills, Inc.
C/O Mark Stabryla N3RDV, VP/Treasurer
1120 McKnight Drive
Bethel Park, PA 15102-2456

Wireless Association of South Hills, Inc.

Order Form for "The TLC Embroidery Company"

Embroidered Shirts and Hats

Quantity	Item/Description	Size	Color	Unit Cost	Net Cost
				Sub-Total	
				6 % Sales Tax	
				Total Enclosed	

<u>Available</u>	<u>Cost (S M L XL)</u>	<u>Cost (2X 3X 4X)</u>
Golf Shirts	\$20.00	\$22.00
Rugby Shirts	\$20.00	\$20.00
Light Jackets	tba	tba
Lined Jackets	tba	tba
Hats	\$10.00	\$10.00

Club logo is not currently available on the hats due to size limitations. Contact TLC Embroidery for more information.

Prices, availability & available colors subject to change without notice.

Use additional sheet(s) if necessary

Make checks payable to Sharon Cox
Mail to: The TLC Embroidery Company
366 Dry Ridge Road
West Alexander, PA 15376

Phone: 724 - 484 - 7703



The WASHRag

Ron Notarius WN3VAW, Editor
3505 Rosalia Avenue
Castle Shannon, PA 15234-2317

Inside This Issue:

- How was your Field Day? N3SH / WA3SH Field Day Results, Comments and Photos!
 - Planning to fix up that Boat Anchor
 - Kits found for this Fall's Kit Night!
 - Pittsburgh Vintage Grand Prix's Coming Up!
 - Kits Found for Kit Night!
 - North Hills ARC & Butler Hamfest!
- All that and more... waiting for you, right inside these pages...



IS THAT A HEX BEAM YOU'RE HOLDING, OR ARE YOU JUST HAPPY TO SEE US?

(With Apologies to Mae West's writers)

Jeff W3JAF & crew (approaching with mast) getting ready to put the Hex Beam in place at Field Day 2001

Photo Courtesy of & ©Copyright 2001 Dave Imhoff W3HND

MORE N3SH/WA3SH FIELD DAY PHOTOS INSIDE!