



WASHRAG™

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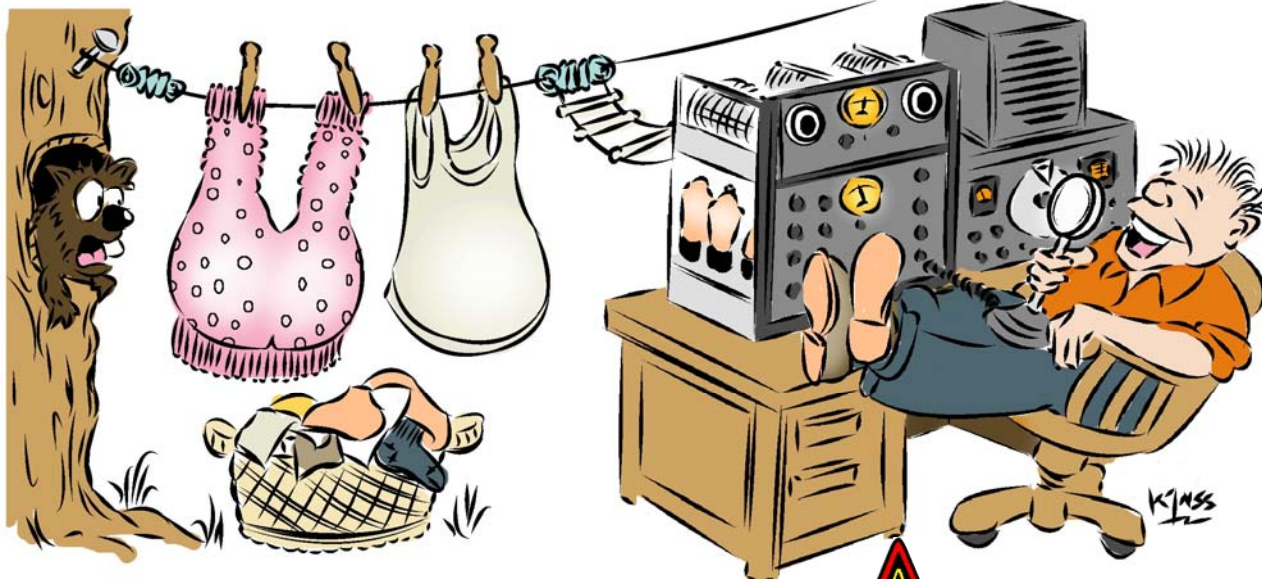
VOLUME 18 ISSUE 04
APRIL 2016

Wireless Association of South Hills



N3SH WA3SH NP2SH/B

www.n3sh.org www.washarc.org



WASHRAG™



VOLUME 18 ISSUE 04

APRIL 2016

Next Monthly Meeting: Thursday, April 7th, 2016

The next meeting of the **WIRELESS ASSOCIATION OF SOUTH HILLS, INC.** will be on **Thursday, April 7th 2016**, in the Conference Room at the **St. Clair Hospital Outpatient Center, 2000 Oxford Drive, Bethel Park, by South Hills Village & Village Square** (map on the back page). The room is available at 6:30 PM. The meeting will be starting at 7:00 PM.

Meeting topics will include Dayton Hamfention, Breezeshooter's Hamfest Field Day 2016, other club plans for 2016, and more. See you there!

Cover Photos: The US Supreme Court Building... and Mike Lazaroff K3AIR, preparing to oral arguments before the Court after being admitted to practice before it, on February 24th. Photo courtesy of & © Copyright 2016 Mike Lazaroff K3AIR

WASH 2016 OFFICERS

EXECUTIVE COMMITTEE:

| | |
|----------------|---------------------|
| President | Carol Danko KB3GMN |
| VP / Secretary | Ben Williams KB3ERQ |
| VP / Treasurer | Mark Stabryla N3RDV |

AND WE COULDN'T DO IT WITHOUT:

| | |
|--------------------------------|------------------------------|
| N3SH Trustee | Larry Comden K3VX |
| WA3SH Trustee | Rich Danko N3SBF |
| NP2SH Trustee | Paul Jordan NP2JF |
| N3SH WA3SH NP2SH/B QSL Manager | Ron Notarius W3WN |
| NP2SH 2009 QSL Manager | Carl Schroeder K9CS |
| VE Team Liaison | Ron Notarius W3WN |
| Webmaster | Sean Sleeman N3NWR |
| Asst. Webmaster | Ben Williams KB3ERQ |
| Quartermaster | Harold Rosenberger K3HCR |
| WASH FM Net Manager | Glen Roberts KE7FD |
| WASHFest 2016 Committee | Carol Danko KB3GMN, Chairman |
| | Bill Hill W3WH, Co-Chair |
| Activities & Operating Events | Rick Bell KB3IAC |
| Ways & Means | Carol Danko KB3GMN |
| WASH 2M Contest Chair | Jim Sanford WB4GCS |
| Field Day 2016 Coordinators | Rick Bell KB3IAC |

CLUB-AFFILIATED REPEATERS, BEACONS, & DIGIPEATERS:

| | | | |
|---------------|-----------|-----------------|--------------------|
| Mt. Lebanon | N3SH / R | 146.955 MHz (-) | PL 131.8 |
| North Side | N3SH / R | 442.550 MHz (+) | PL 131.8 |
| Canonsburg | N3FB / R | 443.650 MHz (+) | PL 131.8 |
| St. Johns, VI | NP2SH / B | 28.276 MHz | Propagation Beacon |
| Canonsburg | N3SH | 144.390 MHz | APRS Digipeater |

N3SH / WA3SH WASHNet, the weekly on-air net of WASH, meets every **Monday** Night, 8:00 PM ET, on the 146.955 & 443.650 repeaters. All radio amateurs, WASH members or not, are welcome to join in!

THE LEGAL STUFF

"The WASHrag™" (formerly **"The Mariner™"**) is the Official Newsletter of the **WIRELESS ASSOCIATION OF SOUTH HILLS, INC. (WASH)**

Published Monthly with occasional Special Editions as warranted.

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Editor & Publisher: Ron Notarius W3WN

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Castle Shannon, PA 15234-2546

e-mail: **newsletter at n3sh dot org or w3wn at arrl dot net**

"The WASHrag", **"The Mariner"**, **SHARCfest**, **South Hills Hamfest**, **WASHfest**, **WASHfest 2016**, **N3SH Net**, **WA3SH Net** and **WASHNet** are **™** trademarks of the **WIRELESS ASSOCIATION OF SOUTH HILLS, INC.**

The **WIRELESS ASSOCIATION OF SOUTH HILLS, INC.** was founded on August 23rd, 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, its members, or its actions in any way, shape, or form.

As always, special thanks to the owners & operators of both the N3SH/R Repeaters and the N3FB/R Repeater System for permitting the **WIRELESS ASSOCIATION OF SOUTH HILLS, INC.** and its members to use their repeaters for club purposes.

WASH Amateur Radio Club News Briefs

Next WASH VE Test April 14th

The Next WASH VE exam sessions will be **Thursday**, April 14th, 2016, 7:00 PM, at the **WPXI Community Room**, 4145 Evergreen Road, Pittsburgh, PA 15214. Talk-in on the 146.955 MHz and 443.650 MHz repeaters. All examiners are ARRL VEC affiliated.

Pre-registration is not required. Walk-ins welcome!

But if you plan on attending the test session, please contact VE Team Liaison Ron Notarius W3WN:

Telephone (412) 572-6723 or E-Mail: w3wn@n3sh.org

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 \$15.00 (payable to: ARRL VEC)

Future test dates (tentative): July 21st, 2016
October 20th, 2016

Carol's Comments



Our 21st Hamfest was a very successful event. Attendance was great and everyone seemed to be having a good time. Thanks to Rick and Jan Bell the food was fantastic. I would also like to thank every one who came to help. But then again our members always give there best .

Our next big event will be Field Day in June. It will held in South Park. As we get closer more information will become available. I believe Rick and Bill will be in charge this year.

I hope every one had a very nice Easter. See you at the meeting.

— 73, Carol Danko KB3GMN
President, Wireless Association of South Hills, Inc.
N3SH / WA3SH / NP2SH/b

Amateur Radio operators are once again needed to assist in communication s at the 2016 City of Pittsburgh Marathon on May 1st.

Over 150 hams are needed to provide race communications. No prior experience required!

Contact Jeff Hutzelman N3NHS jhutz@cmu.edu or 412-401-8348 for more information, or go to marathon.central.org

Saturday, March 26th fell right between Good Friday & Easter Sunday, so maybe that explains why a lot of the Usual Suspects slept in. That, or they were busy preparing to play Easter Bunny the next morning. Regardless, we still had a small but hungry gathering of **the WASH Breakfast Gang** at **Suzie B's**, Route 910 at the intersection of Route 519 at US 19 in Canonsburg. In attendance this time around were N3FB, KB3GMU, N1NCZ & SO, WB4GCS, KC4WTT, N3IDH and W3WN. Breakfast table topics covered SMT preamps for \$25, political T-shirts for birthday presents, new residents in the house, moving to the 21st Century with an iPhone, heard Heard? (Island, that is), *Sound of Music* performance, brakes on the car, going to a seminar—and still not sure what it's all about, the Twilight Zone, zoning board issues, GPS & Gilkerson Road, levels of Public Service you just don't see anymore, hopping on the ATV & shooting dinner on the way to Grandma's house, UPMC and monopolies... and a heck of a lot more.

Don't forget that our next gathering of the Gang will be on Saturday, April 30th, as usual at **Suzie B's**, Route 910 at the intersection of Route 519 at 19, Canonsburg. Our "usual" tables will be reserved, but **please** let Jim WB4GCS know ahead of time, so that Suzie & her crew will have enough space available for us. (We really don't want to fight the State Police for seats... we'd lose!) See you there?

We had 9 candidates at the WASHFest VEC Session on February 28th. Eight passed their exams, resulting in six new Technicians and 2 upgrades to General. Congratulations again to:

| | | |
|-------------|---|--|
| Technician: | Charles Brokchoff KC3GRH, Irwin PA | General: Chris Wilson KC3GIQ, Oakmont PA |
| | Michael Salvitti KC3GRI, Sewickley, PA | Charles Bihun KC3ELA, Pittsburgh (Brookline), PA |
| | Keegan McCormick KC3GRJ, Swissvale | |
| | Warren Leung KC3GRK, Palmyra PA (University of Pittsburgh student) | |
| | Matai Zhonnate KC3GRL, York PA (University of Pittsburgh student) | |
| | Justin Maie KD2KOI, Lambertville, NJ (University of Pittsburgh student) | |

Our thanks again to all of the VE's who took time out of the hamfest to assist the VE session: Glen Roberts KE7FD, Dave DeMotte N3IDH, Gene Kern KB3JHR, Ken Frackenberry AA3GM, and Ed Oelschlager N3ZNI. Also thanks to Bob Mente NU3Q, who was available but needed, and Jin Sanford WB4GCS, who was present but not available due to a potential conflict of interest.

As noted above, **our next test session** in on Thursday, April 14th, at the WPXI Community Room, starting at 7 PM. (It is a week earlier than usual due to room being unavailable on the 'usual' night). If there are any additional club VE's who would be available to lend a hand, please let W3WN know.

Pittsburgh Antique Radio Society RadioFest

Sunday, April 17th, 2016, 8:30 AM—Noon

Vendors Setup starting at 6:30 AM

Center Stage Banquet Hall

1495 Old Broadhead Road, Monaca, PA 15061

More information at <http://www.pittantiqueradios.org/>

WASHNet NCS Schedule

| | | | |
|-------------------|--------------|-------------------|--------------|
| 04/04/2016 | Chuck KC3ELA | 05/30/2016 | Mike WA3PYU |
| 04/11/2016 | Dave N3DFK | 06/06/2016 | Rick KB3IAC |
| 04/18/2016 | Digital Net | 06/13/2016 | Bill W3WH |
| 04/25/2016 | Fred KB3DCO | 06/20/2016 | Digital Net |
| 05/02/2016 | Glen KE7FD | 06/27/2016 | Bob AB3ED |
| 05/09/2016 | Harold K3HCR | 07/04/2016 | Carol KB3GMN |
| 05/16/2016 | Digital Net | 07/11/2017 | Digital Net |
| 05/23/2016 | Larry K3VX | 07/18/2016 | Dave N3DFK |

Indicates Swap Net After the Regular Net

Join WASH or Renew your Membership Today! Membership Application on Page 13

Minutes, March 3rd Meeting

Ben Williams KB3ERQ, Vice President / Secretary, **WASH**

(Pizza arrived at 7 PM. Meeting began once Pizza was consumed)

Carol KB3GMN called the meeting to order at 19:21 hours. 20 members were in attendance.

A moment of silence was observed for recent silent keys & others deserving.

Motion to waive reading of the minutes based on the minutes printed in the newsletter by Bill W3WH, second by Bob KC3DOF, passed unanimously.

Committee reports:

Treasurer (N3RDV): A balance on the bank account was read & accepted. The net profit from **WASHFest 2016** was announced and applauded.

Secretary (KB3ERQ): No Report

VE (W3WN): We had 11 candidates pre-registered for the VE Session at **WASHFest**. 9 candidates appeared, 8 passed (3 upgrades to General, 5 new licenses. Next test session will be April 14th at WPXI, future dates are in the newsletter. Thanks again to WPXI for the use of their community room for testing this year, & to N3FB for making the arrangements.

Repeaters (N3FB):

- At the 443.650 shack- don't need a lot of help. Roof repair, and some controller work.
- Power bill being submitted to Mark.
- Total bill for the repeater shack: \$7651.49 (Building and some repairs to the repeaters themselves.) The initial budge was \$6600.
- 146.055 They are going to back up and change some cables.
- Echo link capability was proposed to put onto the St Clair machine. Dave N3DFK offered to donate some equipment towards this.

WASHNet (KE7FD): Reminder that we will now have a monthly swap net after the regularly scheduled weekly net, on the 4th Monday of the month.

Contests (K3VX): As usual, there is a very nice list of contests in the newsletter. Reminder that Field Day 2016 will be held at Babcock Shelter, South Park. Larry also reminded us that he will not be available this year to run it.

WASHFest 2016 (KB3GMN):

- Rick KB3IAC reported that the kitchen "pretty much sold out of everything." Kitchen profit was \$427,12
- Carol KB3GMN discussed the 2017 location,. We are looking at moving to South Park because there is a good chance that CSVFD Memorial Hall will be under renovation or reconstruction and not available. We would have access to the building on Saturday, which is important to many commercial vendors.
- Cathy Saunder and other vendors report they were "very pleased"
- Frank N3FB brought up a few lingering issues
 - Admission price inadvertently left off the flyer, will be fixed for next year.
 - We should have a sign board to show current door prize (etc) winners
 - We should arrange with CSVFD to have a sign at Memorial Hall to redirect people who go there instead of to South Park.
 - We need to address other clubs selling prize tickets for their events at the hamfest, as there is some confusion amongst attendees.
 - Larry K3VX mentioned that South Park may not permit us to charge an "admission charge", we may have to call it something else.

Public Service (N3RDV): Dave N3IDH is now the Washington ARES liason. He discussed the Mariana Canoe race on April 30th & the Run for Ales on June 4th. Operators are needed. He can be reached at n3idh@wa3com.com

Ways & Means (KB3GMN): 50/50 tonight. "Show me the money!"

Newsletter (W3WN): Out. March Part 2 with **WASHFest** coverage will be out at the middle of the month.

President (KB3GMN): General thanks again to everyone for their help at the hamfest, and especially to her husband, Rich N3SBF for all of his hard work

Old Business: None

New Business: None

Good of the Order:

- Reminder that the Two Rivers ARC Hamfest will be held on April 24th. Carol is planning on getting a club table for anyone interested.
- Congratulation to Chuck KC3ELA for upgrading to General at **WASHFest** (applause)

Motion to Adjourn by Bill W3WH, second by Chuck KC3ELA/AG and carried.

Meeting adjourned at 20:12

WASH Spotlight: K3AIR

On February 24th, attorney and ARRL WPa Section Volunteer Counsel Mike Lazaroff K3AIR was admitted to the Bar of the Supreme Court of the United States, and argued his first case before the court on that day.

This is an honor very few attorneys are ever accorded.

In the photo is Mike along with Supreme Court Justice Sonya Sotomayor, following his appearance in court.

Congratulations Mike!

(Does this mean your rates now go up?)

Photo courtesy of and © Copyright 2016 Michael Lazaroff K3AIR



Every month we're going to feature a **WASH** club member, something about them, something they're involved in or a club-related activity that we're involved in, in the **WASH Spotlight**. Submissions for the Spotlight should be sent to Ron W3WN at [newsletter at n3sh dot org](mailto:newsletter@n3sh.dot.org)

Monthly WASH Breakfast

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



Join us this month at **Suzy B's**, Route 910 at the intersection of Route 519 at US 19, 1 mile North of Downtown Canonsburg. .Start time is about 8 AM until ????. Monitor 146.955 & 443.650 for talk-in or any last minute changes. All are welcome, **WASH** members or not, amateurs or not!

Wireless Association of South Hills Membership

| | | | | | |
|--------|--------|--------|----------|-------------|----------------|
| AB3ED | KC3DOF | W3WN | WASH FL | WASH SC | Silent Keys |
| AA3GM | KC3ELA | W4CKR | KA3UPY/M | N3RNK | |
| AB3NM | KE7FD | WA3PYU | W4ZE | WASH TN | AB3KA |
| AE3DL | KI5ZT | WA3VSS | WASH NE | K3OL | K3EED |
| K3HCR | N1NCZ | | N0PEU | KE3XB | K3LIE |
| K3SGT | N3DFK | | WASH OR | N3YPB | KA3NMG |
| K3VX | N3FB | | N0VLR | WASH TX | KB3ENX |
| KA3VXM | N3IDH | | N0WVP | NB3C | KB3FNM |
| KB3DCO | N3KFD | | KB3NVL | K3LGM | KB3FQT |
| KB3GMN | N3RDV | | KB3NVM | KB3IJX | KB3JHQ |
| KB3GMU | N3RHT | | WASH OH | Jane Wagner | N3CZZ |
| KB3IAC | N3SBF | | N8DPW | WASH VI | N3FZ |
| KB3IVX | NU3Q | | | NP2JF | N3HKQ |
| KB3JHR | W3VFA | | | | N3KEH |
| KB3ORO | W3WH | | | | N3OBD |

If your call should be listed here & isn't, please contact Mark N3RDV

Through April 5th, 2016
List compiled by
Mark Stabryla N3RDV, Vice President/Treasurer

WA3JPP

2016 WASH Upcoming Events Calendar

Club Meetings & Other Significant Events — Subject to Change

| | | |
|---|---|---|
| April 7 th | WASH Meeting | St. Clair Hospital Outpatient Center, 2000 Oxford Drive, Bethel Park |
| April 14 th | WASH VEC Exam | WPXI Community Room, 4145 Evergreen Road, Pittsburgh PA |
| April 24 th | Two Rivers ARC Hamfest | http://www.trarc.net/home |
| May 1 st | City of Pittsburgh Marathon | marathon.central.org |
| May 5 th | WASH Meeting | St. Clair Hospital Outpatient Center, 2000 Oxford Drive, Bethel Park |
| May 8 th | SBK 24 th Annual Race for the Cure | Schenley Park |
| May 20 th — 22 nd | Dayton Hamvention 2016 | http://hamvention.org/ |
| June 2 nd | WASH Meeting | St. Clair Hospital Outpatient Center, 2000 Oxford Drive, Bethel Park |
| June 5 th | Breezeshooter's Hamfest | Big Butler Fairgrounds, 1127 New Castle Road (US 422), Prospect PA 16052 |
| | WASH Picnic @ Breezeshooter's | |
| June 25 th — 26 th | ARRL Field Day | http://www.arrl.org |
| July 1 st | WASH Meeting | St. Clair Hospital Outpatient Center, 2000 Oxford Drive, Bethel Park |
| July 16 th | North Hills ARC Hamfest | http://www.nharc.org |
| July 17 th | Somerset County ARC Hamfest | http://www.k3smt.org |
| July 21 st | WASH VEC Exam | WPXI Community Room, 4145 Evergreen Road, Pittsburgh PA |
| August 4 th | WASH Meeting | St. Clair Hospital Outpatient Center, 2000 Oxford Drive, Bethel Park |
| August 28 th | Skyview RS Hamfest | http://www.skyviewradio.net |
| September 1 st | WASH Meeting | St. Clair Hospital Outpatient Center, 2000 Oxford Drive, Bethel Park |
| September 3 rd | Uniontown ARC Gabfest | http://www.w3pie.org |
| October 1 st — 2 nd | 51 st California QSO Party | http://www.cqp.org/ |
| October 6 th | WASH Meeting | St. Clair Hospital Outpatient Center, 2000 Oxford Drive, Bethel Park |
| October 8 th — 9 th | 59 th Pennsylvania QSO Party | http://www.nittany-arc.net/PAQSO.html |
| October 20 th | WASH VEC Exam | WPXI Community Room, 4145 Evergreen Road, Pittsburgh PA |

"Seen" at the March Meeting

Photos Courtesy of and © Copyright 2016 Ron Notarius W3WN



SSB Signal Samples

Jukka Klemola OH6LI

SSB signal width is one popular discussion topic for the radio amateurs.

Software defined radios provide a great tool to analyze the signals not only during, but also after the contest.

A rather busy band that is not too full of stations, looks like this on the HSDR software:

In this first write-up, let's examine the SSB signal that is generated in our equipment and gets transmitted.

The main technical criterion for the transmitted signal comes from the speech properties. The frequency band we need to transfer to the receiver is less than 3 kHz wide, starting at about 100 to 300 Hz, ending at about 2500 to 2900 Hz.

Any energy outside that frequency band is waste and does not provide to readability of our transmitted SSB signal. An upper sideband transmission on 14250 kHz contains energy from 14250.100 kHz to 14252.900 Hz.

The transmitted SSB signal goes through amplifiers. There is at least one amplifier inside the transceiver and there may be an additional amplifier after the transceiver to further boost the signal.

The SSB signal is specified in a document EB38, by Helge OH2ZE / K7ES, <http://www.alldatasheet.com/datasheet-pdf/pdf/108967/MOTOROLA/EB38.html> (In case the EB38 does not open, you can use search words 'Motorola EB38 SSB')

The most important information is in this Figure 3 of the document EB38:

For our real-life transmitted SSB signal, let's choose a wide range of frequencies; $p=100\text{Hz}$ and $q=2900\text{Hz}$. This kind of a pass band for SSB signal outputs a level of -45dB compared to the passband level at a separation of $6p-5q = 13.9\text{ kHz}$ downwards off the 'center' frequency and upwards $6q-5p = 16.9\text{ kHz}$. That means in practice a S9 + 30 dB signal will show about S6 or more on the S-meter on a band width of more than 30 kHz. This means if there is a loud S9 + 30 dB SSB station on 28490, his within-specification distortion products may be S6 or more between 28476 to 28507.

Of course the signal is not speech any more at that separation. There are only the distortion products, the scratching-like sounds.

It is a real-life fact this kind of signal output is acceptable. Gut feeling tells it is wide, if it is heard on an otherwise empty band.

But think about if the band would be full of action. You would not hear the scratching like signal because it is too weak.

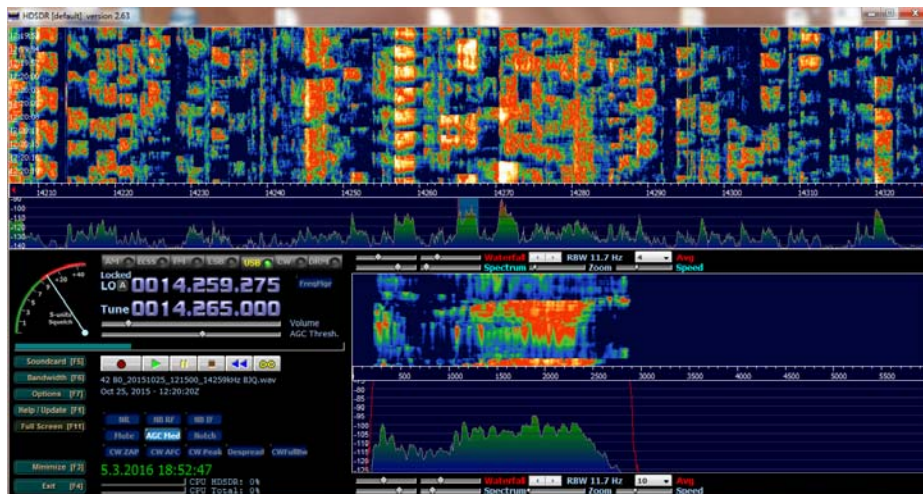
The Figure 3 shows the good SSB signal can be heard even more far away from the pass band. A S9 + 30 dB signal minus 50 dB is still S5 on the S meter. The distortion effects are there, even for a good SSB signal.

These situations, where a strong signal is found on an otherwise silent band, do happen. It is one kind of a paradox to accept this signal is good. It is a good signal despite it causes loud-sounding QRM still 15 kHz or even more far away from the actual pass-band.

If a signal attenuates less than 30 dB at a separation of about 15 kHz, the signal is not at all in good shape. If the pass band level -30 dB happens at a separation of 10 kHz, the signal is still not acceptable.

The cause to distortion like that, there is over driving of some stage. Over driving may be caused by operator, insufficient design or broken equipment.

We will return to the cases of signals and related phenomena in next write-ups.



(Figure 3 Source:

<http://pdf1.alldatasheet.com/datasheet-pdf/view/108967/MOTOROLA/EB38.html>, by Motorola and Helge OH2ZE / K7ES)

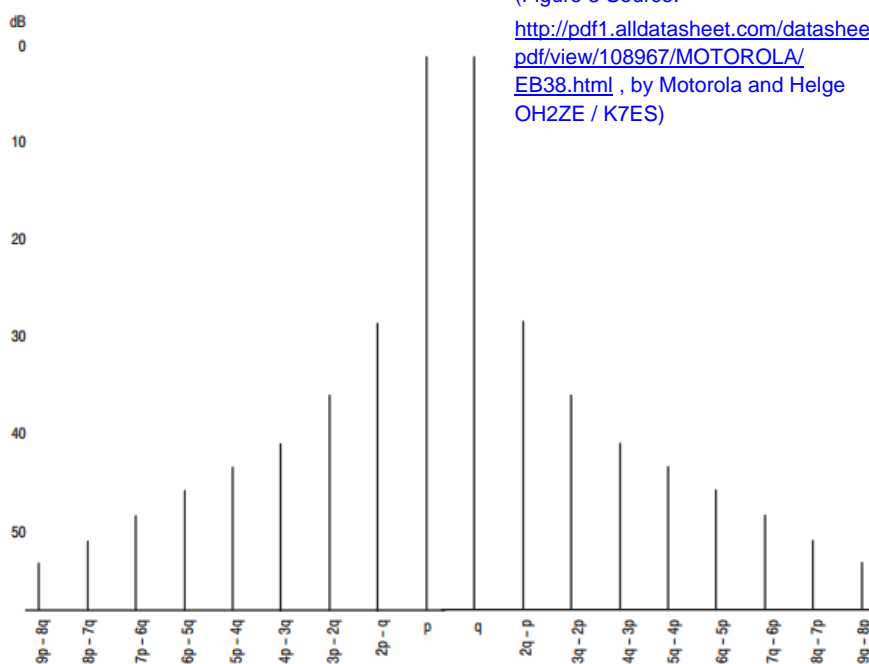


Figure 3. Typical Distribution of Distortion Product Amplitudes Compared to the Two Fundamental Frequency Components



Operators Needed: Race for the Cure

Amateur Radio Operators are needed to help provide communications for the 24th Annual Susan G. Komen Race for the Cure on Mother's Day, May 8th, 2016.

Operators are needed for fixed points along the course, and to shadow the race officials.

The race begins at 6:30 AM, and will take place at Flagstaff Hill in Schenley Park.

If you are interested in volunteering for this worth cause, please contact Bob Mente NU3Q at (412) 279-9016, or nu3q@nu3q.us

New Antenna Cutting Edge Technologies

Rick Westerman NJØIP/DJØIP rick@dj0ip.de

The lack of snow this year has enabled us to be active over the Winter months. We have developed a new cutting edge antenna technology that is sure to sharpen our contest scores and DX competitiveness.

Unfortunately it won't be ready in time for Dayton. I'm discussing with Con (my boss) to see if we can show this on our Spiderbeam Booth in Friedrichshafen.

Introducing the **Openwi re-Fed CUTTING EDGE ANTENNA**.

Here is an antenna that really cuts through the QRM.

FEATURES AND ADVANTAGES:

- NEW patent pending "**Scissor Match**" enables tuning the antenna directly at its feedpoint
- Reduces transmission line loss
- Requires no matchbox
- NEW patent pending "**Stati-kill**"; hundreds of tiny lightning rods prevent static electricity from accumulating on the antenna,
- Prevents corona build-up
- Assures a much quieter reception
- Helps prevent lightning strikes
- New patent pending "**NoMoreNoise**" works hand-in-hand with "**Stati-kill**" to protect the transmission line:
- Kills Common Mode Current "on contact"
- Noise caused by consumer products just disappears
- Enhances DX reception and pulls in those rare ones
- **Neighborhood kids cannot climb up the ladderline!**
- Dogs and other animals quickly learn not to bite the transmission line.
- The XYL can use it for hanging clothes out to dry, without the need for clothes pins
- The neighbors will think it's a fence, or a clothes line, and won't bug you about Electro Smog
- Even reduces your grocery bill (if you like poultry)
- **ENHANCES BRAGGING RIGHTS!** After all, you don't see an antenna like this every day!

WARNING: KIDS, DO NOT TRY THIS AT HOME !

Coming Soon: the **Barbed-Tale Curtain ANTENNA**

FEATURES AND ADVANTAGES:

- All the features of the Cutting Edge Dipole, PLUS:
- Much sharper primary lobes
- Death-Valley-Like Nulls
- Bleeding-Edge Performance!

And: the **Off-Center Bled (OFCB) Dipole ANTENNA**

FEATURE LIST:

- Multi-Band Coax-Fed Antenna !
- No Antenna Tuner Required (except on some WARP bands)
- Special 4:1 Dual-Cutting Vanilla Scissors Match obviates *Cutting Mode Current*, assuring a clean cut through the QRM.
- Note: Vanilla Scissors Match at the feedpoint works much better than Maxwell House Match alone.
- Incorporates "**NoMoreNoise**" and "**Stati-Kill**" patent pending technology!
- It is strongly recommended to use together with a good **Maxwell House Choke** at the shack end of the coax.

Under Development: The **Barbed Bad-Boy, a Short-Barbed Stinger Antenna**

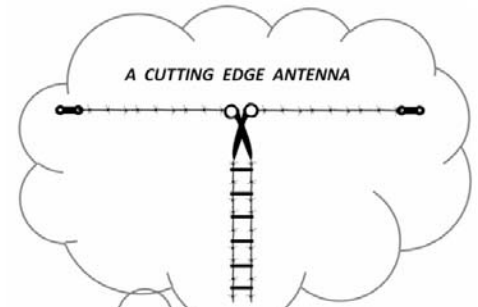
- Inverted Scissor Match assures efficient matching of the low impedance, typical of short antenna.
- Razor-Sharp Tuning assures peak penetrating performance
- Narrow bandwidth requires care in tuning but adds inherent bandpass filtering to improve reception and harmonic reduction.
- Estimated Availability: 5Q-2017

Under Consideration: The **Barbed Beverage On Ground (BBOG)**, a surprisingly sharp low band receive antenna

- Nearly Invisible
- Absolutely No-Noise Guaranteed (except for an occasionally scream)
- Really rips through local QRM and QRN, especially when running barefoot.
- Extremely simple to deploy.
- Ships with special deployment protective gloves.

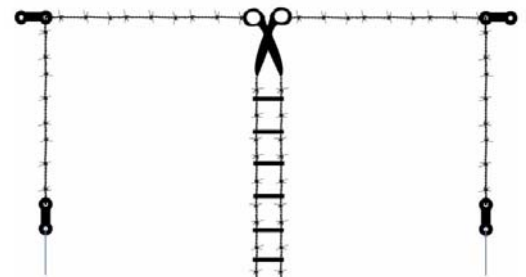
WARNING: NOT FOR DEPLOYMENT WHERE TOURISTS RUN BAREFOOT ON THE BEACH

(This antenna is currently on HOLD, pending outcome of legal dispute with Green Piece.)

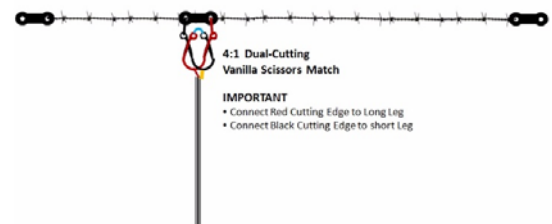


This is just an idea.
I haven't tried it yet.

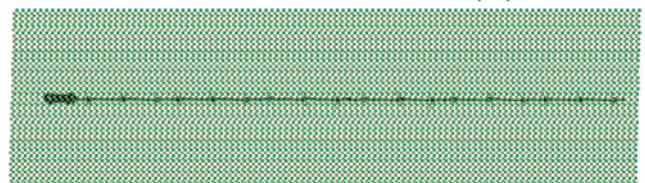
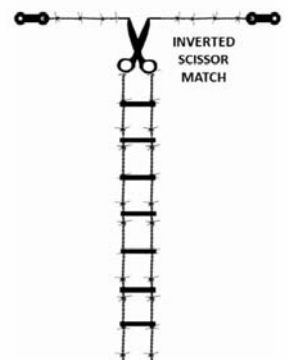
The Barbed-Tale Curtain



Off-Center-Bled Dipole



BARBED BAD-BOY



At Spiderbeam, we're busy making "Yesterday's Tomorrow", Today!

Article courtesy of the Ten-Tec Reflector, posted on April 1st, 2016.

40 Years Ago — Dayton: 1976 Steve Silsby WA4BRL

In April of 1976, my wife Faye WB4YPD and I made our first trek to Hamvention. The sights, sounds, personalities, new rigs, old equipment, and even the run-down Wampler facility were all new to us. Here are some photos from the show.



Wampler Ball Arena — Main Hamvention Entrance



The Line Forms to Get In



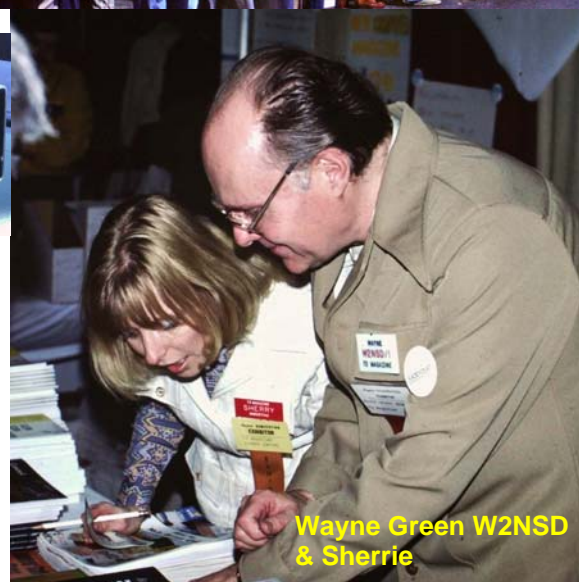
ARRL Writer Lou McCoy W1ICP & President Harry Daniels W2TUK



Below Right

From just down the road in Miamisburg, Drake was always a big presence at Hamvention. Drake's new UV-3 VHF/UHF transceiver garnered a lot of attention. It came standard with 144MHz and one could add modules for 220 and 432 MHz.

Having that all in one box was a big deal in 1976.



Wayne Green W2NSD & Sherrie



The Heathkit Display



Spectrum International



Bomar Crystals



Hamtronics (Dealer) Display

Kingman Reef Deleted from the DXCC List

Dave Patton NN1N / American Radio Relay League

Newington, CT, March 28th, 2016 — The ARRL Awards Committee has voted to **delete Kingman Reef (KH5)** from the DXCC List, effective 29 March 2016. Kingman Reef will be added to the Deleted Entities List on 29 March 2016. The total number of entities on the List will drop from 340 to 339.

The deletion process is described in DXCC Rules Section II DXCC List Criteria, Part 5(a) Deletion Criteria: "An entity may be deleted from the List if it no longer satisfies the criteria under which it was added. However, if the entity continues to meet one or more currently existing rules, it will remain on the List."

With respect to the previous paragraph's text, Kingman Reef's original addition by virtue of separate administration has changed (separate administration by the U.S. Navy has been removed), and the reef does not meet any current criteria to remain on the list. The U.S. Fish and Wildlife Service administers Kingman Reef and Palmyra Island. The reef is too close to Palmyra Island to count as a separate entity. The reef is now considered part of the Palmyra/Jarvis DXCC entity.

DXCC members who have affirmed credit with Kingman Reef will see their *current* entity totals drop by one on their DXCC awards — including on the bands and modes where Kingman Reef credit is given. They will also see their DXCC Challenge totals drop commensurately. Honor Roll status will now be attainable after confirming 330 entities on the DXCC List.

Added note by DX-World — The K5P Palmyra team flew over Kingman Reef at 10,000ft on the way to Palmyra in January 2016 (right)

The reef is still above water and apparently intact, albeit fragile.



The ARRL DXCC Department has approved for DXCC credit the unexpected **P5/3Z9DX** "demonstration" operation from North Korea last December.

Well-traveled Polish DXer Dom Grzyb 3Z9DX, has said **he expects to be back in North Korea** — officially the Democratic People's Republic of Korea (DPRK) — for his "official" activation by late summer.

P5/3Z9DX showed up on the air from the most-wanted DXCC entity on December 20th and 21st to demonstrate Amateur Radio for North Korean officials. During that activation — the first in more than a decade — P5/3Z9DX made nearly 785 SSB contacts, most of them on 15 meters. Nearly 600 of the contacts were with stations in Asia; P5/3Z9DX worked just 26 stations in North America. He [posted](#) his log on ClubLog.

Some unsubstantiated claims were floated following the pre-Christmas P5/3Z9DX operation that Grzyb was not really operating from North Korea.

In January Grzyb contacted [The Daily DX](#) Editor Bernie McClenny W3UR. During his visit to North Korea, Grzyb told McClenny, authorities were friendly and polite, and that he was surprised that they allowed him to operate. P5/3Z9DX reported being severely hampered by extremely high noise levels on all HF bands, not to mention a geomagnetic storm. Noise, he said, made it "almost impossible" to copy weaker signals in Pyongyang. When he goes back to the DPRK this summer, he expects to operate from a far quieter location in a rural area, Grzyb told [The Daily DX](#).

His equipment was left behind in Pyongyang, as agreed to before his December visit. The P5/3Z9DX preview was the first from North Korea since the 2001-2002 operation by Ed Giorgadze, 4L4FN. — [ARRL DXCC Department & The Daily DX](#)

If you've downloaded the [WASHRag](#) from the N3SH web site, or picked up a copy from a friend... you can sign up to have the PDF copy sent directly to your email. You **do NOT** have to be a member of [WASH](#)!

Just send an email to wa3sh-subscribe@yahoogroups.com and the automation should take care of the rest!

DX News Briefs



The **VK0EK** DXpedition to **Heard Island** will be QRV through 10 April. They are on 160—10 meters, CW SSB & Digital modes. They passed 50,000 QSOs with a week to go. Contacts can be monitored in real time using the DXA application, which can be found at <http://dxa.vk0ek.org/>. [*Editor's Note: SW Pa Amateurs — Listen on 30 meters around 0300 - 0400 Z, propagation willing*] More information at <http://vk0ek.org/>. QSL via M0URX or ClubLog — Cordell Expeditions & KK6EK

A half dozen Japanese operators are QRV through 11 April as **4W5JA**, 160—10, CW SSB & RTTY. QSL via JJ2VLY. More information at <http://dxnews.com/4w/> — 4L5A

Members of the UT7L Contest Club are QRV as **ET7L** through 1 May. More info at <http://et7l.dxr.com.ua/> QSL via US0LW — UT7L Team

DL1RNT will be QRV from Embudu Island AS-013 as **8Q7NT** 5 to 17 April. QSL via DL1RNT — DL1RNT

OH1TV & OH2YY plan to be QRV from Pulau Layang Layang (Swallow Reef) AS-051, 5 — 9 April as **9M00**. This counts as the **Spraty Islands**. QSL via OH2YY — OH2YY

JH0CKF will be active again from Palau 6 - 8 April 2016 as **T88MZ**, 80—10 Meters SSB. More information at http://dxnews.com/T88MZ_Palau/. QSL via JH0CKF — 4L5A

ZL1MRC will be QRV as **E51MRC** from Muri, South Cook Islands, 13 —22 April, on HF. QSL via ZL1MRC — DX World.

LU4DXU will be QRV from **Easter Island** as **CE0Y/LU4DXU** 16—29 April, 80—6 meters SSB. QSL via LU4DXU — LU4DXU

A91HI will be QRV from Hawar Island AS-202 (New) 27 April — 1 May, with up to 5 stations QRV at one time. QSL via M0OXO. More information at <http://a91hi.com> — MM0NDX, DX Coffee

OE9SBD will be QRV as **V85/OE9SBD** 18 —22 April, HF, CW. QSL via OE9SBD or V85AVE — DX World

CY9C will be QRV from St. Paul Island 19—29 August. The team has decided to operate from two sites on the island. More information at <http://www.cy9dexpedition.com/> QSL via WA4DAN — Team CY9C

DX Team Calabria plan to activate **9H3LH** from EU-023 in October. More information at <http://www.calabriadxteam.it/> --IK8YFU, DX Coffee

The **C5WP** operation planned for 29 March—2 April was **cancelled**. ON7WP reports that Brussels Airlines "could not warrant the transport of all my luggage" on the various connecting flights. They would also not permit him to transport his "extra" Pelican Case for his equipment. No word yet on if or when this operation will be rescheduled — ON7WP

QSL Routes

4D1R via A61BK — 425 DXN
4L2M via EA7FTR — 425 DXN
4V1TL via W3HNNK — W3HNNK
4Z7T via N4GNNR — 425 DXN
5B4AHL via M0URX — 425 DXN
5C5W via EA5XX — 425 DXN
5E5E via W7EJ — 425 DXN
5H3EE via DL4ME — 425 DXN
5T4C via NI5DX — 425 DXN
5V7D via DL9MBI — 425 DXN
8P1W via KU9C — KU9C
8P2K via KU9C — KU9C
9G1AA via PA3ERA — 425 DXN
9G5GH via EA5ZD — 425 DXN
9H6A via 9H1BT — 425 DXN
A25GF via ZS6AYU — 425 DXN
CE2AWW via N7RO — 425 DXN

CN2AA via UA2FM — 425 DXN
CO8LY via EA7ADH — 425 DXN
CR3W via DL5AXX — DL5AXX
E44YL (CW) via IK2CKR
E44YL (SSB) via IK3GES
E1Y via EI5JQ — 425 DXN
EY8MM via K1BV — 425 DXN
FT4JA via F5CWU — FT4JA
HI3CC via W2CCW — HI3CC
KL7RA via N6TR — N6TR
LT1F via AC7DX — 425 DXN
OA4SS via KB6J — 425 DXN
OH0X via OH2TA — OH2BH
P33W via UA3DX — 425 DXN
PJ4DX via M0URX — 425 DXN
VK4KW via N3SL — 425 DXN
ZW5B via K3IRV — 425 DXN

Thanks to the NJDXA DX News Reflector, the DX-QSL Reflector, 425 DX News, OPDX News, DX Coffee, DX World.Net, ICPO Bulletin, & ARRL DX Bulletin for our **DX News** information. Thanks also to the ARRL DXCC Desk, & Bernie McClenny W3UR / [The Daily DX](#) for confirmations & additional information.



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Antenna Zoning or PRB-1 Issues?

Contact: **Michael S. Lazaroff K3AIR, Attorney at Law**

The Cingolani Building

300 North McKean Street, Butler PA 16001

Phone: 724-283-0653

The **WASHRag** Masthead is courtesy of Jeff Murray K1NSS creator of DASHToons & Dash the Dog Faced Ham!!

Find the online cartoons and stories of Dash the Dogfaced Ham & more at www.dashtoons.com !

Shop for Dash items at his online store on Café Press, www.cafepress.com/shopdash



For Sale: From the estate of George WA3BJS:

Vibroplex Bug. Missing the shorting stub. 1960's vintage. \$100

CF-706 HF/VHF/UHF Duplexer. Looks to run around \$65 new. Slightly used. \$35

Contact Chuck Mills W3YNI w3yni1@gmail.com

UK Chancellor of the Exchequer George Osborne announced in the 2016 budget that 750 MHz of public sector radio spectrum would be "released" — that is, auctioned. The Amateur Service in the UK currently shares significant spectrum with the public sector. In "Supporting the digital economy," the **Budget 2016** document calls electromagnetic spectrum a valuable and scarce resource.

"**Budget 2016** announces a new government commitment that 750 MHz of valuable public sector spectrum in bands below 10 GHz will be made available by 2022, of which 500 MHz will be made available by 2020." The document states. "This builds on government's previous 2010 commitment, and will deliver wider economic benefits by generating capital receipts and by supporting innovation in digital communications services and the development of new technologies."

Previous spectrum sell-offs have adversely impacted the Amateur and Amateur Satellite Services. In 2014 Ofcom **announced** that it was ending Amateur Radio access to significant portions of the 2.3 and 3.4 GHz bands. The action came in the wake of a year-long "**consultation**" — a rule making proceeding — that involved the release by the Ministry of Defence of 40 MHz of spectrum at 2.3 GHz and 150 MHz of spectrum at 3.4 GHz. Amateur Radio is secondary on the bands.

Amateur Radio lost privileges on frequencies in the two bands that overlap with spectrum that Ofcom plans to award for "new civil uses" — 2350 to 2390 MHz and 3410 to 3475 MHz.

In 2015, Ofcom said it was considering the Amateur Satellite Service allocations at 10.475 GHz and 47.0 GHz for 5G use. Ofcom published an update on spectrum bands above 6 GHz that might be suitable for next-generation mobile, often referred to as "5G."



FCC FCC News

Courtesy of the American Radio Relay League

Newington, CT, March 28th, 2016 — In **comments** filed on March 23 on its **Petition for Rule Making (RM 11759)** seeking changes to 80 and 75 meters, the ARRL has told the FCC that its primary objective is to "rebalance" the bands by correcting a 10-year old FCC error.

"ARRL's proposal is not fairly viewed as a proposal to take anything away from anyone," the League's comments assured. "It is more properly viewed as the effectuation of a fair, equitable, and efficient 'band plan' looking forward for the foreseeable future that balances everyone's needs, and which remedies a plainly unfair plan, imprudently created in the 2006 **Report and Order** in WT Docket 04-140."

Prompting the League's assurances were comments filed on the ARRL's **Petition** by a number of Amateur Extra class licensees, who felt that refarming 3600 to 3650 kHz for data modes could prove to be a disincentive to General licensees to upgrade. Others commenters saw it as an unfair spectrum grab. The ARRL noted that prior to 2006, the band was evenly divided between RTTY/data and phone/image subbands, with the RTTY/data subband extending from 3500 to 3750 kHz, and the phone/image subband extending from 3750 to 4000 kHz.

The 2006 FCC **Report and Order** "substantially altered" what the League called "this even division of emission types." In outlining the history of the proceeding, the ARRL pointed out that the FCC's **Notice of Proposed Rulemaking** in Docket 04-140 would have shifted the line between the 80 meter RTTY/data subband and the 75 meter phone/image subband from 3750 kHz to 3725 kHz, pursuant to a 2002 ARRL **Petition for Rule Making**, RM-10413. This would change the ratio of spectrum between phone/image and RTTY/data segments on 75/80 meters from 50/50 to 55/45, and it is what the FCC proposed in its **NPRM**.

In its **Report and Order** in Docket 04-140, however, the FCC made "a very substantial and unjustifiable departure" from what it had proposed in its **NPRM**, the ARRL recounted. The Commission expanded the phone/image subband at 75 meters to 3600-4000 kHz, and it reduced the 80 meter RTTY/data subband to 3500-3600 kHz, eliminating RTTY operation above 3600 kHz and changing "the entire dynamic of this band," the League said.

The FCC had said in its proposal that no licensees would lose operating privileges. Nonetheless, the FCC's phone band expansion reduced by 100 kHz the spectrum between 3500 and 4000 kHz that was previously available to General class licensees, while Advanced licensees lost 75 kHz. In an apparent FCC oversight, the **Report and Order** completely eliminated access by automatically controlled digital stations (ACDS) to 3620 to 3635 kHz. A subsequent FCC **Report and Order on Reconsideration** only made the situation worse by replacing the deleted ACDS segment with 3585-3600 kHz.

"It resulted in a sudden and severe dislocation of traffic-handling nets using telegraphy, without advance planning or notice," the ARRL said. "It disaccommodated net participants with General and Advanced class licenses; and it worsened the effect of the overexpansion of the 75 meter phone/image subband."

The result, the ARRL noted, has been "a shortfall in available RTTY/data spectrum on 80 meters" that has created a significant obstacle to narrowband digital data communications and experimentation. The League said its current **Petition** "simply restores that which was disrupted in 2006 in error."

In its comments, the League conceded that compromises are inevitable in managing a heavily used band like 75/80 meters, no matter the band planning approach. "Looking forward, it is necessary, in order to encourage experimentation with and expand the use of digital communication techniques, to rebalance the 75 and 80 meter subbands," the ARRL concluded.

Silent Keys



Comedian, Actor & Writer Gary Shandling ex-KD6OY, 66, Los Angeles, March 24th

Has Roadway found the tower yet?



Two Rivers ARC 45th Annual Hamfest

Sunday, April 24th, 2016, 8:00 AM—2:00 PM

The Spectrum

6001 Smithfield Street, Boston, PA 15135 (Off PA Route 48)

Talk-in on 146.73 Mobile Check-In 146.52

Admission \$5

More Information at <http://www.trarc.net>

62nd Annual Breezeshooters Hamfest ARRL Western PA Section Convention

Sunday, June 5th, 2016, 8:00 AM—3:00 PM

New Location!

Big Butler Fairgrounds

1127 New Castle Road (US 422),

Prospect PA 16052

Admission \$5

More Information at <http://www.breezeshooters.org>



Skyview Radio Society Swap'n'Shop

Sunday, August 28th, 2016, 8:00 AM—1:00 PM

Grounds Open at 6 AM for Vendors & Tailgaters

Skyview Radio Society Clubhouse

2335 Turkey Ridge Road, New Kensington, PA

Talk-in on 146.640 PL 131.8

Admission \$5

More Information at <http://www.skyviewradio.net>



Uniontown ARC GabFest 67th Annual Hamfest

Saturday, September 3rd, 2016, 8:00 AM—1:00 PM

Setup Time at 6 AM for Vendors & Tailgaters

W3PIE Clubhouse, 433 Old Pittsburgh Road just off Route 51
& US 119, Uniontown

Talk-in on 147.045 PL 131.8

Free Admission — Free Parking — Free Swap-N-Shop Setup With Registration

More Information at www.w3pie.org/gabfest.htm



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(check quarter →)

(check one)

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Jan-Mar

☐ **2nd Qtr**
Apr-Jun

☐ **3rd Qtr**
Jul-Sept

☐ **4th Qtr**
Oct-Dec

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\$7.50

\$5.00

\$2.50

☐ (A1) Associate Membership:

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☐ (FM1) Family Membership (\$3.00 x No. of household family members): \$ _____

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

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Call Sign: _____

License Class: _____

Expires On: _____

Work Phone: _____

Birthday: _____

ARRL Member? ☐ Yes ☐ No Family ARRL Member? ☐ Yes ☐ No

Date: _____

Amount Enclosed: \$ _____

N3RDV has requested that all membership requests and renewals include an application so that his information is up to date

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



Butler County ARA Swapfest 2016

Sunday, September 11th, 2016, 8:00 AM—3:00 PM

Grounds Open at 6 AM for Vendors & Tailgaters

Unionville Volunteer Fire Department

102 Mahood Road (at Route 8 North), Butler, PA 16001

Talk-in on 147.360 PL 131.8

Admission \$5

More Information at <http://www.w3udx.org>



WACOM Hamfest 2016

Sunday, November 6th, 2016, 8:00 AM—3:00 PM

Vendors Setup starting at 6 AM

Washington County Fairgrounds

2151 North Main Street, Washington, PA 15301

Talk-in on 146.790 PL 131.8

Admission \$5

More Information at <http://www.wacomarc.org>

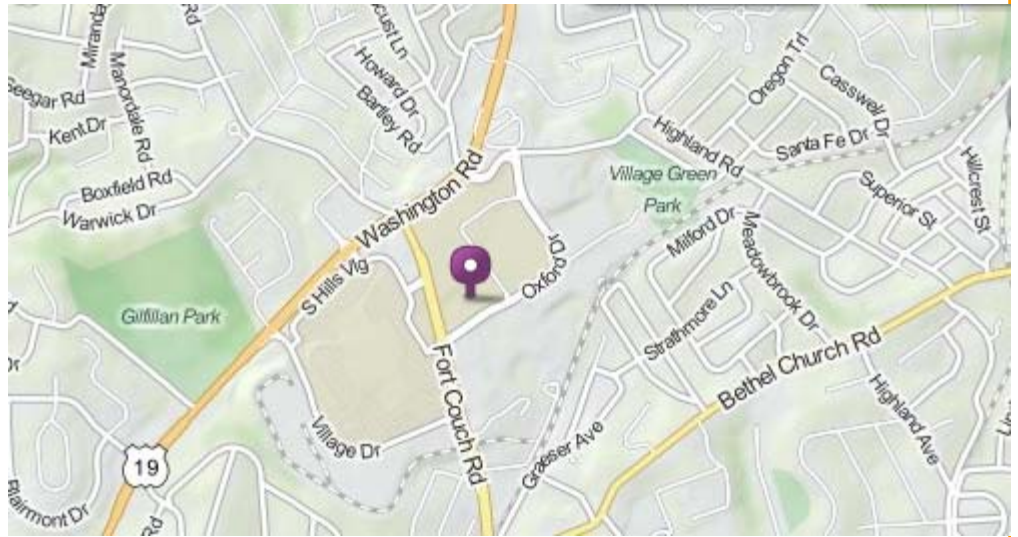
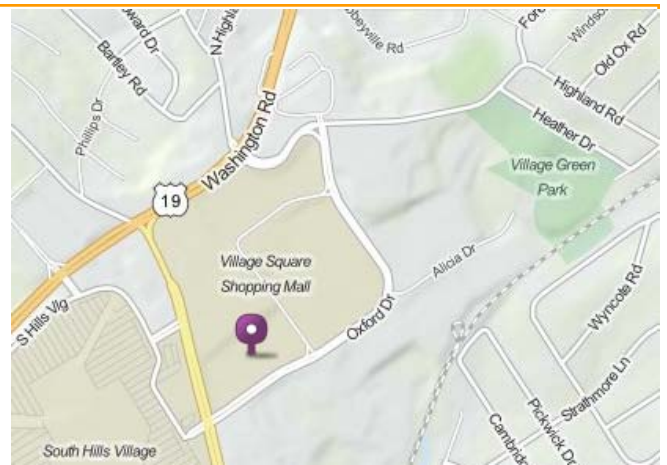
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Adjacent to Village Square Mall, across Ft. Couch Road from
South Hills Village Mall, just off of US Route 19



The WASHRag

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Ron Notarius W3WN, Editor

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