



WASHRAGTM



VOLUME 18 ISSUE 02
FEBRUARY 2016

Wireless Association of South Hills



Abwehr Enigma - G312

The German Secret Service, or Abwehr, commonly used the Enigma-G which is smaller than a standard Enigma machine and has no plugboard (Steckerbrett).

This machine is equipped with four rotors, one of which is the reflector and also an incremental counter. Each letter key also has an addition symbol.

N3SH WA3SH NP2SH/B

www.n3sh.org www.washarc.org



WASHRAG™



VOLUME 18 ISSUE 02

FEBRUARY 2016

Next Monthly Meeting: Thursday, February 4th, 2016

The next meeting of the **WIRELESS ASSOCIATION OF SOUTH HILLS, INC.** will be on **Thursday, February 4th 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 the 2 Meter Simplex Contest results, final planning and preparations for **WASHFest 2016**, club plans for 2016, and more. See you there!

Cover Photo: The World War II German Secret Service Enigma-G machine, as seen by Larry Comden K3VX during his trip to England last fall. See the article on Page 7 Photo courtesy of & © Copyright 2015, 2016 Larry Comden K3VX

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)**

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Editor & Publisher: Ron Notarius W3WN

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Ron Notarius W3WN
3395 Rosewood Drive
Castle Shannon, PA 15234-2546

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

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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, it's members, or it's 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 it's members to use their repeaters for club purposes.

WASH Amateur Radio Club News Briefs

Next WASH VE Test February 28th

The Next WASH VE exam sessions will be **Sunday, February 28th, 2016, 10:00 AM**, at **WASHFest 2016**, 3600 Library Road, Castle Shannon, PA. Talk-in on the 146.955 MHz and 443.650 MHz repeaters. All examiners are ARRL VEC affiliated.

Pre-registration is required. Walk-ins will NOT be accepted due to limited available space. 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.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 **\$15.00** (payable to: ARRL VEC)

Future test dates: 2016 Schedule To Be Announced

Carol's Comments



WASHFest 2016: Our 21st year, hard to believe we have been doing this for that amount of time. I guess we are doing something right. I could not pull this off without the help from our members and my other half. Everything is coming along just fine. All we have to do is dot the I's and cross the T's. Rick and Jan Bell will be in charge of the food this year and we all know what a great cook he is.

Once all is done we can look forward to our pizza social. And then we can start planning our next group function (N3SH Field Day 2016).

Hope to see you all at the meeting. And Happy Valentine's Day to all

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

The Amateur Radio Club of the University of Arkansas

(W5YM), which celebrates its centennial this year, has donated a J-37 telegraph key to be used in a radio position under restoration onboard "Fifi," a World War II vintage B-29 Superfortress. Members of the Rockwell-Collins Amateur Radio Club have been recreating a radio operator's position on the aircraft.

The J-37 will be a component of the Smith-Erwin Memorial Radio Operator Position onboard the still-flying B-29 aircraft.

How'd your year start off? The last weekend of the month was a good time for a recap (or maybe a nightcap), and thus, **the WASH Breakfast Gang** flocked once again at **Suzie B's**, Route 910 at the intersection of Route 519 at US 19 in Canonsburg. Enjoying the low cost of a gallon of gas to travel there this month included N3FB, KB3GMU, WB4GCS, W3WH, KB3GMN, N3SBF, KB3YCX, N3IDH, KB3JHR and W3WN. Morning topics covered the 2 meter contest logs and prize tickets, working 160, concerns about **WASHFest 2017** (since the CSVFD Memorial Hall may — MAY — be undergoing renovations next year), stamp collecting, the Allegheny County ARES/RACES meeting, is there enough snow for snowmobiles, earning the "Penguin March" badge, 160 Meter antennas, dietary restrictions, people on the movie, going to Pirates games, working the January VHF Contest from a rare grid square, campgrounds for Pa QSO, flushing commodes with seawater, how's Jack W9UK doing?, going to Dayton... and a whole lot more.

Our next gathering for 2016 will be on Saturday, February 27th, 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?

A lot to cover this month, so getting right to it...

Carol KB3GMN reports that **we will not have access to the hall** on Saturday. Again this year, another group has booked the hall. So, those who can help set up (mainly moving tables & chairs around), plan on getting some sleep & coming in around 4:30 AM on Sunday. It doesn't take very long (we pretty much have the arrangement down pat, well, mostly); the more the merrier & the faster it goes...

We do ourselves proud ever year with **WASHFest**, and **WASHFest 2016** promises to be no exception. That doesn't mean that we can just sit back and let things run themselves (does seem like that sometimes, doesn't it?). So this is the time for all club members to pull together, let Carol know when you can lend a hand, what you can help out with. [And, for those of you who will be helping with Talk-In and/or the VE Session are welcome to take up some space for your "stuff" on Ye Editor's tables.]

Our **next VE Session** will take place at **WASHFest**, with the rest of the year to be scheduled shortly. Our available space is quite limited, so we will NOT be accepting walk-ins and WILL insist on pre-registration of all candidates; sadly, we must be strict on this, as we had a few difficulties last year. While we wish it could be otherwise, the room simply isn't there. (And renting the other hall is cost-prohibitive; we'd have to test well over 75 candidates just to cover the rental.) So if you, or someone you know, would like to test for a new or upgraded license at **WASHFest**, please have them pre-register as soon as possible!

Ok, a few words about our **annual 2 Meter Simplex contest**. Not to take any thunder away from Jim WB4GCS, but participation was down. It's a real shame, too, since we just read the other day about a group sponsoring a similar contest making a big splash with it (of course, now that it's deadline, we can't find the link). The interest is there... we just have to reconnect with it! More on this at the meeting. (And if you haven't submitted a log, email Jim...)

Larry K3VX has made a **small stock of resistors available** to **WASH** club members, no charge, first come first served, and when they're gone, they're gone. As Larry has limited space at his QTH at present, Ron W3WN is storing them for distribution. So, if you need a few for a project, just send a short e-mail W3WN

The ARRL is helping the National Parks Service celebrate their 100th Anniversary with this years **National Parks On The Air** event. The NPOTA operations began on January 1st, and already have garnered a lot of activity. It looks like it's going to be a lot of fun for all involved! More information on how the event works and how the awards for it will be presented can be found at <https://npota.arrl.org>

WASHNet NCS Schedule

02/01/2016	Dave N3DFK	03/28/2016	Bill W3WH
02/08/2016	Harold K3HCR	04/04/2016	Bob AB3ED
02/15/2016	Digital Net	04/11/2016	Carol KB3GMN
02/22/2016	Glen KE7FD	04/18/2016	Digital Net
02/29/2016	Bill W3WH	04/25/2016	tba
03/07/2016	Bob AB3ED	05/02/2016	tba
03/14/2016	Digital Net	05/09/2016	tba
03/21/2016	Rick KB3IAC	05/16/2016	Digital Net

Join WASH or Renew your Membership Today! Membership Application on Page 15

Minutes, January 7th Meeting

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

Carol KB3GMN called the meeting to order at 19:03 hours. 20 members and guests 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 Ben KB3ERQ, second by Bill W3WH, passed unanimously.

Committee reports:

Treasurer (N3RDV): A balance on the bank account was read & accepted.

Secretary (KB3ERQ): No Report

VE (W3WN): Next VE Session at **WASHFest** on February 28th; due to space limitations, there will be NO walk-ins this year. The rest of 2016 to be scheduled. Thanks to N3FB for making the arrangements.

Repeaters (N3FB): N3FB/R on 443.65 is back to normal in the new shack, running on the primary machine at full power. The links to it need some tweaking. After some adjustments, the 2 meter machine has been pretty stable since the preamp was removed, still needs work, but it is pretty much up to spec without the preamp. We need a new preamp to put back in, and we need people to drive around and test the coverage.

WASHNet (KE7FD): Updated NCS schedule is due out, NCS stations are needed.

Contests (K3VX):

- 2016 2 Meter Simplex is coming up from 7 to 11 PM on the 16th of this month. Details are in the newsletter. ZIP codes are the multipliers.
- ARRL is running the NPOTA special event as part of the 100th anniversary of the National Parks Service. Short discussion on possible doing an NPOTA event this year.
- Winter Field Day is the weekend of January 30th & 31st. **WACOM** is planning to operate in the event.
- Larry will not be available this year to help run ARRL Field Day, so another co-chair will be needed.

WASHFest 2016 (KB3GMN): Kathy Sauder definitely coming as long as there are no weather issues. EAGLE 1 Communications is coming. More tables reserved (22 as of last count). Carol has the main prizes; the black box prizes are done. Rick will be running the kitchen again. We still don't know if we will have access to the hall on Saturday night, information pending.

[Editor's note/Update: We will **not** have Saturday access due to another event, so setup will start at 4:30 AM on Sunday. Sorry.]

Everything is coming along nicely.

Public Service (N3RDV): The St. Patrick's Day Parade on March 12th is looking for operators. See Mike WA3PYU for more information

Bob NU3Q stated he is now the Net Manager for the Allegheny County ARES/RACES net. He is looking for a **WASH** Liason to the net. He also stated that RACES volunteers must take FEMA required course ICS 100, 200 & 700. Email [NU3Q at NU3Q dot US](mailto:NU3Q@NU3QdotUS) for more information.

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

Newsletter (W3WN): Out.

President (KB3GMN): Show of hands: How many present plan to operate in the 2 Meter Simplex contest? (Count of 10)

Old Business: None

New Business: None

Good of the Order: Larry K3VX brought a box of resistors for club members to share, free for the asking.

Motion to Adjourn by Bill W3WH, second by Eric K3SGT and carried.

Meeting adjourned at 19:35



WASH Spotlight: Selfie



Bill W3WH snapped this "selfie" while mobile, as part of the K3VX/M operation during the 2016 WASH 2 Meter Simplex contest.

Scores from early logs received and some comments on Page 7

(Editor's Note: OK, so you guys got a respite this month. But you have been warned. Send in pictures, or next month, it WILL be the dog!)

Photo courtesy of and © Copyright 2016 Bill Hill W3WH

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@n3shdotorg)

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

2016					
AB3NM	N3SBF	KC3DOF	WASH FL	WASH SC	Silent Keys
K3HCR	W3WH	KC3ELA	KA3UPY/M	N3RNK	
K3SGT	WA3PYU	KC4WTT	W4ZE	WASH TN	AB3KA
K3VX	WA3VSS	KE7FD	WASH NE	K3OL	K3EED
		N2QIV	N0PEU	KE3XB	K3LIE
KA3VXM	2015	N3DFK	WASH OR	N3YPB	KA3NMG
KB3GMN	AA3GM	N3IDH	N0VLR	WASH TX	KB3ENX
KB3GMU	AE3DL	N3KFD	N0WVPV	NB3C	KB3FNM
KB3IAC	K3LGM	N3RDV	KB3NVL	K3LGM	KB3FQT
KB3IVX	KB3DCO	N3RHT	KB3NVM	KB3IJX	KB3JHQ
KB3JHR	KB3ERQ	W3LE	WASH OH	Jane Wagner	N3CZZ
KB3ORO	KB3GMP	W3RWS	N8DPW	WASH VI	N3FZ
K15ZT	KB3GUZ	W3VFA		NP2JF	N3HKQ
N1NCZ	KB3PSB	W3WN			N3KEH
N3FB	KB3YCX	WB4GCS			N3OBD

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

Through February 2nd, 2016
List compiled by
Mark Stabryla N3RDV, Vice President/Treasurer

AB3KA
K3EED
K3LIE
KA3NMG
KB3ENX
KB3FNM
KB3FQT
KB3JHQ
N3CZZ
N3FZ
N3HKQ
N3KEH
N3OBD
N3SKR
N3SRC
N3ZEL
N3XFE
W3ZLK
WA3JPP

2016 WASH Upcoming Events Calendar

Club Meetings & Other Significant Events — Subject to Change

February 4 th	WASH Meeting	St. Clair Hospital Outpatient Center, 2000 Oxford Drive, Bethel Park
February 13 th	Breezeshooter's Groundwave CW	http://www.breezeshooters.org/html/groundwave_contest.htm
February 20 th — 21 st	ARRL DX Contest CW	http://www.arrl.org
February 26 th — 28 th	CQ 160 Contest SSB	http://www.cq160.com/
February 28 th	WASHFest 2016	CSVFD Memorial Hall, 3600 Library Rd, Castle Shannon
	WASH VE Exam @ WASHFest	
March 3 rd	WASH Meeting & Pizza Night	St. Clair Hospital Outpatient Center, 2000 Oxford Drive, Bethel Park
March 5 th — 6 th	ARRL DX Contest SSB	http://www.arrl.org
March 12 th — 13 th	Stew Perry Topband Challenge	http://www.kkn.net/stew
March 12 th	Breezeshooter's Groundwave SSB	http://www.breezeshooters.org
March 26 th — 27 th	CQ WPX Contest SSB	http://www.cqwpix.com/
April 7 th	WASH Meeting	St. Clair Hospital Outpatient Center, 2000 Oxford Drive, Bethel Park
April 24 th	Two Rivers ARC Hamfest	http://www.trarc.net/home
May 5 th	WASH Meeting	St. Clair Hospital Outpatient Center, 2000 Oxford Drive, Bethel 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	

After more than 40 years as a purveyor of inexpensive electronics kits for hobbyists, the Ramsey Hobby Kits group has thrown in the towel, effective on January 1. The Ramsey RF Test Equipment Group is unaffected by this change.

"We end our heritage with a smile, not a frown, and say thank you, to all our customers and fellow hobbyists," Ramsey's [announcement](#) said.

The Victor, New York, company sold a wide array of hobby kits over the years, starting with its LED Blinky kit in the 1970s and eventually including simple ham radio transmitters and receivers, aircraft band receivers, and other devices. Ramsey kits were frequently available at hamfests.

The company indicated that it will continue to provide technical and warranty support for hobby kits purchased through the end of 2015. Ramsey said its remaining hobby kit inventory has been relocated to [Amazon](#).

CWops has announced a new, annual [award](#) to recognize individuals, groups, or organizations that have made the greatest contribution(s) toward advancing the art or practice of radio communication by Morse code.

Eligible candidates include the authors of publications related to CW; recruiters, trainers, mentors, coaches, and instructors of Morse code; designers and inventors who advance the art or practice of CW, and others contributing to the art or practice of CW. The award is not limited to Amateur Radio operators or organizations.

Anyone can [submit](#) a nomination. Nominations must be received by April 15, 2016. These should include the nominee's name and applicable call sign, the nominee's contact information, including e-mail and USPS addresses and a telephone number, and a detailed explanation to support the nominee's qualifications. The individual nominating also should provide contact information.

A plaque will be presented at [Dayton Hamvention®](#) or mailed to the recipient.

"Seen" at the January Meeting

Photos Courtesy of and © Copyright 2016 Ron Notarius W3WN



A Ham's Trip Through The West Midlands of England

Larry Comden K3VX

During a two week trip last fall, I went to two ham locations and one technical location which might interest some club members. First, I attended the monthly meeting of the Mid Warwickshire Amateur Radio Society. This is a small club, 8 members came to the meeting. The members were very welcoming to Jean and I. I asked about the significance of the number (like G4) in their call signs. None, just like our messed up non-geographic indication (i.e. a W1 in FL)

They didn't have any sort of business meeting but went straight to widely varied presentations. The first presentation concerned building and using simple circuits which appear on their Intermediate (General Class for us) license exam. The Foundation (Technician equivalent) license has an overall 10W limit but lots more bands to operate including 70MHz. Intermediate raises the power to 50W and the Full license allows 400W.

Next, was an evaluation of VHR/UHF SWR meters and the possible use (or mis-use) on HF. Conclusion: don't rely on the readings since the direction coupler is too short for the longer wavelengths at HF.

Then a quiz about acronyms in use for digital communications – I didn't know any of them and neither did most of the members.

Lastly, I gave a short talk about our club activities, passed around the latest **WASHRag** and a slide show of our Field Days.

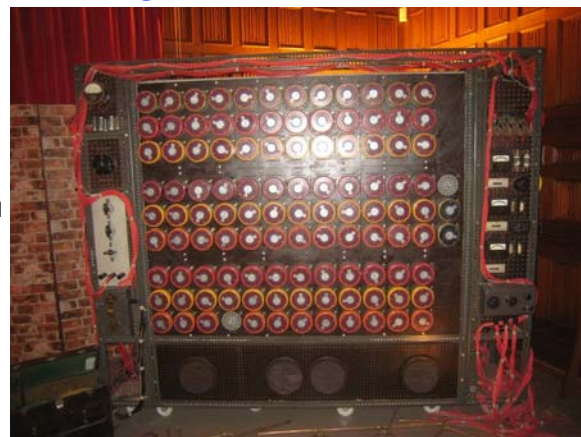
Bletchley Park was the home of Project Ultra which succeeded in breaking the German Enigma code. Two movies, "Enigma" and "The Imitation Game" cover some of the events leading to the success. The story is very well told by the demonstrations and displays in the "huts" and the Mansion. Their efforts shortened the war by two years and made Atlantic convoys safe from U-Boat attacks. I was especially impressed by a live demonstration of the Alan Turing designed "Bombe".

The Bombe was designed to discover some of the daily settings of the Enigma machines on the over 50 German military networks: specifically, the set of rotors in use and their positions in the machine; the rotor core start positions for the message—the message key—and one of the wirings of the plugboard. Possible combinations approximately 151 trillion, obviously impossible without some machine aid. Eventually, 200 of these machines were used by Allied intelligence services around the world. See <https://en.wikipedia.org/wiki/Bombe> and the many books about WWII cryptography for details.

Eventually, the Bombe was superseded by Colossus, a much faster vacuum tube version.

Bletchley Park is also the home of the Radio Society of Great Britain (RSGB) flagship club station GB3RS. Beautiful, manned by volunteers, great donated equipment (Yaseu FT-5000), big monitors, good station layout, and a SteppIR on the rooftop tower. I could have operated but was short of time.

Photos of the Enigma Machine (cover picture), the Bombe (top right) and of K3VX at GB3RS (center and lower right) courtesy of and © Copyright 2015, 2016 Larry Comden K3VX



Soapbox, 2016 WASH 2 Meter Simplex Contest

As of January 30th, 2016

Courtesy of Jim Sanford WB4GCS, Contest Chair

Observations:

- Disappointing turnout, only 13 unique calls, and some made only one contact with us
- We operated from 6 unique Zips Cides, and we worked 13 unique Zips.
- 26 FM QSOs, 22 SSB (!), 5 CW.
- N3FB was worked on all 3 modes. WB4GCS on SSB & CW, several others on FM & SSB.
- Kudos to KA3KSP for activating several Zips.

73, Larry K3VX (mostly driving) and Bill W3WH (mostly operating)

Had a good time.

Disappointing with turnout, especially since I'd announced on Microwave Reflector.

Mixed emotions. It was during the contest last year that we got The Phonecall.

73, Jim Sanford WB4GCS

Wish I'd had a little more time to operate this year, but some family matters took priority. Regret missing out on the non-FM activity, I guess I really need to get my hands on a multi-mode rig! Still enjoyed what little time I had. Hopefully next year will be a little better in terms of scheduling!

73, Ron Notarius W3WN

Claimed Scores, 2016 WASH 2 Meter Simplex Contest

As of January 30th, 2016

Courtesy of Jim Sanford WB4GCS, Contest Chair

Call	Score	Call	Score
K3HCR	612	N3FB	1152
K3VX/M	758	N3IDH	54
KA3KSB/M	1596	N3SBF	1026
KB3GMN	1026	W3WN	198
KB3YCX	224	WB4GCS	342
KC3FIQ	180	WO3X	16
KC3TOM	16		

CTCSS For Dummies Ray Price KV4BL courtesy of eHam.net

One aspect of FM operation that seems to have quite a lack of understanding with regard to it is CTCSS (aka Private Line, PL, Channel Guard, CG, Quiet Call, QC, etc). Continuous Tone Coded Squelch System has been around for over fifty years, yet is under-utilized or improperly utilized by many FM'ers, to include repeater owners/trustees and end-users. It is my hope that this article will in some way contribute to increased and proper utilization of this convenient and useful tool.

CTCSS is a system whereby a (not really) sub-audible tone is encoded into the transmit audio of a radio and a receiver on another radio on that frequency will only open up (decode) when it picks up that specific tone. While the tones are called "sub-audible", most people can hear them as a hum in their radio's speaker when monitoring a radio or repeater that is encoding such a tone.

Higher frequency tones are more easily heard. Most radios capable of CTCSS have at least 38 tones between 67.0 Hz and 250.3 Hz, with some having even more tones over a wider frequency range. For instance, you may keep in contact with friends on 146.535 MHz Simplex. You or your friends may experience intermittent bursts of noise which open your regular Carrier Squelch (CSQ) with enough frequency to be really annoying, whether you are getting those bursts of noise on a base, mobile, or HT. If the operator being thus annoyed turns their squelch up enough to eliminate the noise, they might reduce or also eliminate the ability to hear friends who are calling who are below the squelch threshold.

In some cases, the noise bursts may be so strong that the Carrier Squelch will not silence them. These are where CTCSS really shines. Let's say that instead of running your squelch up really high and risking missing calls or not eliminating the noise, you and your friends agree to set your radios to encode a certain tone on that channel when you transmit. For Simplex purposes, I would recommend a fairly high tone, say 203.5. The reason I recommend higher tones for Simplex is so that a ham trying to join the conversation will be more likely to hear and notice that a tone is in use in case he wants to join in. Noticing that everyone is using a tone, he won't think your group is being stuck up if he calls and doesn't get a response. If he knows you are using a tone, he can either guess at what it is (a skill that CAN be learned) or use his radio's "Tone Scan" feature. Of course, popular local repeater tones may also be used.

Getting back to use of the tones, now that everyone is encoding that tone ("T" on most FM ham radios), if any member of the group is experiencing annoying bursts of noise, intermod, etc, he can turn on his radio's decoder ("TSQ" on most FM ham radios) and his receiver will be silent until someone transmitting that specific tone keys their mic. While this feature will not stop interference from very strong noise sources, it will keep your receiver quiet until one of your group transmits.

CTCSS can be a great "quick fix" for all kind of noise, which may override your normal Carrier Squelch. One new ham was enjoying the local repeater when they held their bi-weekly nets, but a computer or other device in his home was breaking his Carrier Squelch on the repeater frequency, even with his squelch set as high as it would go. Since he was receiving that repeater full scale and that repeater's trustee wisely encoded the same tone on its output that was required to access it on the input (more on this later), I suggested that he activate his CTCSS decoder ("TSQ") on that channel. That way he could leave his base on that repeater channel and not be annoyed by the noise that was overpowering his regular squelch on just that one frequency. Problem solved!

CTCSS originally was developed for commercial Land Mobile FM radio systems such as police and business band, to keep the end-users from being constantly bombarded with chatter from other agencies or businesses who were on the same frequency. With growing numbers of FM repeaters on ham bands, it was soon put to use to keep users in distant towns from keying up the local repeater in addition to the one in their area during band openings or when operating from higher elevations. It excels in this purpose.

Back in the mid- 1990's, quite a few FM ham radios might have come with only Carrier Squelch capability, with the option to add a tone board to allow your radio to encode a tone and allow access to repeaters that required a CTCSS tone to access them. Even more radios came with no CTCSS decode board to allow you to decode tones and keep the speaker on your radio silent. Again, such boards were available in many cases as an expensive "add-on". Thankfully, for the last ten or fifteen years, just about all modern bases, mobiles, and HT's, for FM ham radio use come equipped to encode ("T") or encode and decode ("TSQ") CTCSS tones.

One of my pet peeves with regard to repeaters is how many repeater owners and/or trustees will set up a repeater to require a tone on the input to key up a repeater, but fail to encode that same tone on the output for the convenience of the end-users. In cases where older equipment is being used and finding or purchasing a tone encoder might be difficult or expensive, I can understand why a repeater owner or trustee might not choose to encode a tone on the output. Just about all repeater equipment of newer vintage is programmable (just like your mobile or HT) for encoding and decoding tones. In those cases, setting up a repeater to encode a tone on the output involves a couple of minutes or literally just seconds of extra effort. That little bit of extra effort enables the users (supposedly the reason they go to the trouble and expense to put a repeater up to begin with) to turn on their decoders ("TSQ") and put their carrier squelches on a minimum setting while screening out annoying noise from computers, car electronics, gas pumps, and more.

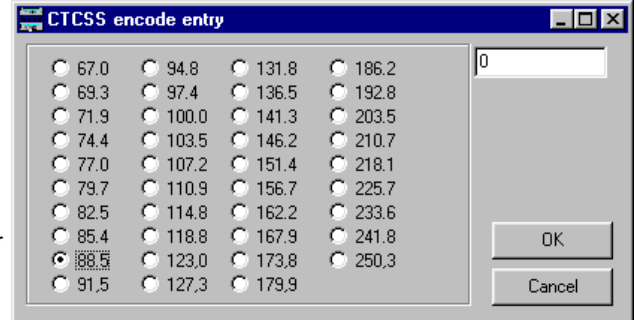
Encoding on the output also allows travelers and newcomers to find out what the access tone required to get into the repeater is, via the use of their radio's "Tone Scan" feature. Setting the repeater up to encode on the output (IMHO) shows superior engineering and pride in the repeater by the owner or trustee, and something quite the opposite in those who won't spend the extra few seconds or minutes to set up encode on the output, if such is enabled by a few key presses.

Of course I have heard numerous outlandish and illogical "reasons" for not encoding a tone on the output. "We don't want our users to turn on their tone squelch because they might interfere with a distant repeater." (Uhhh... really?) "Not encoding a tone on the output makes it easier for users to program the repeater in their radios." (Uhhh, no... It increases the chances that they won't hear the repeater, say if they program "TSQ" instead of "T".) One of my (not so) favorites is, "the repeater passes tones." This is almost as bad as no tone at all, maybe worse. Different radios have different tolerances and tightness with regard to the tones they emit. Running that through the repeater's audio sections can cause variances in the tone reaching the end user's radio, often resulting in some people opening up your decoder properly, some chopping in and out, and others not opening your decoder at all. "Passing tones" through the repeater rarely if ever works as well for the end-user as properly encoding a steady tone on the repeater's output.

One of the biggest misconceptions I hear (too regularly) and usually from veteran hams is, "they PL'd such-and-such repeater. That means it is now a closed repeater and they don't want us to use it anymore." NOPE! Repeaters are PL'd to eliminate or reduce incidences of the repeater being keyed by users of another machine a long way off, during band openings or similar circumstances.

Rarely is simply adding CTCSS to gain access done with intent to discourage people from using it. Quite the opposite, it is done to make using the repeater a more enjoyable experience for everyone. On that note I will add that some of the modern, menu-driven radios can be challenging to program, especially for some of our senior veteran hams. If you know one of these old timers who have been shut out of a repeater that was recently PL'd, please offer to help them re-program their radio. That is one of the many rewards of the hobby, helping others.

Hopefully this has helped some to better understand CTCSS and how useful it is and can be on FM. As I noted elsewhere in this article, it IS fifty-plus year-old technology, not some evil combination of witchcraft and nuclear science, the slightest error in use of which might destroy the world as we know it.



A Persistent Ham, And The Best of the Tradition of Helping Others

John Farler K4AVX courtesy of the Ten Tec e-mail reflector & [his blog](#)

David Pierce KE4OZS, has been a ham over 19 years. Most of this time was spent as a Tech Class licensee. He worked at a local fire department, but had to quit when his vision started to deteriorate several years ago. Now it has gotten pretty severe, but he can use a magnifying glass to read parts of a page at a time. Our club, the KY Mountains ARC, meets informally every Friday at a local home-cooking restaurant for breakfast. David showed up one morning about a year ago, and said, "I want to take my General Exam." We give exams to anyone who shows up and wants one. So, after 19 years, he took the exam in a booth, while we filled our stomachs. He passed with very little trouble. Congratulations to the new general!

Then, about six months ago, he was ready to take the Extra Class Exam, saying he wanted to get it done, before his vision got even worse, and he would have a very difficult time studying and taking the exam. He came through again with flying colors. Since he is unemployed because of the vision problem, the club wanted to get him on the air somehow. I had an old Ten Tec Triton IV, which received, but would not transmit, which I had bought from an old friend who got into financial trouble when his wife left, cleaning out the bank accounts. WB4IEA and I (mostly him) worked on it four or five hours, and found dead finals and a bad transistor in the driver, and some suspicious voltages from the control board.

Pricing finals came up with a big cost, and there appeared to be more than just finals wrong with the radio. I posted on the [Ten Tec Reflector](#) asking if anyone had an old junked 540 with good finals, and explaining David's hard work in upgrading after so many years and overcoming problems. Imagine my surprise when [Mike Bryce WB8VGE](#), emailed me saying he would work on the radio for free, I just needed to get it to him.

Then came another surprise when another ham on the Ten Tec Reflector, Jim Younce K4ZM, emailed me, saying he was a former Ten Tec dealer (Yes, they used to sell through dealers), and had final transistors, driver transistors, and some other parts left over from his dealer days, and he would donate them without charge to the cause. Jim, who lives in Mobile, Alabama, has a history of helping handicapped hams. Take a look at his bio on QRZ. I got him and Mike together via email, sent the transceiver on its way, and the job was started.

I really believe Mike had it fixed the first day he received it, or very soon after, as he emailed "The Ten Tec Lives!" He took the job of repairing it in spite of having a very heavy work schedule himself, and went through alignment and everything that needed fixing or tweaking. He kept me updated on the progress and soon the rig was on its way back to Kentucky.

I set it up with the power supply and digital readout I had for the rig, and amazingly, the first contact I made was in South Africa on 15 meter phone, barefoot, on my mini-beam. The receiver has that nice sound from the front mounted speaker, and everything worked just fine.

I thought the rig would be ideal for him with the fairly large digital readout, and Dave managed to get an 80/40 dipole up for the rig. We turned it on and made a contact with a local ham, who gave us a good report on audio and signal strength. Dave has made several local and longer contacts since then, and has been happy to finally get on HF, after 19 years on the "short stick."

Our club President, KY4JLB, donated a D-104 microphone to be used on the rig, since I wanted to keep the Ten Tec "banana" microphone shown in the photo. It's the only one I have with high impedance to work on the several old Ten Tec and other vintage rigs I still have. I rewired the D-104 to work with the Ten Tec, and it seems to be fine.

I think the Jacks on the front of the PS and the large digital readout will make this rig easier to use for Dave. The big speaker in the front of the PS also is better than the small one in the bottom of the transceiver.

Congratulations to David, shown with his wife at this year's club dinner, for having the persistence to upgrade under a handicap. He used to do a lot of tower work, years ago.

Also, thanks to the two hams, WB8VGE in Ohio, and K4ZM in Alabama, who graciously devoted their time and resources to help Dave get on the air. Both are active on the [Ten Tec Reflector](#), as well as the [QRP-L listserv](#), and have contributed much to the hobby, and continue to do so.



Do You Ever... Just Listen?

Lou Giovannetti KB2DHG courtesy of [eham.net](#)



I got into this hobby way back in the early 1970's. Long story short, a mentor ham friend of mine gave me an old Hallicrafters Receiver. I was 12 years old at the time...

I remember sitting up to all hours of the night, listening just listening to all those mysterious radio signals and noises. Tuning in on foreign broadcast stations and the Morse code conversations I could only imagine what they were saying. (Hence my love for CW) I remember just listening to plain old dead air...

I often found myself wondering what signal I might just catch, maybe even an alien from outer space!

To this day I still find myself just listening...

We Amateurs (and I could be wrong) engage so much on getting the signal out but hardly ever talk about what's on the air!

One of the most fun things I do with this hobby is SWL (short wave listening)...

I will spend hours just going through ALL the bands from top to bottom and bottom to top. It is just so cool listening to the wonderful mysterious sounds of space.

So I ask you? Do you still listen? And I don't only mean listening to just ham radio operators...

I tune in to most everything... Although short wave has lost a lot of broadcast stations, there is still much out there. You just have to keep tuning. Our transceivers have SO MUCH MORE than just the ham bands!

If you have not or are new to the hobby, ham radio, I strongly recommend you set aside a night or day, turn on the rig and tune around and JUST LISTEN...

Do you listen?

Changing of the Guard

American Radio Relay League



The ARRL Board of Directors has elected ARRL First Vice President Rick Roderick K5UR, of Little Rock, Arkansas, as the ARRL's next president. The Board took the action as it convened for its 2016 Annual Meeting, January 15th-16th in Windsor, Connecticut. Roderick, 63, officially assumed office for a 2 year term at the conclusion of the Annual Meeting. He is the ARRL's 16th president, succeeding Kay Craigie N3KN, of Blacksburg, Virginia, who served for three terms as the League's president.

The Board also chose other officers, electing Dakota Division Director Greg Widin, KØGW, of Stillwater, Minnesota, as First Vice President, succeeding Roderick, and Rocky Mountain Division Director Brian Milesosky N5ZGT, of Albuquerque, New Mexico, as Vice President, succeeding Jim Fenstermaker K9JF. Roderick, Fenstermaker was later named by the Board as an ARRL Honorary Vice President.

As a result of the Vice President election, Rocky Mountain Division Vice Director Dwayne Allen WY7FD, of Sundance, Wyoming, will become the new Division Director, succeeding Milesosky, while Kent Olson KAØLDG, of Horace, North Dakota, will become the new Dakota Division Director. President Roderick will fill the Vice Director vacancies in due course.

In other action, the Board re-elected International Affairs Vice President Jay Bellows KØQB; Chief Financial Officer Barry Shelley N1VXY, and ARRL Chief Technology Officer Brennan Price N4QX.

The Board also elected one new member to the Executive Committee, which can act on the behalf of the Board between its two yearly meetings in January and July. Delta Division David Norris K5UZ, will replace New England Division Director Tom Frenaye K1KI, on the panel.

The other Board members are Hudson Division Director Mike Lisenco N2YBB; West Gulf Division Director Dr David Woolweaver K5RAV; Pacific Division Director Bob Vallio W6RGG, and Great Lakes Division Director Dale Williams WA8EFK.

ARRL Chief Operating Officer Harold Kramer WJ1B, also was attending his final meeting in an official capacity. Kramer retires on March 1st after about 10 years at ARRL Headquarters.

Tom Gallagher NY2RF, of West Palm Beach, Florida, will succeed David Sumner K1ZZ, as the Chief Executive Officer of ARRL, effective April 18th. In that role, he will oversee all activities at ARRL Headquarters in Newington, Connecticut. Meeting in a special webinar session on January 25th, all 15 ARRL Directors voted to elect Gallagher as CEO and Secretary, positions that Sumner will relinquish on April 18th. Gallagher will join the ARRL staff as CEO-Elect on February 29th, and a transition period will follow.

"I am excited by the prospects of ARRL's Second Century, but I am equally mindful of Dave Sumner's enormous 4-decade contribution to our organization and of the extraordinary contributions he has made to advancing the art and science of Amateur Radio, to growing our ranks, and to expanding the sheer enjoyment of ham radio around the world," Gallagher said. Gallagher said he is looking forward to attending the [ARRL 2016 National Convention](#), hosted by the Orlando [HamCation](#), February 12th-14th.

Former ARRL staffer Bart Jahnke W9JJ, is the League's new ARRL Contest Branch manager. Jahnke returned to ARRL Headquarters on January 4th after a decade away, which he spent working in the customer service, manufacturing sales and support, and information technology fields in the Midwest and on the East Coast. He succeeds Matt Wilhelm W1MSW, who resigned last year.

"It is great to be back at ARRL and to see the faces of many friends still here — and still dedicated to serving Amateur Radio — as well as new faces, new friends, to join with in the journey," said Jahnke, who previously spent nearly 20 years at Headquarters. "Of the many bustling activity areas at ARRL Headquarters, the Contest Branch remains right up there in terms of high demand. With continued strong activity comes our obligation to produce and release results as rapidly as possible." "We need to continue to work smarter, not harder, to serve the contest community," he said.

Many may recall Jahnke from his former role as ARRL Volunteer Examiner Coordinator (VEC) Manager, a position in which he served from 1989 until 2005.

K5UR NY2RF Photos by Rick Lindquist WW1ME; W9JJ photo by Steve FordWB8IMY. All photos courtesy of the American Radio Relay League

As he nears retirement, ARRL CEO David Sumner K1ZZ has been honored by the Dayton Amateur Radio Association ([DARA](#)), which sponsors the annual [Dayton Hamvention](#)®.

Sumner had been invited to speak at DARA's January 8th meeting, purportedly to recount his many years with ARRL. While such out-of-town speaking engagements are not out of the ordinary for him, something he wasn't anticipating awaited him at this event. "Dave provided a great insight into the mission of the ARRL, but our club had some surprises," said DARA President Don Dubon N6JRL.

The Dayton Amateur Radio Association honored Sumner with a plaque noting his "Outstanding Career and Service to Amateur Radio." The club also made him a "Gold Card" lifetime member of DARA, an honor bestowed on very few, Dubon said. In addition, the ARRL Ohio Section presented him with a Special Recognition Award from the ARRL Ohio Section.

"I am very pleased that the relationship between DARA and the ARRL has blossomed into one of the outstanding partnerships in organized Amateur Radio," Sumner said.

A reception followed the meeting.

Photo courtesy of the American Radio Relay League

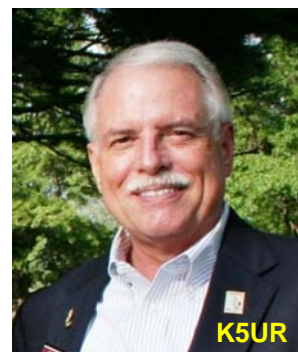
[Field Day](#) is June 25-26 — always the 4th full weekend in June — and the 2016 ARRL Field Day Packet now is available to [download](#) as a PDF file. This year's Field Day introduces two new ways to score bonus points — Social Media and Safety Officer.

Rule 7.3.16 Social Media offers 100 bonus points for promoting your Field Day activation to the general public via an active, recognized, and utilized social media platform, such as Facebook, Twitter, or Instagram. This bonus is available to bona fide Amateur Radio clubs and Field Day groups that welcome visitors to their operations.

Rule 7.3.17 Safety Officer offers 100 bonus points by designating someone to serve as a Safety Officer for groups setting up Class A stations. This person must verify that all safety concerns on the Safety Check List — found in the [ARRL Field Day Packet](#) — have been adequately met. This In order to claim this bonus, participants must include a statement verifying the completion of the Safety Check List in the supporting documentation sent to ARRL Headquarters.

Last year, 2720 stations submitted ARRL Field Day entries. Nearly 1.3 million contacts were logged during FD 2015 — an increase of just over 1 percent. There were 35,369 individuals taking part in Field Day last year.

For more information about Field Day 2016, [contact](#) ARRL Headquarters



Satellite Package Carrying Amateur Radio Payloads Released Into Orbit from the ISS

American Radio Relay League

A package of two satellites carrying Amateur Radio payloads has been deployed into orbit from the International Space Station (ISS) as part of a collaborative Texas A&M and University of Texas at Austin research effort. Built by Texas A&M students, AggieSat4 (AGS4) will release UT's Bevo-2 CubeSat in about a month, once it is far enough away from the ISS. Both schools received support from NASA's Johnson Spaceflight Center (JSC) for the design, construction, testing, and launch phases. The goal of the overarching LONESTAR (Low Earth Orbiting Navigation Experiment for Spacecraft Testing Autonomous Rendezvous and Docking) program is for the two satellites to individually rendezvous with each other and perform docking and undocking maneuvers.

"The overall objective is to find ways for small spacecraft to join together autonomously in space," Helen Reed KD7GPX, professor of aerospace engineering and director of the [AggieSat Lab](#) at Texas A&M told NASA. "We need simple systems that will allow rendezvous and docking with little to no help from a human, which will become especially important as we venture farther out into space. Applications could include in-space assembly or reconfiguration of larger structures or systems as well as servicing and repair."

The AggieSat team received its first beacon signal from the satellite at its Texas A&M Riverside Campus ground station. The AggieSat4 team is asking any Amateur Radio operators receiving the beacon signal to [send](#) any data to the AGS4 team. AggieSat4 will transmit 9.6 kbps FSK telemetry and 153.6 kbps FSK on 436.250 MHz. Once it's placed into its own orbit, Bevo-2 will transmit on 437.325 on CW and 38.4 kbps FSK.

Both satellites were launched to the space station during a December 6th, 2015, resupply mission. Earlier last week, Astronauts Tim Peake KG5BVI, and Scott Kelly made preparations to deploy the sizeable LONESTAR phase 2 mission satellite package from the ISS, using the SSIKLOPS deployer. The satellite mission also will demonstrate communication cross links, data exchange, GPS-based navigation, and other tasks. AggieSat4 will capture images of the Bevo-2 release.

The satellites were independently developed by student teams at the two universities. Both teams were responsible for development plans for their satellite and had to meet established mission objectives.

The Bevo-2 Satellite was designed, built, and tested in the Texas Spacecraft Lab (TSL) at the University of Texas at Austin. "This whole experience is very exciting," TSL Director Glenn Lightsey KE5DDG, said last fall as undergraduate and graduate students were in the final stages of their project. "It's great to have a research program where our students can build satellites that fly in space." Reed and Lightsey are co-investigators for the LONESTAR 2 project.



**AggieSat
Released from the
ISS (NASA Photo)**

The ARRL Has Petitioned the FCC To Fix A "Shortfall"

in available RTTY/data spectrum" the regulator created when it reapportioned 80 and 75 meters in 2006. The League's January 8 [Petition for Rule Making](#) asks the FCC to shift the boundary between the 80 meter RTTY/data subband and the 75 meter phone/image subband from 3600 kHz to 3650 kHz. The ARRL's *Petition* points out that the proposed change has received strong support from the ARRL membership and was adopted as policy by the League's Board of Directors in July 2015. At that time the Board also agreed to seek RTTY and data privileges for Technician and Novice licensees within the portion of the 15 meter band where they now may operate CW and to do the same on 80 meters, contingent upon the 80/75 meter subband revision.

Specifically, the petition asks the FCC to make the following changes, with regard to 80/75 meters:

- Modify the 80 meter RTTY/data subband, so that it extends from 3500 kHz to 3650 kHz.
- Modify the 75 meter phone/image subband, so that it extends from 3650 kHz to 4000 kHz.
- Make 3600-3650 kHz available for General and Advanced Class licensees, as was the case prior to 2006.
- Make 3600-3650 kHz available to Novice and Technician licensees for telegraphy — consistent with existing rules permitting Novices and Technicians to use telegraphy in the General and Advanced RTTY/data subbands on 80, 40, and 15 Meters.
- Modify the rules governing automatically controlled digital stations (ACDS), to shift the 80 meter ACDS segment from 3585-3600 kHz to 3600-3615 kHz, consistent with the IARU Region 1 and 2 band plans.

The ARRL contended that the FCC *Report and Order* in Docket 04-140 released in 2004 made "a very substantial" and unjustifiable departure from what the so-called "Omnibus" *Notice of Proposed Rule Making (NPRM)* had proposed, with respect to 75 and 80 meters. The resulting *R&O* in that proceeding, among other actions, expanded voice privileges on additional frequencies in various bands, including 75 meters. The FCC shifted the phone/image subband from 3750-4000 kHz to 3600-4000 kHz, trimming the 80 meter RTTY/data subband from 3500-3750 kHz to 3500-3600 kHz and changing "the entire dynamic of this band substantially," the League said.

"The ratio of wideband phone spectrum to narrowband RTTY/data emissions went from 50/50 to 80/20, rather than the 55/45 split that the Omnibus *NPRM* had proposed," the ARRL petition explained. "The adverse effects of this 2006 Commission action on various classes of licensee were significant and immediate."

The League said that, while the Omnibus *R&O* indicated that incumbent licensees would lose no operating privileges, these "clearly" were adversely affected for some licensees. The ARRL said the most substantial adverse effect of the "unexpected and vast expansion" of the 75 meter phone/image was the elimination of access to 3620-3635 kHz by ACDS.

The Omnibus *R&O* rule changes limited 80 meters to 3500-3600 kHz, and no longer authorized RTTY and data emissions above 3600 kHz. The Omnibus *R&O* did not modify § 97.221 of the rules, "so its provision for automatically controlled digital stations in the subband 3620-3635 kHz was rendered a nullity," the League said. "This was clearly an oversight by the Commission at the time."

The FCC denied a subsequent ARRL *Petition for Reconsideration* seeking a partial stay of the new rules affecting 80/75 meters. Instead, the Commission replaced the inadvertently deleted 3620-3635 kHz ACDS segment with 3585-3600 kHz.

"Far from fixing the problem created by the error in the Omnibus *R&O*, the moving of the inadvertently deleted digital subband downward in frequency below 3600 kHz made the situation in the 80 meter RTTY/data subband even worse than it was," the ARRL said. The result has been a shortfall in available RTTY/data spectrum at 80 meters.

"ARRL has analyzed the regulatory limitations as part of a comprehensive effort to make more efficient the use of those HF allocations, especially with respect to encouraging further experimentation and proficiency in narrowband digital communications technologies," the League said in concluding its *Petition*. "The recommendations for modified band plans developed by ARRL necessitate the few, but important regulatory changes proposed."

VP8SGI Updates

Intrepid DX Group via EA5RM

February 1st — Today, they had a windy day, 60 knots, and some antennas have fallen down but they were able to fix afterwards. VP8SGI manager, KU9C, will not be able to change logs at this time. If your QSO is not in the VP8SGI log, work them again. In case you have not been able to repeat missing QSO, feel free to contact KU9C at vp8sgi_logresearch@yahoo.com for log inquiries after VP8SGI goes QRT.

January 31st — Today, Chief Pilot EA5RM informs that VP8SGI team were running 6 stations at the same time. Paul N6PSE describes South Georgia Is. as an amazing, very beautiful, windy and cold place. They are surrounded by Penguins and young Seal pups. Check their [website](#) for additional photos.

First Top Band QSO were not easy due CQWW Contest past night. Tonight they will be once again on 160 meters. Their phased verticals seem to work very well. Special effort will be done on Low Bands.

20SSB laptop was running out of time yesterday. Problem was located and they were working on this issue today.

The Intrepid DX Group VP8 team send you their best wishes from Husvik Bay, South Georgia Islands.

January 30th — Chief Pilot EA5RM informs that VP8SGI is running with five stations at the same time. Good reports are coming from EU and NA after first operation day. They are going to keep the five stations on the air as much as possible. Biggest problem for them today are the out of turn calls coming especially from EU and NA, so please, lets help them to run the pile-up. Tonight they will be QRV on 160 meters outside CQWW Contest.

January 29th — Shortly after 15:00z VP8SGI started operations from Husvik, South Georgia on 15m CW, then 17 SSB.

Meanwhile, the full VP8STI log has been [uploaded to Club Log](#). OQRS has been turned on. If anyone has a log enquiry, Bob N2OO asks that you hold off until this Monday, February 1 since he will be participating in the CQWW 160 CW Contest (from W2GD) this weekend and would appreciate if his email is kept clear until Monday. Any log inquiries should be send to vp8sti_logresearch@yahoo.com. Non-log issues can continue to go to his regular email address.



DX News Briefs



The Radio Club Argentino (RCA) proudly announces to all radio amateurs that it will be operating from Carlini Base, **South Shetland Islands (AN-010)**, during February. Our goal is to make as many contacts as possible with all hams worldwide. Departure is scheduled on February 14th. Activity will start next day and will last until early March, with two HF stations covering 80m to 10m SSB and CW. A third rig will be in standby mode for band openings in 6m. Operators will be Marcelo LU1AET and Carlos LU1BCE. — RCA, DX World

AF1Y will be QRV as **T88MZ** between 3—5 February 3-5 during his spare time, HF bands. QSL via DU1CK — AF1Y

JA0JHQ will QRV as **JD1BOW** between 13—22 February, 160 – 6m CW & Digi. QSL via JA0JHQ — DX World

A group of German operators will be QRV as **4S7GWG** and **4S7RTG** 2—18 March. QRV on HF, CW SSB & RTTY. QSL 4S7GWG via DL2AWG. 4S7RTG via DL7VEE. More information at <http://4s.mydx.de/> — DX World

4X6TT will be QRV as **4X429DS** from "The Earth's Lowest Elevation On Land Ever" at 429 Meters Below Sea Level (The Dead Sea) between 3—6 March. Activity will be on all bands and modes. A very special award will be awarded to each station that has confirmed him on 3 bands (any Mode). QSL via N4GNN — 4X6TT, OPDX

JP1RIW & DL2KUH will be QRV as **T88KH** and **T88KU** between 17—21 March. QSL T88KH via JP1RIW, DL2KUH via T88KU — DX World

DF8AN will be QRV as **CN2AY** 25—29 March, 160—6 meters, mainly CW. He will be testing antennas for his **9M0S** op (see below) and would like 'real' signal reports. QSL via DF8AN, no eQSL or LotW — DF8AN, OPDX

W1CDC will be QRV as **8R1A** 11—24 April 11-24, holiday style on 80-10 meters, including the 30/17/12m bands, using CW mainly. There will be SSB on the local Caribbean nets. QSL via W1CDC — W1CDC, OPDX

A team of UK operators will be QRV as **A25UK** 13-18 April, 160-10m, CW/SSB/RTTY. Logs uploaded daily to Club Log. QSL via M0OXO. More information on their [Website](#) — M0OXO

DF8AN, will be QRV as **9M0S** from Layang Layang Island (AS-051) 19—29 April 19-29, 160-6 meters using mainly CW. QSL via DF8AN, no eQSL or LoTW. For more details at <https://www.facebook.com/groups/227645770903070/?fref=nf> — DF8AN, OPDX

A group of Brazilian operators will be QRV from **Batuta Island SA-088** as **ZX5B** between 21 - 24 April 21-24, QRV on 40 – 6m CW, SSB & RTTY. QSL via PP5BZ — PP5BZ

IZ4DPV will be QRV as **D4C** during the ARRL DX SSB contest, 5—6 March, from Sao Vicente Island (AF-086). QSL via HB9DUR direct or via the buro — IZ4DPV, OPDX

QSL Routes

4J90UD via DL6KVA – KB8NW	OP1A via ON6UQ – KB8NW
4KRA29 via 4K4K – KB8NW	OT5A via ON7LR – KB8NW
4V1TL via W3HNN – KB8NW	P40MM via DL2RMM – KB8NW
8Q7HW via DK1HW – KB8NW	R1943S via RZ4AWB – KB8NW
8R1A via W1CDC – W1CDC	R1LK via RV1AQ – KB8NW
A25UK via M0OXO – KB8NW	RJ7A via RA9YA – KB8NW
A35T via M0URX – KB8NW	T48K via DK1WI – KB8NW
BG5VSD/IK7YTT via EA5GL	T88SA via WB5GSA – KB8NW
CN8AY via DF8AN – KB8NW	TM1A via F6KOP – KB8NW
D4C via HB9DUR – IZ4DPV	TM39PVJ via F8GGZ – KB8NW
DQ200RHH via DF7PN – KB8NW	TO66R via F6HMQ – KB8NW
EY8MM via K1BV – KB3NW	V47JR via W2APF – W2APF
HC1WDt via W0OR – W0OR	VP8SGI via KU9C – KB8NW
II8FC via IZ8XJJ – KB8NW	VP8STI via N2OO – KB8NW
OO5C via ON5HC – KB8NW	YO2016BALKAN via YO3KAA

Thanks to the NJDXA DX News & DX Chat Reflectors, the DX-QSL Reflector, 425 DX News, OPDX News, DX World.Net, ICPO Bulletin, & ARRL DX Bulletin for our DX News information. Thanks also to Bill Moore NC1L / 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!!

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Radio amateurs once were the target of interference complaints filed with the FCC. Now, the FCC has made it easier for hams to file their own RF interference and other complaints, thanks to a new feature of the FCC's recently redesigned [website](http://www.fcc.gov). The addition was made at the ARRL's request. Hams have always been able to file

such complaints, but when a new system geared largely to consumers came online a year ago, they lost the ability to do so via e-mail to a dedicated address. The change made it less clear how amateurs should file such complaints and what, if anything, would result.

Once on the FCC site, click "File a Consumer Complaint" on the right side of the screen. The next page lists several categories. Under "Radio," click on "File Complaint." This will take you to a web form that you can fill out. The form includes a dropdown menu for the "Radio Issues" field. Pick one, such as "Interference." This will bring down another menu. The "Your Radio Method" field includes another dropdown menu. Select "Amateur Radio." Complete the rest of the form. It is possible to add attachments. Click on "Submit" to file your complaint. As they say in those late-night TV ads, "It's that easy!"

The FCC e-mail addresses for submitting complaints have been discontinued; they had been rendered ineffective by spam.

Each complaint is assigned a ticket number, and complainants receive an e-mail acknowledgment and, if appropriate, a follow-up report on what was done to address the complaint. Many complaints are simply acknowledged, however, and the complainant is told that it will be used for statistical analysis. A complainant can update a complaint with additional information.

R & L Electronics has developed free screen savers that can help you study for your ham radio exam.

There are 3 different versions, one for each class of license. The screen savers will randomly flash a question, then the correct answer.

These can be downloaded at
www.randl.com/shop/catalog/screen.php



FCC News

Courtesy of the American Radio Relay League

Newington, CT, January 22nd, 2016 — New York Congressman Peter King has asked FCC Chairman Tom Wheeler to put some Enforcement Bureau heat on those interfering with various radio communication services, including Amateur Radio, in the New York City Metropolitan Area. While visiting Capitol Hill to promote the [Amateur Radio Parity Act](http://www.fcc.gov), ARRL Hudson Division Director Mike Lisenco N2YBB, and General Counsel Chris Imlay, W3KD, recently met with King, a Republican representing New York's 2nd District, to discuss the interference issue. King is among the original of the 118 cosponsors of the Amateur Radio Parity Act (H.R. 1301) in the US House.

"Rep King, a long-time supporter of Amateur Radio who is also very concerned about the malicious interference of licensed services, offered to send a letter to FCC Chairman Tom Wheeler on our behalf," Lisenco said. "Like many areas of the country, the Hudson Division has been plagued with malicious interference on our VHF and UHF repeaters for years. There has been no relief from the FCC, despite repeated pleas for remedy made by ARRL. All requests for help have consistently fallen on deaf ears."

In his January 15 [letter](http://www.fcc.gov) to Wheeler, King pointed out that while multiple perpetrators have been involved, the identity of the "ringleader" is well known to the Enforcement Bureau. He reiterated that the malicious interference had "been allowed to continue for too long," and he called for "timely and visible enforcement" to deter others.

"The Amateur Radio repeaters on Long Island that are rendered useless by this individual are used for emergency preparedness exercises and were used extensively in Hurricane Sandy disaster relief efforts," King told Wheeler. "This individual has been allowed to proceed without any apparent Commission enforcement for well over 2 years, despite repeated complaints from ARRL, NBC engineering staff, and at least two Long Island Amateur Radio clubs. NBC remote pickup units and public safety radio systems also have been troubled by malicious interference. In earlier correspondence with the FCC, King noted, he had expressed concerns regarding interference caused by "pirate radio operators" who impact public safety.

King said he realizes that FCC Enforcement Bureau resources are limited and that he appreciates the attention the Commission has paid to such issues as pirate radio investigations, but he asked for a tougher stance.

"[D]eliberate interference with public safety, broadcast program production, and Amateur Radio public service communications, such as what is exhibited in this case, must be swiftly and visibly addressed," King concluded.

Lisenco said King's willingness to cooperate in addressing the interference problem is "an indication that our legislative efforts are building a brand with legislators" that goes beyond any specific bill, such as the Amateur Radio Parity Act. "It underscores the importance of maintaining a presence in Washington through both our consultants and our own efforts," he said, "and it offers us avenues of redress that, until now, we were unable to access."

ARRL General Counsel Chris Imlay W3KD (left); Rep Pete King (R-NY), and ARRL Hudson Division Director Mike Lisenco N2YBB.
Photo courtesy of & ©Copyright 2016 the American Radio Relay League



Has Roadway found the tower yet?



WASHfest 2016

The South Hills Hamfest — Now in our **TWENTY FIRST** big year!

Sponsored by the WIRELESS ASSOCIATION OF SOUTH HILLS AMATEUR RADIO CLUB, INC.

Breakfast &
Lunch will
be available!

Sunday, February 28th, 2016
8:00 AM until 3:00 PM Rain or Shine (or Snow!)
Castle Shannon VFD Memorial Hall
3600 Library Road (State Route 88), Castle Shannon, PA
Talk-In on 146.955(-) and 443.650(+) 131.8 PL



(800) 545-8881

DXCC Card Checking Available!

Thanks Allen Carpenter W8OP



*FREE Coffee for the entire Hamfest
courtesy of HAM RADIO INSURANCE ASSOCIATES
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MAIN PRIZES — You've Got to Play to WIN!



- 1st Prize: Yaesu FT-991 100 W HF/6M Transceiver
- 2nd Prize: Yaesu FT-2900R 75 W 2M FM Transceiver
- 3rd Prize: West Mountain Radio ClearSpeech Speaker

Additional Hourly Door Prizes! Special Black Box Prize (Separate Drawing)!

Main Prize tickets are \$2.00 each, 3 for \$5.00, 7 for \$10, 15 for \$20

All Prizes Subject to last-minute changes

For Table Reservations, or More Information, Please Contact:

Carol Danko KB3GMN at (412) 884-1466 n3sbf@comcast.net

E-mail us directly at washarc@yahoo.com Check out our website too! www.n3sh.org

Please Note: Early Table Reservations must be paid in full on or before January 31st, 2016.

Reservations received after February 1st, 2016 must include payment in full.

Reserve now... we have sold out in advance six years running!

Hamfest Table Reservation Form—Please PRINT LEGIBLY ALL INFORMATION

Name: _____ Email: _____

Address: _____ Phone: () _____ - _____

City: _____ State: _____ Zip: _____

Call Sign: _____

Tables WITH Electricity: _____ X \$15.00 = _____

Tables WITHOUT Electricity: _____ X \$12.00 = _____

5 Or More Tables w/o: _____ X \$10.00 = _____

Please make all checks payable to:
WIRELESS ASSOCIATION OF SOUTH HILLS
PLEASE MAIL RESERVATION TO:
WASHfest 2016
c/o CAROL DANKO KB3GMN
4246 Seton Drive
Pittsburgh, PA 15227-1244

We reserve the right to resell any tables not occupied by 8 AM, unless prior arrangements have been made!



WIRELESS ASSOCIATION OF SOUTH HILLS, INC.

Membership Application, New or Renewal



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

(check quarter _____) →
(check one) ↓

	<input type="checkbox"/> 1st Qtr Jan-Mar	<input type="checkbox"/> 2nd Qtr Apr-Jun	<input type="checkbox"/> 3rd Qtr Jul-Sept	<input type="checkbox"/> 4th Qtr Oct-Dec
<input type="checkbox"/> (F1) Full Membership:	\$20.00	\$15.00	\$10.00	\$5.00
<input type="checkbox"/> (F2) Full Membership < 18 or > 65 yrs of age:	\$10.00	\$7.50	\$5.00	\$2.50
<input type="checkbox"/> (A1) Associate Membership:	\$10.00	\$7.50	\$5.00	\$2.50

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

Name(s): _____

Name: _____

Address: _____

City, State: _____

Home Phone: _____

Email Address: _____

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]

Signature: _____

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



Join the American Radio Relay League or Renew Your Membership through the WIRELESS ASSOCIATION OF SOUTH HILLS, INC.

Members of the [WIRELESS ASSOCIATION OF SOUTH HILLS](#) can start a new membership or renew an existing membership in the American Radio Relay League, the National Organization of Radio Amateurs, through the club.
Benefits for you: Joining and participating in everything the League has to offer, including a QST subscription.
Benefits for the club: A few more shekels for our coffers.

Just fill out the form below, include a check or money order made out to WASH/ARRL, and return all 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

Name: _____

Address: _____

City, State, ZIP: _____

Please Check the Appropriate One-Year Rate:

- ☐ \$49 in US
☐ Age 21 or younger, \$20 in US (only if you are the oldest licensed amateur in your household)
☐ Canada \$49
☐ Elsewhere \$62
☐ Other (including Blind, Life, QST by First Class Postage — please contact ARRL for rate)

Dues subject to change without notice

Call Sign: _____

Date of Birth: _____

Total Enclosed: \$ _____

☐ Additional Family Members at the same address (\$8 per family member)

Name & Call Sign: _____

Name & Call Sign: _____

Name & Call Sign: _____



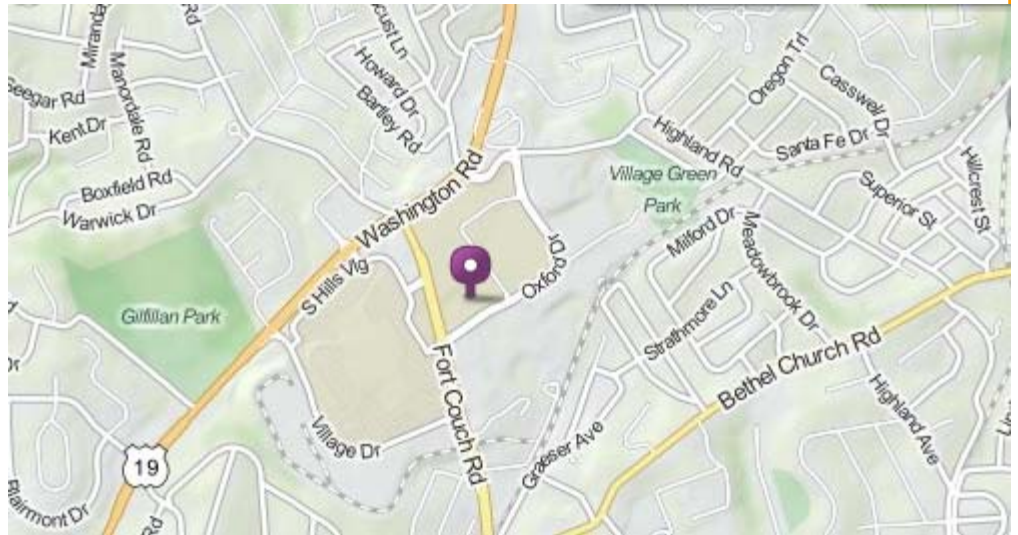
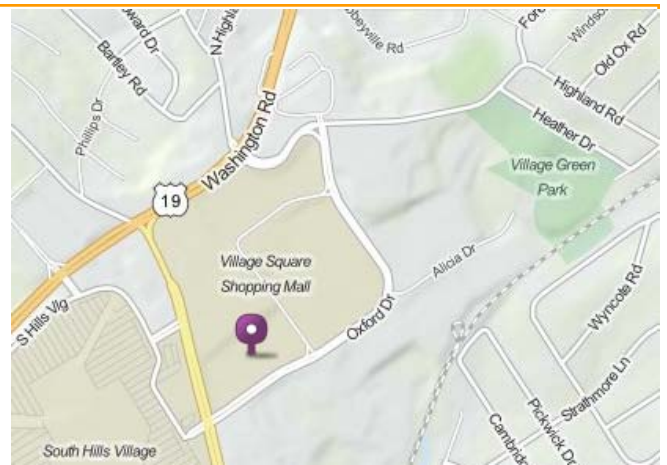
2016 WASH Meeting

Location

St. Clair Hospital Outpatient Center Conference Room

2000 Oxford Drive, Bethel Park PA 15102

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



The WASHRag

Wireless Association of South Hills, Inc.

Ron Notarius W3WN, Editor

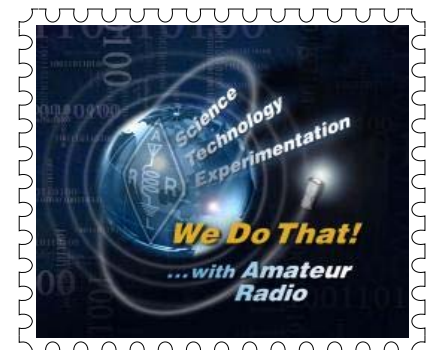
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NP2SH/B

www.n3sh.org
www.washarc.org



Now... you ARE
planning to be at
WASHFest 2016,
Aren't you?

