



WASHRAGTM



VOLUME 19 ISSUE 08
AUGUST 2017

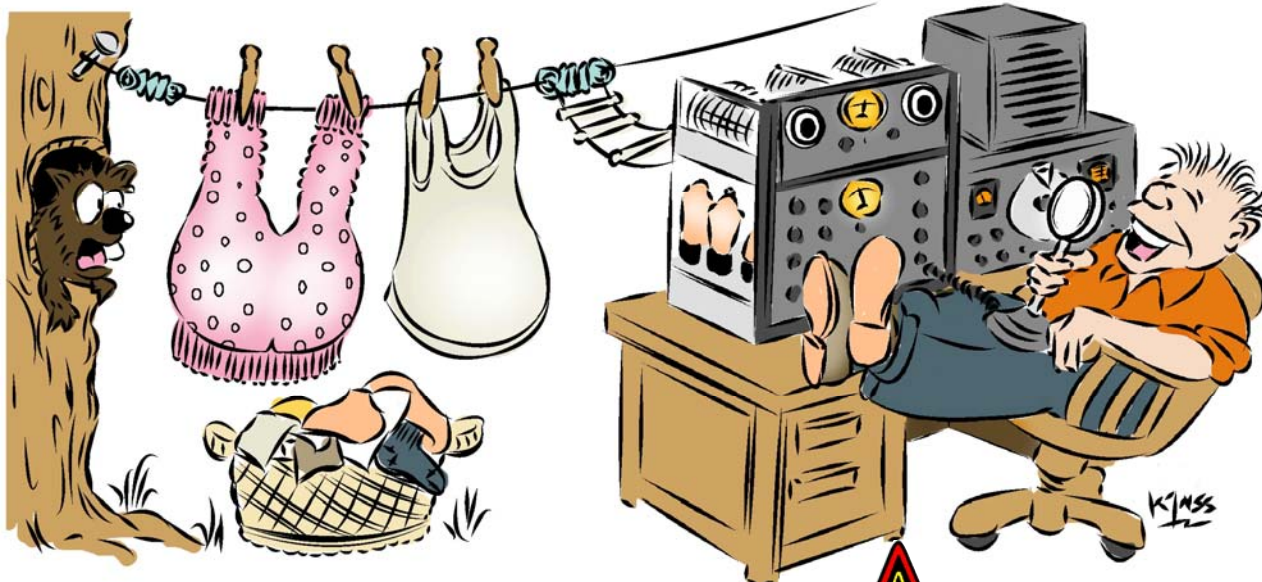
Amateur Radio Operators & Volunteers at the 2017 PVGP in Schenley Park

Wireless Association of South Hills



N3SH WA3SH NP2SH/B

www.n3sh.org www.washarc.org



WASH RAG™



VOLUME 19 ISSUE 08

AUGUST 2017

Next Monthly Meeting: Thursday, August 3rd, 2017

The next meeting of the **WIRELESS ASSOCIATION OF SOUTH HILLS, INC.** will be on **Thursday, August 3rd 2017**, 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.

Topics will include upcoming plans for the 2017 Pa QSO Party, upcoming hamfests and contests, Club plans for the Fall, other events, and more. See you there!

Cover Photos: Top: Vintage Race Cars Racing, as they go around Flag Corner 18 at the 2017 PVGP. Bottom: Amateur Radio Operators & Corner Flag Workers listening to Chief Safety Steward Barry Kaplan KB3GKT at the morning meeting. Photos courtesy of & © Copyright 2017 Ron Notarius W3WN

WASH 2017 OFFICERS

EXECUTIVE COMMITTEE:

President	Glen Roberts KE7FD
VP / Secretary	Harold Rosenberger K3HCR
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	Chuck Bihun KC3ELA
WASHfest 2018 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 2017 Coordinators	Rick Bell KB3IAC
	Bill Hill W3WH

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)**, a 501.C.3 not for profit organization.

Published Monthly with occasional Special Editions as warranted.

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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 October 19th

The Next WASH VE exam sessions will be **Thursday**, October 19th, 2017, 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 Liason 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: **WASHFest** 2018
February 25th, 2018

Glen's Musings



What a scorcher July was! Too hot for antenna work, just operating, if you're into that sort of thing. This brings up an interesting question:

What does Amateur Radio mean to you? You might be an avid tester, or a collector of rare DX QSL cards, leaning or sharpening your CW/digital/voice skills. Maybe it's tinkering with tech, antennas, or rag chewing, just to name a few things that bring us together. If we all had the same interest, there'd be a lot of folks among us who enjoy that one or two things but really no one else. A smaller group indeed than what we are today. Collectively we are like a seven course dinner:

1. Aperitif or some kind of finger food like pretzels, crackers or nuts.
2. Appetizer like the Aperitif, only there's more to it like Wings with Classic Buffalo Sauce, cheese
3. Salad, cheeses
4. Main Course
5. More cheese.
6. Dessert
7. Coffee, tea or a Grape Nehi

The feast is rich and abundant, diverse and satisfying. I really can't eat tomatoes or mushrooms so I pick around those when I encounter them (think Superman and Kryptonite).

So looking at the interests of WASH members, I see all the above but in a radio sense. We all don't enjoy the same things and might avoid some activities, but collectively we each bring something to the table that allows all to be satisfied if they partake. Along the same lines, if we invite and involve others unfamiliar to the feast of Amateur radio, they're bound to find something they enjoy too. In fact, just like you did once upon a time.

So don't be shy, invite others to your shack and offer them an aperitif or an appetizer.

— 73, Glen Roberts KE7FD

President, Wireless Association of South Hills, Inc. N3SH / WA3SH / NP2SH/b

Six tiny "Sprite" satellites, each consisting of a 4 gram circuit board packed with electronics, were dployed in late June. The Sprites are the brainchild of Zc Manchester KD2BHC, who was interviewed about them in a recent article in *Scientific American*. The Sprites were launched as secondary payloads from India, and went into Low Earth Orbit. Signals from at least one have been received on 437.325 MHz.

Saturday, July 29th was the midst of Summer for so many. Even so, some of the stalwarts of the **WASH Breakfast Gang** joined forces once more at **Suzie B's**, 950 South Central Avenue (Route 910 at the intersection of Route 519 at US 19) in Canonsburg. This month, those enjoying an early morning summer breeze included WB4GCS, N3FB, KB3GMU, N3IDH, KC3GMM, N3BPB and W3WN. Topics of the morning included working DXCC on the Software Defined Radio (SDR), laying the keel for the Ark, raining cats & dogs—and rhinoceroses, AMSAT Board ballots and elections, vertical antennas, thinking of Jack, KDKA digital, wearing black suits, North Korea, wondering "how different could WW2 have been?", 10 GHz tower-mounted transceivers, One Watt to a 30 dB dish, time to build the new rover box... and much more.

Our next gathering of the Gang will be on Saturday, August 26th, as usual at **Suzie B's**, 950 South Central Avenue (Route 910 at the intersection of Route 519 at US 19), Canonsburg, officially starting at **8:00 AM**. 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?

The July issue came out before **W3A Field Day** results were tabulated. We have them, and those are included on Page 7, along with some members comments, and some more photos too. Also, don't miss the article from WB4GCS discussing his SDR station on Page 8!

As you may have read last month, the **Steel City ARC** is going to be holding an **Open House** on (tentatively) August 13th. at their clubhouse in Collier Township near Settler's Cabin Park. All **WASH** members have been invited to stop by (thanks to Carol KB3GMN).

Ye Editor sends his regrets that we don't have the "usual" page of snapshots from the last meeting, as a family matter called him out of town at the last moment. So we substituted some **candid snapshots from the PVGP**. Did you know that not only was 2017 the 35th Year for the PVGP in Schenley Park (starting as a modest one day event), but that Amateur Radio Operators have been involved since day one — and even before, during the initial planning for the event? That's quite a track record for ANY public-service related event... and they keep wanting us hams back, since we're considered part of the "family". Something to consider for next year, and years to come!

We're actually running out of space, so don't forget that we're only a few short months away from the **annual Pennsylvania QSO Party**! We hope to have more information about upcoming plans by **WASH** for the PaQP in the next few months.



Join WASH or Renew your Membership Today! Membership Application on Page 17

Minutes, July 7th Meeting

Glen Roberts KE7FD, President **WASH**

Glen KE7FD, called the meeting to order at 19:08 hours.

The Pledge of Allegiance was recited, followed by a moment of silence was observed for recent Silent Keys & others deserving, and then introductions.

Motion to waive reading of the minutes based on the minutes printed in the newsletter by Bob KC3DOF, second by Chuck KC3ELA, & passed unanimously.

Announcements:

- + Jim WB4GCS talked about upcoming EME activity
- + Rick KB3IAC talked about the possible 53 facility SET sometime next June. All healthcare facilities in SWPA could potentially be involved; Rick stated that 50 sites were expected to be.

Business: Frank N3FB presented an electric bill for the repeater for \$21.10. Motion to pay the bill passed unanimously.

Committee reports:

Treasurer (N3RDV): Report read and accepted.

Mark requested a motion to file the 2016 tax returns for the club, and electronically sign for the club officers; also to authorize an extension if necessary. Motion by Ron W3WN, second by Carol KB3GMN, passed unanimously.

Secretary (KB3ERQ): No Report

VE (W3WN): Next test session July 20th. We have two candidates preregistered for July. Dates for the rest of 2017 now confirmed October 19th, all at 7 PM at the WPXI Community Room. Thanks again to Frank N3FB for making the arrangements.

Repeaters (N3FB): Repeating.

WASHNet (KC3ELA): No report

N3SH.ORG (N3NWR): No report

Public Service (AB3ED): PVGP in Schenley Park July 15th & 16th, please let Corky N3MJP know if you can help out.

Contests (K3VX): No Report

Ways & Means (KB3GMN): No Membership Contributions will be accepted tonight.

Newsletter (W3WN): Out.

Good of the Order:

BSA JOTA will be October 19th & 20th; does the club wish to formally get involved?

Do we have any interest in becoming involved again with AAAP's Star Parties at their observatory in Mingo Creek Park?

Motion to Adjourn by Bob KC3DOF, second by Chuck KC3ELA, and carried unanimously.

Meeting adjourned at 20:09

WASH Spotlight: VE Exam



We had three candidates for the July 20th WASH ARRL VEC Exam Session at the WPXI Community Room. All three candidates were successful!

Please join us in congratulating new upgrade General Robert Adams KC3IRF (center), and new licensees & Technicians Eric Clinger KC3JOQ (left) and Curtis Bowers KC3JOR (right)!

Our thanks as always to the VE's who were able to donate their time for the test session... Frank Bobro N3FB, Rich Danko N3SBF and Ron Notarius W3WN. As always, our thanks to WPXI for their generous permission for our use of their Community Room for the exams!

Our next ARRL VEC Exam Session will be on Thursday, October 19th, 2017

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.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 & 443.659 for talk-in or any last minute changes. All are welcome, **WASH** members or not, amateurs or not!

Wireless Association of South Hills Membership

AA3GM	KB3JHR	N3RIY	WASH FL	WASH TN	Silent Keys
AB3ED	KB3ORO	N3SBF	KA3UPY/M	K3OL	
AB3NM	KB3YCX	N3TDV	W4ZE	KE3XB	AB3KA
AE3DL	KC3DOF	N3UE	WASH NE	N3YPB	K3EED
AK3RG	KC3ELA	N3YQX	N0PEU	WASH TX	K3LIE
K3HCR	KC3HNU	NU3Q	WASH OR	NB3C	KA3NMG
K3SGT	KC3IRH	W3LE	N0VLR	K3LGM	KB3ENX
K3VX	KE7FD	W3WH	N0WVP	KB3JX	KB3FNM
KA3TWI	N1NCZ	W3WN	KB3NVL	Jane Wagner	KB3FQT
KA3VXM	N3DFK	W8LEV	KB3NVM	WASH VI	KB3JHQ
KB3DCO	N3FB	WA3PYU	WASH OH	NP2JF	N3CZZ
KB3GMN	N3IDH	WA3VSS	N8DPW		N3FZ
KB3GMU	N3JFQ	WO3Z			N3HKQ
KB3IAC	N3RDV				N3KEH
KB3IVX	N3RHT				N3OBD

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

Through July 2nd, 2017

List compiled by

Mark Stabryla N3RDV, Vice President/Treasurer

WA3JPP

From the WASHRag Archives:

How many do you recognize?



Photo taken at Field Day 1997, at Bob Sanford AA3FI's QTH in Hickory, PA

2017-18 WASH Upcoming Events Calendar

Club Meetings & Other Significant Events — Subject to Change

August 3 rd	<i>WASH</i> Meeting	St. Clair Hospital Outpatient Center, 2000 Oxford Drive, Bethel Park
August 5 th	Allegheny County ARES Picnic	Aspinwall Fireman's Memorial Park
August 13 th	Steel City ARC Open House	208 McMichael Road, Collier
August 26 th —28 th	Hawai'i QSO Party	http://www.hawaiiqsoparty.org/
September 7 th	<i>WASH</i> Meeting	St. Clair Hospital Outpatient Center, 2000 Oxford Drive, Bethel Park
September 10 th	Butler Co ARA Swapfest	Unionville Fire Hall, Butler PA
October 5 th	<i>WASH</i> Meeting	St. Clair Hospital Outpatient Center, 2000 Oxford Drive, Bethel Park
October 7 th —8 th	California QSO Party	http://www.cqp.org
October 14 th —15 th	Pennsylvania QSO Party	http://www.nittany-arc.net
October 19 th	<i>WASH</i> VE Exams	WPXI Community Room, 4145 Evergreen Road, Pittsburgh PA
October 28 th —29 th	CQ WW DX Contest SSB	http://www.cqww.com
November 2 nd	<i>WASH</i> Meeting	St. Clair Hospital Outpatient Center, 2000 Oxford Drive, Bethel Park
November 4 th —6 th	ARRL Sweepstakes CW	http://www.arrl.org
November 5 th	WACOM Hamfest	Washington County Fairgrounds
November 18 th —20 th	ARRL Sweepstakes SSB	http://www.arrl.org
December 1 st —3 rd	ARRL 160 Meter Contest	http://www.arrl.org
December 7 th	<i>WASH</i> Meeting	St. Clair Hospital Outpatient Center, 2000 Oxford Drive, Bethel Park
December 9 th —10 th	ARRL 10 Meter Contest	http://www.arrl.org
December 30 th —31 st	Stew Perry Topband Challenge	http://www.kkn.net/stew
January 1 st , 2018	Straight Key Night	http://www.arrl.org
January 13 th , 2018	<i>WASH</i> 2 Meter Simplex Contest	http://www.n3sh.org

"Seen" at the 2017 PVGP

Photos Courtesy of and © Copyright 2017 Ron Notarius W3WN



W3A Field Day 2017 — Saturday Evening

Photos courtesy of and © Copyright 2017 Glen Roberts KE7FD

Field Day Totals:

W3A: CW	533
Digital:	64
Phone:	296
Total QSO Points:	1490
N3SH (GOTA): CW:	107
Digital:	2
Phone:	13
Total QSO Points:	231



Total QSOs for Both Stations: 1015

— Larry Comden K3VX

2017 Field Day is in the history books!

Despite some rough spots along the way we managed to rack up over 1000 Q's, a new best for **WASH**. After Friday's abysmal weather, we enjoyed two pristine days for the annual effort. Special thanks to all those(you know who you are) who contributed a bit of extra effort to make the weekend a success.

Thanks again to all who participated and contributed to all those contacts.

— 73, Bill Hill W3WH, Field Day Co chairman

I would like to thank all for a very nice time.

Good food, good friends, and a lot of contacts! What more could you ask for, except good weather, which we had!

This club always makes me proud. A job well done!

— 73, Carol Danko KB3GMN

I had a ball at Field Day!

— 73, Jim Sanford WB4GCS

ARRL Proposed Band Plan for 630 Meter Usage

American Radio Relay League

Newington, CT, July 6th, 2017 — [ARRL 630-Meter Experiment](#) Coordinator Fritz Raab W1FR, has proposed an informal band plan for the pending 472-479 kHz band. Raab said that once US radio amateurs are granted access to 630 meters, he would move stations operating under the blanket WD2XSH FCC Experimental (Part 5) license to 461-472 kHz.

"This will clear the amateur frequencies, while allowing the experimenters to run unattended propagation beacons without using the limited bandwidth that will be available to amateurs," Raab explained in his spring 630-Meter Experiment Project Status quarterly report. "The new 630-meter band will have a very limited amount of spectrum (7 kHz)."

On March 28th, the FCC [adopted rules](#) that will allow secondary Amateur Radio access to 472-479 kHz and to 135.7-137.8 kHz (2,200 meters), with minor conditions. One of these involves a requirement to notify the Utilities Telecoms Council (UTC) of proposed Amateur Radio operation on either new band. The FCC says the Office of Management and Budget (under the Paperwork Reduction Act) must first approve the information-collection requirements in §97.303(g)(2). Procedures to meet the requirements are said to be still under development by UTC, which says it wants to avoid Amateur Radio interference to power line communication (PLC) systems used to manage the electrical power grid. No such interference has been reported during the extensive Experimental operation on 630 meters as well as on 2,200 meters.

Raab and LF/VLF enthusiast John Langridge, KB5NJD, prepared the 630-meter band plan "based upon established patterns, separates different modes of operation, and harmonizes US amateur operations with those in Europe." The plan, which has not been endorsed or adopted by ARRL, calls for using only narrow-band modes — with bandwidths of 150 Hz or less — during nighttime operation. Modes such as AM, SSB, and MCW would not be used at night except during special events, under the plan, but in the event a "wideband" mode were necessary, the signal should be confined to between 476 and 479 kHz.

The plan also suggests operating frequencies for WSPR and JT9, as well as for QRSS (very slow-speed CW).



Continued on page 14

Impressions of Software Defined Radio at Field Day 2017

James A. Sanford, PE WB4GCS

I'm sure that all of you are well too aware of my interest in software defined radio (SDR). When I first got into it, the best high performance kit available was the HPSDR from TAPR. It consists of a backplane (4-layer board very carefully designed for controlled impedance and group delay on the data bus) and separate interface, exciter and receiver boards. The initial interface used two cards to emulate a high performance USB sound card; a newer interface uses ethernet to connect to the computer. Additional cards available are low pass filters and a GPS-stabilized (or compared) frequency reference with a TCXO good to 1 Hz at 10 MHz over its complete temperature range. I have been acquiring pieces parts and spares over the years. The original design has been ported to several single-board versions using larger FPGAs, which allow some advanced features that I don't have, but I've stayed with what I have and that for which I have spare parts.

I've also been acquiring something called UHFSDR, which is a bit lower performance, covering 10 to 700 MHz. More about the IF for the microwave stack in another article.

A year-and-a-half or so ago, I had the opportunity to buy a complete unit from one of the original developers. I jumped on it, both to give me a complete unit to play with now and to have a working model/prototype for assembling my other SDR. I have watched the software evolve; within the last few months some updates have been issued that are absolutely fabulous. AGC unmatched by anything except maybe the Drake TR-4, after which it was modeled – but if I'm smart (stupid!) enough to want to meddle, I can. Noise reduction better than anything I've ever seen. Impulse noise reduction to beat the band. The most recent version moves an entire studio of high-end audio processing into the software transmit audio channel; tweaking this and seeing the incremental improvements in transmit audio was a blast.

Since the SDR works by taking many samples into a buffer and then processing (at some cost in latency), when a noise burst occurs, it has before and after samples. It uses those to not just blank the noise, but to reconstruct what *would have been* heard. It does this very well. The noise reduction modes use various mathematical techniques to separate signals which correlate (voice, CW tone) from random signals (noise) that do not correlate, and then delete the noise. There are multiple modes of noise reduction to use based on the situation at hand; all are effective.

The significance of the above paragraphs cannot be overstated. I walked away from HF in favor of the microwaves long ago, because I like to tinker and build things. This SDR receiver sounds so good, that I enjoy just listening to it. Since I can't get WJPA very well in the basement, when I'm down here working, I often put on 40 or 75 meters and just listen to QSOs. The noise blanker and noise reduction modes make HF SSB sound almost like FM, albeit with narrower audio frequency response. Speaking of which, the software filters are very sharp and have no ringing. This thing is a joy to listen to.

I demonstrated the receive performance to Frank one evening, and he got bit and now has one very much like mine.

I have been making QSOs on this for over a year, and have been [eager](#) to try it in a stressful contest like field day. Part of my eagerness was CW performance. Bill W3WH, tried an SDR some time ago, and as I understand it, was disappointed with CW performance due to latency in the software. As already mentioned, one feature of the current firmware and software is that all CW processing has been moved from software into the FPGA, virtually eliminating latency, so I have been eager to see Bill's reaction to this radio.

I brought it out to Field Day and Frank brought his. I put mine on the air, after enduring hits about the "beast" of a gaming computer my son gave me when I asked him to spec out a high performance platform for SDR. ("I like big cases!" "Yeah, but the size of a NIMITZ-class aircraft carrier??") Frank had a great Saturday interfacing his SDR to the N1MM logging software that he likes. In his spare time, he configured my SDR to talk directly to the second Ethernet connection on the "beast", so all my SDR traffic was off the logging network. Thanks, Frank!

I set up 2 monitors, one for SDR and one for the logging software. To make things simpler and hopefully reliable, I gave MFJ another chance after a 20 year hiatus, and bought their MFJ-929 200 watt auto-tuner. After getting everything set up, I made a few SSB contacts. Everything seemed to work. Then I tried CW, since I had pre-programmed the CW memory keyer. I had a [ball](#)! Between Saturday afternoon and Sunday morning, I made over 100 CW contacts according to a quick review of the logs. The club aggregate for CW was over 600 CW contacts; Larry told me that's the best WASH has ever done. I was very pleased with the noise reduction, impulse elimination, and sharp filters of this rig. I developed an algorithm using ALT-TAB to bounce between tuning the SDR with the mouse wheel and typing into the log program. The highest QSO rate I saw among the CW station, the digital station, the phone station and myself was 140/hour over the previous 60 minutes. Exciting!!

A secondary objective was to get feedback on this thing from the clubs *real* CW operators. Larry, Bill, and Ron all spent a few minutes in the SDR seat. All liked the performance of the radio, but all had difficulty with the user interface. Admittedly, I've had at least 2 years to get familiar with it, and as it was, had to develop some processes on the fly. Ron made a very good comment, operating this rig might be best with one operator familiar with the SDR and another CW operator logging. I think that's a good plan. I survived as a hunt-and-pounce operation; Ron is right, I am not sure that I would have done so well as a run station.

I have acquired a USB tuning "knob" that I need to configure and install. I've read that it nicely restores the functionality of the "big knob" of traditional radios; the programmable buttons are highly regarded. More on this after I get it installed and some run time on it.

I would still like to get Bill, Ron, or Larry over here to make some CW +Q's with this rig and get their impressions.

So, my take-aways from this year's Field Day:

- + I love my SDR!
- + I had a [ball](#) on CW!
- + I had a [ball](#) at Field Day overall!
- + I think we had a higher average station utilization than I've seen in the past, which I was glad to see.

Another great N3SH Field Day!

Looking forward to EME and next Field Day!



WB4GCS SDR gear
on the left
N3FB SDR gear &
laptop on the right



Jim WB4GCS operating the SDR station

ARRL Announces Significant Changes to Contest Rules for the 2017-18 Contest Season

On July 26th, 2017, ARRL Contest Branch Manager Bart Jahnke W9JJ sent an email to the "CQ-Contest" email reflector announcing 'a few changes to reflect current "best practices" in the contest community and help us improve the quality of the competition and reporting of results.'

No prior public discussions appear to have been held prior to these changes. Nor is it clear that all of these changes actually represent "best practices"; although some have been adopted over recent years by many major and regional contests, they have also been controversial and not universally accepted.

According to the email, the changes (which are not proposed, but have already been put into effect) include:

- + Increased focus on online log submissions via web app as we phase out email Robots.
- + Shortening log submission deadlines to help get the log data into log checking more quickly.
- + Encouraging in HF competition that logs use 1 kHz accuracy for improved log checking.
- + Making all logs public, once the contest results are made public.
- + Club Competition (discussion of past seasons updates and improvements).
- + Remote-Controlled-Station contest entries.

Additional changes include:

- + The announcement that paper logs will continue to be accepted, but will only be eligible for awards at the discretion of the Contest Branch Manager; and that operators of remote stations located in the US or it's possessions MUST have an FCC issued license
- + Sufficient privileges for all operation. CEPT will not be sufficient for remote control purposes.
- + Maintaining two or more frequencies to solicit contacts (i.e., "run") on the same band and mode is prohibited

The practical effects of some of these changes are significant.

- + "Logs that use 1 kHz accuracy" implies that any operator using an older radio that does not have a computer interface either must log by hand the exact frequency, or spend what could be significant amounts of money to purchase a replacement radio that does — even though the older radio itself is as good or better, on the air, than what could be purchased.
- + Making "all logs public" mandatory, without option to decline and regardless of the wishes or personal privacy concerns of the operator or station owner, may be a violation of state or federal laws regarding privacy and disclosure of personal information.
- + Current log deadlines are 2 weeks. The new deadline is 5 days. There are legitimate concerns from those who might be travelling (especially to DX locations for international contests) that they would have insufficient time to oversee and submit logs prior to the deadlines, especially when they are travelling to areas of the world with limited or non-existent Internet access.
- + Making the acceptance for awards purposes of paper logs subject to the discretion of the Contest Branch Manager implies that a potential 'winning' log, at any level, could be considered 'non accepted' for any reason or whim of the CBM. In past years, there were often accusations of 'favoritism' (some unfounded, but some legitimate) by past CBM's, and this 'discretion' opens the door for future accusations of the same.
- + A strict interpretation of the new rule to prohibit 'maintaining two or more frequencies' as written would prohibit working 'split', which is still a very necessary requirement during HF SSB contests on 40 and 80 meters. Many parts of the world do not permit SSB operation where it overlaps with the US "Phone Subband", or the overlap does not include frequencies available to some (General) operators. As written, this rule would potentially have a devastating impact for many operators, if strictly enforced.

Since the announcement was made, the changes have been posted to the ARRL web site, and will also be in the September 2017 issue of QST. It was also published in the July 27th copy of the electronic ARRL Letter. They can be found at <http://www.arrl.org/arrl-contests-changes-for-2017-2018> and [http://www.arrl.org/files/file/Contest%20Operating%20Guides/2017/ARRL-Contest-Changes-for-2017-2018-\(Sept-QST-2017-p91\).pdf](http://www.arrl.org/files/file/Contest%20Operating%20Guides/2017/ARRL-Contest-Changes-for-2017-2018-(Sept-QST-2017-p91).pdf)

At the conclusion of the email announcement, Mr. Jahnke asked that anyone with questions feel free to contact him. Multiple amateurs have, both directly and via the CQ-CONTEST email reflector. As of deadline, no one reports receiving any replies to any questions or concerns.

— Ron Notarius W3WN

Space: The Final Frontier

Richard Carpenter AA4OO

I was listening to CW stations tonight through my SDR having extended QSOs on 40m between 7015 and 7035 kHz. There seemed to be a good number of stations sending between 24 wpm and 28 wpm, maybe a bit faster. The signals were strong and I had good signal to noise on most of the conversations. 24- 28 wpm is generally faster than I'm able to comfortably copy but I use these listening sessions to improve my head copy skills.

As I listened I realized that I could copy some stations nearly 100% while with others sending at about the same speed I just could not head copy no matter how hard I concentrated. One particular QSO had two stations operating at the same speed and about the same SNR. I'd guess they were operating about 25 wpm. One of the stations I copied easily without thinking much about it while the other I just caught a word here or there. The difference was their space between words. Not necessarily space between characters but between the words. I started paying closer attention to the station I could copy clearly and I could count about a one second pause between each of his words. The other station was running one word into the next.

Then I started switching back and forth between a number of QSOs and I recognized that my comprehension was very dependent on word spacing. I could even copy bug operators who had their DITS flying over 30 wpm with 20 wpm spaces clearly as long as they paused between words.

Silence is golden

The artist Sting is a famous bass player. In an interview in 2000 Sting said: *For me, the sound is only half of music - the space between the notes is also vitally important...*

Is space the final frontier in being able to copy CW? Why is it that some CW operators, and I'll venture to say most CW operators don't put adequate space between their words. CW is not a fast mode of communication so why not give each word the importance it deserves? Why be in a rush?

I'm going to strive to put more space between my words in my next QSOs. It may just make copy for the other operator a bit easier and rather than them bailing on you after an exchange or two you may just chat away for an hour because they enjoy the solid comprehension of every word you send. If you work me and don't hear me putting an adequate pause between my words, call me out on it.

So lower your power, and pause before your next word, then raise your expectations



Silent Key

Jack Layton W9UK of McMurray, PA, became a Silent Key on July 14th. He was 76.

A mainstay of the 146.955 and 147.09 repeaters, one of the best CW operators on the bands, Jack was known to most of us for his knowledge of electronics and antennas, and in his professional life as a former Chief Engineer of KDKA and current broadcast consultant. Jack was also the author of many technical and historical books, most recently "Exploring the Mason Dixon Line: Walking in the Footsteps of History." What many of us may not have known was that Jack was also an ordained Deacon in the Roman Catholic Church, and until recently served at the St. Benedict the Abbot Parish in Peters Township.

Although never formally a member of **WASH**, over the years Jack came to many club events, spoke at several meetings as guest speaker, and one of the best N3SH Field Day CW operators. He was a member of several of the DX trips that Bill W3WH and Larry K3VX made, along with other friends and club members. He was a Friend of the Club.

Jack is survived by his wife, daughter, son and family members.

He will be missed.



Jack W9UK during the 2006 trip to Montserrat
Photo courtesy Larry Comden K3VX

ARRL President Issues Call for Members to Reach Out to their Senators to Support S. 1534

American Radio Relay League

Newington, CT, July 25th, 2017 — ARRL President Rick Roderick, K5UR, is calling on League members to urge their US Senators to support the [Amateur Radio Parity Act of 2017](#), S. 1534. ARRL has opened a [RallyCongress page](#) to simplify the task.

"[W]e are at a crossroad in our efforts to obtain passage of The Amateur Radio Parity Act," Roderick said. He said the campaign to secure passage of the bill scored a major victory earlier this year when H.R. 555 passed unanimously in the US House of Representatives. Obtaining passage of the companion Senate bill, S. 1534, is the final legislative hurdle.

"Now is the time for all hams to get involved in the process!" Roderick said. "Many of you already live in deed-restricted communities, and that number grows daily."

He urged radio amateurs now restricted by a Homeowners Association from installing effective outdoor antennas to visit the RallyCongress site and e-mail their two US Senators. He also encouraged those not now affected by deed covenants, conditions, and restrictions (CC&Rs) to support their fellow radio amateurs by doing the same.

"If you want to help create an opportunity — not available before now — for Amateurs who live in deed restricted communities to install effective outdoor antennas on property that they own or lease, send these e-mails today!" Roderick said. "We need you to reach out to your Senators today. Right away."

S. 1534 was introduced in the US Senate on July 12, marking another step forward for this landmark legislation. Senators Roger Wicker (R-MS) and Richard Blumenthal (D-CT) are the Senate sponsors. The measure will, for the first time, guarantee all radio amateurs living in deed-restricted communities governed by a Homeowners Association (HOA) or subject to any private land-use regulations, the right to erect and maintain effective outdoor antennas at their homes, while protecting the aesthetic concerns of HOAs.



Motorola Files Additional Patent Infringement Complaints Against Hytera

American Radio Relay League

Newington, CT, July 25th, 2017 — Motorola Solutions this week ratcheted up its legal battle with competitor Hytera, filing new patent infringement [complaints](#) in Germany against both Hytera Communications Corporation Ltd of Shenzhen, China, and Hytera Mobilfunk of Bad Münden, Germany. The latest legal actions, announced on June 24, are in addition to Motorola's previously filed patent infringement complaints in Germany.

"With these additional patent infringement actions in Germany, Motorola Solutions now has five pending [patent infringement] litigations against Hytera," Motorola said in a news release. These include complaints filed with the US International Trade Commission and separate patent infringement and trade secret misappropriation complaints filed last March in the US District Court for the Northern District of Illinois.

The complaints filed this week in Germany assert that Hytera's two-way wireless communication devices with improved squelch functionality infringe on a Motorola Solutions patent. Motorola says the focus of the new cases differs from earlier cases and represents the second patent covering acoustic performance of two-way radio devices.

Already known for its Land Mobile Radio Service products, Hytera entered the Amateur Radio digital mobile radio (DMR) market last year.

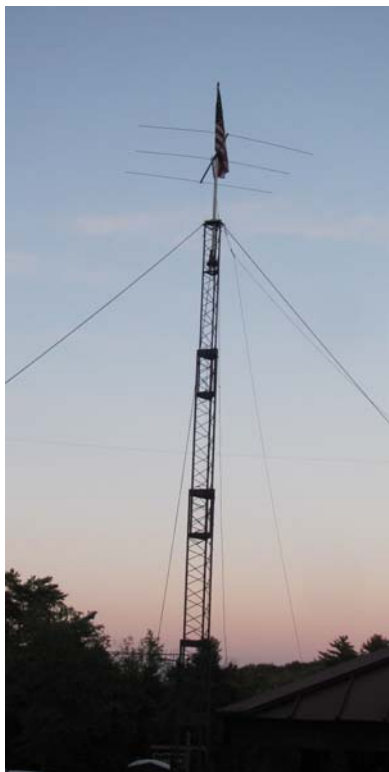
In its latest suit, Motorola is seeking an injunction preventing Hytera from offering and delivering products with the acoustic squelch feature in Germany, as well as the recall and destruction of infringing products and various unspecified damages.

Last March Motorola alleged in its US District Court complaint that proprietary and patented information was taken illegally by three former company engineers who now work for Hytera, and that this was done as "part of a deliberate scheme to steal and copy" Motorola's technology. Motorola contended that its digital radio products were rendering Hytera's analog systems obsolete, and rather than develop its own digital products, Hytera stole Motorola's ideas. Motorola said technology features it developed started showing up in Hytera products soon after Hytera began hiring engineers who had left Motorola in 2008, according to the earlier lawsuit.

Hytera offered no immediate comment on the latest court actions by Motorola.



MOTOROLA
SOLUTIONS



The Tower Trailer, Saturday
Dusk, W3A Field Day 2017

WPA Section News

Joe Shupienis W3BC, ARRL Western Pennsylvania Section Manager

Falls Creek, PA, July 14th, 2017 — **Hamfest Season is here!**



It is now the middle of the Hamfest Season. Take some time to get out and show your support of at least one local hamfest this year. Our section staff has been to several very good ones this year, and the turnout is very encouraging. Vendors have been very generous in supplying hourly and main prizes to the WPA hamfests, and your help in keeping the attendance up will go a long way to making the future of WPA hamfests a good one!

We try to announce all the hamfests on the Section Website Events Page, which can be found at <http://wpa-arrrl.org/wpa-events-calendar/> and includes maps and information.

Free ARRL Gifts! If you join or renew your ARRL Membership with us at a hamfest, you qualify for a special, hamfest-only gift. You may choose one of the following ARRL Publications to be shipped for free to your QST mailing address. Even if your membership doesn't expire this year, your renewal will be added onto your current membership, and you get a valuable ARRL book for FREE!

- + ARRL's Portable Antenna Classics
- + ARRL's Portable Antenna Classics
- + Small Antennas for Small Spaces 2nd Edition
- + Even More Wire Antenna Classics Volume 3
- + Get on the Air with HF Digital

Announcing: 2017 District Meeting Schedule:

Our WPA Section Staff are putting together a series of District Meetings for ARES leaders, Club officers and other interested amateurs in each of our four Districts. These meetings will last 4-5 hours and will cover updates on ARRL activities, VE test procedure updates, Club activity workshops and upcoming Section Events such as JOTA and the SET.

All ECs and other Field Organization appointees, Club Officers and all interested Radio Amateurs are encouraged to attend the meeting in their District to get the latest information and assistance in filling out monthly report forms, procedure changes, and new initiatives.

These meetings will contain the best programs from the former ARES Conference that used to be held in Johnstown, and the Leadership Workshop that used to be held in Indiana. The reason we are doing four events instead of one is to cut down on the travel for interested people. Each of these meetings will be at an easily accessible location, within 1.5 hours of travel from any QTH in the District.

- + South-2, Saturday August 12th, Holiday Inn Express, Breezewood
- + North-2, Saturday October 28th, Penn State DuBois Campus, Dubois
- + South-1, Sunday November 5, WACOM Hamfest at Washington Co Fairgrounds

Jamboree On The Air Plans

Jamboree On The Air (JOTA) Plans are being made for October 22nd-23rd this year. It looks like there are clubs near each of the Scout Council offices and camps, and our WPA Section Youth Coordinator Russ Bush N3YD is working to coordinate with the Councils and Clubs to provide the well-organized, amateur radio club activity the Scouts prefer. If you are interested in helping out as part of this organized effort, please contact Russ at n3yd@arrrl.net for more information.

Rather than opening the doors of our home hamshacks to whatever Scouts may want to show up to watch us make a QSO, it is preferable to work with local clubs that have fully-equipped QRO, DX-capable club stations, and those that can set up a full-featured QRO, DX-capable station at a Scout Camp and place these stations on the air to allow individual scouts take turns making multiple JOTA contacts. Watching you struggle to make a QSO with a battery-powered QRP radio and a short wire antenna 10 feet in the air — while a lot of fun to experienced hams — will hold very little interest for today's youth.

The same goes for your prize boat anchor collection. I love the smell of hot tube radios and the music of CW as much as anybody, but when giving a demo to kids, I bring the Pro-III and a microphone!

Let's get in touch with Russ and see where we can best serve the Scouts, and make our WPA JOTA efforts march in step with the rest of the Scouting World!

Final Final

There's so much going on in our WPA Section, I don't know when to stop writing! If your group has an upcoming event, PLEASE let us know and we will do our best to help publicize it.

73 and Press On!



Allegheny County ARES Picnic

Open to all Amateur Radio Operators and their Families

Saturday, August 5th, 2017, 11:00 AM—2:00 PM

Aspinwall Fireman's Memorial Park, Ninth Street, Aspinwall

Please RSVP by July 30th to ab3ed@arrrl.net or call (412) 653-1147

Burgers and dogs will be provided. Please bring chairs, non-alcoholic beverages, and a dish to share.



US F&WS Selects DDXA For KH1 Baker Island DXpedition

American Radio Relay League

Newington, CT., June 7th, 2017 — The Pacific Islands Refuges and Monuments Office of the US Fish and Wildlife Service (FWS) has selected the Dateline DX Association (DDXA) — the DXpedition group that activated Howland Island in 2009 and Wake Island in 1998 — to pursue a DXpedition to Baker Island. Dates have not yet been determined. Baker and Howland Islands (KH1) are part of the Pacific Remote Islands Marine National Monument (PRIMNM), created by former President George W. Bush in 2009. Baker and Howland is the fourth most-wanted DXCC entity on Club Log's [DXCC Most Wanted List](#).



The group will announce planned activation dates and other details once a vessel has been selected and the FWS has approved the vessel and dates. DDXA co-leaders are Don Greenbaum N1DG; Tom Harrell, N4XP and Kevin Rowett K6TD.

The FWS in early June agreed that a DXpedition to Baker Island would be an acceptable use of the Baker Island National Wildlife Refuge but detailed strict conditions under which it would issue a special use permit (SUP) to allow such use. Earlier this year, the FWS conducted a [Compatibility Determination](#) for Amateur Radio operation on the ecologically sensitive island refuge. Baker Island is 1,830 nautical miles southwest of Honolulu — an 8-day voyage.

"While...not a wildlife dependent public use according to National Wildlife Refuge Administration Act of 1966, as amended, Amateur Radio operation is a use that assists in the management of the resources indirectly," the FWS said in its Compatibility Determination, released on June 8.

A DXpedition to the Refuge may last up to 14 days, with only 12 days of radio operation and allowing time for setup and breakdown on each end of the visit.

Christmas & Cocos Keeling Islands

This expedition began planning in early 2017 as the brainchild of Chris VK3FY, Lee VK3GK and Tony VK3TZ. The idea was to activate each island as part of the Oceania DX Contest in either the SSB or CW divisions.

Both Christmas Island (OC-002) as **VK9XI**, and Cocos Keeling Island (OC-003) as **VK9CI** will be active each for a week.

- Christmas Island from October 2nd – 10th (coincides with Oceania SSB)
- Cocos Keeling Island from October 10th -17th (coincides with Oceania CW)

The on air plan will the team mainly work Split. Please do not call on their transmit frequency, (unless specifically asked). SSB split will start most of the time 5 KHz up from their transmit frequency. CW/RTTY will start 1 KHz up from their transmit frequency. The team intends to try and keep splits as narrow as possible. Also, if they are not listening UP, they will listen DOWN.

Always listen to and follow the operators instructions. No specific frequencies has been chosen yet. Keep watching the DX clusters or spots.

More information at <http://christmascocos2017.vkdxg.com/> — VK DX Group

Radio Amateurs in Belize, Cyprus & the Philippines Now Have Access to Contiguous 60 Meter Bands

In Belize, the secondary allocation of 5351.5 to 5366.5 kHz has become available, with a maximum EIRP of 25 Watts.

In Cyprus, the secondary allocation of 5351.5 to 5366.5 kHz has become available, with a maximum EIRP of 15 Watts, along with a MW allocation of 472 to 479 kHz with a maximum EIRP of 1 Watt.

The Philippines has granted amateur access to 5351.5 to 5366.5 kHz under ITU footnote 5.133B, with a maximum EIRP of 15 Watts.

— Paul Gaskell G4MWO / The 5 MHz Newsletter

DX News Briefs



The **9L1T** planned March 2018 DXpedition has been cancelled. The license was revoked for security reasons. More information at <http://www.i2ysb.com/idx/> -- IDT

KE4TA has received his license for **9XØTA**, which is good for 3 years. He will be QRV, once his gear arrives (hopefully in the next 2 weeks or so) primarily on 20 & 17 but will try 80 & 40 as well. He is concerned about high noise levels and ask that stations not be "offended if I'm not answering your call, I likely can't hear you!" QSL via N4NGR -- OPDX

CT1FJZ is now QRV as **D2FJZ**, 20 meter SSB, for an unspecified time. QSL via CT1FJZ -- DX World

OY/CT1BWW will be QRV through 10 August, 40 - 10, CW SSB & Digital. QSL via CT1BWW -- CT1BWW

ZL1BQD is once again QRV as **5WØRR** through 15 August. Operation mostly using JT65, possibly FT8 mode QSL via ZL1BQD -- ZL1BQD

TZ4PR is QRV through October. QSL via F1UIJ -- DX World

F4GHS will be QRV as **E51GHS** 7 - 25 August, holiday style, on 20 meters. QSL via F4GHS -- DX World

A group of South African ops will be QRV as **ZS9V** from AF-064 Robben Island 9 -13 August. More information at <http://zs9v.org.za> -- DX World

ZS2VR and ZS2KU will be QRV as **7P8VRR** and **7P8QM** 18 - 21 August, 40 20 & 15 meters. QSL both via their home calls -- OPDX

A team of Cuban amateurs will be QRV as **T48LHH** from Punta Rasa Lighthouse 18—20 August during International Lighthouse & Lightship Weekend. Activity will be on 160, 80, 40, 20, 10 & 2 meters, CW SSB & Digital. QSL route not specified — OPDX

A team will be QRV as **5T5OK** 15 - 29 September, 160 - 6, CW SSB & RTTY. More information at <http://www.cdpx.cz/> QSL via OK6DJ -- DX World

WA1ZAM will be QRV as **PJ7PL** 20 October—5 November, including the CQ WW DX SSB contest. Outside of the contest, he will be QRV 'holiday style' on 30—10 SSB & RTTY, possibly some CW. QSL via WA1ZAM — OPDX

DF2WO will be QRV **9X2AW** 15 - 30 November. QSL via MØOXO -- DX World

The **9MØW** Spratly Islands DXpedition has been rescheduled to 10 - 20 March 2018, due the unavailability of the resort. -- DX Coffee

The Italian DXpedition Team will be QRV as **J5T** in mid-November, 4 stations on all bands. More information at <http://www.i2ysb.com/idx/> QSL via I2YSB -- IDT

QSL Routes

40/USØVA via USØVA
4X/EA3HSO via N4GNR
8Q7PW via G4PWO
9A/S59A via S59A
9M2/IK2PFL via IK2PFL
AM625VQ via EA6VQ
AM725QL via EA7QL
BG4/IK7YTT via IW7EGQ
CS7/DO3HK via DO3HK
DL/OZ1KAH via OZ1KAH
DR1517LU via DK1DSA
GB5GHT via MØXIG
HF1ØØLZ via SP4FIY
I12FIST via IZ2FME
LA/DL3YDX via DL3YDX
LA/OK1XC via OK1XC
LY/SNØWFF via SP5C
LZ114RF via LZ1YE

OHØJV via DL7RV
P4/DF4XX via DF4XX
P4/DL7AC via DL7AC
P4ØX via DL8UD
R1591M via RK3AW
R17CWB via R17CWB
R17CWC via RD9CX
R28ØTLT via R4IT
RA17CW via RA17CW
RD17CW via RD17CW
RG5ØSP via RC3M
RJ17CW via RJ17CW
RK17CW via RK17CW
RU17CW via RU17CW
SC4ØVIC via SM6JSM
T88GA via JA7XBG
TF/SM6YOR via SM6YOR
TM5GTW via F5KFL
ZL2/2EØUGO via 2EØUGO

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.



WASH Classifieds

Information shown here is as supplied to the **WASHRag**. Condition as stated, and all sales should be considered "as-is" unless otherwise noted. All subject to prior sale or withdrawal from sale at the owner's discretion. All responsibility for this information lies with the source and not the **WASHRag** or the **WIRELESS ASSOCIATION OF SOUTH HILLS, INC.**

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Antenna Zoning or PRB-1 Issues?

Contact: **Michael S. Lazaroff K3AIR, Esquire**

Lazaroff & Suhr, Attorneys at Law

277 West Main Street, Saxonburg, PA 16056

Phone: 724-352-4905

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



Items For Sale:

- + Galaxy V Transceiver, 80—10 meters, 300 Watts, CW/SSB. Needs recap/switch cleanup. With Power Supply & Speaker. Was last used to work 40 Meters LSB. \$75 with cables.
- + Tektronix Oscilloscope, 100 MHz Dual Channel, Delayed Sweep. Model AN/USM-425(V)1, militarized version of a 465M. Functional, may need alight calibration tweak. \$100
- + Eimac 6C21 Power Triode. No shorts, filament has continuity. Not used in the last 40+ years. \$75
- + HP 5381A Frequency Counter., 80 MHz Option 001,m 7 digit display. X1, X10, X100 attenuator. .1S, 1S, 10S Gate Times. Good condition. Accurate. \$75,

Prices are suggested, will entertain any reasonable offer!

Bill Zeitz WA3VSS wmzeit@verizon.net

Many HF listeners across North America & elsewhere were able to copy signals from Alaska's High Frequency Active Auroral Research Program (HAARP) during its first scientific research campaign, since it was taken over by the University of Alaska - Fairbanks Geophysical Institute in 2015, Chris Fallen KL3WX has informed the ARRL that the next HAARP research campaign will get underway in mid-to-late September, carrying on the experiments begun during the previous campaigns.

Follow HAARP on it's official [Facebook Page](#) or via Twitter (@UAFHAARP)

— American Radio Relay League

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!

FCC FCC News

Courtesy of the American Radio Relay League

Newington, CT, July 19th, 2017 — A revised FCC Form 605 — *Quick-Form Application for Authorization in the Ship, Aircraft, Amateur, Restricted and Commercial Operator, and General Mobile Radio Services* — going into effect in September will ask all applicants to indicate if they have been convicted of or pled guilty to a felony. The Communications Act obliges the Commission to ask "the felony question," as it did on the old Form 610 and still does on other applications. This action will correct its omission on Form 605, which has existed for years. Applicants' responses and explanations will be used to determine eligibility to be a Commission licensee. The FCC told ARRL that it's still deciding whether to issue a public notice on the change.

"The Commission is revising the basic qualifications section of the form to include a question regarding whether an application has been convicted of a felony in any state or federal court," the Office of the FCC Secretary explained in a May filing with the Office of Management and Budget (OMB), which must okay the revision. "Applicants answering YES must provide an explanation regarding the conviction. This item enables the FCC to determine whether an applicant is eligible under sections 310(d) and 308(b) of the Communications Act of 1934, as amended, to hold or have ownership interest in a station license."

The revision also will apply to NCVEC Form 605 — the *unofficial* Amateur Radio-specific version of the application that is completed and filed at volunteer examiner coordinator (VEC) examination sessions. VECs will have to start using the revised form on September 7. Responding to VECs' questions, the FCC offered some guidance, with a particular focus on NCVEC Form 605.

ARRL VEC Manager and NCVEC Vice-Chair Maria Somma, AB1FM, thanked the FCC for honoring a request to amend the effective date of the change, initially in early August. "At the urging of the NCVEC leadership, the FCC took into consideration the undertaking to change and distribute all affected forms and update software and agreed to push back the execution date by 1 month," she said. The NCVEC will create a revised NCVEC Form 605 and release it to VE teams before September 7th.

Once the Form 605 update has been implemented, assuming all other information is correct, negative felony question responses will result in a license grant, the FCC said. A YES will place the application in the "pending file for review" category. Applicants answering YES would have to, within 14 days, provide the FCC with a statement explaining the circumstances, and a statement "giving the reasons why the applicant believes that grant of the application would be in the public interest, notwithstanding the actual or alleged misconduct," the revised Form 605 instructions state. The FCC said an applicant's answer to the felony question and explanation will be public via ULS, unless a separate request is made to the FCC that the applicant's explanation be kept confidential. The FCC will review applications on which the felony question has been answered in the affirmative and decide whether to grant them or designate them for hearing.

"The applicant must provide sufficient information for the FCC to determine whether there exists any material and substantial question of fact regarding whether the applicant has the character qualifications to be a Commission licensee," the FCC said. There is no set checklist of items, but useful information would include such information as details regarding the conduct that resulted in the conviction or guilty plea, including time and place; the date of the conviction or guilty plea; the penalty imposed and whether it has been satisfied, and "any efforts taken to remedy the wrongs committed and ensure that the applicant will not engage in such conduct in the future," the FCC said.

The FCC said the only additional information that VECs will have to collect is the response to the felony question; any explanatory exhibits and confidentiality petitions will go directly to the FCC, and VECs will have no information as to the status of such applications.

The FCC said the felony question must be answered every time — even if previously answered — for New, Modification, Renewal/Modification, and Amendment applications. "Assuming that nothing has changed, the attachment to the subsequent applications can simply reference the file number of the application where the complete explanation was given, rather than having to set forth the complete explanation each time," the FCC memo said. "Clubs are not exempt from the felony question. The question applies to the club as an entity and to the trustee, but not to any other individual officers."

Individuals convicted of a felony and later pardoned or whose record has been sealed should answer YES, and include information regarding the pardon, "as that will be relevant to whether the conviction still presents any material and substantial question of fact regarding whether the applicant has the character qualifications to be a Commission licensee," the FCC told VECs. "An overturned conviction need not be disclosed — but a conviction still on appeal must be disclosed."

Has Roadway found the tower yet?

WWV 25 MHz Signal Swapped to Circular Polarization, Reception Reports Invited

American Radio Relay League

Newington, CT, July 11th, 2017 — The resurrected 25-MHz signal of time and frequency standard station [WWV](#) is now emanating from a circularly polarized turnstile antenna. WWV had used a vertically polarized antenna on 25 MHz in the 1970s. Silent since 1977, the 25-MHz signal returned to the air on an “experimental basis” in April 2014, and it’s been transmitting ever since — initially on a broadband discone until August 2015, when it switched back to a vertical, which it used until the July 7 switch to circular polarization.

“[W]e are broadcasting with 2 kW from a circularly polarized turnstile antenna,” WWV lead electrical engineer Matt Deutch NØRGT, told ARRL this week. “It is just your standard plain-vanilla turnstile — two horizontal orthogonal dipoles with a quarter-wave phase-shifting coax linking them.”

Deutch has explained that when the 25-MHz transmitter was shut down in 1977, the antenna’s radiating element was “tossed in the bone yard, and a new longer section put on the tower to make it a 15 MHz stand-by antenna,” Deutch recounted. When WWV first reintroduced the 25-MHz broadcast some 37 years later in response to requests, it used a broadband monopole. But, it was later decided to use that antenna for WWV’s 2.5-MHz stand-by transmitter and to rebuild the 25-MHz antenna. The old radiating section was retrieved and the antenna rebuilt, so that it looked like what was being used in 1977.

Deutch said it’s hoped that the latest antenna change to circular polarization might be helpful to anyone studying propagation during next month’s total solar eclipse, which will be visible across the US. “My effort right now is focused on getting the word out, just to make people are aware that [the 25-MHz signal] is available, if it can be useful to them.”

Before the change, Deutch said WWV had received reports on the 25 MHz signal from across the Atlantic. The 25 MHz broadcast includes the same information transmitted on all other WWV frequencies and at the same level of accuracy.

Located in Fort Collins, Colorado, WWV is operated by the National Institute of Standards and Technology ([NIST](#)). WWV has [invited](#) listeners’ comments and reports on its 25-MHz signal.



FCC Crackdown on Pirate Broadcasters Targets At Least One More Amateur Licensee

American Radio Relay League

Newington, CT, July 6th, 2017 — A recent flurry of FCC Enforcement Bureau correspondence to alleged unlicensed broadcasters has targeted at least one more radio amateur — this time in the Greater New York City area. It’s not the first time Winston A. Tulloch KC2ALN, of Paterson, New Jersey, has heard from the FCC, which has had Tulloch in its sights for at least several months regarding a pirate FM station on 90.9 MHz. Last November, the Enforcement Bureau sent Tulloch a *Notice of Unlicensed Operation* after receiving information that he was operating a radio station. FCC agents used direction-finding techniques to zero in on a signal on 90.9 MHz coming from his residence.

“The field strength of the signal on frequency 90.9 MHz was measured at 105,451 microvolts per meter (µV/m) at 101 meters, which exceeded the maximum permitted level of 250 µV/m at 3 meters for non-licensed devices,” the FCC said at the time.

Tulloch was sent a second *Notice of Unlicensed Operation* on June 8, after Enforcement Bureau agents from the FCC’s New York Office on May 2 responded to a complaint of an unlicensed FM station operating on 90.9 MHz in Paterson. This time the signal, measured at 176,526 µV/m, was determined to be emanating from another residence about 1 mile from Tulloch’s. The FCC said someone at the residence identified Tulloch as the station’s operator.

A [third Notice of Unlicensed Operation](#) followed on June 30, after Enforcement Bureau agents following up in the unlicensed FM station investigation in Paterson on June 12 confirmed by direction-finding techniques that the signal on 90.9 MHz was continuing to come from the same residence. On that occasion, the agents measured the signal at 5,705 µV/m at 185 meters, still greatly exceeding the maximum permitted under FCC Part 15 rules for unlicensed devices.

FCC Enforcement Bureau Region 1 Director David C. Dombrowski now has advised Tulloch at least three times that the unlicensed radio operation on 90.9 MHz “must be discontinued immediately.” The Commission’s enforcement resources are already suffering from last year’s closing of FCC field offices and the layoffs of field agents, however, and the current administration’s budget allocates less money for the FCC.

In late May, the Enforcement Bureau issued a *Notice of Violation (NoV)* to Lyle E. Hilden KD6LUL, of Vista, California, alleging that he had engaged in pirate radio broadcasting on the FM band. The Enforcement Bureau also sent *Notices of Unlicensed Operation* to other individuals in the Greater New York City area as well as to individuals and couples in Massachusetts and Florida.



ARRL Proposed 630 Meter Band Plan -- Continued from page 7

“Those desiring to operate continuously transmitting CW propagation beacons or to use wideband modes are encouraged to obtain experimental licenses and to operate either below 472 kHz or above 479 kHz,” Raab said in his quarterly report. “This will ensure they are easily monitored but will not use up the limited 7 kHz of the amateur band.”

Raab’s report notes that the Japan Amateur Radio League (JARL) has issued its first 472-10 award to JH3XCU. Brazilian radio amateurs now have access to 630 and 2200 meters, while some other South American countries allow access by special permit, the report noted. Amateurs in these countries now have access to 630 meters: Germany, Greece, Malta, Monaco, Norway, Philippines, Czech Republic, Ireland, Switzerland, New Zealand, Finland, Spain, France, Poland, Bulgaria, Canada, Vietnam, Japan, Cayman Islands, La Reunion Island, Hungary, and Brazil.

“It appears that there are now over 100 DXCC entities that have permission to operate on 630 meters,” Raab pointed out in his report.

ARRL’s new [222 MHz and Up Distance Contest](#) will debut on August 5th at 1800 UTC and continue until the next day. This 24 hour contest offers a wide range of entry categories, from FM, CW, and SSB to digital modes.

The object is to work as many stations as possible on the 222 MHz through 241 GHz bands, using any allowable mode.

A station in a specific grid locator may be contacted from the same location only once on each band, regardless of mode. Contacts on higher frequencies earn more points, so expect plenty of activity from locations that offer a height advantage.

Check the rules update for Club and Team competitions, and requirements to register Teams *before the contest*.

The deadline to submit logs is 14 days following the contest — August 20th at 1800 UTC in the case of this year’s event.

Skyview Radio Society Swap'n'Shop

Sunday, August 27th, 2017, 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 2nd, 2017, 8:00 AM—1:00 PM

Setup Time at 6 AM for Vendors & Tailgaters

W3PIE Clubhouse, 433 Old Pittsburgh Road (just off State Route 51 & US 119 or State Route 43), 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



Butler County ARA Swapfest 2017

Sunday, September 10th, 2017, 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 2017

Sunday, November 5th, 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>





WASHfest 2018

The South Hills Hamfest — Now in our **TWENTY THIRD** big year!
Sponsored by the WIRELESS ASSOCIATION OF SOUTH HILLS AMATEUR RADIO CLUB, INC.

Sunday, February 25th, 2018
8:00 AM until 3:00 PM Rain or Shine (or Snow!)

Home Economics Building, South Park

3735 Buffalo Drive, South Park Township, PA 15129

Behind the Allegheny County Police Station on Brownsville Road

Talk-In on 146.955(-) and 443.650(+) 131.8 PL

Donation \$5



Breakfast & Lunch will be available!



FREE Coffee for the entire Hamfest
courtesy of HAM RADIO INSURANCE ASSOCIATES
of Canonsburg, PA



(800) 545-8881

MAIN PRIZES TBA — You've Got to Play to WIN!

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, 2018. Reservations received after February 1st, 2018 must include payment in full. Reserve now... we have sold out in advance eight 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 2017
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)

☐ **1st Qtr**
Jan-Mar

☐ **2nd Qtr**
Apr-Jun

☐ **3rd Qtr**
Jul-Sept

☐ **4th Qtr**
Oct-Dec

☐ (F1) Full Membership:

\$20.00

\$15.00

\$10.00

\$5.00

☐ (F2) Full Membership < 18 or > 65 yrs of age:

\$10.00

\$7.50

\$5.00

\$2.50

☐ (A1) Associate Membership:

\$10.00

\$7.50

\$5.00

\$2.50

☐ (FM1) Family Membership (\$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



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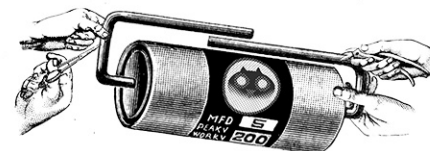
The Daily DX, 3025 Hobbs Road,
Glenwood, MD 21738 Phone: 301-854-5650



Arhhh!
What Mightst We Draw For Ye, Matey?



HANDMADE BY GNOMES.



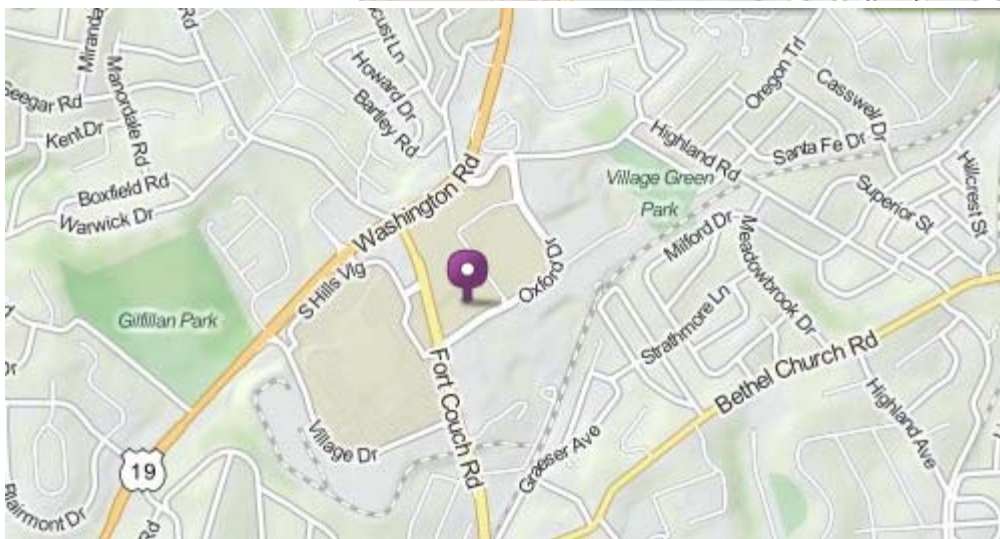
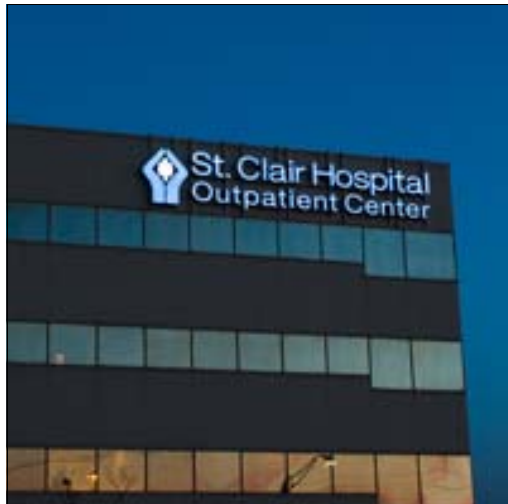
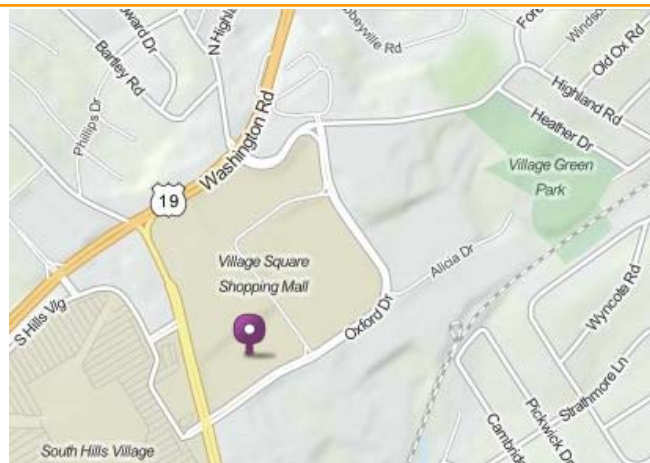
2017 WASH Meeting

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

3395 Rosewood Drive

Castle Shannon, PA 15234-2546



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NP2SH/B

www.n3sh.org
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