



# WASHRAG<sup>TM</sup>



Wireless Association of South Hills

VOLUME 19 ISSUE 03  
MARCH 2017

***WASHFest 2017  
Coming Up!***

N3SH WA3SH NP2SH/B

[www.n3sh.org](http://www.n3sh.org) [www.washarc.org](http://www.washarc.org)





## WASHRAG™



VOLUME 19 ISSUE 03

MARCH 2017

### Next Monthly Meeting: Thursday, March 2<sup>nd</sup>, 2017

The next meeting of the **WIRELESS ASSOCIATION OF SOUTH HILLS, INC.** will be on **Thursday, March 2<sup>nd</sup> 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.

Meeting topics: **WASHFEST 2017** wrap-up, Pizza, a presentation on Inverted "L" antennas by K3VX & W3WH, Pizza, Field Day, Pizza, and more. Did we also mention it's our annual post-**WASHFEST** Pizza Night? See you there!

Cover Photo: Bill Hill W3WH operating at the W3WN Multi-Single station in the 2017 ARRL DX CW contest last weekend. (If you look carefully, you'll see LucyFurr lurking under the desk at his feet!) Don't forget ARRL DX SSB is coming up March 4<sup>th</sup> & 5<sup>th</sup>! Photo 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 2017 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.

This issue is © Copyright 2017 by the **WIRELESS ASSOCIATION OF SOUTH HILLS, INC.**

Editor & Publisher: Ron Notarius W3WN

Permission is granted to other Amateur Radio publications to reprint articles in this issue, provided the original author and "The WASHrag™" are given credit. Comments, articles, and requests for copies of or information about "The WASHrag™" should be mailed to the editor:

Ron Notarius W3WN  
3395 Rosewood Drive, Castle Shannon, PA 15234-2546  
e-mail: [newsletter@n3sh.org](mailto:newsletter@n3sh.org) or [w3wn@arrl.net](mailto:w3wn@arrl.net)

"The WASHrag", "The Mariner", SHARCfest, South Hills Hamfest, WASHfest, WASHfest 2017, N3SH Net, WA3SH Net and WASHNet are trademarks of the **WIRELESS ASSOCIATION OF SOUTH HILLS, INC.**

The **WIRELESS ASSOCIATION OF SOUTH HILLS, INC.** was founded on August 23<sup>rd</sup>, 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 26<sup>th</sup>

The Next WASH VE exam sessions will be **Sunday, February 26<sup>th</sup>, 2017, 10:00 AM**, at **WASHFEST 2017**, 3735 Buffalo Drive (Home Economics Building), South Park PA 15129. 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.net](mailto: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)

2017 test dates:      Remaining Dates TBA

### Glen's Musings



#### WASHfest 2017:

This year marks our 22<sup>nd</sup> Annual Hamfest!

Our goal is to provide a good time for all those who attend so everyone come, enjoy the deals, the food and do your best to win a prize! I look forward to seeing you all there.

#### WASH Members:

Remember, this is our only fundraiser which makes it possible for other programs and events in the coming year, such as Field Day, picnic's and of course Pizza night March 2<sup>nd</sup>, 7 PM.

I will be there early for set up for those of you who volunteered to help.

See you on Sunday!

— 73, Glen Roberts KE7FD

President, Wireless Association of South Hills, Inc.

N3SH / WA3SH / NP2SH/b

The [Cedar Creek ARC](#) in Athens, TX has purchased and distributed copies of [Ham Radio for Dummies](#) (2<sup>nd</sup> Edition) by Ward Silver NØAX, to schools and libraries in their tri-county area. The purchase was financed in part by a grant from LDG Electronics. The activity was covered in [The Athens Review](#) on February 15<sup>th</sup>

[ Well, normally we start off with the latest report of the [WASH Breakfast Gang](#), but since the March newsletter is early, we have a repeat ]

Saturday, January 28<sup>th</sup> didn't feel quite cold enough to be a January morning, not that anyone was complaining. But it was still a fine time for the faithful of the [WASH Breakfast Gang](#) to gather once again at [Suzie B's](#), 950 South Central Avenue (Route 910 at the intersection of Route 519 at US 19) in Canonsburg... if they could find parking, as the State Police were in full occupation of a corner booth this time around. Regardless, the gang this month consisted of N3FB, KB3GMU, WB4GCS, W3WH, KB3JHR, K3HCR, N3IDH and W3WN. Topics of the morning covered some repeater work today, the [WASH 2 meter contest](#) — entries, tickets, and power levels of the ops, working DX on 2 meter SSB and the recent TU4 DXpedition, a 1 Watt QRP rig for \$3 on eBay (yes, that's for real), PA QSO Party certificates and records, diabetic cats, cell phone issues, reforming electrolytics, paid parking in Canonsburg and Washington business districts, [WASHFEST](#) preparations, VE testing, the venerable IC-751 and V/UHF transverters, and more,

Because of [WASHFEST](#) setup, the gang WILL meet as a "split squad" on Saturday, February 25<sup>th</sup>. Some of the gang will be as usual at [Suzie B's](#), 950 South Central Avenue (Route 910 at the intersection of Route 519 at US 19), Canonsburg — but a [slightly early "start" time of 7:30 AM](#), so that we get done in time to head to South Park for setup. 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?

And some of us will gather at the [South Park Eat 'n Park](#) on [Library Road/Route 88](#) (across the street from South Park shops) at 7:30 AM, again so that we can head straight over for setup right after..

With [WASHFEST](#) upon us, some last minute updates and housekeeping information...

We are expecting [table delivery on Saturday](#) at about 9 AM. We need help from everyone who can spare an hour or so to unload and arrange the tables, so that everything is ready to go when the vendors start arriving. With a lot of hands, it shouldn't take long.

We may need a [few hands "on call" during Saturday evening](#) for any "early bird" vendors, especially those coming in from out of state. Let Carol know if you are available.

As noted in the minutes, Rick KB3IAC needs a few people to [assist him in the kitchen](#). Ron W3WN can use one or two people to [help with the talk-in station](#). Carol, of course, needs help [all during the day Sunday](#) at the entrance, at the club table, selling tickets... all of you who've been to previous [WASHFESTs](#) know the drill!

Thanks in advance to all of our club VE's. Just a reminder to bring your credentials! We've already got over a [half dozen pre-registered candidates](#), and we expect at least that many walk-ins. A little help from every VE, and we can get the exams processed smoothly!

Plans are to have an post-[WASHFESTs](#) newsletter, featuring lots of pictures, as we did last year. We need pictures! Crowd pictures, gear pictures, individuals... so if you have a camera, bring it! After Sunday, email your pictures (or make other arrangements) to W3WN, and we'll get them in!

By the way, if anyone asks... as of deadline, the CSVFD Memorial Hall is currently getting a new roof and there's a big dumpster in front of it...

And Carol's phone is ringing, tables are going fast! Another sell-out? Hard to say, with a bigger hall and more tables available, but...

That's it. There's not much more to say. It's almost time. It's time to roll up our collective sleeves, so... see you on Sunday!

### WASHNet NCS Schedule

03/06/2017	TBA	05/01/2017	TBA
03/13/2017	Digital Net	05/08/2017	TBA
03/20/2017	TBA	05/15/2017	Digital Net
<b>03/27/2017</b>	TBA	05/22/2017	TBA
04/03/2017	TBA	<b>05/29/2017</b>	TBA
04/10/2017	Digital Net	06/05/2017	TBA
04/17/2017	TBA	06/12/2017	Digital Net
<b>04/24/2017</b>	TBA	06/19/2017	TBA

Indicates Swap Net After the Regular Net

*Join WASH or Renew your Membership Today! Membership Application on Page 19*



## Minutes, February 5<sup>th</sup> Meeting

Harold Rosenberger K3HCR, Vice President / Secretary, **WASH**

Ron Notarius W3WN took the minutes on behalf of Harold K3HCR, who was out of town

Glen KE7FD, called the meeting to order at 19:00 hours. 16 members and 2 guests were in attendance.

A moment of silence was observed for recent silent keys & others deserving, followed by introductions.

Motion to waive reading of the minutes based on the minutes printed in the newsletter by Bob KC3DOF, second by Carol KB3GMN, and passed unanimously.

### Committee reports:

Treasurer (N3RDV): No Report

Secretary (KB3ERQ): No Report

VE (W3WN): Next VE Exam will be in February at **WASHFest**, rest of 2017 exams to be scheduled. Walk-ins will be accepted, VE's needed.

Repeaters (N3FB): Found a problem with the 3 minute timer on .650. Frank & Jim are working on "the voter" and starting to get a handle on it. There is an uncoordinated repeater in WV that is now on 146.955, about 80 miles away; let Frank know if we hear interference on 955 from this machine.

**WASHNet** (KC3ELA): Activity is picking up. Still soliciting volunteers for NCS stations.

N3SH.ORG (N3NWR): No report

Contests (K3VX): Good listing of upcoming major contests in the newsletter. Participation is encouraged! We will be looking for ops soon for the 2017 Pa QSO Party.

Public Service (AB3ED): Mike WA3PYU will need help for the St. Patrick's Day Parade on March 11<sup>th</sup>. Pittsburgh Marathon is on May 7<sup>th</sup>, Jeff N3NHS will be looking for help soon. Race for the Cure in Schenley Park on May 13<sup>th</sup>, contact Bob NU3Q. There will be an air show at Pittsburgh International Airport on May 13<sup>th</sup> & 14<sup>th</sup>, more info to follow soon from Harry W3YJ

Ways & Means (KB3GMN): Membership Contributions will be accepted tonight at the end of the meeting.

Newsletter (W3WN): Out.

Membership Recognition: Congratulations to Bob KC3DOF, who received an award from the SKCC. He tied for 1<sup>st</sup> Place in the number of states worked in their recent event. He also just earned his WAS CW. (applause)

President (KE7FD): Brief discussion of upcoming plans for the year, as outlined in his column in the February newsletter.

### WASHFest 2017 (KB3GMN):

- Table delivery is set for about 9 AM on Saturday. 80 tables to be delivered. (There are 30 "good" tables on hand in addition to the tables being rented.) We will need help setting them up on Saturday, and then taking them down on Sunday afternoon.
- We will need some "heavy duty" electric extension cords for all appliances in use in the kitchen.
- 52 tables sold to date
- Three new vendors!
- Cathy Sauder DEFINITELY is coming, as is G&G.
- Still working out the overnight coverage but should not be a problem
- ALL prizes are bought and paid for.
- We have 2250 blank tickets; we sold ~2750 last year. Consensus from discussion to order another 5000 or more. (see New Business)
- Rick KB3IAC will make up four "arrow" signs.
- Rick will need three volunteers to help in the kitchen.
- Patty KC4WTT will bring some gluten free items, and some low sugar items as well.
- We need a volunteer to be at CSVFD Memorial Hall for a short time to redirect 'regulars' who are not aware of the move.
- Larry K3VX will be bringing the flag.

Old Business: None

New Business: Motion by Bill W3WH, second by Chuck KC3ELA, to purchase 10,000 blank prize tickets for 2017 and future **WASHFests**. Carried unanimously.

Motion by Bill W3WH, second by Ron W3WN, to reimburse Frank N3FB \$110 for the electric bill. Carried Unanimously.

Continued on Page 10

## WASH Spotlight: Winners!

Carol KB3GMN (front) and Richie N3SBF displaying their certificates as operators of W3WH/CLA Clairton County in the 2016 Pennsylvania QSO Party.

(That's also Bill W3WH partially obscured in the back)

Congratulations to them and to all of the County winners in the contest!

Photo courtesy of and © Copyright 2017 Ron Notarius W3WN



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:n3sh dot org)

## Monthly WASH Breakfast

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



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

## Wireless Association of South Hills Membership

<b>2017</b>	WA3VSS	N3IDH	WASH FL	WASH TN	<b>Silent Keys</b>
AA3GM	2016	N3KFD	KA3UPY/M	K3OL	
AB3ED	AE3DL	N3RDL	W4ZE	KE3XB	AB3KA
AB3NM	K3HCR	N3RHT	WASH NE	N3YPB	K3EED
K3SGT	KB3IAC	NU3Q	N0PEU	WASH TX	K3LIE
K3VX	KB3IVX	W3KTW	WASH OR	NB3C	KA3NMG
KA3VXM	KB3JHR	W3LE	N0VLR	K3LGM	KB3ENX
KB3DCO	KB3ORO	W3VFA	N0WVP	KB3JX	KB3FNM
KB3GMN	KB3RVI	W4CKR	KB3NVL	Jane Wagner	KB3FQT
KB3GMU	KB3HIK	WB4GCS	KB3NVM	WASH VI	KB3JHQ
KC3DOF	KC3HNU	WO3Z	WASH OH	NP2JF	N3CZZ
KC3ELA	KC4WTT		N8DPW		N3FZ
KE7FD	KI5ZT				N3HKQ
N1NCZ	N3DFK				N3KEH
N3FB					N3OBD
N3SBF					N3RNX
W3WH					N3SKR
W3WN					N3SRC
WA3PYU					N3ZEL
					N3XFE
					W3ZLK
					WA3JPP

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

Through January 30<sup>th</sup>, 2017  
List compiled by  
Mark Stabryla N3RDV, Vice President/Treasurer

# 2017 WASH Upcoming Events Calendar

*Club Meetings & Other Significant Events — Subject to Change*

March 2 <sup>nd</sup>	WASH Meeting / Pizza Night!	St. Clair Hospital Outpatient Center, 2000 Oxford Drive, Bethel Park
March 4 <sup>th</sup> -5 <sup>th</sup>	ARRL DX Contest SSB	<a href="http://www.arrl.org">http://www.arrl.org</a>
March 5 <sup>th</sup>	Warren County Hamfest	<a href="#">Youngsville Fire Department, 222 E. Main Street, Youngsville PA 16371</a>
March 7 <sup>th</sup>	SKYWARN Spotter Training (Basic)	<a href="#">Washington County EOC, 1001 W. Beau St. Level C, Washington, PA</a> Classes start at 1 PM and 6:30 PM
March 18 <sup>th</sup>	WACOM Traffic Handling & Net Operating Open Class	<a href="#">South Strabane VFD, 1696 E. Maiden St Washington, PA</a> Class starts at 10 AM
March 18 <sup>th</sup>	Breezeshooter's Groundwave SSB	<a href="http://www.breezeshooters.net">http://www.breezeshooters.net</a>
March 22 <sup>nd</sup>	SKYWARN Spotter Training (Basic)	<a href="#">Butler County EMA, 120 McCune Drive, Butler PA</a> Class starts at 6:30 PM
March 25 <sup>th</sup> — 26 <sup>th</sup>	CQ WPX Contest SSB	<a href="http://www.cqwpix.org">http://www.cqwpix.org</a>
April 6 <sup>th</sup>	WASH Meeting	St. Clair Hospital Outpatient Center, 2000 Oxford Drive, Bethel Park
April 23 <sup>rd</sup>	Two Rivers ARC Hamfest	<a href="#">The Spectrum, Boston PA</a>
May 4 <sup>th</sup>	WASH Meeting	St. Clair Hospital Outpatient Center, 2000 Oxford Drive, Bethel Park
May 19 <sup>th</sup> — 21 <sup>st</sup>	HAMVENTION <sup>®</sup>	<a href="#">Greene County Fairgrounds, Xenia OH</a>
May 27 <sup>th</sup> — 28 <sup>th</sup>	CQ WPX Contest CW	<a href="http://www.cqwpix.org">http://www.cqwpix.org</a>
June 1 <sup>st</sup>	WASH Meeting	St. Clair Hospital Outpatient Center, 2000 Oxford Drive, Bethel Park
June 4 <sup>th</sup>	Breezeshooter's Hamfest	<a href="#">Big Butler Fair Grounds, Prospect PA</a>
June 10 <sup>th</sup> — 12 <sup>th</sup>	ARRL June VHF Contest	<a href="http://www.arrl.org">http://www.arrl.org</a>
June 18 <sup>th</sup>	ARRL Kid's Day	<a href="http://www.arrl.org">http://www.arrl.org</a>
June 24 <sup>th</sup> — 25 <sup>th</sup>	ARRL Field Day	<a href="http://www.arrl.org">http://www.arrl.org</a>
July 8 <sup>th</sup> — 9 <sup>th</sup>	IARU HF World Championship	<a href="http://www.iaru.org">http://www.iaru.org</a>



The [Field Day 2017 packet](#) now is available from the ARRL website. Field Day 2017 is June 24<sup>th</sup>-25<sup>th</sup> — always the fourth full weekend in June. There have been no significant rule changes from 2016.

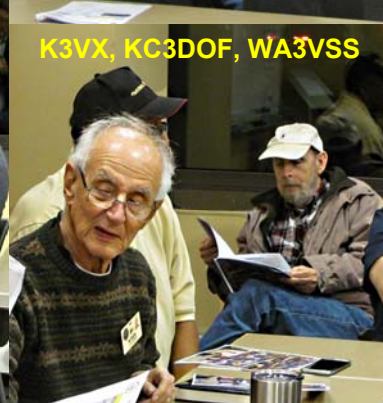
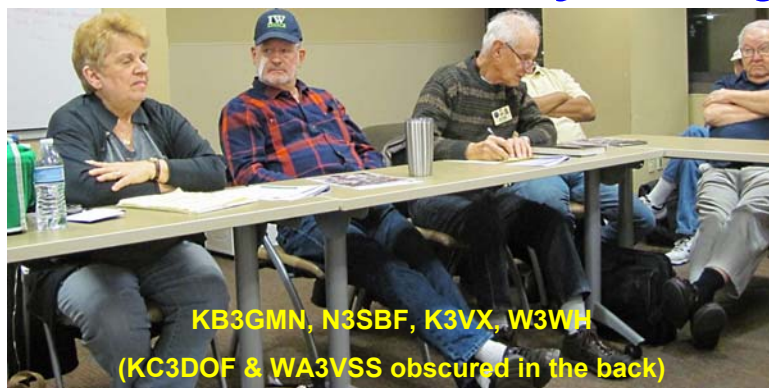
The Field Day packet contains everything you or your club will need to succeed in June, including explanations, FAQs, articles from experts, and even a log page template, if you log on paper for FD.

For more information on Field Day, [contact](#) the ARRL Contest Branch.



# "Seen" at the February Meeting

Photos Courtesy of and © Copyright 2017 Ron Notarius W3WN





# 160 Meters: Top Band, aka The Gentleman's Band

Bill Hill W3WH Photos courtesy of and © Copyright 2017 Bill Hill W3WH

160 meters sits just above the AM Broadcast band, from 1.8 to 2.0 MHz. For many, probably most hams it is equivalent to outer space or some other unknown territory. In my case I was probably licensed 55 years before I ventured to 160. (\*)

Unlike most HF bands, 160 has no hard and fast band plan. For the most part any mode anywhere in the band is OK. On the other hand there are areas where QRP, CW, Digital and Phone modes traditionally occur.

Many of our bands favor daylight for best propagation but this Medium wave band is perfect for night owls and mostly in the winter. During daylight similar to 80 meters most of our RF is absorbed by the atmosphere until the sun goes down when it is reflected back to earth allowing hams to talk with each other. I mentioned winter. Winter is the season of the year when we enjoy the least atmospheric noise on 160 though it's really seldom very quiet.

Night time, winter and noise combine to make 160 more of a challenge than many of our available frequencies. They also yield great satisfaction when you are successful in meeting their challenges with QSOs on top band. I almost forgot about perhaps the biggest challenge of all-antennas. For 160, antennas are big (aka long and/or tall). A half wave dipole for 40 meters is about 66' long. For 160 it's 260' long. As if 260' isn't enough to cope with, how does the average guy get a half wave antenna up a quarter wave (130')? For most of us, we don't have a snowball's chance of getting an antenna up that high.

By now most of you will be wondering I'm going with this commentary. Well here's the answer. There are nine bands between 160 and 10 meters. These are the traditional HF Ham Frequency allocations. I've been lucky enough to work and confirm more than 100 Countries (DXCC) on each of these band except for 160. thus it has become my current challenge. Working DX (ie. long distance contacts) on 160 is to say the very least a challenge due to the noise, antenna size etc. Just working the West Coast from Pa. Isn't easy most of the time much less Europe, and other far away places. Yet many of our fellow Hams are successful in doing it.

Since I took up the challenge of 160 I'm finding that the principal thing you need is patience which is a commodity I'm very short of. I also have a small yard which doesn't lend itself to accommodating large, high antennas. So far I've worked 83 countries (entities) with 65 confirmed.

A couple of years ago I installed a 43' vertical antenna with lots of ground radials underneath it and I bought a 500watt linear amplifier. This arrangement has pretty much solved the transmitting half of the equation. I don't have the loudest signal on the band it's no terrible either. The receiving half of the equation is a horse of another color. Most hams who are serious about achieving success on 160 use separate low noise receiving antennas. Well I've tried many kinds including a K9AY loop, active RX dipole, Magnetic loops, on ground Beverages and a couple others I'm sure the thing that they all have in common is that they're either completely or mostly deaf at my QTH. Hence the challenge. The old cliché, "If you can't hear 'em you can't work 'em!", is very true in my case. This isn't to say that I haven't had my moments because I've worked and confirmed Australia on top band but these victories are few and far between. It's very frustrating to hear fellow hams working Europeans routinely when you can't hear them at all!

I really thought that by this spring I would have achieved DXCC on 160. Well right now I think there are two chances for success this season-slim and of course slimmer. Not none, because you never know what can happen if you keep trying. I guess the whole point of this article is that if you are looking for a challenge in our hobby consider trying to be successful on 160. It should keep you busy for quite a while.

(\*) 160 meters is actually our oldest Amateur band, going back to the earliest days of the Amateur Service when it was known as 200 Meters (prior to the reassignment of frequencies below 1800 kHz to other radio services) — Editor



## Final Results: 2017 WASH 2 Meter Simplex Contest

Jim Sanford WB4GCS, Contest Chair

Call	Reported Score	Call	Reported Score
KA3KSP	2850	KB3VSP	121
KB3FCZ	2821	W3LZR	120
W3ON	1242	N3LZV/M	84
K3VX/M	1156	N3JDR	50
KC3HJP	1152	WO3X	48
KE7FD	352	N3BKW	45
KB3GMN	330	KA3NGP	36
WO3C	300	W8LPN	25
N3SBF	215	KC3IDT	12
N3BLS	180	WB8WUA	9
		N1GC	1

After Amateur Electronic Supply went out of business in July 2016, GigaParts began hiring the AES staff

**GigaParts**  
www.gigaparts.com

in Las Vegas and working on moving the operation to a new location less than 5 minutes from the famous Las Vegas Strip and just 3 miles from the former AES building.

Although the retail showroom won't be ready for visitors for another few months, the Las Vegas store is now the primary distribution center for GigaParts shipments to the western half of the US.

Former AES customers will see some familiar faces at GigaParts Las Vegas, including AES's former shipping manager, Terry Spaulding, and store manager, Julio Suarez. "I'm excited to be back and I'm looking forward to helping all of my old friends again," said Julio. "AES was iconic in ham radio and it was sad to see it die off, but we have an opportunity with GigaParts to do things better than we ever could before," he continued.

In addition to the new and improved facility, another improvement will be a single toll free number for customers wishing to place orders by telephone: (866) 535-4442.

Jeff Sinclair, the e-Commerce Division Manager at GigaParts, states, "This is a significant move forward for GigaParts as we continue to expand our distribution capabilities in North America. The new facility in Las Vegas doesn't just mean faster shipping to our West Coast customers, but the employees there add decades of experience in customer service and ham radio product knowledge."

Initially, the Las Vegas store will carry the complete lines of amateur radio and maker equipment with more product lines being added later. Understanding that hams come to Las Vegas from all over the country and all over the world, GigaParts plans on making the retail showroom more of an interactive showcase of the latest equipment rather than a self-service shopping experience common amongst other amateur radio outlets.

To welcome AES customers, GigaParts is offering a \$25 gift certificate to every former AES customer. See [www.gigaparts.com/AES](http://www.gigaparts.com/AES) for details.

— Gigaparts Press Release

## Scammers are Sophisticated

Jarrad Mitchell VK3BL via [eHam.net](http://eHam.net)

Just wanted to share a story of caution regarding how sophisticated scammers are these days, and they are actively praying on the Ham community who may not be so good with computers and also generally more trusting.

Recently, I got an email from "K7CBA" (Impersonated) in response to my wanted ad for a THP HF-1K Amplifier on the VK classifieds webpage.

Their English was fantastic with a few slip-ups. The giveaways were:

- 1) Overly generous with postage.
- 2) Wouldn't accept PayPal.
- 3) Photos not found in Google images search, but were lifted from qrz.com for sale section. I found them by Googling the amplifier's model and the for sale thread came up.
- 4) Contacted me via my qrz.com profile email.
- 5) K7CBA has no email listed on QRZ.COM profile so couldn't verify ownership (be aware sometimes scammers steal profiles too).

When questioned about previous call signs, the scammer was even smart enough to find K7CBA's old calls in the FCC Database!!!

**Be Very Aware. Always Insist On PayPal, In Person Pickup Or Another Escrow Service You Trust.**

Here are the seller's emails. Note how good the English is:

Email 1: "Hi Jarrad, I have an excellent condition THP model HL-1K/A desk top amp for sale. It runs a pair of 4CX-250B tubes and provides 500 watts out on 160-15 meters including 30 and 17 meters. I also have a new pair of tubes to go with it. I would like \$650 plus shipping and insurance via FedEx or UPS for the amp and the spare tubes.

Let me know if interested. K7CBA, Joseph"

Email 2: "Jarrad, That's not a problem, I have both fedex and ups account that I can ship with and also my daughter works in a shipping company so that won't be a problem for me. This is not my first time of shipping items like this outside the states, I've sold more than 3 radios and amp to different ham member in Australia without any complain. Would you be interested in the spare tubes that comes with the amp? Also let me know your payment options?

Pls note: the amp and spare tubes will be properly packed with foams inserts in 2 boxes, I will pay the extra \$\$ for FedEx or UPS packing. Also my daughter will be shipping the amp to you on my behalf as I am currently on a wheel chair and can't do much, I am just recovering from a recent hip surgery and only dependent upon the convenience of others. Await your response 73, Joseph"



## The Next Big Ham Things

Glenn C. Peck KE5GK via [eHam.net](http://eHam.net)

I have long since drawn my last paycheck as director of marketing for a local telephone interconnect company. Hopefully, I few creative sparks remain. Here are some ideas for the next big ham things:

### Ham Fitness Counter

Many photos in QST, on the Internet & other ham informational sources, plus personal observations at any ham activity, gives credence to the position that some hams have a BMI higher than the cost of many used pieces of ham gear! Enter the Ham Fitness Counter (HFC). Fashioned after the FitBit™, but with a twist.

- + The HFC will have an algorithm that gives a display that is ham centric.
- + The HFC will be connected, via Bluetooth, to a ham's smart phone.
- + Levels of activity will be designated Technician, General, Advanced, & Extra Class. A ham rig on the phone will reflect the daily activity as either selectable SWR, Power (QRO or QRP), or S-Meter.
- + Daily achievements will be cumulative and reflected in the awards, WAS, WAZ, DXCC, Country Honor Roll, etc.

To help launch this effort, ham gear manufacturers would pay to have their gear on the smart phone display. ARRL would be enlisted to help turn the bright young hams into HFC designers.

If I were younger, I would start on this right after tonight's net.

### "You Bet Your License" Network Ham TV Quiz Show

With questions ranging in difficulty from Novice (I am old) to Extra Class, the questions would increase in difficulty and the ham contestant could take prizes already won, or go double-or-nothing to the next level. The top two hams for the show would go into the "QRM Round."

Contestants would be in separate soundproof booths, with headsets, to listen to a simulated DX SSB QSO. The audience and viewers would hear what the hams were hearing. The aim is to copy as many call signs in two minutes. As time passes, QRM and QSB would be introduced. Also, in the background would be a wife yelling to come to supper and kids arguing over the TV remote. The final noise would be an angry neighbor pounding on the door.

The loser would surrender a copy of his ham ticket to Men In Black attire who would shred the license. (A pre-show agreement, signed by all contestants, that the loser of the QRM round would stay off the air for a year.)

The winner receives a 30-day all expenses paid ham vacation to a rare, beach front, exotic island. The three stories QTH has a ham shack with high dollar gear with separate positions for each band and a one-time special call sign that awaits the winner. The dream vacation features a 120-foot tower holding six over six element beams. Full wave wire antennas are on the property for each 160-10 meter bands.

### A Coloring Book for Hams

Pages to be colored include the mailman delivering the first QSL card.

Another, hams from the local club erecting a tower with an ice chest with 807s (young hams ask an old timer about 807s) printed on the side. One club ham says to ham standing close by, "Guywires? We don't need no stinkin' guywires!"

What about an angry neighbor watching TV with the telltale herringbone picture & a balloon over his head with "Edith, get me that %\*#^)&^ diagonal wire cutter!"

Maybe this would be appropriate; an XYL standing in the doorway to the shack and holding a rolling pin with a balloon saying, "That's it! I've told you and told you no more around-the-clock ham contests!" This might work -- sparks flying from a large amplifier and a pegged SWR meter.

What about an FCC monitoring van in the driveway and a large tower in the background with a balloon over the van that says, "I think we have finally caught that ex-CB'er this time!" Another, a ham, asking a flea market ham, "Are you sure this rig was only struck by lightning twice?" The possibilities are endless...





# *A Day in the Life: 00*

Eric P. Nichols KL7AJ

**I don't know** what possessed me to become an O.O. for the second time...some thirty-five years after the first time. No, O.O. does not stand for Officer Obie, though at times I did feel like him. It's for Official Observer, sometimes affectionately known in our world as a "radio cop." It was a thankless task, fraught with danger and despair, but someone had to do it.

Now, at this juncture, in good cop drama tradition, I'm supposed to say something like, "The names were changed to protect the innocent," but I won't, because they were guilty.

It was a dark and stormy night...no, actually, come to think of it, it was broad daylight in the middle of summer, not too long ago, when I was scanning the bands in search of a potential perpetrator. It had been a quiet week; nothing more demanding than sending out a few reminders about band edges and identification...and an expired license or two. I was looking forward to nothing more than a quiet weekend with the XYL.

Fate had another idea in mind, however. As I was about to end my beat that Friday afternoon, making one more pass across the bottom of 40 meters, the signal slapped me upside the head like a wet towel in a junior high locker room. The kind of signal that showed an O.O. what he's really made of. I was reminded of Thomas Paine's famous words, "These are the times that try men's souls."

It was a dreadful signal, vaguely resembling a bludgeoned and senseless corpse of CW. It was smothered in a horrifying porridge of key clicks, chirp, and raw A.C. hum, all at the same time. I hadn't heard the likes of it since the Cold War days. I found myself both terrified and intrigued. I was ready for a fight.

I steel myself for the confrontation that surely would ensue. Any man who had the audacity to present such an abominable signal on the air would be capable of anything. While normally, I would simply fire off a postal missive reminding the miscreant ham of his wayward ways, this...*this* called for real-time interdiction...a phone call.

I checked the federal database for the call sign, which despite its horrendous on-air form, was reasonably intelligible....KL7DIL. It would take all the self-restraint I could muster to not remind him that his call sign was LID spelled backwards. The poor sap in question was a James Hartley....an ironic name for someone with the most unstable oscillator I'd ever heard. It was a local call. I shuddered at the prospect that this ham lived somewhere in my town.

The call went down like this:

"Hello?"

"Is there a James Hartley there?"

"Speaking...."

"Mr. Hartley. This is Eric Nichols KL7AJ. I am the official observer for this region. Do you have the amateur radio call sign, KL7LID?"

"Uh....yes. Is there a problem?"

"I believe there is. I have been monitoring your signal. It has an utterly unacceptable amount of chirp, key clicks, and A.C. hum, and other minor defects too numerous to count. I won't mention your so-called fist."

"Oh my. Are you going to revoke my license?"

"No, Mr. Hartley. That's not my jurisdiction. I'm just here to warn you that you are being watched."

"I'm terribly sorry. I haven't been on the air in forty-five years, and I'm a little rusty. Maybe my rig is a bit rusty too. I'll look into it right away."

"That would be wise, Mr. Hartley. I won't take any more of your time. Thank you for your cooperation."

I could hear the beads of sweat dripping from the poor sap's brow as he hung up the receiver. It was far too easy. I was expecting much more of a fight. Something gnawed at the back of my brain as I shut down the rig and headed for the kitchen. Something just didn't sit right, and I knew I'd have to figure it out, or it would eat me alive.

I tossed and turned that night like a mouse at a cat convention. The XYL evicted me from our love nest to spend seven tormented hours on the living room sofa. I had to remind myself that I had asked for this job. Twice.

The alarm clock rattled me out of my dreamless slumber....or my slumberless dream. I still don't know which. It was seven in the morning. I slapped the clock into stunned silence and staggered back to darkened shack, driven by an unseen force. I fired up the receiver and spun the dial to 7.060 MHz...the scene of the previous day's crime.

To my bleary amazement, there was KL7DIL in QSO with a ham in Detroit...and his signal was just as clean as a hound's tooth; his keying as precise as a Chopin etude. It made no sense. There was no way our friend Hartley could have cleaned up his act so fast. I'd had a few boat anchors of my own in my day, and I know they just didn't come back from the morgue smelling like a petunia. Hartley was up to something.

I deduced that there was no choice but to pay a personal surprise visit to the enigmatic Mr. Hartley. I had to know what his racket was. At least I had his address.

It was in an ancient downtown section of Fairbanks...a place once known as Sourdough Slough. I hadn't been there in years. For a brief moment, I considered bringing in some backup....but then my senses returned. This was my battle, and my battle alone.

It was a tense drive across town; I still had no idea what I'd encounter. As I neared the Slough, I kept my eyes peeled for a telltale tower. Not too surprisingly, I came up bupkis. This crank was keeping a low profile. I had to rely on the address, 904 3rd Avenue. It was a shabby little hovel...but so was every other house in the Slough. I parked across the street from the residence and trained my spy goggles on the sky over Sourdough Slough. It took but a moment before I spotted the wire running between the chimney and a birch tree in the back yard. Guilty as charged.

I put away my spy goggles and exited the old flivver, taking a quick glance behind me as I crossed the road. All was clear. I approached the rickety wooden gate guarding the walkway to the front door, I scanned the premises for vicious guard dogs...or neighbors. There were none.

I stepped onto the porch and rang the doorbell. A faint female voice inside said something indecipherable. A moment later the door opened, and I was greeted by a gray-bearded sourdough-looking feller...appropriate for someone living in Sourdough Slough.

"Good morning, Mr. Hartley. I'm Eric Nichols. We spoke yesterday."

"So we did," said, Mr. Hartley, suspiciously. "What are you doing here?"

"As I said yesterday, I'm an Official Observer. I'm here to observe."

"Officially?"

"No, actually. You just got my curiosity glands wobbling a bit. I'm just a fellow radio amateur."

"Ah. Well, I suppose it's only right that I show you some ham hospitality. Would you care to come in and...um...er...observe, Mr. Nichols?"

"That would make my day, Mr. Hartley," I said.



# WPA Section News: Radio Activity All Over!

Joe Shupienis W3BC, ARRL Western Pennsylvania Section Manager



*Falls Creek, PA, February 20<sup>th</sup>, 2017* — On Saturday February 18<sup>th</sup>, I was helping out at Camp Mountain Run, where around 325 Cub Scouts were enjoying their annual Klondike Derby. Every year, the Scouting sponsors of the event invite local amateurs to put on a radio demonstration to multiple groups of approximately 30-40 Cub Scouts each. These groups take turns visiting the amateur radio station we set up, and every scout gets to speak on the radio individually to say hello to a ham at a distant station.

Public service events like this benefit the scouts, their parents and the local amateur radio community. Please be sure to include a brief write-up of all such activities with your group's monthly report! I look forward to hearing

all about the benefits we provide the public while serving with integrity and excellence.

## Digital Mode Workshop — Uniontown ARC W3PIE — March 18<sup>th</sup>

On Saturday, March 18<sup>th</sup> at 9:00 AM to 3:00 PM, the Uniontown ARC will present a presentation on Digital Voice Modes. This will include demonstrations, discussions and Hands-On Use of various technologies, including D-STAR, System Fusion, DMR, TRBO, P25, NXDN, and the like. Seminar will be at the W3PIE club house, 433 Old Pittsburgh Road, Uniontown PA 165401. Already, several hams have signed up, & there is lots of room for more. To Sign up or to ask for more information contact our WPA PIC Cory Sickles WA3UVV by email: [wa3uvv@gmail.com](mailto:wa3uvv@gmail.com)

A full write-up of the event can be found at [wpa-arrl.org/wpa-events-calendar](http://wpa-arrl.org/wpa-events-calendar).

## Help Wanted

We are still looking for a few good hams to lead several key areas of service the Section provides. Contact me for more details, application packages, or to share ideas you may have. To find out what these jobs entail, please visit the links next to each description:

- Section Youth Coordinator [arrl.org/Section-Youth-Coordinator](http://arrl.org/Section-Youth-Coordinator)
- Affiliated Club Coordinator [arrl.org/Affiliated-Club-Coordinator](http://arrl.org/Affiliated-Club-Coordinator)
- South 2 District Emergency Coordinator [arrl.org/District-Emergency-Coordinator](http://arrl.org/District-Emergency-Coordinator)
- Technical Coordinator [arrl.org/Technical-Coordinator](http://arrl.org/Technical-Coordinator)

These leadership jobs are a great opportunity to help your fellow amateurs all over the section. We are looking for enthusiastic, responsible people who are willing to give back to our favorite hobby by providing these important services.

Your WPA Section Needs YOU! It doesn't hurt to ask -- you're not going to get "railroaded" into anything you can't handle. Get in touch with me and we'll talk.

## Monthly Report Update

THANK YOU to everyone who filed their January Monthly Report and/or Station Activities Reports! Our SEC filed the January report to ARRL HQ, and will be listed as such in the April edition of QST! Please support him in this work, and get your reports in early, every month, as it says on the report form (FSD)

I encourage everybody to send in your reports every month, so they can be collected together and reported here, on our Internet sites, and to ARRL HQ. All reports are welcome, from the required Monthly Staff Reports, to interesting things from your club or your own hamshack.

Required reports should be filed with the appropriate official (DEC, SEC, PIC, TM, OOC or SM) during the last week of the month, so they may be processed in time for inclusion in QST and other League publications.

Non required reports should be files with our new PIC, your Assistant Section Manager or with me.

## Section Traffic Manager Scores Clean Sweep

Congratulations to Herb Gilliland W3YNX of Sarver, our Section Traffic Manager, for a 2016 clean sweep of all 12 monthly reports being filed in time with ARRL HQ. Great Job Herb! Keep up the good work!

## The Final Final

That's about all for this week. Please let us all know if you or your local group did anything interesting, or if you have an upcoming event. I can't wait to hear all about what amateur radio is doing in your location!

Be sure to visit/join/participate in our online locations: [www.wpa-arrl.org](http://www.wpa-arrl.org) [facebook.com/groups/wpaarrl](https://facebook.com/groups/wpaarrl)

73 & Press On!



A high-altitude Amateur Radio balloon, [K2BSA-11](#), will be launched from the 2017 National Boy Scouts of America Jamboree in West Virginia. The balloon is expected to reach an altitude of 48,000 feet and will transmit on 144.390 MHz APRS. An onboard GPS/computer will shift APRS frequencies based on the balloon's location around the globe.

Carrying out the July 20<sup>th</sup> launch from the Summit Bechtel Reserve will be Bill Brown WB8ELK; Keith Kaiser WA0TJT, and other members of the K2BSA Radio Scouting team. They are hoping that the balloon will



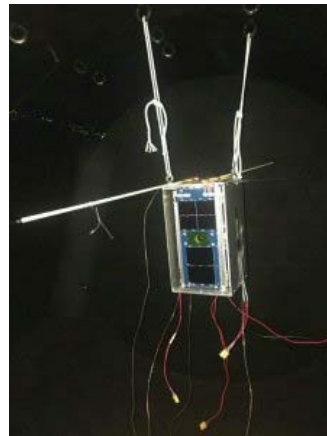
As its Amateur Radio FM transponder satellite [BY70-1](#) was poised to re-enter Earth's atmosphere, its developers, China's Amateur Youth Space Program, said it will be mounting future missions. The 2U BY70-1 CubeSat was built by Beijing Bayi High School students.

"We hope more amateur youth space program will be brought to you in the near future!" the students said in a February 17<sup>th</sup> statement on the school's website.

BY70-1 was launched on December 28<sup>th</sup> but ended up in a lower-than-expected 524 x 212 kilometer orbit, which contributed to its brief orbital lifetime. "Satellite BY70-1 has completed all designed missions," the students' message said.

They asked for reports, via [e-mail](#), including audio or video clips, from those who were successful in using the satellite or who obtained satellite camera photos. They offered a QSL card in return for those who made a contact or souvenirs for those who copied telemetry or used the onboard camera.

Photo courtesy of AMSAT-UK



Good of the Order: Ron W3WN invited anyone interested to help operate his station as a Multi-Single entrant in the ARRL DX CW contest this month, and ARRL DX SSB next month.

Motion to Adjourn by Bill W3WH, second by Bob KC3DOF and carried unanimously.

Meeting adjourned at 20:07.

Minutes Continued from Page 4



## *A Day In The Life: 00* continued from Page 9

The mysterious Mr. Hartley led me down some decrepit stairs to the basement, where surely I would be greeted by a room full of boat anchors. As my eyes adjusted to the near darkness of the dungeon, the mystery deepened. There was nothing to be seen but a starkly modern radio station, equipped with a half dozen of the most modern-looking computer controlled rigs.

"Where are all the vintage radios?" I queried.

"I have none," Mr. Hartley said. "What you see is what you get. After I got back on the air, I decided to go completely high tech. Life is too short for....well, too short for much of anything, I suppose."

It takes a lot to confuse this old sleuth, but Mr. Hartley had me at a disadvantage. I couldn't recall the last time that had happened.

"How do you explain your horrendous signal yesterday?" I further queried. "And, even more, how do you account for your astounding improvement this morning? I was....observing."

Mr. Hartley directed me to a well-worn swivel chair at one of the computers. "Take a seat, Mr. Nichols." I complied. Mr. Hartley proceeded to light up a pipe.

"Mind if I smoke?"

"No, I don't. Go ahead."

"Good. Cuz' it wouldn't make any difference, anyway. This is my house and I smoke when and if I want to. And I want to."

"Fair enough," I said.

Mr. Hartley took a few drags on his pipe and exhaled some smoke rings, thoughtfully.

"The last time I was on the air, it took everything I had to put out a decent signal. I spent a few decades working on power supply filters and VFO temperature compensation, and keying wave-shaping. I had achieved perfect T9 signals the hard way...before I went QRT back in 1966. That's a whole 'nother story in itself. Well, when I finally got back on the air a few months ago...started listening around....I noticed that *everyone* had perfect T9 signals. I did some poking around and learnt that the kids these days are all using software defined radios. They all were putting out perfect T9 signals with no effort at all. Well, I figured I wasn't all that decrepit yet, so I came up to speed pretty quick on some of this SDR business."

"So I see," I said. But I didn't.

Mr. Hartley went on. "So, after I figured out how to make a computer do radio, I started putting out easy T9 signals myself. But pretty soon I discovered that none of these SDR radios have any *character*. They all sound good, but they all sound the *same*. And furthermore, it occurred to me that a lot of these whippersnappers have never even heard anything but a T9 signal. So I decided to fix that."

"So you found some old boat anchors and put them on the air?"

Mr. Hartley laughed. "No, no no! I simply reconfigured these SDR radios to simulate chirp or key clicks or A.C. hum. It's a snap to do this with just a few keystrokes!"

I scrunched up my brow for a moment in disbelief. "You mean you use SDR technology to *intentionally* create radio defects that hams have spent decades trying to eliminate?"

"You got it, Mr. Nichols! Isn't technology wonderful?"

Mr. Hartley grabbed a mouse and clicked on a virtual slide potentiometer on one of the displays.

"I can create drift...a little or a lot."

He clicked on another slider.

"I can dial in a little A.C. hum....or completely unfiltered half-wave rectification."

He clicked on another slider.

"I can make upward chirp or downward chirp."

He clicked on yet another slider.

"I can make tiny key clicks or I can make big ones. Or I can do all of them at the same time. Shucks, I can simulate a full-blown spark transmitter, if you like."

"No, I don't like. But I'll take your word for it," I said. I heard the horror in my own voice.

"Would you like to see more?"

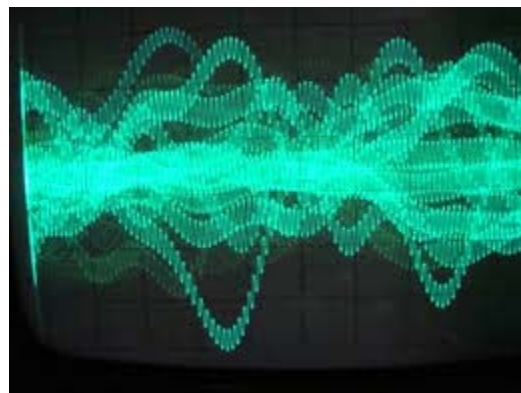
"Uh, no thank you. I think I've seen enough already."

"Well, suit yourself. I think you're missing out on some great technology. Never too old to learn."

"Thanks but no thanks, Mr. Hartley. I'd best be on my way," I said. I staggered back up the creaky staircase and saw myself out of the house. As I regained my senses, I realized this was one for the books. I also realized it was time to resign my second term as O.O.

As I said, these are the times that try men's souls.

Remind me, if someone asks me to be O.O. again, I should respectfully decline.



## 1<sup>st</sup> Annual Warren Hamfest

Sponsored by the Warren County Auxiliary Communications Services & BSA Venture Crew 73

Sunday, March 5<sup>th</sup>, 2017, 8:00 AM—4:00 PM

Youngsville Volunteer Fire Department, 222 E. Main St., Youngsville PA 16371

Talk-in on 145.11 PL 186.2

Admission \$5

More information: Russ Bush N3YD [n3yd@usa.com](mailto:n3yd@usa.com) (814) 564-9202

# ARRL Seeks Opinions Concerning Possible New Entry Level License

American Radio Relay League

Newington, CT, February 8<sup>th</sup>, 2017 — An Entry Level License Committee was established by the ARRL Board of Directors and appointed in September 2016. As part of its ongoing work, the committee is gathering member input and will make recommendations to the Board for possible rules changes to submit to the FCC.

The result could mean changes to the Technician license, but it could also be an additional, but simpler, license with privileges that would give a newcomer a taste of most facets of ham radio from HF to VHF and UHF.

The committee has created an [online member survey](#).

Please complete and submit the survey no later than April 7<sup>th</sup>, 2017. Survey results will be published.



The ARRL Board named the winners of several awards when it met in Connecticut January 20-21.

## International Humanitarian Award

Richard Darling AH7G, and Barbara Darling NH7FY, are the recipients of the 2016 International Humanitarian Award. The Board cited the couple's support of past International Humanitarian Award winner John Bush KH6DLK/V63JB, and their "significant material support" to his efforts in the Federated States of Micronesia. "[T]hey have supported these ongoing efforts over many years with on-the-air activities including communication during weather events, including several typhoons, as well as other emergency activities, including assistance to boaters in trouble," the Board's resolution said.

## Doug DeMaw Technical Excellence Award

The Board bestowed the 2016 Doug DeMaw Technical Excellence Award upon Stephen J. Franke K9AN, and Joseph H. Taylor K1JT, for their article, "Open Source Soft-Decision Decoder for the JT65 (63, 12) Reed-Solomon Code," which appeared in the May/June 2016 issue of QEX.

## Bill Leonard W2SKE, Professional Media Awards

Recipients of the 2016 Bill Leonard, W2SKE, Professional Media awards were Wayne Rash N4HCR (print); Jamala Henderson (audio), and Derek Felton (video) for their individual excellence in covering Amateur Radio topics in the media.

Rash, senior columnist for eWEEK and a freelance writer and editor who has written about technology topics for 35 years, was recognized for his *Yahooo Tech* article, "Why Modern Makers are Bringing Back Ham Radio."

Henderson, a reporter/producer for National Public Radio (NPR) affiliate KUOW-FM in Seattle was honored for showcasing the efforts of the Seattle Auxiliary Communications Services group in conjunction with FEMA's Cascadia Rising exercise last June in her piece, "Ham Radio Operators Could Be Superheroes When the Earthquake Hits."

The Board recognized Felton, a videographer and editor for WGNO-TV in Metairie, Louisiana, for highlighting the participation of 12-year-old Bryant Rascol KG5HVO, as part of the Jefferson Amateur Radio Club's 2016 Field Day effort.

In its resolution, the Board said active promotion of Amateur Radio in the media is necessary for generating interest in and growth of the service, preservation of spectrum, and fulfillment of ARRL's mission.

# "Mysterious Foghorn" is Chinese Over-The-Horizon Burst Radar

International Amateur Radio Union & American Radio Relay League

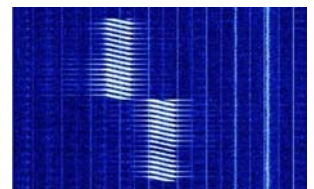
The International Amateur Radio Union Region 1 ([IARU-R1](#)) Monitoring System (IARUMS) [newsletter](#) reports a mysterious "foghorn" — a Chinese over-the-horizon (OTH) burst radar — is operating in Amateur Radio bands.

"We observed the mysterious foghorn on 7, 10, and 14 MHz," the newsletter recounted. "This is a Chinese OTH radar, which is often jumping, and sounding like a foghorn." The signal is frequency modulation on pulse (FMOP) with 66.66 sweeps-per-second bursts.

Other intruders reported by the IARUMS include a Russian frequency-shift-keying (FSK) signal from Kaliningrad on 7,193 kHz, and a Russian FSK signal on 7,193 kHz (50 baud, 200 Hz shift). German telecommunications authorities have filed another complaint.

The latest IARUMS newsletter also reports strong splatter from Radio France International (RFI) on 7,205 kHz down to 7,186 kHz. The French REF has informed RFI and French telecommunications authorities.

Intruders still reported and the subjects of further complaints from German authorities include Radio Hargeysa in Somaliland on 7,120.0 kHz; Radio Eritrea with Ethiopian interference on 7,175.0 kHz; Radio Taiwan and a Chinese jammer on 7,200.0 kHz, and a Radio Tajik harmonic (from 4765 kHz) on 14,295.0 kHz.



Chinese OTH Radar waveform, courtesy of Wolf Hadel DK2OM

## WACOM Amateur Radio Licensing Class in Washington, PA



Dates: February 27<sup>th</sup>, 2017—April 24<sup>th</sup>, 2017  
 Total of 9 Sessions  
 Times: 6:00 PM—9:00 PM  
 Class Level: [Technician](#)  
 Pre-Registered Required: No  
 Cost: No charge for the class. There is a charge for the book.  
 Exam Offered: Yes. Exam will be given on April 26<sup>th</sup>, 2017  
 Instructor: Bob Ketzell KB3IN

Location: South Strabane Township VFD #1, 1696 E. Maiden Street, Washington PA 15301

More information available from Bob Ketzell KB3IN, (724) 228-0425 or [kb3in@yahoo.com](mailto:kb3in@yahoo.com)

Sponsored by Washington Amateur Communications, Inc.





# Ten Tec & Alpha RF Systems: Status — 17 February 2017

Rick Westerman DJØIP/NJØIP courtest of the Ten Tec Reflector

Gemuenden, Germany, February 17<sup>th</sup> —Dear OM and YL's,

Last night Mike Dishop N8WFF gave me an update on the current status of the two companies and asked me to pass it on wherever I can. Here is the status:

**BOTH COMPANIES ARE ALIVE AND WELL AND DEFINITELY STILL IN BUSINESS !**

It is sad to read the recent email posts on several forums, questioning whether these two companies are out of business or still in business. Both companies are very much alive and slowly progressing.

Recently Dishtronix completed its two new web pages for these companies, migrated all of the data from its old RKR website to the two individual new web sites, and closed down the old site. This is great progress.

UNFORTUNATELY the closing of the old site was seen as an omen of bad news when indeed it is a breath of fresh air!

The new sites are now up and running. Here are the two new web sites:

- ALPHA: <http://www.alpharfsystems.com>
- TEN-TEC: <http://www.tentec.com>

Here is the current status of both companies:

**ALPHA:** Alpha is **currently producing 9500 and 8410 amplifiers**. Both amplifiers will be back in stock in March (2017) and sitting on the shelves.

All back orders have already been filled. Alpha repair service has always been operating and continues to deliver first class service to its customers.

**TEN-TEC:** Ten-Tec has moved to its new, larger facility and has continuously repaired radios at its Sevierville TN site. It has been getting repaired radios out the door on a daily basis (except for the few days where they were moving shop). There is still no (publicly available) telephone service. Email-only.

Service requests should be sent to [service@tentec.com](mailto:service@tentec.com).

"Robert" is answering emails, but only works on Tuesday, Wednesday, and Thursday. If you email on Friday, you need to be patient because he isn't going to read it until Tuesday. The repair technicians are working five days a week fixing radios.

**TEN-TEC production:** The current plan is to do a small run of Eagle transceivers. The projected price (stripped) is \$1600 to \$1700. It is obvious that Ten-Tec cannot compete on price alone with the subsidized engineering in Japan and slave (like) labor in China. If you love Ten-Tec and want a Ten-Tec radio, then you will have to pay what it costs to build a Ten-Tec in USA.

In a long follow-up e-mail to the Ten Tec Reflector on February 17<sup>th</sup>, Mike Dishop N8WFF added some additional information regarding Ten Tec and Alpha.

Some pertinent excerpts:

"First let me thank each of you who expressed well wishes for me and Ten Tec.

We have been open and working since I purchased Ten Tec and Alpha. Hundreds of radios have been repaired, including radios that were piled up and unrepaired by the previous owners. Even the backlog at Alpha has been mostly cleared except for a few 87A's which are very difficult to get parts for.

Alpha is producing amplifiers entirely in house now and has nothing but satisfied owners since I assumed control of the company. If anyone wants a brand new 9500, I've got one sitting on the shelf waiting for you. We are caught up on ALL amplifier back orders."

"We (Ten Tec) have speech processors for sale, 612s whatever those are, all kinds of microphone cords and microphones and a whole bunch of the CW version Arduino radio in stock. We are working on the (online) store. It will be just like the Alpha (on line) store -- we have that up and running."

"We have repaired over FIVE HUNDRED transceivers and amplifiers this last year. Out of production Omni VI, Orion, Orion II, and supplied dial strings, PTO rebuild kits, etc. This is my 18<sup>th</sup> year in the ham radio business. You can't find ONE person who says I screwed them over or did not deliver what I guaranteed I would do. Granted we don't get it right every single time. Factory techs miss things too. We are all human and prone to error."

"Ten Tec is making radios. Alpha is making amplifiers. I offered to bring back the Eagle because it is a good receiver that doesn't make your ears bleed. It sounds good and you can listen to it for hours. It gives the production people something to do and keeps them busy until the next great radio is ready. Maybe it enables us to build a supply line of parts that may be used in the next great radio. Maybe we have a strategy and a reason for doing things the way we are."



## A Look Inside...

Photos courtesy of Rick Westerman DJØIP/NJØIP and ©Copyright 2017 Mike Dishop N8WFF



Far Left: MYDATA Assembly Machines and other equipment

Left: Parts Shelves

Above: RX-340 Boards

# A Novice License for the 21<sup>st</sup> Century

Jim Miccolis N2EY courtesy of [www.qrz.com](http://www.qrz.com)

Technician is the current entry-level license class, the way the Novice was back when I got started back in 1967. The Novice was a great entry-level license back then - but it's not 1967 any more.

The Technician isn't doing a good job as the entry-level license. There are too many cases of people getting a Technician license and never getting on the air, or getting a Technician and an HT, discovering there isn't much they can do with it, and falling by the wayside. Telling new hams "all you need to do is upgrade to General" is a cop-out. It's bait-and-switch. And it's not working.

The Technician became the defacto entry license back during the repeater boom of 30+ years ago, when there were active repeaters everywhere and mobile/portable radio was The New Big Thing. But it's not 1977 or 1987 any more, and what we have is an entry-level license with too much VHF/UHF and too little HF. Worse, we have an entry-level test that requires the new ham to know too much arcane stuff, and not enough basic, practical radio.

It's time to scrap the Technician and invent a new entry-level license for the 21st century. But *not* an "easier simpler" license! Rather, a license that is a *balanced* introduction to amateur radio, with focus on what new hams need to know, and with a test that is *more* comprehensive, so the new ham has *more* know how.

Here's what I'd do if I were in charge:

- 1) Close off the Technician to new licenses. Existing ones could be renewed and modified same as Novices and Advanceds, so nobody loses anything. Techs could upgrade to General or Extra same as ever.
- 2) Create a new license class called "Basic". Basic license is earned by passing a **50 question test on the rules, operating practices and basic, practical radio. The Basic test would focus on the basics every ham should know. The test would not be "easier" or "harder" than the Tech, it would be more focused on the basics and more comprehensive.**
- 3) Basic privileges would consist of parts of several HF, VHF and UHF bands, low power (150 watts HF, 25 watts VHF/UHF), and a selection of modes (CW, SSB, FM, some data modes like RTTY and PSK31).

Something like this:	80 meters:	75 kHz of CW/data space
	75 meters:	100 kHz of phone space
	40 meters:	100 kHz of CW/data space, 50 kHz of phone space
	30 meters:	Entire band
	15 meters:	75 kHz of CW/data space, 100 kHz of phone space
	10 meters:	Same as current Novice/Tech privileges
	6, 2, 1.25 meters, 70 cm:	Entire band

- 4) Basics could not be club trustees or repeater control operators nor VEs.
- 5) Basic vanity calls limited to "Group D" 2x3 blocks
- 6) Any questions in the existing Technician pools that were not made part of the Basic pool would either be dropped (if no longer relevant) or moved to the General pool. General license test increased to 50 questions to accommodate those questions from Tech pool that are retained.
- 7) Existing Technicians do NOT get Basic privileges automatically. If they want more privileges, they can either upgrade to General or Extra, or, pass the Basic test and get a Basic.

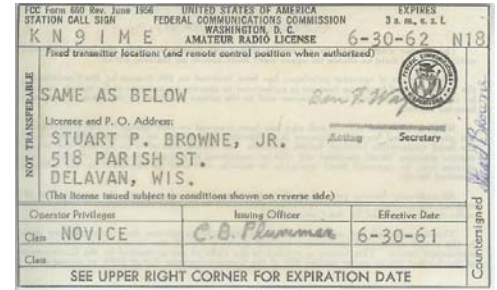
The current Tech is very lopsided - it gives everything above 30 MHz, including full power on meat-cooking frequencies, but very little below 30 MHz. It gives new hams a distorted view of amateur radio. The Tech test is similarly lopsided, covering all sorts of stuff the new ham almost certainly won't use but ignoring huge areas the new ham needs to know.

The Basic - and its test - would be designed to provide a solid foundation in, well, the basics! Basic would essentially be "a Novice for the 21st century"

By closing off the existing Technician license and replacing it with the Basic, there's no increase in admin work for the FCC or VECs.

Everybody wins. Nobody loses.

Why not?



## MARS Refocuses Its Mission

American Radio Relay League

Newington, CT, February 22<sup>nd</sup>, 2017 — Today's Military Auxiliary Radio System (MARS) program has changed markedly from what it was just a few years ago. So says US Army MARS Program Manager Paul English WD8DBY, who contends that MARS must adapt in order to remain relevant and useful to its sponsor, the US Department of Defense (DOD).

"Probably the most significant changes were the Navy's decision to 'sunset' the Navy Marine Corps MARS program and our move to refocus Army and Air Force MARS on providing contingency HF Radio communications support to the DOD and the services," English said. "In order to focus our support on the Department of Defense, MARS leadership had to rethink, essentially from the ground up, what it means to be a MARS member." MARS relies on volunteers from within the Amateur Radio ranks. Among other things, recruits receive specialized training in military messaging formats and digital messaging protocols.

While the priority MARS mission is to provide contingency HF communication to support the DOD and the military, MARS also supports communication for combat commands providing humanitarian assistance and disaster relief, provides contingency communication for Defense Support to Civil Authorities (DSCA), and provides "morale and welfare communications" in support of the DOD.

MARS still provides support for civil authorities, but it must follow DOD procedures for how that support is provided, English explained. "MARS leadership used to actively encourage our members to support civil authorities," he said, "and that put us in direct competition with the Amateur Radio community as well as with other federal agencies."

English said that in today's MARS program, the primary digital protocol is software that emulates Military Standard (MilStd) 188-110A (M110A) serial phase-shift keying, which is compatible with what is used by the military. MARS members may still use Amateur Radio digital modes on working channels, but M110A is the principal mode. There are no plans to transition to digital voice modes.

This year, MARS introduced an online encryption program that allows all digital radio traffic to be encrypted as it is being transmitted. MARS has also expanded its use of automatic link establishment (ALE), although members are not required to use it.

"Our bread and butter remains single-channel HF communication," English said. "The majority of our members who do use ALE are using the MARS ALE software program. Some of our members who support our national nets are moving to hardware ALE radios."

The MARS program supports quarterly contingency communication exercises supporting the DOD. These are based on "very bad day"



Continued on  
page 16



## HAARP Is Back!

American Radio Relay League

Newington, CT, February 14<sup>th</sup> — The High Frequency Active Auroral Research Program ([HAARP](#)) in Gakona, Alaska, will soon undertake its first scientific research campaigns since the facility was taken over by the University of Alaska Fairbanks (UAF) Geophysical Institute 18 months ago. Among the investigators is UAF Researcher Chris Fallen KL3WX, who will be working under a National Science Foundation grant, "RAPID: Spatiotemporal Evolution of Radio-Induced Aurora." Fallen says the HAARP transmissions will take place within the facility's transmitter tuning range of 2.7 to 10 MHz and should be audible outside of Alaska and may even produce visible effects within the state.

Fallen's experiments were carried out February 19<sup>th</sup>–22<sup>nd</sup>.

"This time my experiments will largely focus on artificial radio-induced airglow that potentially can be photographed from nearly anywhere in Alaska — weather permitting," Fallen told ARRL. "I plan to start and stop each experiment block with an audio Luxembourg-style broadcast — transmitting two amplitude-modulated carrier waves at different frequencies separated by about 1 MHz, with the resulting skywave signal being a mix of both frequencies."

Fallen said that he has prior success reproducing the "Luxembourg effect" using two DTMF tones. "But this time, I have a short simple musical composition recorded by a local musician," he said. "It was composed specifically to take advantage of the Luxembourg effect."

According to UAF, Fallen, an assistant research professor in space physics, will create an "artificial aurora" that can be photographed with a sensitive camera within Alaska. The phenomenon has been created in the past above HAARP during certain types of transmissions.

Just which HF frequencies Fallen will use won't be determined until shortly before he begins his research. "The specific frequency chosen during a particular experiment depends on the experiment's objectives, FCC regulations, and ionospheric conditions at the time," Fallen explained. He will use ionosonde data to guide frequency selection.

In an explanatory [blog](#), Fallen explains that HAARP scientists use the ionosonde to estimate two important parameters: (1) the amount of low-level ionosphere D-region HF radio absorption that frequently occurs due to natural, but not well understood, processes that prevent HAARP radio wave energy from reaching the higher ionosphere E and F regions; and, (2) the ionosphere vertical "critical frequency" [sometimes referred to as *f<sub>o</sub>F<sub>2</sub>*], above which any radio transmissions pass through the ionosphere into space rather than being reflected or absorbed."

Fallen said experiment times and frequencies for his airglow and Luxembourg experiments will be updated on his blog and on his Twitter account linked in the blog. He encourages radio amateurs and SWLs to record the events they hear and post reports to social media or [e-mail](#) him.

Built and operated by the US Air Force until August 2015, HAARP includes a 40-acre grid of antennas and a very high-power array of HF transmitters to conduct ionospheric research. Scientists later this month will use HAARP to conduct other experiments that will include a study of atmospheric effects on satellite-to-ground communications and over-the-horizon radar experiments.

Research funding agencies also include the US Department of Energy's Los Alamos National Lab and the Naval Research Laboratory. HAARP also has a [Facebook page](#).

Newington, CT, February 22<sup>nd</sup> — Many listeners were able to copy signals from Alaska's High Frequency Active Auroral Research Program ([HAARP](#)) early on February 20 (UTC). The facility has begun its first scientific research campaign since being taken over by the University of Alaska Fairbanks (UAF) Geophysical Institute 18 months ago. UAF Space Physics Group Assistant Research Professor Chris Fallen KL3WX, said the Twitter and e-mail feedback from his first evening's run has been "fantastic." Fallen will fire up the powerful HAARP transmitters again on February 21 starting at 0300 UTC (the evening of February 20 in US time zones) with a few tweaks.

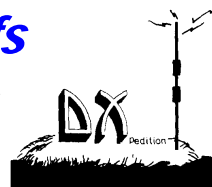
"I may adjust the frequency to 2.83 MHz and 3.33 MHz, but generally it will be 2.8-ish and 3.3-ish either way," he told ARRL.

Fallen is starting and stopping each experiment block with an audio broadcast, transmitting AM carriers on or about 2.8 and 3.3 MHz, with the resulting skywave signal — the "Luxembourg Effect" — being a mix of both frequencies. He has transmitted a simple piece of music, composed locally, specifically to help demonstrate the Luxembourg effect. Fallen said he got reports on the first evening from Georgia, Michigan, British Columbia, Southern California, and Finland — among other locations.

"The CW artificial aurora experiment that follows (weather dependent) is 90 seconds on, 30 seconds off, with the following sequence: 2.80, 2.80, 2.82, 2.84 MHz," Fallen said. "The ionosphere has been

Continued on page 16

## DX News Briefs



News reports indicate that Pope Francis has issued a "Papal Delegate" regarding the governance of the Sovereign Military Order of Malta, following the resignation of the Grand Master of the SMOM on 24 January. ( <http://press.vatican.va/content/salastampa/it/bollettino/pubblico/2017/01/25/0057/00139.html#ing> ) There is speculation that the Vatican may effectively annex the SMOM, thus ending its separate sovereignty. ( [www.catholicherald.co.uk/commentandblogs/2017/01/25/the-vatican-has-destroyed-the-order-of-maltas-sovereignty-what-if-italy-does-the-same-to-the-vatican](http://www.catholicherald.co.uk/commentandblogs/2017/01/25/the-vatican-has-destroyed-the-order-of-maltas-sovereignty-what-if-italy-does-the-same-to-the-vatican) ). If this were to happen, it is very possible that the DXCC entity **1A** SMOM may cease to exist and become a Deleted Entity — DX Coffee

**TX5T** is currently QRV from OC-114 (FO/A) through 3 March, courtesy of the CanAm DX Group, HF, CW SSB & Digital. More information at <http://www.australs2017.com> . QSL via MØURX — TX5T

**VP2MMF** is currently QRV from NA-103 through 5 March, HF, CW & SSB. QSL via K1XX — K1XX, DX Coffee

**5X10** is currently ARV through 7 March, on 40, 20, 15 and 10 Meters. QSL via EA5GL — EA5GL, DX Coffee

**8P9AL** is currently QRV from NA-021 through 7 March. QSL via KG9N

**PJ7AA** is currently QRV from NA-105 through 17 March. QSL via AA9A

**TI7/KØBBC** will be QRV 28 February — 7 March. QSL via KØBBC

LA6VDA will be QRV as **JW6VDA** from EU-026 1 — 22 March, SSB only on HF. QSL via LA6VDA as per his QRZ.COM page — LA6VDA, DX Coffee

**9N7EI** will be QRV from the EI DX Group on 8 — 20 March. They will be running 5 stations 'continuously' on 'all bands and modes' 80 — 10, from a 'spectacular' QTH located 6000 feet ASL, outside of Kathmandu with a clear path towards NA. More information available at <https://9N7EI.COM> — EI9FBB

**XR5M** will be QRV from SA-061 Mocha Island, "a rare and beautiful destination", 8 — 13 March, 160 — 6 meters, CW & SSB. More information at <https://xr5m.blogspot.com/ar/> QSL via IK2DUW — XR5M

**TU7C** will be QRV 9 to 19 March, CW SSB & RTTY. More information at <https://tu2017dx.wordpress.com> QSL via F1ULQ — Team TU7C

1KTA will be QRV as **E51KTA** (**E51/S**) from OC-013 10 — 19 March. He may activate other IOTA or **E51/N**. QSL via M1KTA — M1KTA, DX Coffee

Last year's EP2A team will be QRV as **S21GM** and **S21KW** 14 — 27 March. Both calls will be use, during different halves of the operation, due to "the specifics of regulations in Bangladesh". The team asks that DX operators treat both calls the same to avoid duplicate QSOs and prevent others from getting an ATNO. More information at <http://www.lral.lv.s21gm/index.html> QSL via YL2GN -- YL2GM

## QSL Routes

5KØN via AA4NC — AA4NC	S21KW via YL2GN — YL2GM
5U7RK via F5PRU — JA1HGY	SX5R via SV5DKL — J42T
5X10 via EA5GL — EA5GL	TO3Z via F6HMQ — F6HMQ
8P9AL via KG9N — KG9N	TU7C via F6KOP — F5NQL
9H3NH via JAØJHQ — DX Coffee	V31DV via GØDVJ — DX Coffee
9X2CW via SM1TDE — DX Coffee	V31MU via WØMU — DX Coffee
A7ØX via MØOXO — JA1HGY	V31VP via WBØTEV — WBØTEV
A71YY via MØOXO — JA1HGY	V63AVO via JA3AVO — JA1HGY
E51KTA via M1KTA — M1KTA	VP2MMF via K1XX — L1XX
JW6VDA via LA6VDA — LA6VDA	WP2AA via WD9DZV — KK9A
KG4AW via KG9LB — QRZ.COM	XX9D via DL4SVA — DL4SVA
KG4DY via KE4KDY — QRZ.COM	YJØWW via JA2NQG — JA1HGY
KG4WV via W4WV — W4WV	YJØCOW via KCØW — JA1HGY
KG4ZK via W4ZYT — QRZ.COM	ZD8V via KØAV — JA1HGY
PJ7AA via AA9A — AA9A	ZF2SC via KA9P — DX Coffee
S21GN via YL2GN — YL2GM	ZF2FB via W9XS — DX Coffee

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.**

### HAM RADIO INSURANCE ASSOCIATES, INC.

P.O. Box 201

Canonsburg, PA 15317-0201

Toll-Free 1-800-545-8881

Fax: (412) 746-5944

[bill.hill@hamradioinsurance.com](mailto:bill.hill@hamradioinsurance.com)

"All-Risk" Amateur Radio Equipment Insurance Plan for:

Radio Equipment      Computer Equipment  
Antennas Rotors & Towers      Computer Media & Software  
Mechanical Breakdown & Electrical Damage Coverage



Antenna Zoning or PRB-1 Issues?

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

The Cingolani Building

300 North McKean Street, Butler PA 16001

Phone: 724-283-0653

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

Find the online cartoons and stories of Dash the Dogfaced Ham & more at [www.dashtoons.com](http://www.dashtoons.com) !

Shop for Dash items at his online store on Café Press, [www.cafepress.com/shopdash](http://www.cafepress.com/shopdash)



### For Sale:

"I had bought these (for use on) the motorcycle but never got around to using them. Both are in immaculate condition. Best Offer"



Ed Wolf N3UE [ewolf at wolfesplace dot use](mailto:ewolf@wolfesplace.com)

## HAARP Continued from page 15

looking ratty all day, so I do not have much hope for the artificial aurora experiments."

He said his Twitter feed ([@ctfallen](https://twitter.com/ctfallen)) has included "a lot of great waterfalls, videos, and audio by hams and SWLers. It's quite an event, of sorts."

Fallen is working under a National Science Foundation [grant](#). He's posting additional information on his "Gakona HAARPoon 2017" [blog](#). He points out that exact times, transmit frequencies, and experiment modes "are subject to change in response to a variety of factors." Selected updates will be posted via [Twitter](#).

Fallen encourages radio amateurs and SWLs to record the events they hear and post reports to social media or [e-mail](#) him.



Has Roadway found the tower yet?

## FCC FCC News

Courtesy of the American Radio Relay League

Newington, CT, February 16<sup>th</sup>, 2017 — The FCC has invited comments on the ARRL's January 12<sup>th</sup> [Petition for Rule Making](#) to allocate a new, contiguous secondary band at 5 MHz to the Amateur Service. The League also asked the Commission to keep four of the current five 60-meter channels — one would be within the new band — as well as the current operating rules, including the 100 W PEP effective radiated power (ERP) limit. The federal government is the primary user of the 5 MHz spectrum. The FCC has designated the League's *Petition* as RM-11785 and put it on public notice. Comments are due Monday, March 20<sup>th</sup>. ARRL plans to file comments in support of its petition.

The proposed ARRL action would implement a portion of the *Final Acts of World Radiocommunication Conference 2015 (WRC-15)* that provided for a secondary international allocation of 5,351.5 to 5,366.5 kHz to the Amateur Service; that band includes 5,358.5 KHz, one of the existing 5 MHz channels in the US. The FCC has not yet acted to implement other portions of the WRC-15 *Final Acts*.

"Such implementation will allow radio amateurs engaged in emergency and disaster relief communications, and especially those between the United States and the Caribbean basin, to more reliably, more flexibly and more capably conduct those communications [and preparedness exercises], before the next hurricane season in the summer of 2017," ARRL said in its petition.

The League said that 14 years of Amateur Radio experience using the five discrete 5-MHz channels have shown that hams can get along well with primary users at 5 MHz, while complying with the regulations established for their use. "Neither ARRL, nor, apparently, NTIA is aware of a single reported instance of interference to a federal user by a radio amateur operating at 5 MHz to date," ARRL said in its petition. NTIA — the National Telecommunications and Information Administration, which regulates federal spectrum — initially proposed the five channels for Amateur Radio use. In recent years, Amateur Radio has cooperated with federal users such as FEMA in conducting communication interoperability exercises.

The League said in its petition that while the Amateur Radio community is grateful to the FCC and NTIA for providing *some* access to the 5-MHz band, "the five channels are, simply stated, completely inadequate to accommodate the emergency preparedness needs of the Amateur Service in this HF frequency range," ARRL said. Access even to the tiny 15-kHz wide band adopted at WRC-15 would "radically improve the current, very limited capacity of the Amateur Service in the United States to address emergencies and disaster relief," ARRL said.

The WRC-15 *Final Acts* stipulated a power limit of 15 W effective isotropic radiated power (EIRP), which the League said "completely defeats the entire premise for the allocation in the first place." ARRL said the FCC should permit a power level of 100 W PEP ERP, assuming use of a 0 dBd gain antenna, in the contiguous 60-meter band. "To impose the power limit adopted at WRC-15 for the contiguous band would render the band unsuitable for emergency and public service communications," the League said.

The ITU *Radio Regulations* permit assignments at variance with the *International Table of Allocations*, provided a non-interference condition is attached.

Interested parties may comment on RM-11785 using the FCC's Electronic Comment Filing System ([ECFS](#)).

## MARS Continued From Page 14

scenarios, where traditional forms of communication are no longer available. "Through these exercises, the DOD — via the MARS community — reaches out to the Amateur Radio community to provide situational awareness information at the county/local level," English said.

That makes sense to MARS member Bill Sexton N1IN, who was Army MARS public affairs officer from 2001 until 2014. "At least in theory, the blanketing omnipresence of hams across all 50 states offers a backup for blacked-out regions in the event of a catastrophic attack or natural disaster," Sexton allowed. "The challenge is mobilizing back-up operations in the total absence of internet, telephone, cell phone, or texting resources."

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](mailto:wa3sh-subscribe@yahoogroups.com) and the automation should take care of the rest!



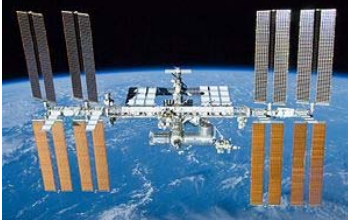
# ARRISS Opens Window For Proposals

## To Host Contacts With Space Station Crew

American Radio Relay League



Newington, CT, February 20<sup>th</sup>, 2017 — The Amateur Radio on the International Space Station ([ARRISS](#)) program is seeking proposals from schools and formal or informal educational institutions and organizations — individually or working in concert — to host Amateur Radio contacts next year with ISS crew members. The [window](#) to submit a proposal is April 15<sup>th</sup>. ARISS anticipates that contacts will take place between January 1<sup>st</sup> and June 30<sup>th</sup>, 2018. Crew scheduling and ISS orbits will determine the exact contact dates. Proposal [information and documents](#) are on the ARRL website.



To maximize these radio contact opportunities, ARISS seeks proposals from schools and organizations that can draw large numbers of participants and integrate the contact into a well-developed education plan. Each FM-voice contact lasts about 10 minutes — the length of a typical overhead ISS pass from horizon to horizon.

Scheduled ham radio contacts with ISS crew members allow students to interact with an astronaut or cosmonaut through a question-and-answer format. Participants and the audiences alike can learn firsthand from the astronaut or cosmonaut what it's like to live and work in space and to learn about space research on the ISS. Students will be able to observe and learn about satellite communication, wireless technology, and radio science.

Because of the nature of human spaceflight and the complexity of scheduling activities aboard the ISS, organizations must demonstrate flexibility to accommodate changes in contact dates and times.

To help organizations prepare proposals, ARISS offers 1-hour online information sessions, designed to provide more information regarding US ARISS contacts and the proposal process, as well as provide an avenue for interested organizations to ask questions. Attending an online Information Session is not required but is strongly encouraged.

**Information Sessions** for the current application window will take place on Monday, March 6<sup>th</sup>, at 7 PM EST (0000 UTC on March 7<sup>th</sup>) and Thursday, March 16<sup>th</sup>, at 4 PM EDT (2000 UTC). **Contact** ARISS to sign up and take part.

Amateur Radio organizations around the world, NASA, and space agencies in Russia, Canada, Japan, and Europe sponsor these educational opportunities by providing the equipment and operational support to enable direct communication between crew on the ISS and students around the world via Amateur Radio. In the US, ARISS is a collaborative effort between [ARRL](#) and [AMSAT](#), in partnership with NASA and the Center for the Advancement of Science in Space ([CASIS](#)).

[Contact](#) ARISS for more information.

## Ham Radio Is Not Dead Yet

Danielle Roof courtesy of [JAMECO workshop "My Story"](#)

Meet Joel Wilhite, or KD6W as he's known in the [American Radio Relay League](#). Yes, Joel is a competitive ham radio enthusiast.

Joel admits to using a "store bought" shortwave radio back in the early 80s when he first started this hobby, but his focus ever since has been one of innovation. It started with a few "upgrades" but increasingly Joel has focused on designing his competitive ham radios from the ground up. From tubes to transistors, this is clearly not your father's ham radio.

The American Radio Relay League dates back to 1914 when an inventor, [Hiram Percy Maxim](#), best known for his firearm silencer, was anything but silent about his ham radio hobby. Frustrated by the inability to communicate directly with other hams, he had the idea of creating a relay system to extend the range of radio communication.

Fast forward to modern times and Joel designs and redesigns his radios as one of the top competitors the ARRL's 10GHz and Up contest which they hold twice a year. A 10 year veteran of the competition his best result is a second place finish.

The object of the 10GHz & Up contest (<http://www.arrl.org/10-ghz-up>) is to communicate with as many other radio broadcasters from as many different locations as possible. Joel's modifications including "locking in the oscillator so that two devices trying to communicate do not drift into a different frequency. He used a [Jameco DC to DC converter](#) to accomplish this crucial task, as well as other existing parts. In order to lock the oscillators, he uses phase lock loops. During the contest, the competitors try to get to a broadcast location, get on the air as fast as possible, communicate with others, and repeat this in as many locations as possible. Since the contest requires almost constant movement, a crucial part of the design process is ensuring that the operator has the ability to break down and reassemble the device. This requires a certain amount of durability and flexibility in the design.

He will often use a pre-made module but fires up his CAD software for the design process evaluating fit and function. This ownership of the design is both practical and a source of pride for Joel — he enjoys the knowledge that he is the greatest expert when it comes to his own devices.

According to Joel, the innovations in this industry continue to come, and he's regularly researching what capabilities he might be able to incorporate into his designs. He always asks himself, "Can I make this in a way that is better, faster, or cheaper?"

Joel's day job in television is nothing like his weekends as KD6W, ARRL competitor. He has been pursuing his radio hobby as much as possible since he first got licensed in 1982 and is a part of a very active hobbyist community. They collaborate on a wide variety of projects and share articles, new ideas, and more. While he's a competitor, it's clear that collaboration can be just as much fun.

Together, Joel and his fellow radio enthusiasts work to continue learning, developing, and practicing their skills. According to Joel, "getting a license is easy" — the fun truly starts when people are able to access their own creativity and think of new, innovative projects. While many of us may think of amateur radio as a thing of the past, Joel assures me that it is "not the old tube ham radio stuff anymore." The field, like so many others, continues to evolve and grow with the advancement of technology and our access to it.

To learn more about the ARRL, visit <http://www.arrl.org/> and to contact Joel directly email [kd6w@arrl.net](mailto:kd6w@arrl.net).

**Danielle Roof is a senior at Tulane University originally from San Carlos, California. She is studying Political Economy and Education, and hopes to go into teaching. Her favorite things to do when she's not studying are dance, yoga, and traveling to new places.**



# Two Rivers ARC 46<sup>th</sup> Annual Hamfest

Sunday, April 23<sup>rd</sup>, 2017, 8:00 AM—2:00 PM

## The Spectrum

6001 Smithfield Street, Boston PA 15135

( Off of PA Route 48 near the city of McKeesport )

Talk-in on 146.730 — Mobile Check In 146.52

Admission \$5

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



# 63<sup>rd</sup> Annual BreezeShooters Hamfest & Computer Show



Sunday, June 4<sup>th</sup>, 2017 8:00 AM to 3:00 PM

at the Big Butler Fairgrounds,

1127 New Castle Road (US 422), Prospect PA 16052

\$5 Per Person Admission Donation

Indoor Tables & Tailgate / Flea Market Spaces Available

Flea Market spaces \$10 for the first space, \$5 for each additional space

Fairgrounds open at 5 PM June 3<sup>rd</sup> for Vendor & Tailgate Setup

14 Main Prizes

11 Half Hour Prizes (based on Admission Tickets)

Indoor Tables \$20 per table and may be reserved by contacting

Bob at (724) 410-1028

Or mail reservations to PO Box 101018, Pittsburgh PA 15237

Table reservation cut-off date May 20<sup>th</sup>, 2017

Download directions & the latest flyer from the BreezeShooters Web Site at

<http://www.breezeshooters.net> or email [hamfest2017@breezeshooters.org](mailto:hamfest2017@breezeshooters.org)

# North Hills ARC 32<sup>nd</sup> Annual Hamfest

Saturday, July 15<sup>th</sup>, 2017, 8:00 AM—12:00 PM

Parkwood Presbyterian Church

4289 Mt. Royal Blvd, Allison Park, PA 15101

Talk-in on 147.09 PL 88.5

Admission \$5

More Information at <http://nharc.org>







# 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



## DXers have a choice!

Get a free two week trial of The Daily DX and The Weekly DX and decide for yourself which one best fits your needs for informing you of all the DX news!



Send an email to [bernie@dailydx.com](mailto:bernie@dailydx.com) or go to [www.dailydx.com](http://www.dailydx.com)

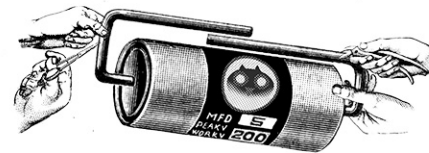
The Daily DX, 3025 Hobbs Road,  
Glenwood, MD 21738 Phone: 301-854-5650



**Arhhh!**  
**What Mightst We Draw For Ye, Matey?**



**HANDMADE BY GNOMES.**



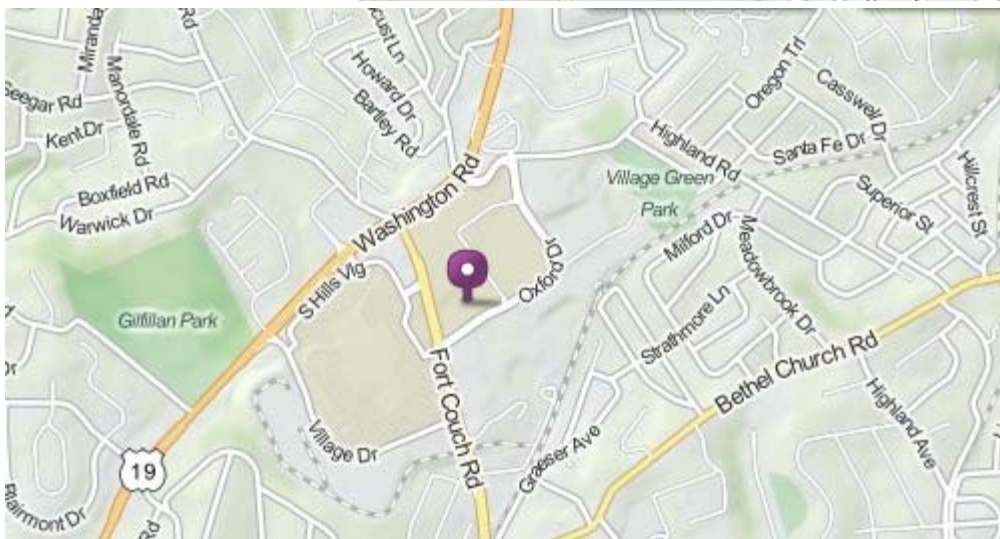
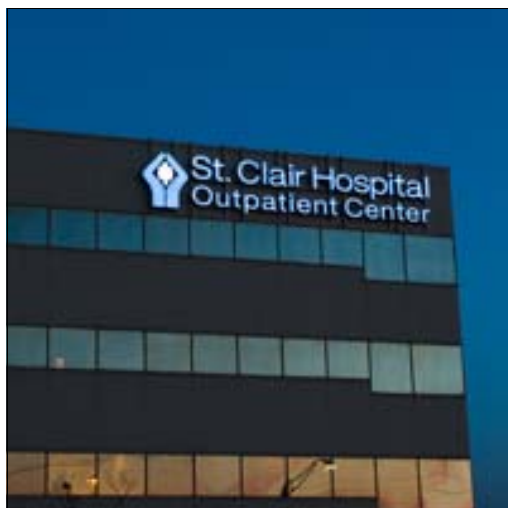
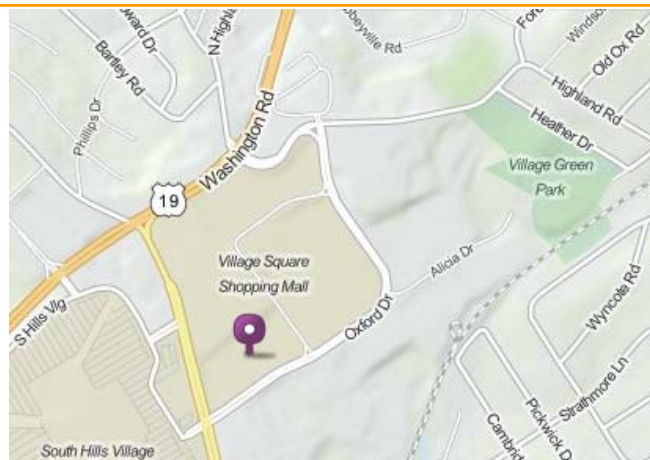
# 2017 WASH Meeting

## 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



N3SH / WA3SH  
NP2SH/B

[www.n3sh.org](http://www.n3sh.org)  
[www.washarc.org](http://www.washarc.org)



## Reminder: March 2nd — Pizza Night!

