



WASHRAGTM

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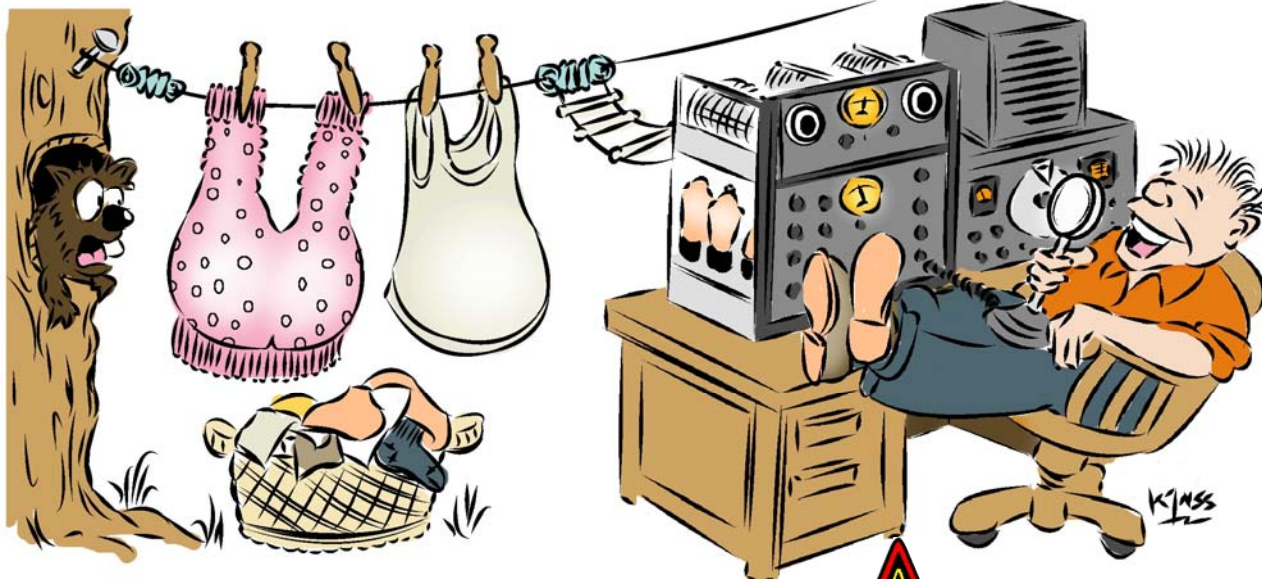
VOLUME 17 ISSUE 12 DECEMBER 2015

Wireless Association of South Hills



N3SH WA3SH NP2SH/B

www.n3sh.org www.washarc.org



WASHRAG™



VOLUME 17 ISSUE 12

DECEMBER 2015

Next Monthly Meeting: Thursday, December 3rd, 2015

The next meeting of the **WIRELESS ASSOCIATION OF SOUTH HILLS, INC.** will be on **Thursday, December 3rd 2015**, 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.

See you there!

Cover Photo: A Christmas Tree at the Amundsen-Scott South Pole Station KC4AAA, December 2008.

Photo courtesy of & © Copyright 2008, 2015 The University of Delaware and The National Science Foundation

WASH 2015 OFFICERS

EXECUTIVE COMMITTEE:

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

AND WE COULDN'T DO IT WITHOUT:

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

CLUB-AFFILIATED REPEATERS, BEACONS, & DIGIPEATERS:

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

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

THE LEGAL STUFF

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

Published Monthly with occasional Special Editions as warranted.

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Editor & Publisher: Ron Notarius W3WN

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"The WASHRag", **"The Mariner"**, **SHARCfest**, **South Hills Hamfest**, **WASHfest**, **WASHfest 2015**, **N3SH Net**, **WA3SH Net** and **WASHNet** are **™** trademarks of the **WIRELESS ASSOCIATION OF SOUTH HILLS, INC.**

The **WIRELESS ASSOCIATION OF SOUTH HILLS, INC.** was founded on August 23rd, 1993, as the original **SOUTH HILLS AMATEUR RADIO CLUB**, and operated under that name through 1998. WASH was also known briefly in late 1998 as the **N3SH AMATEUR RADIO CLUB**. It is not in any way affiliated with the "South Hills Amateur Radio Club, Inc." and is not responsible for that group, it's members, or it's actions in any way, shape, or form.

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

WASH Amateur Radio Club News Briefs

Next WASH VE Test February 28th

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

Pre-registration is required. Walk-ins will NOT be accepted due to limited available space. If you plan on attending the test session, please contact VE Team Liaison Ron Notarius W3WN:

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

Please bring the following to your test session:

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

Pen / Pencil / Calculator

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

Original CSCE plus a copy of CSCE (if upgrading)

Check or Cash in the amount of **\$15.00** (payable to: ARRL VEC)

Future test dates: 2016 Schedule To Be Announced

Carol's Comments



First I would like to thank all those who put their trust in me as President for another year. I will certainly do my best!

Our first event or the year will be our 2 meter contest on January 16th, 2016. It will run from 7 to 11 PM. Jim Sanford WB4GCS will now be the chair person for this event. All logs will be sent to him. His address is listed with the rules in the news letter.

And of course our next event will be **WASHFest 2016**, our 21st Hamfest, on February 28th 2016. With everyone's help I am sure it will be great!

Looking forward to seeing everyone at the meeting on Thursday, December 3rd, 2015.

Richie & I would like to wish all Merry Christmas & a Happy Hanukkah.

— 73, Carol Danko KB3GMN

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

~465 QSL
cards being
sent to the
QSL bureau
in Indonesia
were
recovered
from the
wreckage of
Malaysian
Airlines
Flight MH17.
VERON
reports that
a cleaning
charge is
being
assessed
before the
cards will be
returned to
the senders...
in excess of
US\$27,000

The last Saturday of November is always a bit of an odd duck, coming after Thanksgiving and Black Friday, and right before Deer Season in WPA. Nevertheless, **the WASH Breakfast Gang** gathered once again at **Suzie B's**, Route 910 at the intersection of Route 519 at US 19 in Canonsburg. This month's post-tryptophan contingent included WB4GCS, KC4WTT, N3DFK, W3WH, N3IDH, N1NCZ & Pat, KE7FD and W3WN. Table topics this month included a Linux AV survey, how went your Thanksgiving?, night maneuvers in the Army, a brief history of Symantec & Norton AV, listening to classical music on FM broadcast, hernia operations, rebuilding the ham shack, repeater status (duplexers), Echolink, AA3FI teaching Jackie to fly, dress codes for school kids... and much, much more.

Our next gathering will be on Saturday, December 26th, as usual at **Suzie B's**, Route 910 at the intersection of Route 519 at 19, Canonsburg. (Since this is also Field Day weekend, there may be a "satellite" meeting at the South Park Eat 'n' Park as well.) 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?

As we are coming into the last month of 2015, it is time to **look back** on another successful year for **WASH**, & to **look forward** to 2016.

2015 saw another successful **WASHFest**, 2 Meter Simplex Contest, Field Day, and (for those who participated) Pa QSO operation by club members. Another great turnout for the **WASH** picnic at the Breezeshooter's Hamfest, and a great time was had by all who attended the annual Dayton Hamvention. Those who participated in the SET drill with St. Clair Hospital & other served agencies got high marks all around. We've seen the club repeaters undergo upgrades and maintenance, the N3FB/R machine finally getting a new building, and we will soon see our linked repeaters fully operational.

Looking forward... we have our **annual 2 Meter Simplex contest** coming up next month. Rules are in the newsletter, and new contest chair Jim WB4GCS is revamping the entry forms to make them easier to use than ever. (Well, he will once Ye Editor gets the old ones to him!) As you talk with other amateurs in the area, make a point, when you can, to mention the event and encourage people to join in on this fun, short little local contest! (Don't forget to mention that every entry gets a free prize ticket to **WASHFest**!)

Just a few weeks later will be the **21st Annual WASHFest 2016**. We've done ourselves proud every year and made this one of the premier and most looked-forward-to hamfests in the area, and this year's event promises to be no exception! Carol KB3GMN is busy taking reservations and putting the finishing touches on the plans and preparations, but she still needs your help, and the help of all **WASH** members, to spread the word around and make sure all of our vendors and guests have the best time possible!

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

At this time, **we'd like to take a moment and say "thank you"** to everyone who has contributed to the **WASHRag** in some form or another this year, and past years. Be it an article, photos, cartoons, suggestions, or whatever. This newsletter would not exist without your input, and would not continue to exist were it not for everyone who takes a few moments to read it (before using the printout to line the bottom of their birdcage).

May you and your family have a wonderful & joyous holiday season and New Year, no matter how you choose to celebrate it!

WASHNet NCS Schedule

12/07/2015	Bob AB3ED	02/01/2016	TBA
12/14/2015	Carol KB3GMN	02/08/2016	TBA
12/21/2015	Digital Night	02/15/2016	TBA
12/28/2014	Dave N3DFK	02/22/2016	TBA
01/04/2016	TBA	02/29/2016	TBA
01/11/2016	TBA	03/07/2016	TBA
01/18/2016	TBA	03/14/2016	TBA
01/25/2016	TBA	03/21/2016	TBA

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

Minutes, November 5th Meeting

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

Carol KB3GMN called the meeting to order at 19:04 hours. 26 members were in attendance.

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

Motion to waive reading of the minutes based on the minutes printed in the newsletter by Pat KC4WTT, second by Bill W3WH, passed unanimously.

Committee reports:

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

Secretary (KB3ERQ): No Report

VE (W3WN): We had 5 candidates for new licenses; all passed, 4 new Generals and 1 new Technician. Next VE Session at **WASHFest** on February 28th; rest of 2016 to be scheduled. Thanks to N3FB for making the arrangements.

Repeaters (N3FB): Interior & exterior of the new building is progressing nicely & almost complete. 443.65 undergoing maintenance. 146.955 is hearing better but still has some issues. 442.55 is deaf and in need of some TLC.

WASHNet (KE7FD): Net needs more participation or "we're going to close down the repeaters".

Contests (K3VX): Upcoming events listed in the newsletter.

Public Service (N3RDV): No report.

WASHFest 2016 (KB3GMN): Kathy Sauder definitely coming. EAGLE 1 Communications is coming, 20 tables to date reserved. Everything is coming along nicely.

Ways & Means (KB3GMN): 50/50 tonight.

Newsletter (W3WN): Out.

President (KB3GMN): By-laws are out of date and need revised. Question was raised regarding absentee ballots. By-laws neither prohibit nor allow them. Following discussion, motion by Jim WB4GCS, second by Harold K3HCR to not accept them tonight pending updated by-laws clarifying their use. Motion carried.

Old Business: None

Elections for 2016 Officers:

Nominations re-opened. No further nominations for either office.

Nominations closed.

Remarks by Jim WB4GCS regarding both candidates being worthy of election and that it is good for the club to have two people who both want to do the job.

Ballots distributed.

President: 15 votes for Carol KB3GMN, 11 votes for Rick KB3IAC. Carol KB3GMN declared the winner.

VP/Treasurer: Motion by Frank N3FB, second by Jim WB4GCS, directing the Secretary to cast one vote for Mark N3RDV. Motion carried.

New Business: Jim WB4GCS discussed the issues with the repeater 2 Meter pre-amp; it's oscillating and will need replaced. Motion by Harold K3HCR, second by Bill W3WH to allocation \$150 for new pre-amps. Motion carried.

Good of the Order: Rick KB3IAC discussed the kits planned for the December meeting, and displayed the sample long-sleeve shirts with the club logo that he has arranged to get for interested club members.

Motion to Adjourn by Jim WB4GCS, second by Ron W3WN and carried.

Meeting adjourned at
19:40



WASH Spotlight: K3VX and...



Congratulations from all of us to newlyweds Larry & Jean Comden, married on November 21st, 2015!



Photo courtesy of and © Copyright 2015 Bill Hill W3WH

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

Monthly WASH Breakfast

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



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

Wireless Association of South Hills Membership

AA3GM	KB3IVX	N3KFD	WASH FL	WASH SC	Silent Keys
AB3NM	KB3JHR	N3RDV	KA3UPY/M	N3RNX	
AE3DL	KB3ORO	N3RHT	W4ZE	WASH TN	
K3HCR	KB3PSB	N3SBF	WASH NE	K3OL	
K3LGM	KB3YCX	NU3Q	NØPEU	KE3XB	
K3SGT	KC3DOF	W3LE	WASH OR	N3YPB	
K3VX	KC3ELA	W3RWS	NØVLR	WASH TX	
KA3VXM	KC4WTT	W3VFA	NØWPV	NB3C	
KB3DCO	KE7FD	W3WH	KB3NVL	K3LGM	
KB3ERQ	KI5ZT	W3WN	KB3NVM	KB3IJX	
KB3GMN	N1NCZ	WA3PYU	WASH OH	Jane Wagner	
KB3GMP	N2QIV	WA3VSS	N8DPW	WASH VI	
KB3GMU	N3DFK	WB4GCS		NP2JF	
KB3GUZ	N3FB				
KB3IAC	N3IDH				

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

Through November 5th, 2015
List compiled by
Mark Stabryla N3RDV, Vice President/Treasurer

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

2015/16 WASH Upcoming Events Calendar

Club Meetings & Other Significant Events — Subject to Change

December 3 rd	WASH Meeting	St. Clair Hospital Outpatient Center, 2000 Oxford Drive, Bethel Park
December 4 th –6 th	ARRL 160 Meter Contest	http://www.arrl.org
December 12 th –13 th	ARRL 10 Meter Contest	http://www.arrl.org
December 26 th –27 th	Stu Perry Topband Challenge	http://www.kkn.net/stew/
December 31 st	ARRL Straight Key Night	http://www.arrl.org
January 7 th	WASH Meeting	St. Clair Hospital Outpatient Center, 2000 Oxford Drive, Bethel Park
January 16 th	WASH 2 Meter Simplex Contest	http://www.n3sh.org
January 16 th	Breezeshooter's Groundwave PSK31	http://www.breezeshooters.org/html/groundwave_contest.htm
January 30 th — February 1 st	ARRL VHF Contest	http://www.arrl.org
February 4 th	WASH Meeting	St. Clair Hospital Outpatient Center, 2000 Oxford Drive, Bethel Park
February 13 th	Breezeshooter's Groundwave CW	http://www.breezeshooters.org/html/groundwave_contest.htm
February 20 th —21 st	ARRL DX Contest CW	http://www.arrl.org
February 28 th	WASHFest 2016	CSVFD Memorial Hall, 3600 Library Rd, Castle Shannon
	WASH VE Exam @ WASHFest	
March 3 rd	WASH Meeting & Pizza Night	St. Clair Hospital Outpatient Center, 2000 Oxford Drive, Bethel Park
March 5 th —6 th	ARRL DX Contest SSB	http://www.arrl.org
March 12 th	Breezeshooter's Groundwave SSB	http://www.breezeshooters.org/html/groundwave_contest.htm
March 26 th —27 th	CQ WPX Contest SSB	http://www.cqwp.com/
April 7 th	WASH Meeting	St. Clair Hospital Outpatient Center, 2000 Oxford Drive, Bethel Park
May 5 th		
June 2 nd		
June 5 th	Breezeshooter's Hamfest	Big Butler Fairgrounds, 1127 New Castle Road (US 422), Prospect PA 16052
	WASH Picnic @ Breezeshooter's	

"Seen" at the November Meeting

Photos Courtesy of and © Copyright 2015 Ron Notarius W3WN



A Tube-Type Transceiver Buyer's Guide

James Benedict N8FVJ courtesy of eham.net

Many ham radio operators are familiar with the vintage tube gear in our early days of ham radio. However, more recent hams have little knowledge of tube type gear and vintage to them are older solid-state design.

Back in the early 1960s, the move from AM to SSB produced compact and lightweight transceivers. These SSB transceivers are not a true boat anchor of years past. The receiver performance is only mediocre by today's standards. However, provide a lot of fun to operate on the ham bands. The receive tube type non-fatiguing audio quality is a pleasure to hear during good band conditions.

Choosing a vintage tube type SSB HF transceiver to meet your needs is key to the fun factor. If your ham shack is subject to a lot of manmade noise on the HF bands, a quality noise blanker is important. Only a few tube type HF transceivers used a quality noise blanker. Some did not have any noise blanker option. On the other hand a quiet receiver area keeps all options open.

Modern HF transceivers have an excellent noise blanker, high dynamic range and no tune up procedure for the RF output amplifier. The digital display provides precise frequency without any drift. Instant band switching, dual VFOs and memories are taken for granted without a second thought.

The performance of the tube type HF SSB transceivers drift an average of 500Hz after a warm up period plus do not have a RIT control. Most hams will tolerate signal drift on the bands. Vintage gear nets are available for check in too. Good modern day receiver performance is considered a minimum of -133dB sensitivity, 100 KHz Dynamic Range of 120dB and a narrow Dynamic Range of 75dB at 2 KHz.

The transceivers rate from best to average. The first four transceivers are so close performance wise that any could be rated #1.

COLLINS KWM-2 Series



The Collins KWM-2 and KWM-2A are sought after and expensive. Band coverage are any 200 KHz range in between 3.4 MHz to 30 MHz (except 5 MHz to 6.5 MHz). A crystal calibrator for zeroing the dial is included. The KWM-2 includes fourteen 200 Hz positions and the KWM-2A provides an additional twenty-three positions for 10 meters. That is a lot of crystals. New crystals are \$16 each! The 134-PB noise blanker option performs well. An aftermarket Walters rejection tuning unit will reduce or remove an interfering signal. Power output is 100 watts PEP (slightly less on upper frequency bands).

The Collins KWM-2 series has a dual conversion receiver with a Collins mechanical filter for good selectivity. Receiver performance is similar to the 75S-3 receiver with an outstanding sensitivity of -140dB, 100KHz blocking Dynamic range of 105dB and a 3 KHz narrow Dynamic range of 63dB. A separate power supply and speaker is required.

DRAKE TR-4 Series

The Drake models include the early & late TR-4, TR-4C, TR-4CW & TR-4CWrit. The frequency coverage is 80 meters thru 15 meters and 500 KHz of 10 meters (normally 28.5 MHz to 29 MHz). The early TR-4 does not include a noise blanker option. Mid Drake TR-4 series include a hard wired noise blanker option and the late TR-4, TR-4C, TR-4CW and TR-4CWrit use a 34-PNB plug-in noise blanker. The noise blanker will remove most noise to -40dB down. Power output is 200 watts PEP.



The TR-4 series makes use of a simple single conversion type receiver. Unlike general coverage receivers, images are not an issue. The frequency dial can be verified with a built-in crystal calibrator. The TR-4 series uses an asymmetrical pair of 8 pole crystal filters (one for each sideband) providing very good selectivity due to that asymmetrical design. The TR-4CW includes a CW filter and the TR-4CWrit has a receiver RIT control.

The Drakes had a small design issue at the mixers. The C34 capacitor on the 6EA8 (V3B) pentode grid to ground reduces the dynamic range. Remove the grounded side lead of the C34 capacitor and reconnect to capacitor C29. One

side of C29 is connected to the 6EA8 cathode. Reconnect C34 to C28 opposite side that also is connected to the tuning coil. This should increase the 100KHz blocking dynamic range from 105dB to 115dB with regard to the Drake TR-4 somewhat lower sensitivity of -124dB. After the modification the Drake TR-4 should meet -124dB sensitivity, 100KHz Dynamic blocking range of 115dB and a 2KHz narrow Dynamic range of 63. Perhaps 12BZ6 replacing the 12BA6 receiver RF amp will increase the receiver sensitivity, but may deteriorate AGC performance. One TR-4 model of the total of 12 various models used a 12BZ6 as an RF amplifier tube.

I suspect the Drake solid-state noise blanker is the best of the lot. This would make the mid & late Drake TR-4 and newer series the best for a noisy environment. A separate power supply & speaker is required.

NATIONAL NCX-5

The National NCX-5 operates from 80 meters to 15 meters and 500 kHz on 10 meters (28.5 MHz to 29 MHz was standard). Power output is 100 watts PEP.



The NCX-5 has an interesting receiver, but is missing a noise blanker option. The dial is a mechanical digital design and is surprisingly accurate. A crystal calibrator was an option. A receiver RIT is included. The NCX-5 dual conversion receiver uses two RF stages. (Before dual conversion receivers were available, a dual tuned RF stage provided better image control). An eight-pole crystal filter is used in the IF. Although rather wide at 2.8KHz @ -6dB, the 60dB specification is only 4.76KHz wide. The NCX-5 receiver should provide a superior 100 KHz wide dynamic range if the Mixers and AGC is well designed. Some will state the 12BE6 second RF amplifier is a noisy performer. But, that is only true if used as a converter tube. I never seen the receiver specifications, but others have commented the receiver is definitely the equal of the TR-4 with the high sensitivity of the Collins KWM-2. A separate power supply and speaker is required. Owning all three transceivers, I agree.

HALLICRAFTERS SR-150 & SR-400 Cyclone



I combined both radios due to similar performance, but the SR-400 is the upgrade and expensive like the Collins KWM-2 series. Some will comment the SR-400 is in a different league compared to the SR-150. Both transceivers cover 80 meters thru 10 meters (28.0 to 29.5 MHz). Both transceivers have a receiver RIT. The SR-400 output 275 watts SBB & 200 watts CW and the SR-150 output is 150 watts PEP & 125 watts CW.

Both receivers are a dual conversion design with an IF crystal filter. A built-in 100Hz crystal calibrator is standard. The receivers are reported to be very quiet. I never saw measured specifications. A separate power supply and speaker are required.



A Tube-Type Transceiver Buyer's Guide

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SWAN 350, 500 & 700 series



The Swan transceivers operate 80 meters thru 15 meters plus 28.5-29.0 MHz on 10 meters. RF power output varies from 250 watts PEP/150CW to later models producing 300 watts PEP/200 watts CW. The base 350 model does not include a calibrator or noise limiter. The 350A did include a crystal calibrator. The noise limiter is likely a diode based audio clipper circuit and performance on SSB is poor. Perhaps the latest models had a true noise blanker.

The receiver is a simple single conversion design with an eight-pole crystal lattice filter. A series called the SS special used two eight pole crystal filters for better selectivity. A tag exists on the front panel identifying these models. I owned a Swan model 350 and found the receiver more noisy vs the Collins, Drake & National. I never saw receiver specifications, but suspect -133dB noise floor, 100KHZ Dynamic range of 85dB and narrow 5KHz

Dynamic range of 60dB. A separate power supply and speaker is required.

HEATHKIT HW-100/101, SB-100 thru 102 series

The HW and SB series were about identical design wise. All models provide 80 meters thru 15 meters and 500kHz on 10 meters. Unlike the hard-wired transceivers listed above, the Heathkits were based upon using cheaper phenolic circuit boards. Some heat and moisture issues caused problems over the years, but did not make for unusually high reliability. A kit is difficult to build even with most of the wiring on the circuit boards. Power output was 100 watts PEP/CW.

The receivers were double conversion using an eight pole crystal. Performance is similar to the Swan 350, 500, 700 series, but the double conversion receiver is perhaps a little less noisy. A noise limiter was not included and an optional crystal calibrator was available. The tuning dial may slip after the years. A separate power supply & speaker is required.



SWAN 270 CYGNET

The Swan provides 80 thru 15 meters with 500KHZ on 10 meters. Power output is 100 watts PEP/CW. A crystal calibrator or noise limiter is not included in the design. A noise limiter is about useless on SSB.

The receiver is a single conversion design. Performance is the same as the Swan 350 series. The power supply and speaker is built-in. If the additional power output of the larger Swans is not desired, I would prefer the Swan 270.



ADDITIONAL COMMENTS

The top four transceivers outperform a Yaesu FT-101E IMO. Quieter receiver, better narrow dynamic range performance and the AGC is lacking in the early to mid-production Yaesu FT-101. The Yaesu noise blanker was improved in the later series.

Replacement tubes can be expensive. With regard to receiver tubes, eBay is not always the best price. The 12BE6 & 12BA6 averages \$6-8 on eBay whereas a few tube dealers in FL sell NOS for \$4-5.

If performing self-service, be aware of the dangerous high voltages

None of these transceivers included a speech processor. The Turner +3 desk microphones have a great performing built-in audio compressor. Loud, but not overbearing or distorted plus not a tendency to over modulate.

The tube type higher RF output transceivers may help a little on 80 & 40 meters. Even 1/2 an S unit out of the noise makes a difference.

Keep in mind these classic tube type transceivers are fun backup classics. If only affording one HF transceiver, I would rather own a FT-747GX, IC-735 or an Alnico DX-70.

But, these old tube types make warmth like a pet and seem to have a soul.

Nobel Prize winner Dr. Joe Taylor K1JT will be helping to celebrate the 100th anniversary of the University of Pittsburgh Panther Amateur Radio Club W3YI by giving a public lecture. All amateur radio operators are invited.



Title: DXing with Weak Signals

Speaker: Dr. Joe Taylor, K1JT

Room: O'Hara Student Center Ballroom,
4024 O'Hara St, Pittsburgh, PA 15213

Date: Friday December 4th, 2015

Time: 3:00 pm

A reception will follow the lecture.

For more information contact:

Brandon Contino KE0COO,

Brandon.Contino@pitt.edu, PARC President

or Juan Manfredi NA0B, manfredi@pitt.edu, PARC Faculty Advisor

On November 16th, news reports indicated that the State of Oregon was "cutting ties" with the head of Oregon's ARES group & OR SEC, Vince Van Der Hyde K7VV.

"The cut comes after he asked volunteers not to take part in a recent emergency drill — because of bad equipment and control issues."

Reports indicate that Van Der Hyde requested that Oregon ARES members not participate in a State sponsored emergency drill one week earlier. He declined to speak to newspaper reporters, but allegations are that in a letter to OR ARES members, he cited "state equipment was in disarray, volunteers were not given enough time to prepare and the state doesn't have operational control of the service."

News reports state that the Oregon Office of Emergency Management issued a statement confirming the end of the relationship with Van Der Hyde, but stressed that it's not cutting ties with Oregon ARES.

— American Radio Relay League
Kristian Foden-Vencil, Oregon Public Broadcasting
<http://www.eham.net>

Announcing the Sixteenth Annual WASH 2Meter Contest!

This January will mark the Sixteenth Annual **WASH** 2 Meter Contest. We've already had a lot of interest in it, and this year promises to be even more exciting!

Everyone who participated in it the last thirteen years had a blast, and we hope to continue the tradition again this year!

Please review this year's rules carefully. After evaluating feedback from participants, **we made some changes and additions in the last few years** that we hope will really generate some interest! We also have a **new contest chair & mailing address** for 2016! There may be some additional "tweaking" of the rules between now and January, so keep an eye on this column in the next few newsletters, and we'll look forward to seeing you on the 16th!

Date & Times: Saturday, January 16th, 2016 from 7 to 11 PM EST.
(That's January 12th 0000-0400 UTC to the purists!)

Objectives:

- To make as many contacts as possible
- To have fun!

Band, Mode & Frequencies: The contest will take place solely on 2 meter band.

- **FM** : FM simplex only, no repeater contacts. The FM frequencies are all standard 2 Meter simplex frequencies, as per the ARRL 2 Meter Band Plan, every **15 kHz**, from **146.505 to 146.595 MHz**, and **147.450 to 147.580 MHz**. Use of simplex frequencies in the "FM Experimental Simplex" band of 145.510 to 145.670 are not recommended. See list of recommended simplex channels at the end of the rules.
- **CW**: 144.05 to 144.1 MHz Only. (See ARRL 2 Meter band plan)
- **SSB & AM**: 144.2 to 144.275 MHz Only. (See ARRL 2 Meter band plan).
- **Digital (including RTTY)**: 144.51 to 144.55 MHz. (See ARRL 2 Meter band plan) Multiple digital modes may be used, and participants are free to use any generally accepted Digital mode, but only ONE Digital QSO with a given station regardless of mode

→ *Note: Listen for CW QSO's around 144.1 MHz 15 minutes after the hour*

→ *Listen for SSB & AM QSO's around 144.2 MHz 30 minutes after the hour*

→ *Listen for Digital QSO's around 144.51 MHz 45 minutes after the hour*

In the event of accidental QRM with nets and non-contest QSO's in progress, please respect their right to the frequency and QSY.

Power Limit: Maximum 100 watts output.

Exchange : Callsign, contact number, ZIP Code.

For the purposes of the contest, the 5 Digit ZIP Code for your location is sufficient — do not use the "Zip +4" code. Mobiles and portables should use the ZIP code of their location as determined to the best of their ability. Canadian stations will use their 6 digit postal code

Example 1: "N3ZCG from W8XK, please copy Number 3, 15347."

Example 2: "K3VX from K3CM, please copy Number 21, 16801"

Example 3: "W3WH from W3OC, please copy Number 7, 15137"

Contacts : Work as many different calls and locations as possible, giving Exchange as noted above. Work each station **once** per mode, and **once** per ZIP Code — Mobiles can be reworked whenever they change locations. Remember hilltops work best!

Disqualification: Remember, this is a friendly "for fun" contest. Stations may be disqualified for infractions of the rules and for unacceptable operating practices. While not an inclusive list, stations may be disqualified for:

- FM signals transmitted on simplex channels below 146.505 MHz.
- Intentional interference to non-contesters, nets, & QSO's
- Intentional interference to other contest operators
- The committee reserves the right to verify QSO's. QSO's that can not be verified may be removed from the log without penalty.

Scoring: Each Contact: **Phone** (FM, SSB, AM): 1 point
CW: 2 points
Digital (any mode): 2 points

Multipliers: Locations (Number of different ZIP Codes)

Power: Stations running 10 watts output or less: 3
Stations running over 10 up to 30 watts output: 2
Stations running over 30 watts output: 1

Final Score: Total Points x Locations x Power

After the Contest: Fill out all the log information. In the upper left corner check whether "base" or "mobile." In the upper right corner be sure to enter your callsign and club affiliation (or "none" if not a member of any club). Please number all log sheets consecutively. Log sheets can be downloaded from the **WASH** web site, www.n3sh.org, no later than January 1st.

Submit Log Sheets: Check your log sheets carefully for dupes. Verify that all information is entered.

Send the logs to: WASH 2 Meter Simplex Contest
c/o Jim Sanford WB4GCS
10 Sugar Run Road
Eighty Four, PA 15330

Enclose a #10 SASE for return of results.

Entry Deadline: February 1st, 2016

Each log submitted on or before the deadline will receive one (1) main prize ticket to WASHFest 2016 on February 28th

Logs submitted with an SASE will have their ticket mailed to them, otherwise, the tickets will be available at the **WASH** Club table

Recommended FM Simplex Frequencies:

After the first year of the contest, we found that the limited number of frequencies suggested in the rules were insufficient for the activity level. In subsequent years, we permitted use of any recognized simplex frequency, as per the ARRL recommended guidelines published in the annual ARRL Repeater Directory and other sources, above 146.520 MHz.

You will note that many of these frequencies are listed as potential dual use, with a "local option" for them to be used for repeater inputs and outputs.

After discussions with Frank Bobro N3FB, Repeater Coordinator for the Western Pennsylvania Repeater Council (WPRC), we have determined that the following simplex frequencies are recommended for use. Use of those that are "dual use" are not expected to cause issues for any known repeaters.

Remember that good amateur practice indicates that should a contest participant be notified that they are inadvertently causing interference to a coordinated repeater that is using a recognized simplex channel, they should immediately cease use of that frequency in favor of, and out of respect for, the existing repeater.

The following list of recommended frequencies are recognized as standard simplex channels and should not suffer from co-channel problems with any existing repeaters:

146.505 MHz	146.580 MHz	147.510 MHz
146.520 MHz (*)	147.450 MHz	147.525 MHz
146.535 MHz	147.465 MHz	147.540 MHz
146.550 MHz	147.480 MHz	147.555 MHz
146.565 MHz	147.495 MHz	147.570 MHz

Simplex channels below 146.505 MHz are not to be used, as many of these are in use in WPA as repeater input frequencies.

(*) The National Simplex Frequency, 146.520 MHz, **may** be used. However, many stations use 52 for casual conversation or as a calling frequency. If the frequency is in use or becomes used by non-participants, please permit them to use the frequency unimpeded.

To avoid interference to other contestants and other users of the bands, please do not operate on 5 or 10 kHz "offsets" from these recognized FM channels.

Bottom line: Enjoy the contest, but do so responsibly.



The N3SH UHF Repeater Duplexer

Jim Sanford PE WB4GCS wb4gcs@amsat.org

First, the initial measurement of the duplexer response between the antenna and receiver port (table 1, right)

This is OK, useable, but not great.

After initial tuning, the pass frequency is good, but the notch is in the wrong place. No more tuning room. I have to remove cavities T1 & T2 from the panel, open the bottom, and reposition the fixed node of the notch. (See Photo 2 right). The fixed end of the loop needs to move to the right hole, to allow greater spacing of adjustment.

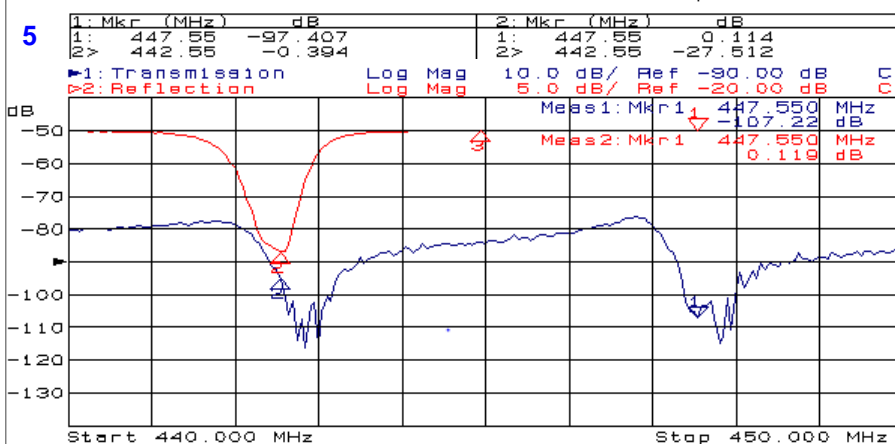
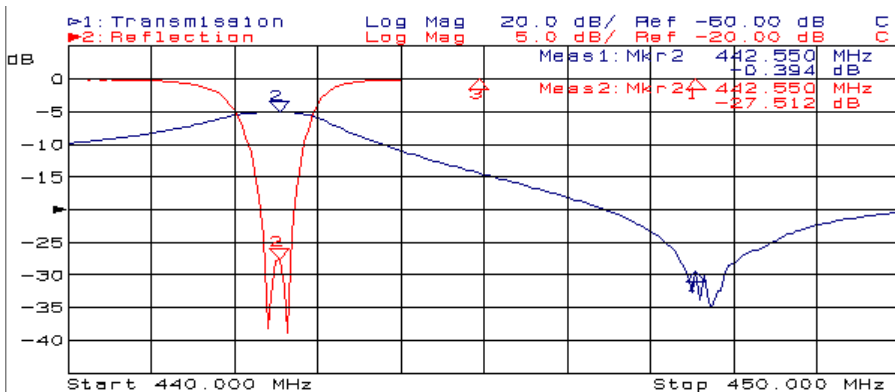
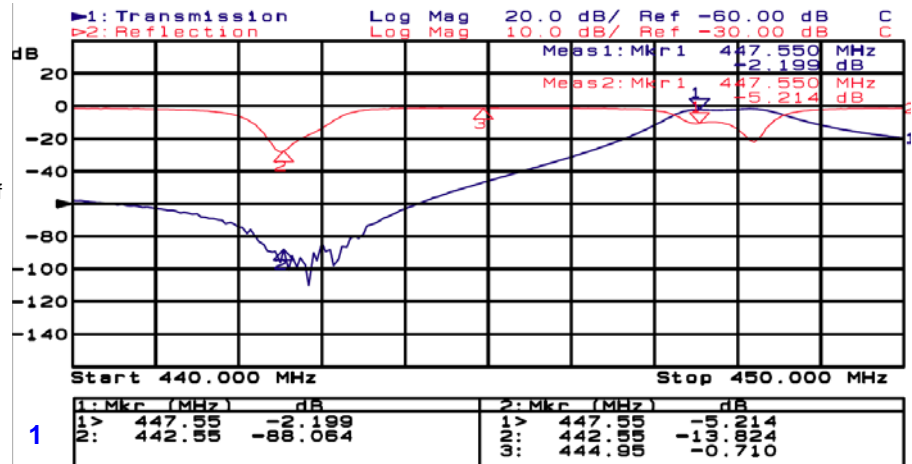
Switching to the receiver side, cavities R1 & R2 also underwent retuning. Transmission loss is significantly improved and rejection notch 3 db or so better. I did not try to lock down the tuning adjustments, because it changed the setting. Care in handling will be required.

The transmitter cavities will require much more work — the have to be removed and the notch loops reconfigured — they are at their extreme of adjustment.

A 1-1/8" wrench was used to remove the cavities from the panel, and a 1/4 inch spin-tight to remove the cavity bottom. Photos 3 & 4 show the before & after pictures of the inside of the cavities.

After the adjustments were made, some changes occurred when the locking screws were adjusted. It was possible to fine-tune the notch by slightly tuning the peak, and transmission response was not significantly affected.

Following reassembly and testing, initial tests (graph not displayed) showed a 0.3 db transmission loss, which seemed too good to be true. 107 db rejection of the receiver frequency is excellent. Since analyzer output power was maximized to account for the increased rejection of the entire



chain, I recalibrated the analyzer and re-measured (chart 5 below).

So, 0.4 db transmission loss is still better than specified 0.5 db.

97 db rejection is good.

Finally, let's look from transmitter to receiver (table 6 below left)

What we care most about is attenuation at the receive port of the transmitter, which ideally, should be the sum of the two rejections — over 180 db. That is beyond the capability of this analyzer (not enough power output), and is reflected in the very noisy nature of this measurement. Even if it is only 107db, as reflected in the traces above, that is very good.



So, to summarize... see table 7 (right),

Sealed adjustments.

Called it done.

(All photos & charges are courtesy of & © Copyright 2015 Jim Sanford WB4GCS)

	Initial (db)	Final (db)
Receive Insertion Loss	-2.19	-0.62
Receive TX Rejections	-88.06	-93.21
Transmit Insertion Loss	-0.95	-0.39
Transmit RX Rejection	-86.99	-97.4

WRC-15 Concludes

American Radio Relay League, Radio Society of Great Britain, ITU



Newington, CT, November 27th, 2015 — World Radiocommunication Conference 2015 ([WRC-15](#)) concluded its deliberations on November 27 in Geneva, as heads of delegations sign the *Final Acts* that revise the *Radio Regulations* — the international treaty governing the use of radio frequency spectrum and satellite orbits. Some 3300 participants, representing 162 out of the International Telecommunication Union's (ITU) 193 member states, attended the 4 week conference. Another 500 or so participants, representing 130 other entities including industry, also attended as observers. Festus Daudu of Nigeria chaired WRC-15.

"A great deal has been achieved in the last 4 weeks, and the results will have a major impact on the future of the telecommunication general and radiocommunications in particular," ITU Radiocommunication Bureau (ITU-R) Director François Rancy said in a closing [press release](#). "The outcomes of WRC-15 are aimed at maintaining a stable, predictable and universally applied regulatory environment that secures long-term investments for the multi-trillion dollar ICT industry." WRC-15 addressed more than 40 topics related to frequency allocation and sharing.

The conference reached consensus on a new secondary allocation for Amateur Radio at 5351.5-5366.5 kHz with a power limit of 15 W effective isotropic radiated power (EIRP). Some Region 2 countries, but not the US, will be permitted up to 25 W EIRP. With this action — and despite conditions that are more restrictive than had been hoped at the start of the Conference — the Amateur Service has obtained its first new global HF allocation since 1979.

The 15 kHz band at 60 meters "will maintain stable communications over various distances, especially for use when providing communications in disaster situations and for relief operations," an ITU news release said. The new band will not become available for use until the FCC addresses the WRC-15 *Final Acts* in a rule making proceeding and establishes operating parameters.

The International Amateur Radio Union ([IARU](#)) team at WRC-15 also focused its efforts on tweaking the agenda for WRC-19. Agenda Item 1.1 will consider 50-54 MHz harmonization in Region 1. A proposed agenda item to align the 160 meter allocation in Region 1 with the rest of the world did not make the cut.

Agenda Item 1.12, addressing the Earth Exploration Satellite Service (10 GHz EESS), was approved at plenary with footnotes relevant to certain Middle East countries and with the Amateur Service allocations untouched.

Threats by the mobile telephone/broadband industry in the vicinity of 10 GHz and 24 GHz have been averted for the time being, but are expected to be raised again at WRC-19 and/or at WRC-23. The band 420-450 MHz was dropped from proposed WRC-19 studies regarding space operations frequencies for short-duration (3 years) small satellites.

Leading up to WRC-19, ITU-R will address an ambitious schedule of studies covering a wide range of services from Amateur Radio to broadcasting, mobile broadband, mobile satellite, fixed satellite, Earth stations on mobile platforms, and space exploration services.

ITU-R has been invited to study existing allocations to the space operation service below 1 GHz and, if no suitable frequencies can be identified, then possible new allocations, or an upgrade of the existing allocations, to the space operation service within the frequency ranges 150.05-174 MHz and 400.15-420 MHz should be considered.

ARRL Chief Technology Officer Brennan Price N4QX, and Technical Relations Specialist Jon Siverling WB3ERA, served on the US delegation to WRC-15.

"I think it's a miracle," Rancy said at a closing press conference. "I'm always amazed that in 4 weeks we can produce 500 pages of very thick, very detailed, very complex regulations...without a single vote."

P5CW (P5/K6VVA) "CW Only" Project Update

Rick Hilding K6VVA

1. Unfortunately, the hoped for "RadioSPORT" Demonstration as P5CW in the 2015 CQ WW CW DX Contest did not take place.
2. Multiple efforts for permission were made through my new P5 Envoy, the DPRK Mission to the UN and my personal direct communication to 7 DPRK Ministries (which included access to all related documentation and real time Petition data via a Password Protected webpage).
3. In a further attempt to help the DPRK AUTHORITIES grasp the potential POSITIVE GLOBAL PUBLIC RELATIONS benefits to them associated with the special 150th ITU Anniversary event proposal, final efforts included a turnkey Sample-Draft PRESS RELEASE. You can view a copy of the document [HERE](#). IMHO, the DPRK missed out a great opportunity.
4. When I started this quest in 2006, the initial "No" responses were always "Not until relations improve between our two countries." As my efforts persisted, I was later further encouraged to continue when something occurred most people never thought would happen. That being, the "Star Spangled Banner" (USA National Anthem) was performed live in Pyongyang by the New York Philharmonic on February 26, 2008, and was considered to be a significant event in North Korea-United States relations. This included a live broadcast of the concert on Korean Central Television. The DPRK Official I was in frequent contact with at the time was in attendance.
5. As previously indicated, I believe "THE INTERVIEW" movie released late last year did much damage to DPRK-USA relations for any matter of consequence or complexity. The "Hermit Kingdom" mindset in the DPRK continues to present challenges. However, there *could* be significant major changes to occur in the entire landscape there "much" sooner than later.
6. Perhaps I should resurrect my "Ventriloquist" act, buy a copy of Rosetta Stone, learn Korean and tender a new proposal to perform in Pyongyang (in conjunction with a P5CW activation, of course). One condition might be that Dear Leader, Jr. be a "Human Ventriloquist Figure" in my act like those in the final segment of an old 1999 VHS video I just converted and uploaded to my (Eric Hilding) channel on [YOU TUBE](#) (<https://www.youtube.com/watch?v=ZuQritSa98w>). Note: Some browsers may require copy & pasting the full URL into a new window for viewing.
7. Thanks again to all who have participated in this challenging project to date.

"Stay Tuned..."



Effort Underway in Puerto Rico to Reclaim Desecheo

American Radio Relay League

A legislative effort is under way in the Commonwealth of Puerto Rico to reclaim **Desecheo Island** (KP5) and to include it within the municipality of Mayagüez. According to a [report](#) in *El Nuevo Día*, the Puerto Rico House of Representatives of Puerto Rico approved two bills on October 26 that call on the US government to return ownership of Desecheo Island to Puerto Rico.



The island was the site of the KP1-5 Project's **K5D DXpedition** in early 2009 that logged nearly 116,000 contacts. KP5 was added to the ARRL DXCC list in 1979 under the "separate administration" rule. While this was subsequently removed, Desecheo and other entities were grandfathered.

Desecheo currently is under the administration of the US Fish and Wildlife Service (USFWS) within the US Department of the Interior. It is about 16 miles west of Puerto Rico, in the Mona Channel between Puerto Rico and the Dominican Republic. The legislative effort is headed by Popular Democratic Party Rep Charlie Hernández, who would like to see Desecheo become a tourist attraction. The legislation now heads to the Senate in Puerto Rico.

One of the House bills approved would repeal the legislation authorizing transfer of Desecheo to the US government for defense purposes during World War II and was used as a bombing and gunnery range until 1952. A second bill would alter the territorial limits of Mayagüez to add the nearly 5 square mile Desecheo.

"This refuge is close due to the presence of unexploded military ordnance, the USFWS says on its Desecheo Island web page, which also says that travel to the small island is "not applicable." Desecheo became a US Wildlife Refuge in 1976. Currently Amateur Radio groups wishing to operate from Desecheo Island, a separate DXCC entity, must first obtain permission from the US Fish and Wildlife Service.

In the wake of the 2009 DXpedition to the island, Desecheo dropped from the top 10 to number 43 on ClubLog's **DXCC Most Wanted List**.

The DVD of the 2015 **K1N DXpedition** to **Navassa Island** is now available. More information, along with other souvenir merchandise now available, can be found at www.navassadx.com (The links may not work in Internet Explorer but are supposed to work in other browsers.)

The **VP8STI** South Sandwich, **VP8SGI** South Georgia & **VP8IDX** (Falklands & /MM) licenses have been issued and are in hand. In just six short weeks, the team will be making their voyage to South Sandwich Island.

We expect to land at South Sandwich and begin operations sometime on January 17th if sea conditions and weather permit. After ten days at South Sandwich, we will break camp and voyage three days to South Georgia. We expect to land and be on the air on February 1st.

This is a "Pure DX" Dxpediton. The team is not mountain climbing or collecting specimens, our sole focus is getting you in our logs! We will work very hard to do that!

— Intrepid DX Group

DX Engineering of Tallmadge, Ohio, has acquired the assets of InLogis and the exclusive right to manufacture and sell the Inlogis (formerly Pixel) Active Magnetic Loop Antenna, model **RF-PRO-1B**. All manufacturing operations and equipment for the RF-PRO-1B have been moved from Golden, Colorado, to Tallmadge, Ohio.

DX Engineering says it will serve all existing RF-PRO-1B customers with replacement or service parts and expert advice.

The DX Engineering Active Magnetic Loop Antenna is a receiving antenna for HF with "figure 8" directivity and rotating capability, without occupying the space needed for a typical Beverage system.



DX News Briefs



The Intrepid-DX Group is seeking nominations for the individual or group that most displayed their "Intrepid Spirit" in 2015. The Intrepid Spirit, for purposes of this award, is defined as:

"An Intrepid Spirit is bold, courageous, dedicated, innovative, fearless, generous, resolute and visionary in their approach to Amateur Radio. We are seeking to make this award to the group or individual that most displayed their intrepid spirit in 2014, by expressing an unshakable commitment to the Amateur Radio DX Community. This award is made in memory of our friend, James McLaughlin WA2EWE/T6AF. SK, Kabul Afghanistan, April 27th, 2011."

Nominations may be submitted via email to: intrepiddxgroup@gmail.com. All nominations must be received by December 15th, 2015. The Board of Directors of the Intrepid-DX Group will evaluate the nominations and the 2015 award will be presented at the International DX Convention in Visalia, California on April 16th, 2016. More information available at

<http://www.intrepid-dx.com> — Intrepid DX Group

HH5/N5JR will be QRV 2 – 14 December, 160 – 6, with emphasis on RTTY & the WARC Bands. QSL via N5JR – DX World

KH2/F4FEC will be QRV 3 – 9 December, all HF bands. He will then be QRV as **KH0/F4FEC** 10 – 13 December. QSL via F4FEC – F4FEC

8P8JB will be QRV 15 December— 5 January, 80—10 meters, QRP. QSL via J69AZ — J69AZ

A25GR will be QRV 22 - 30 December, holiday style, 40 – 17 CW & SSB. QSL via MØXUU – MØXUU

7P8VR will be QRV 4 – 7 January, 40 – 10, no WARC bands. QSL via DDØVR -- DDØVR

PJ4B will be QRV 7-22 January, holiday style, HF. QSL via PA8A – PA8A

V47TR will be QRV from NA-104 13—21 February, holiday style on 20—10 meters CW & SSB (including 12 & 17 meters). He will be looking for SKCC members. QSL via K8AQM — K8AQM

FH/F2DX and **FH/F6BEE** will QRV 18 – 24 March, 40 – 6. prior to joining the **FT4JA 2016** DXpedition. QSL via home calls – DX World

FT4JA 2016 is scheduled for 31 March—14 April. The team of 12 operators include 5 from the FT4TA 2014 trip. They plan to take Juan de Nova off of the "top 10 needed" list, with 6 HF stations plus a dedicated 6 meter station. More information at <http://www.juandenovadx.com/en/>. QSL route has yet to be posted to the web site – Team FT4JA

QSL Routes

3V8SS via LX1NO -- NG3K
4X/R1CC via DJ1ND — OPDX
4X7R via 4X6QM -- NG3K
8Q7DV via UA8DX -- NG3K
LU7YS via EA7HBC —OPDX
C41 via LZ2HM —OPDX
C92ZO via OHØXX — OPDX
CR2X via OH2BH -- OH2PM
CR3OO via W3HNK -- NG3K
CT7AEQ via LZ1WR —OPDX
EA8/SM7BUA via SM7BUA
ET3AA via N2OO -- K4ZW
HK1R via K61PM -- HK1R
HP1XT via K6CT -- CX7TT
J3/KO8SCA via KO8SCA
LX7I via LX2A -- LX2A
OHØV via OH6V -- OH6LI

OP4CAS via ON4CAS —OPDX
OP7VA via ON7VA —OPDX
PJ2/DF8ZH via DF8ZH —OPDX
PZ5W via NØAT — NØAT
S79C via MØOXO -- S79C
S9TM via NR6M -- WW2DX
TAØ/LZ5X via LZ1DCW
TC9ØIARU via TA2OTT
UNØOA via RW6HS — OPDX
YN2CC via AJ9C -- NG3K
Z21MG via OK6DJ -- OK6DJ
Z6ØWW via OH2BH -- DL3DXX
ZA1WW via OH2BH -- OH2BH
ZB2X via OH2KI -- NG3K
ZD8AA via N6AA — ZD8AA
ZD8W via W6NV -- NG3K
ZF2ET via K5GO -- K5GO

Thanks to the NJDXA DX News & DX Chat Reflectors, the DX-QSL Reflector, 425 DX News, OPDX News, DX World.Net, ICPO Bulletin, & ARRL DX Bulletin for our DX News information. Thanks also to Bill Moore NC1L / ARRL DXCC Desk, & Bernie McClenny W3UR /The Daily DX for confirmations & additional information.



WASH Classifieds

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

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Antenna Zoning or PRB-1 Issues?

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

The Cingolani Building

300 North McKean Street, Butler PA 16001

Phone: 724-283-0653

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

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

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



Idiom Press of Merlin, OR, has announced the of its assets to Ham Supply of Elizabeth, CO.

Ham Supply will honor warranties for existing Idiom Press products, and once production is resumed, Ham Supply will honor all existing orders placed with Idiom Press after reconfirming them with the customer. They intend to have the new business in full operation by the first week of January 2016, although some previously placed orders may ship earlier.

Idiom Pressed published *The Complete DXer* by Bob Locher W9KNI, who started the business before turning it over to his son Rob W7GH, who is returning to the computer programming field.



Special Event station W1Q will be on the air December 1-15 to celebrate QST's 100th anniversary. The first QST was published in December 1915.

ARRL COO Harold Kramer WJ1B, and volunteer operators will be on the air.

This is *not* an official ARRL operation, and Kramer will handle all details, QSL cards, and LoTW entries.

He will post additional information on his QRZ.com page under WJ1B.

— **Harold Kramer WJ1B**

Courtesy of the American Radio Relay League



FCC FCC News

Courtesy of the American Radio Relay League

Newington, CT, November 30th, 2015 — The FCC has issued a **Citation and Order** to an Illinois man to notify him of his obligation to stop operating devices that cause interference to licensed radio operations and to comply with federal rules and regulations related to RF devices.

The FCC Enforcement Bureau's Northeast Region office issued the *Citation* on November 24th to Edward Kozol of Lemont, Illinois, warning him that he could face fines of up to \$16,000 a day unless he resolves the interference, which was reported last spring by AT&T.

"This includes consumer and industrial devices such as lighting ballasts that utilize radio frequencies in their operation," the FCC noted. Kozol was cited for operating incidental radiators that are causing harmful interference in violation of Section 15.5(b) of the Commission's rules.

The *Citation* stemmed from an April 22nd, 2015, complaint from AT&T concerning interference to its cellular communications system operating in the 700 MHz band. Agents from the Enforcement Bureau's Chicago Office used direction-finding techniques to determine that the radio emissions in the 700 MHz band were emanating from Kozol's residence. The 700 MHz signal was injecting noise into AT&T's network and degrading or blocking service to AT&T's customers, the *Citation* said. The agents also left a written warning.

FCC agents returned on May 20th and September 16th and found the same signal originating from Kozol's residence and requested Kozol's permission to look for any possible RF sources within his residence. "Mr Kozol ignored numerous requests to allow agents to locate and identify the offending transmitter," the FCC said. Agents also mailed additional warnings to Kozol.

The FCC directed Kozol to confirm in writing that he has taken necessary steps to ensure that he is no longer violating the Commission's Part 15 rules, including discontinuing the use of and replacing any "offending" devices. The FCC also asked for a written report on steps taken and to advise the FCC Enforcement Bureau's Chicago Office if he is unable to resolve the issue.



Has Roadway found the tower yet?



WASHfest 2016

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

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

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



(800) 545-8881

Breakfast & Lunch will be available!



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

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



- 1st Prize: Yaesu FT-991 100 W HF/6M Transceiver
2nd Prize: TBA
3rd Prize: TBA

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

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

All Prizes Subject to last-minute changes

For Table Reservations, or More Information, Please Contact:

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

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

Please Note: Early Table Reservations must be paid in full on or before January 31st, 2016. Reservations received after February 1st, 2016 must include payment in full. Reserve now... we have sold out in advance six years running!

Hamfest Table Reservation Form—Please PRINT LEGIBLY ALL INFORMATION

Name: _____ Email: _____

Address: _____ Phone: () _____ - _____

City: _____ State: _____ Zip: _____

Call Sign: _____

Tables WITH Electricity: _____ X \$15.00 = _____

Tables WITHOUT Electricity: _____ X \$12.00 = _____

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

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

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



WIRELESS ASSOCIATION OF SOUTH HILLS, INC.

Membership Application, New or Renewal



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

(check quarter _____) →
(check one) ↓

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

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

Name(s): _____

Name: _____

Address: _____

City, State: _____

Home Phone: _____

Email Address: _____

New Members Only:

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

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

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

Signature: _____

Call Sign: _____

License Class: _____

Expires On: _____

Work Phone: _____

Birthday: _____

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

Date: _____

Amount Enclosed: \$ _____

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

Please make your check or money order payable to the club treasurer, Mark Stabryla.
The Wireless Association of South Hills, Inc. reserves the right to accept or reject new memberships or renewals.
Please return completed membership form along with check/money order to the club treasurer or mail to:

WIRELESS ASSOCIATION OF SOUTH HILLS, INC.
c/o Mark Stabryla N3RDV, VP/Treasurer
1120 McKnight Drive
Bethel Park, PA 15102-2456



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

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

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

WIRELESS ASSOCIATION OF SOUTH HILLS, INC.
c/o Mark Stabryla N3RDV, VP/Treasurer
1120 McKnight Drive
Bethel Park, PA 15102-2456

Name: _____

Address: _____

City, State, ZIP: _____

Please Check the Appropriate One-Year Rate:

- ☐ \$39 in US
☐ Age 21 or younger, \$20 in US (only if you are the oldest licensed amateur in your household)
☐ Canada \$49
☐ Elsewhere \$62
☐ Other (including Blind, Life, QST by First Class Postage — please contact ARRL for rate)

Dues subject to change without notice

Call Sign: _____

Date of Birth: _____

Total Enclosed: \$ _____

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

Name & Call Sign: _____

Name & Call Sign: _____

Name & Call Sign: _____



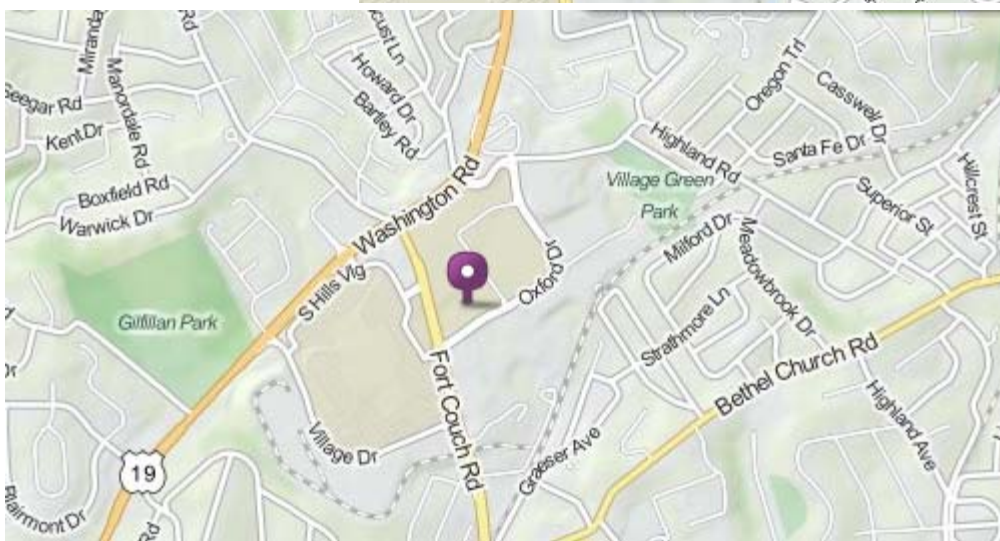
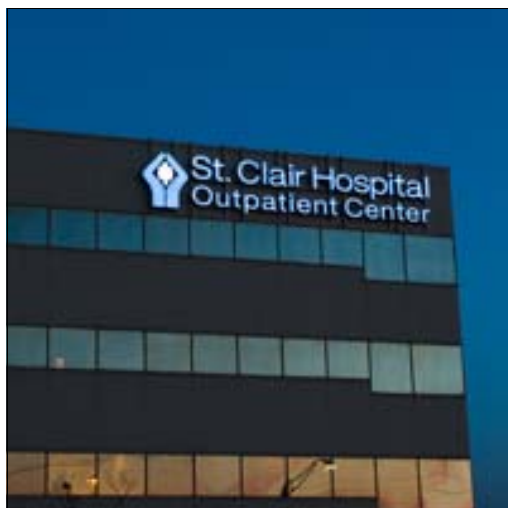
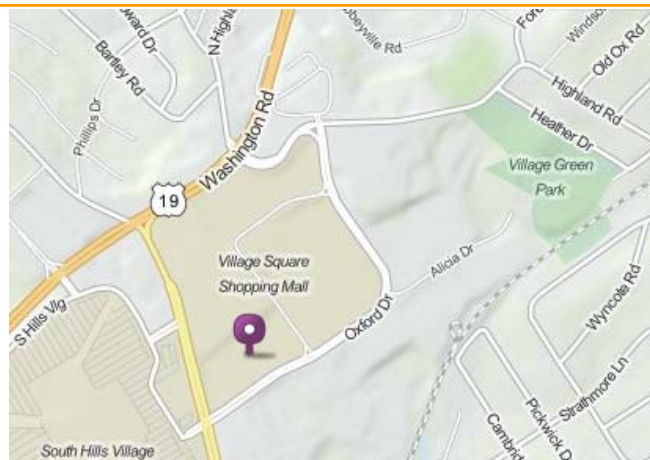
2015 WASH Meeting

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
www.washarc.org

