



# WASHRAG <sup>TM</sup>

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DECEMBER 2011

N3SH  
WA3SH  
NP2SH/B

Wireless Association of South Hills



## President Carol

At our November meeting, Carol Danko KB3GMN was elected President of the **WIRELESS ASSOCIATION OF SOUTH HILLS** for 2012.

Carol has been one of our long time members, pre-dating her license. She is one of the club's hardest workers, and it's thanks to her efforts that events like Field Day, the picnics, the parties, and of course, the annual **WASHFest**, come off smoothly and without a hitch.

I look forward to turning the reigns over to Carol and leaving the club in her good hands for the coming year.

Congratulations as well to Mark Stabryla N3RDV, who was re-elected for another 2 year term as club VP/ Treasurer. Mark has served the club well for as long as I can remember in this capacity, and we are honored and privileged to have him with us for another term.



— 73, Ron Notarius W3WN

President, Wireless Association of South Hills N3SH

### Next Meeting: December 15<sup>th</sup>, 2011

The next monthly meeting of the **WIRELESS ASSOCIATION OF SOUTH HILLS, INC.** will be on Thursday, December 15<sup>th</sup>, 2011, at the **Crossroads Ministries Church**, 88 Walter Long Road of f Route 88, Finleyville PA, starting at 7:00 PM.

There will be a very brief business meeting, followed by the continuation & testing of the kit building ongoing project.

Talk-in on the 146.955(-) N3SH/R and 443.650(+) N3FB/R Repeaters (131.8 PL). All members, guests and interested parties invited!



### 2011 WASH Christmas / Holiday Party

Our annual Christmas / Holiday Party will be held on **Friday, December 16<sup>th</sup>, 2011** at the Crossroads Ministries Church, Route 88, Finleyville. It is open to all club members, guests, and friends of the club.

Dinner will be served starting at 7 PM

The party will be catered by Pasta Too. The menu:

- Sautéed Chicken Romano
- Slow Roasted Top Round with Mushrooms in Au Jus
- Cod
- Baked Ziti in tomato sauce
- Vegetable Medley
- Parsley Potatoes topped with seasoned crumb
- Tossed Salad
- Dinner Rolls
- Coffee
- Cold drinks (to be provided by the club)



We're also asking club members to provide cookies & desert, and plans are to also have a Chinese auction.

Cost will be \$15 per person.

If you are planning to come, and have not already done so, please contact Carol Danko KB3GMN at [n3sbf@comcast.net](mailto:n3sbf@comcast.net). We have 34 members and guests coming, she needs to let Pasta Too know if we have additional members coming, so that we have plenty for everyone!

Looking forward to another great time for the holiday season! Hope to see you there!

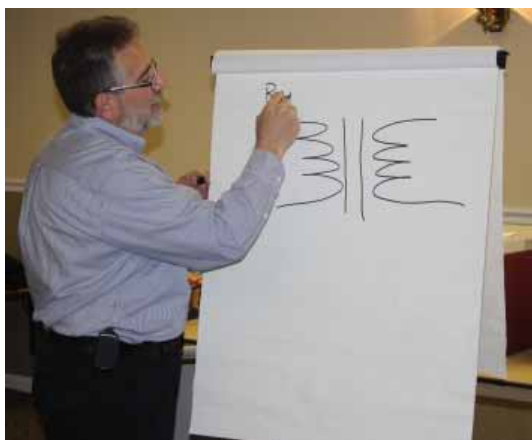
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# "Seen" at the November Meeting



Photos courtesy of and ©Copyright 2011 Ben Williams KB3ERQ



## WASH 2012 OFFICERS

### EXECUTIVE COMMITTEE:

President	Carol Danko KB3GMN
VP / Secretary	Glen Roberts KE7FD
VP / Treasurer	Mark Stabryla N3RDV

### AND WE COULDN'T DO IT WITHOUT:

N3SH / WA3SH Trustee	Steve Lane W3SRL
NP2SH Trustee	Paul Jordan NP2JF
N3SH / WA3SH / NP2SH QSL Manager	Ed Oelschlager N3ZNI
NP2SH 2009 QSL Manager	Carl Schroeder K9CS
VE Team Liaison	Ed Oelschlager N3ZNI
Webmaster	Randy George N3ZK
Asst. Webmaster	Glen Roberts KE7FD
Quartermaster	Harold Rosenberger K3HCR
WASH FM Net Manager	Kevin Smith N3HKQ
WASHFest 2012 Committee	Kevin Smith N3HKQ, Chairman
	Carol Danko KB3GMN, Co-Chair
	Bob Timmins AB3ED
Activities & Operating Events	Carol Danko KB3GMN
Ways & Means	Larry Comden K3VX
Field Day 2012 Coordinators	Rick Bell KB3IAC

### CLUB-AFFILIATED REPEATERS, BEACONS, & DIGIPEATERS:

Mt. Lebanon	N3SH / R	146.955 MHz (-)	PL 131.8
Mt. Lebanon	W3SRL / 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 Sunday Night, 9:00 PM ET, on the 146.955 & 443.650 repeaters. All radio amateurs, WASH members or not, are welcome to join in!

## THE LEGAL STUFF

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

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Editor & Publisher: Ron Notarius W3WN

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

e-mail: [newsletter at n3sh dot org](mailto:newsletter@n3sh.org) or [w3wn at arri dot net](mailto:w3wn@arri.net)

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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 of both the N3SH-W3SRL Repeater System 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. Special thanks also to Glen Roberts KE7FD of The Internet Guild for his assistance in providing space on-line for our website for back issues of "The WASHRag™" which can be found at [www.washrag.info](http://www.washrag.info)

# WASH Amateur Radio Club News Briefs

## Next WASH VE Test January 25<sup>th</sup>

The Next WASH VE exam sessions will be **Wednesday, January 25<sup>th</sup>, 2012, 6:30 PM**, at the **North Strabane Township Building, 1929 Route 519, Canonsburg, PA**. Talk-in on the 146.955 MHz and 443.650 MHz repeaters. All examiners are ARRL VEC affiliated.

Walk-ins are always welcome, but if you plan on attending the test session, please contact VE Team Liason Ed Oelschlager N3ZNI:

Telephone (724) 746-9235 or E-Mail: [n3zni@comcast.net](mailto:n3zni@comcast.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:  
 Wednesday, April 25<sup>th</sup>, 2012  
 Wednesday, July 25<sup>th</sup>, 2012  
 (tentative) Wednesday, October 24<sup>th</sup>, 2012  
 Wednesday, January 24<sup>th</sup>, 2013

Saturday, November 27<sup>th</sup> had people streaming through the malls, done with Black Friday and preparing for Cyber Monday, and had many others still digesting their leftovers of Turkey, Turkey Sandwiches, Turkey Hash, Turkey ala King... and brought some of the usual suspects to the monthly gathering of the **WASH Breakfast Gang** at **The Beach House** in Finleyville. This month, W3WH, WB4GCS, AE3DK, N3HKQ & Peg, W3LE, KB3DCO \* W3WN took their seats at our usual tables. Along with hot coffee and hot food, the topics of the morning included 160 Meter conditions, Legacy AM Broadcast stations, working VK on 17 meters at 1 AM EST, cooking 2 turkeys, the price of solid state HF linear amplifiers, building an antenna transmatch, Tarheel antennas for motor homes, working 6 meters, talking to a ham on an ventilator using Morse code, engineering graduates from colleges, and a whole lot more.

Your last chance to join us for the year comes, conveniently enough, on the morning of New Years Eve, Saturday, December 31<sup>st</sup>. So why not begin the end of the year on a high note? Come and join us at **The Beach House**, Library Road, Finleyville, just south of Trax Farm. See you there!

**MIA but On The Mend:** One familiar call wasn't with us at the last breakfast. Jack Layton W9UK has been in the hospital for a few weeks now. Initial diagnosis was heart problems compounded by pneumonia. Jack has been moved to the Kindred Rehab Hospital on the North Side (if that doesn't ring a bell, the building used to be Divine Providence & Mercy Providence Hospitals). We miss you on the repeaters Jack, get well and we hope to see or hear from you soon!

**2 Meter Net: It's Back!** Don't forget that the weekly **WASH** Sunday evening FM net has resumed as of September 4th at 9:00 PM on the N3SH and N3FB repeaters.

**Condolences** to Dave N3IDH on the recent loss of his mother-in-law.

**Still Mobile:** We recently got a short note from Al KA3UPY. Al and his wife Carol have spent the last few years cruising up and down the shore in their boat. Short story is, the boat was involved in a collision, and they have sold it. Al & Carol have bought an RV and will soon be traveling around the South from their Florida base. We hope to hear Al on HF soon — he's also now upgraded to General!

**Upcoming Events:** Sure seems like the days and weeks go past before you know it... the year's almost over!

We're only a few short weeks or months away from a bunch of club events, so a quick review is in order:

- ◆ December 2011: Christmas/Holiday Party
- ◆ January 2012: 2 Meter Simplex Contest
- ◆ February 2012: **WASHFest 2012**
- ◆ March 2012: post-**WASHFest** Pizza Party

And Dayton will be here before you know it as well!

We ARE having both a meeting and the party this year. The meeting night will be primarily devoted to the Program Committee's ongoing projects, including initial testing.

**Remembering Pearl Harbor:** This year marked the 70<sup>th</sup> anniversary of the attack on Pearl Harbor, which led the US into WW 2. You may have known that Al AC4KU was a WW2 vet, but we didn't know until this year that not only was he a Pearl Harbor survivor, but he fired the first shots from the *USS Ward*, at a midget sub trying to sneak into the harbor, 20 minutes before the planes hit.

Al received special recognition for his part this year, including words from his son, Jim WB4GCS, who is a retired US Navy Captain. And the ceremony was covered by KDKA-TV, and shown on the evening news on December 7<sup>th</sup>.

You can see the entire 2 minute clip on their web site at <http://pittsburgh.cbslocal.com/2011/12/07/pearl-harbor-survivor-recounts-day-of-infamy/>.

On November 18<sup>th</sup>, ballots were counted for several ARRL Division races. Bill Edgar N3LLR, won re-election as Atlantic Division Director with 1628 votes, followed by Phil Theis K3TUF with 1368 votes, and John Mueller K2BT with 755 votes. N3LLR has served as Division Director since 2006.



## WASHNet 2011 NCS Schedule

- |                          |                         |
|--------------------------|-------------------------|
| 12/04/2011 - Bob AB3ED   | 12/25/2011 - Frank N3FB |
| 12/11/2011 - Kevin N3HKQ | 01/01/2012 - Dave N3DFK |
| 12/18/2011 - Dave N3IDH  |                         |

**Join WASH or Renew your Membership for 2012 Today! Membership Application on Page 15!**

## Minutes, November 10<sup>th</sup> Meeting

Glen Roberts KE7FD, Vice President/Secretary, **WASH**

Ron W3WN called the meeting to order at 19:10 hours. There were 24 members and guests in attendance.

A moment of silence was observed for recent silent keys and other deserving persons.

A motion was made by Kevin N3HKQ to waive reading of the September minutes as published in the newsletter. Seconded by Bill W3WH and carried unanimously.

### Committee reports:

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

Secretary (KE7FD): No report.

VE Report (N3ZEL): VE session was held on October 26<sup>th</sup>. All but two candidates successful, including a new licensee.

Repeaters (N3FB): Repeating. 145.59 will be back up in about a week in a new location, under the WA3COM call, thanks to K3PSP.

Net Report (N3HKQ): Last net was well attended. Week on the night of December 11<sup>th</sup> will be on 10 meter AM, 29.200 MHz (Editor's note: Moved to 29.100 to stay in the AM "window").

Activities: Rick KB3IAC reports that the group is having "a whole bunch of fun."

Contests (W3WN for K3VX):

CQ WW CW coming up, followed by ARRL 160 & ARRL 10 meter contests. **WASH 2** meter simplex contest coming up in January.

Public Service (N3IDH): Thanks to everyone who helped with the SET.

Ways and Means (KB3GMN): 50/50 tonight. Reminder that the **WASH** Christmas/Holiday Party will be December 16<sup>th</sup>, cost \$15 per person. Donations still needed for the Chinese Auction.

**WASHFest 2011** (KB3GMN/N3HKQ): Short discussion on status.

Newsletter (W3WN): Out.

President's Report (W3WN): ARRL Atlantic Division Director Bill Edgar N3LLR won re-election for another 3 year term.

2012 Officer Elections:

President: No new nominations. W3WN and KB3ERQ declined nomination. Motion to have the Secretary cast one vote for Carol KB3GMN for 2012 President. Motion carried unanimously

VP/Treasurer: No new nominations. Motion to have the Secretary cast one vote for Mark N3RDV for 2012-3 VP/Treasurer. Motion carried unanimously.

Old Business: None

New Business: None

Good of the order: Very brief discussion on where to hold Field Day 2012.

Motion to Adjourn by Bill W3WH, second by Carol KB3GMN and carried.

Meeting adjourned at 19:50 hours.

Following a quick refreshment break, Electronics 101 followed, led by Rick KB3IAC



## WASH Spotlight: KA0XTT



OK, so what's with this? If you know anything about how the FCC issues calls, you know that this isn't an Amateur Service call...

All we can say now is, watch ABC's "Last Man Standing" on Tuesday, December 13<sup>th</sup>, and all will become clear...

Photo courtesy of and © Copyright 2011 Randy George N3ZK

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 **The Beach House**, on Route 88 in Fiinleyville, just south of Trax Farms and adjacent to Mineral Beach. 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

AA3XY	KB3SRC	N3RDV	WASH FL	WASH VI	Silent Keys
AB3ED	KB3TOA	N3RHT	KA3UPY/M	NP2JF	
AB3EN	KC4WTT	N3SBF	W4ZE		K3EED
AB3KA	KE7FD	N3TIR	WASH GA		(George)
AC4KU	KJ3D	N3YJJ	K3OL		KA3NMG
AE3DL	N0VLR	N3ZK	KB3IJX		KB3ENX
K3AIR	N2QIV	N3ZNI	WASH NE		KB3FNM
K3GW	N3AWF	NU3S	N0PEU		KB3FQT
K3HCR	N3BPP	W3LE	WASH OH		N3FZ
K3LGM	N3CZZ	W3RWS	N8DPW		N3KEH
K3RYA	N3DFK	W3VFA	WASH SC		N3OBD
K3SGT	N3FB	W3WH	N3RNX		N3SKR
K3VX	N3FPF	W3WN	WASH TN		N3SRC
KA3TWI	N3HKQ	WA3NB	KE3XB		N3ZEL
KB3DCO	N3IDH	WA4ONC	N3YPB		N3XFE
KB3ERQ	N3KFD	WB4GCS	WASH TX		W3ZLK
KB3GMN	N3OVP	WO3Z	K3LGM		WA3JPP
KB3GMP	N3QWW	Jane Wagner	Jane Wagner		
KB3GMU					
KB3IAC					
KB3IVX					
KB3ORR					
KB3SPD					
KB3SPE					

Through November 30<sup>TH</sup>, 2011

List compiled by

Mark Stabryla N3RDV, Vice President/Treasurer

# 2011–12 WASH Upcoming Events Calendar

Meeting Topics & Other Significant Club Events — Subject to Change

December 15 <sup>th</sup>	WASH Meeting	@ Crossroad Ministries Church
December 16 <sup>th</sup>	WASH Christmas/Holiday Party	@ Crossroad Ministries Church
December 17 <sup>th</sup> — 18 <sup>th</sup>	Stew Perry Topband Challenge	<a href="http://jzap.com/k7rat/stew.html">http://jzap.com/k7rat/stew.html</a>
December 31 <sup>st</sup>	Straight Key Night	<a href="http://www.arrl.org">http://www.arrl.org</a>
January 12 <sup>th</sup>	WASH Meeting	@ Crossroad Ministries Church
January 14 <sup>th</sup>	WASH 2 Meter Simplex Contest	<a href="http://www.n3sh.org">http://www.n3sh.org</a>
January 21 <sup>st</sup> —23 <sup>rd</sup>	ARRL January VHF Sweepstakes	<a href="http://www.arrl.org">http://www.arrl.org</a>
January 28 <sup>th</sup>	Breezeshooter's Groundwave PSK-31	<a href="http://www.breezeshooters.net">http://www.breezeshooters.net</a>
February 9 <sup>th</sup>	WASH Meeting	@ Crossroad Ministries Church
February 18 <sup>th</sup>	Breezeshooter's Groundwave CW	<a href="http://www.breezeshooters.net">http://www.breezeshooters.net</a>
February 18 <sup>th</sup> -19 <sup>th</sup>	ARRL DX Contest CW	<a href="http://www.arrl.org">http://www.arrl.org</a>
February 26 <sup>th</sup>	WASHFest 2012	<a href="http://www.n3sh.org">http://www.n3sh.org</a>
March 3 <sup>rd</sup> — 4 <sup>th</sup>	ARRL DX Contest SSB	<a href="http://www.arrl.org">http://www.arrl.org</a>
March 8 <sup>th</sup>	WASH Meeting & Pizza Party	@ Crossroad Ministries Church
March 24 <sup>th</sup>	Breezeshooter's Groundwave SSB	<a href="http://www.breezeshooters.net">http://www.breezeshooters.net</a>
March 24 <sup>th</sup> — 25 <sup>th</sup>	CQ Worldwide Prefix Contest SSB	<a href="http://www.cqwp.com/">http://www.cqwp.com/</a>

Dec 2011	WA3SH THE WIRELESS ASSOCIATION OF SOUTH HILLS 2011 / 2012 PROGRAM GUIDE								N3SH
15 <sup>th</sup>	Meeting Month	Sept 2011	Oct 2011	Nov 2011	Dec 2011	Jan 2012	Feb 2012	Mar 2012	Apr 2012
Educational Digital Modes and Software	Meeting Date	8th	13th	10th	15 <sup>th</sup>	12th	9th	8th	12th
	Meeting Program	2011–2012 Program Kick-Off Meeting	Educational Kit Building Tools Soldering	Kit Building Sound Card Itf Power Meter Freq Meter	Educational Digital Modes and Software	Educational Skywarn Presentation	Kit Building 2m/70cm Ant Fox Xmitters	Educational GPS / ARPS & Near Space Science	Kit Building Dummy Load & Attenuators
	Learning	Using							
	Building	Sharing							
Sound Card Test	Follow-Up Activity		Electronics 101	Electronics 101		Electronics 101	Electronics 101	Electronics 101	Electronics 101
NSP-1					Sound Card Test	PSK-31 NET			LEO/EME Day
	Special Projects		NSP-1 Kick-Off	NSP-1	NSP-1	NSP-1	NSP-1	NSP-1	NSP-1
					RMB Prep	RMB Prep	RMB Prep		
	Club Event Or Annual Event		PA QSO Party 8th & 9th JOTA 15th & 16th			WASH 2m Contest 7th	WASHFest 26th		Radio Merit Badge TBD

# *A DX Lesson I Learned from Fishing*

Fred Molesworth AF7S courtesy of [DX World](#)

I just finished working 3DAØNW, who is a very good op, by the way, and there are some lessons to be learned from his pileup.

The primary lesson is SHUT UP AND LISTEN!

I heard stations in the pileup that never shut up long enough to hear if he was calling them back. They obviously didn't listen to or observe his operating pattern either. I think they bought a kilowatt and a tower, and are simply determined to try to power their way through the pileups.

Well folks, it sometimes works, but if you'd use your brain along with your gear, you'd have a lot more success.

Calling blindly somewhere in a 5 kHz range might eventually get your through. But if you observe the DX stations operating pattern, you'd likely get through much more quickly.

It took me about 20 minutes to work Mike through that giant pileup of incessant callers with my measly 100 watts and a dipole. But that's because I learned how he was operating and used it to my benefit.

First he was nearly always coming back to someone within about 5 seconds – just about enough time to send your call once after he says TU. To continue to call and call is anti-productive, and just produced more QRM that made it harder for him to copy the station he was calling.

Secondly, he was moving up and down the band, in about a 4 kHz range. If you took a little time to listen, you'd know where HE was listening, and that with each call he moved 50-200 Hz up or down, whichever direction he was heading at that particular time.

So, using this, I'd find where he was listening and learn from a few calls which way he was moving, and then position myself in the right place. 20 minutes, and I had him.

BUT – that meant there were a few cycles here and there when I didn't call after he signed. I used the time to listen.

I used to be a fly fisherman. It's an art! And any really good fly fisherman will tell you they spend lots of time studying the river before they every tie on a fly and cast it into the water.

They analyze the currents, the riffles, the outcroppings, the eddies, the pools, and they can judge places where fish are likely to be waiting to feed. They'll watch for rises – fish coming to the surface to slurp a bug.

They study the hatch, which insects might be hatching, and what the fish are likely to be attracted to. Then, understanding how the fish are thinking, they'll select the perfect fly to imitate what they're attracted to and tie it on the end of their line.

Only then do they start to cast, and they'll know just how to present that fly, landing it in the perfect place to attract the big one.

They don't simply go stomping into the river with their new set of waders and their 70' crankup pole (oops, getting my stories mixed), and start blindly casting some random fly in some random location because all that does is cause havoc in the river, interfering with other fisherman and probably scaring away the fish.

No, they use intelligence, and finesse. Like I said, it's a real art. And those that are good at it do far better than those who simply chop at the water blindly, interfering with the other fisherman and probably scaring the fish.

## **Same thing applies to successful DXing.**

A little time spent gathering intelligence, understanding how the DX station likes to work rather than wasting electricity calling where he aint will certainly fill your log much more quickly than blindly calling and then continuing to thrash the bands with your call sign randomly cast out in a continuous fashion.

## **Use full break in so you can hear when he's come back to someone. IT MIGHT EVEN BE YOU, but if you don't listen, you'd never know it.**

If he's coming back to a W2, and you're a K6, why in the world do you think continuing to call over the top of his contact is going to get you a qso? Have you EVER heard him respond to that?

## **Be smart. Gather intelligence. Listen a lot. Use your call as if it cost you \$1 every time you sent it.**

Be quiet when he's working someone else and use the time to analyze. You'll find yourself having much more success and getting a great deal more enjoyment out of chasing the elusive ones!

Beginning Friday, December 2, at 1600 UTC, FO-69, also known as the FASTRAC-1 (\*) satellite, will be open for use as a packet radio digipeater. Anyone with a 1200 baud packet TNC and a VHF/UHF FM transceiver will have an opportunity to try it. If you own [satellite tracking software](#), you'll find the latest orbital elements on the [FASTRAC Web site](#).

FASTRAC-1 receives at 145.825 MHz and transmits at 437.345 MHz. The digipeater alias is FAST1. To connect to ARRL Headquarters station W1AW through FASTRAC-1, for example, you would send the following packet:

## **C W1AW VIA FAST1**

Reports of your results are welcome via [e-mail](#), or at the [FASTRAC Facebook page](#).

— Courtesy of The University of Texas Nanosatellite Program

(\*) Formation Autonomy Spacecraft with Thrust, Relnav, Attitude & Crosslink



**Satellites FASTRAC 1 (Sara Lily) & FASTRAC 2 (Emma) shown prior to launch**

# Contesting with the Ten-Tec Eagle

Rick Westerman DJØIP / NJØIP courtesy of the Ten-Tec Reflector

Last year at this time I had the Ten-Tec Eagle but had taken down all of my antennas in preparation for our move back to Germany. This year I made a decent attempt at the CQWW CW contest. I say "decent" rather than "serious" because I slept 6 hours Friday night and 7 hours Saturday night. Real contesters don't sleep more than 1.5 hrs per day during the contest (source: K5ZD sleep study).

Being a low band fan, I did get up early each morning and attack 80 and 40. In doing so, I stumbled onto a real downside of the Eagle.

Before I continue, I need to point out a difference between Europe and USA:

Here in Europe the heating systems in our houses are built different than the heating systems in the states. We have a big water boiler in the cellar which heats water to a high temperature and then circulates the water through pipes throughout the house, with huge radiators in every room. This gives indirect heating, etc. Well during the night the boiler temperature is dropped to a very low temperature to save energy. It switches on again before we wake up the next morning, so we never notice it.

During the contest when you are up all night (most of the night, or just a few hours) it can really be cold in the shack.

In the past, when running my Omni V, Omni VI, Vi+, for about 18 years, I could depend on the transceiver getting really hot during a long contest, especially on the top of the rig in the back, near the heat sink. It was nice to warm my hands on the top cover of the rig.

Well Ten-Tec forgot to include that feature with the Eagle. Throughout the entire contest it never even got warm. I about froze my fingers off.

This rig leaves me cold!

Now the positives: What I experienced using the Eagle with good contest software makes the entire discussion about the merits of the built-in band scope - or lack of one - seem a bit ludicrous. Talk about majoring in minors. Watching bleeps on a screen is about the same as someone who doesn't know the Morse code alphabet, but listens to a CW signal.

I use a laptop to run the contest software. I chose Win-Test contest software, which is a popular European software here - made in France. The software uses Telnet to connect to a server which gathers DX information from various DX Clusters. It then displays this information in a resizable window on the screen of the computer. The data is displayed in the bandmap which resembles an old analog display. The pointer is stable and as you turn the VFO on the radio, the scale scrolls up or down. The scale shows frequency in 1 kHz steps as well as the call signs and locations of nearly all of the interesting stations. Each call sign is color coded to show if it is a new country, a new zone (which is both), or just a station which you have not yet worked. If you have already worked it, it displays in grey Italics.

I pulled the Eagle up just beside the screen, slanted towards the operator. I placed the Vibroplex on the other side of the laptop's screen. I was only running low power (ran it at 90 Watts) so there was really no other accessories to control. This turned out to be a dream configuration, requiring very little body movement to manage things.

I was worried that I would miss the remote tuning knob like I used with all of the other Ten-Tecs, but since the rig is so small, it was right there with me. I didn't have to stretch to reach anything.

The nice thing about the Eagle is, not only are there NOT a lot of knobs which can be twisted by mistake, there is also hardly a need to turn any of them. I did not touch the rig much, except for the VFO knob. In fact I didn't even watch the display.

Instead I watched the "bandmap" on the screen which gave me analog 1kHz readout and the information described above. As I turned the Eagle's VFO knob, all of the stations rolled by the pointer. If I wanted to work a station, I double-clicked it and the Eagle was immediately on the right frequency and the call sign of that station was automatically entered into the log - but not yet accepted as worked.

I know all the hype around having a band scope, etc. but what for? To see some meaningless blips across the band? In a contest you must be looking at a continuous bar because the band is full of stations, wall-to-wall. When I used the Orion in contests, I did not use the scope because it was distracting from the important information that I needed.

All of this functions on the screen of the computer with a simple USB cable connected to the radio. You don't have to bother tapping into the IF of the radio. Outside of the contest it's probably a different story. For 6m work and especially when using with a VHF converter, I'm sure there is a clear justification for a band scope, but in an HF contest I find it useless.

Other solutions offer much more useful information and really don't cost anything to implement, other than the small cost for the software license.

## How did the Eagle fair?

I began the contest with the bandwidth at 300 Hz to be sure the small roofing filter was in use, but I soon reduced it to 200 Hz and left it. Never touched it again.

I did not have an OMNI VI side by side to compare with it but my unprofessional gut feeling says the separation and rejection of adjacent channel QRM was better with the Eagle than on the Om6. It is like I remember it with my Orion.

I have the dual-RCA-Phono option installed on my radio and connected to my preselector. I had the preselector switched in most of the time as a precaution but to be honest, it was not really needed. In my previous QTH I had another ham about 100 yards down the street who liked to run legal power SSB on early weekend mornings. For such cases, or when operating a MM, MS, or M2 team it is clearly an advantage. During the SSB contest recently I found a few times where the wide-band noise was reduced about 1 or 2 S-units when the preselector was in, but that was not the case during the CW contest; I simply didn't have the noise this past weekend.

For my type of operation, this is a much better solution than the mod with the external IF output. Eventually I plan to build a separate RX antenna for the low bands so it is nice to have this option for that purpose. I also tried my ANC-4 with these jacks, but without any disturbing noise, it really was a waste of time.

Looking back on my 50 years of ham radio, I have owned some of the world's best radios, but most of my operation has always been portable or mobile using a small box. Especially when contesting from the mobile I was really disappointed in the radio's performance. With the Eagle we finally have a small portable box which happens to be one of the world's best radios. \

Too bad I can't warm my fingers on it. It just doesn't get hot.

By the way, I made just over 1000 QSOs with the Eagle during the contest. The one simple antenna was a somewhat different build of the OCF Dipole; it worked all bands, even 15m. I don't have a beam here and never will have. Just can't put it up on the steep hill the house is built on.



## Ethics in the Pileup

Tim Marek K7XC courtesy of [DX World](#)

Lately I have seen a trend in operating ethics that is quite frankly alarming and disgusting.

It can be anywhere where people need the contact for an award. The station running the pileup doesn't control the mob calling him effectively, the callers get very aggressive, calling out of turn, and never stopping to listen.

He asks for a "1" and I hear 4, 8, 9, etc still calling... He finally narrows it down thru the bedlam to a "W1A???"

You would think at this point one or 2 stations in the pileup match that partial call sign but what do we hear still calling?... WB4... K3... N5... and finally the W1Axx ... After a couple more attempts to complete the contact he finally works him.

All of this took so long that under "Normal" conditions 10 or 12 people would be in the log by now.

And what are the two top causes of this atrocious behavior?

- (1) The DX station doesn't take control of the pileup and demand the people calling him act accordingly. If you stop the pileup and demand people do not call out of turn, thereby taking control, this behavior tends to drop dramatically.
- (2) As the one trying to work the needed station... LISTEN! If he asks for a partial call that "NO WAY IN HELL" matches your call sign in any way shape or form... SHUT UP! and give the man a chance!

DX stations do not exist just to give you a contact... they don't HAVE TO work a pileup at all, they can QSY to a band that's not even open to where you live to get away from the bedlam...

I know... I was A35WZ back in 1986 and several times had to stop a pile up and take control... One particular 40M SSB JA pileup was horrendous. One guy kept calling out of turn over and over and over. I stopped the pileup and warned him he would never be in my log if he kept it up and if he did it one more time I would QSY to a band where the JA's could not work me for the rest of the day and it would all be his fault... I asked someone in Japan to explain it to him...

The 40 over nine "broadcast quality" voice came out of the blue and chastised him and the pileup in Japanese for 15 seconds and then in perfect English said "The problem has been fixed, would you please continue?"

I thanked him, called CQ and one weak station replied, the next CQ only 4 stations answered, obviously afraid to offend... After a few minutes the pile up was back to full strength with no one calling out of turn the rest of the night.

If this "Mob Mentality" continues, it will make it impossible to operate efficiently anywhere in the world.... A Very Bad thing....

Show some respect for your fellow amateur, play by the rules, and we ALL will benefit...

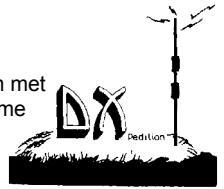


Pardon me...

Did I just hear someone grunt "More Power!"

## DX News Briefs

Three US members of the **HKØNA** Malpelo 2012 team met recently with their Columbian counterparts to make some "critical decisions" about the DXpedition. Since they don't expect another group to get permission to travel to the island for awhile, they are extending the dates of the operation. Approximate dates are now 21 Jan - 5/6 Feb. There will be two operating sites, each with a complete complement of antennas, radios, and amplifiers. More info at [www.hk0na.com](http://www.hk0na.com). QSL via N2OO — HK1R



Canadian stations are using special prefixes in the month of December to celebrate the 75th anniversary of CBC Radio Canada. The following substitutions are permitted: **VG** for **VA**, **VX** for **VE**, **XJ** for **VO**, **XK** for **VY**

JA2PSV has been in Bhutan since October, and is expected to be there through September 2013. He will be ARV as **A52SV**. QSL via JA2PSV or the JARL bureau -- JA2PSV

3D2AG will be QRV from **Rotuma** as **3D2AG/p** from 9 Dec - 9 Jan 2012. He plans to run a "green" operation 80 - 6 meters, battery & solar powered only. QSL via 3D2AG. Email for more info: [nyeurt@yahoo.com](mailto:nyeurt@yahoo.com) — F8IJV

A team of 6 operators will be active from **Kiritimati** 17 Jan - 2 Feb, from the same location that T32C operated from. Each team member will operate with their own calls, 160 - 6, CW & SSB, plus some RTTY & PSK operation. They will also put in a full effort for the CQ WW 160 contest as **T32XX**. QSL routes are: **T32AU** via VO1MX; **T32LJ** via K8ESQ; **T32CO**, **T32TR**, **T32TX**, **T32WW** & **T32XX** via KB8TXZ -- DX World

**T32TV** has been very active recently, using equipment donated to him by the recent T32C team. QSL via KH6CG — KH6CG

DO5ALX & DG7RO will be QRV as **V31RU** & **V31TF** respectively, 4 - 26 Feb. Activity will be on the WARC Bands, RTTY & SSB. QSO via home calls -- DX World

DCØKK will again be QRV as **4S7KKG** 11 Dec - 11 March, digital modes & CW. QSL via DCØKK — DCØKK

A "multi-disciplinary" expedition to Clipperton will take place in March as **TX5Q**. More info at <http://www.cordell.org/CI/> QSL via N7CQQ — KK6EK

SM6CPY will be QRV as **9XØPY**, holiday style, 24 Dec - 7 Jan. QSL via SM6CPY — SM6CPY

CX3AN & CX4CR will be QRV as **8Q7HU** 25 Jan - 5 Feb, 80 - 6 m, CW SSB & RTTY. QSL via CX3AN — CX3AN

JA3AVO will be QRV as **XU7AVO** 12 - 24 January. QSL via JA3AVO -- JA3AVO

KDØMUM is now based at Palmer Station (AN 012) until April 2012, and he is active at **KC4AAC** when work permits, primarily on 20 meters. He also will be monitoring KC4AAC IRLP 8838 from time to time, according to a post of his on QRZ.COM. QSL via K1IED. — KDØMUM

## QSL Routes

4O3A via AI4U — 4O3A  
 5R8KS via IZ8IYX — JA1HGY  
 5R8NL via PA7FM — K9TF  
 5W1A via JA1DXA — PY2YP  
 7Q7HB via GØIAS — WA8JOC  
 9LØW via DK2WV — W4DN  
 A52PP via W8AEF — W2IRT  
 A71CT via EA7FTR — WO2N  
 AHØJ via JA1NVF — W2IRT  
 C31CT via EA3QS — PY2YP  
 D6ØVB via UA4WHX — WO2N  
 D68KN via JL3UIX — DF6EX  
 EK6TA via DJØMCZ — W2IRT  
 ES5QD via LZ1JZ — ES5QD  
 EY3M via W5UE — W5UE  
 EY8ZE via W5UE — W5UE  
 FG4NN via NI5DX — PY2YP  
 FK8DD via LZ1JZ — PAØWRS  
 FM5BH via W3HNC — PAØWRS  
 H77REX via TI4SU — YN4SU

IJ7A via IK7IMO — W3AWU  
 JD1BMH via JG7PSJ — W2IRT  
 KC4USV via K1IED — K1IED  
 OD5NJ via EA5BYP — PAØWRS  
 OJØUR via MØURX — LU2DKN  
 RI1FJA via RX3MM — JA1HGY  
 R11ANC via RN1ON — W9OL  
 T88UE via DL5AXX — JA1HGY  
 T8XX via DL5AXX — PAØWRS  
 TM5SM via F5RJM — W3AWU  
 UG6GAE via EK4AA — K9MM  
 V26OB via DL8ØBQ — JA1HGY  
 VKØKEV via JE1LET — W2IRT  
 VP2MSC via IJ5QD — K9SC  
 VP2MVX via K9SC — K3VX  
 VP8ORK via VE3XN — W4DN  
 XV2RZ via OH4MDY — OH2BF  
 YJØANR via K9SR — WO2N  
 ZD8D via DL9HO — JA1HGY  
 ZK2V via N2SL — ZK2V

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



## WASH Classifieds

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

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Antenna Zoning or PRB-1 Issues?

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

Murrin, Taylor, Flach, Gallagher & May  
110 East Diamond Street, Butler PA 16001  
Phone: 724-282-3141 [lazaroff@murrinlaw.com](mailto:lazaroff@murrinlaw.com)

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More information at his web site, Randy George Woodworking <http://www.randygeorgewoodworking.com/>

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Feel free to mention the **WASHRag** when you call him!

## FCC News

ARRL Web Extra courtesy of the American Radio Relay League

Newington, CT, December 1<sup>st</sup>, 2011 — In their regular meeting on Wednesday, November 30, the four FCC Commissioners **unanimously agreed to allocate spectrum and adopt service and technical rules for the utilization of new implanted medical devices that operate on 413-457 MHz (70 cm)**. These devices will be used on a secondary basis as part of the Medical Data Radiocommunication Service in Part 95 of the FCC rules. The Amateur Radio Service also has a secondary allocation on the 70 cm band. These new rules are the result of a *Notice of Proposed Rule Making (NPRM)* that the FCC released in March 2009.



According to the FCC, these devices would greatly expand the use of functional electric stimulation to restore sensation, mobility and function to those persons with paralyzed limbs and organs; they would be implanted in a patient and function as wireless broadband medical micropower networks (MMNs).

Calling the new rules an "advance[ment of] its mobile broadband agenda," the FCC said this will create "a new generation of wireless medical devices that could be used to restore functions to paralyzed limbs. Medical Micropower Networks (MMNs) are ultra-low power wideband networks consisting of multiple transmitters implanted in the body that use electric currents to activate and monitor nerves and muscles." The Commission also noted that its **National Broadband Plan** -- released in 2010 -- observed "that the use of spectrum-agile radios and other techniques can significantly increase the efficient use of radio spectrum to meet growing demand for this valuable resource. MMNs illustrate how advanced technology can enable the more efficient use of spectrum to deliver innovative new services."

Researchers with the **Alfred Mann Foundation** -- a leading medical research organization located in Santa Clarita, California -- have developed a wireless medical micro-power network to tie together tiny devices implanted in victims of paralysis, creating an artificial nervous system to restore sensation, mobility, and function to paralyzed limbs and organs. "The Mann Foundation argues that the frequency range just above 400 MHz is optimum for their application, which requires no more than 1 mW of RF spread across about 5 MHz of bandwidth," ARRL Chief Executive Officer David Sumner, K1ZZ, wrote in "**It Seems to Us: Coexistence**," published in the June 2009 issue of QST. "However, recognizing the presence of a variety of incumbent radio services in that range, specifically including the amateur service, they have proposed four channels for flexibility in avoiding localized interference. Two of the four channels are 426-432 and 438-444 MHz; the other two are above and below the 420-450 MHz band."

In August 2009, the ARRL **filed comments** in response to the *NPRM*, stating that it believes that the choice of frequency bands for MMNs as proposed is "unfortunate and unnecessary" and that "the WMTS [Wireless Medical Telemetry Service] offers a far more suitable solution than does the 413-457 MHz band for MMNs." Though the Mann Foundation has proposed that MMNs would be secondary to incumbent licensed operations in the subject bands, the Amateur Service is presently secondary to government radiolocation in this band; this represents a cooperative sharing arrangement that is satisfactory to both government agencies and the Amateur Service, the League maintained.

The ARRL noted in its comments that there is Part 90 spectrum above 450 MHz available for low-power biomedical telemetry, but "the Alfred Mann Foundation argues that bands between 450 and 470 MHz are unsuitable due to the fact that the band is 'congested and populated with commercial, high-power transmitters that could preclude reliable operation of lower-power, wireless medical implant devices.'" This, the ARRL said, "is a very worrisome contention, and not the argument that should be made by the proponent of a new service that is secondary to other incumbent licensees. ARRL contends that if the 450-470 MHz band hosts services that are incompatible with reliable operation of MMNs, then the 420-450 MHz band, and especially the segment proposed for MMNs at 438-444 MHz, is equally incompatible with MMNs."

"As part of our mobile broadband agenda, the Commission has already taken a number of actions to seize the opportunities of mHealth," explained FCC Chairman Julius Genachowski in a **press release** after the November 30 meeting. "We entered an unprecedented partnership with the Food and Drug Administration to help ensure that communications-related medical innovations can swiftly and safely be brought to market. We've also taken steps to facilitate spectrum sharing and to improve and expand our experimental licensing program, proposing to ease testing restrictions on universities and research organizations and proposing a new program to speed development of new health-related devices that use spectrum."

Genachowski went on to say that MMNs have been shown "to reliably operate in spectrum shared with other services

Has Roadway found the tower yet?

Continued on page 11

# ANNOUNCING THE TWELTH ANNUAL WASH 2 METER CONTEST!

This January will mark the Twelfth 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 nine years had a blast, and we hope to continue the tradition again this year!

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 8<sup>th</sup>!

**Date & Times:** Saturday, January 14<sup>th</sup>, 2012 from 7 to 11 PM EST.  
(That's January 15<sup>th</sup> 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 **146.535 to 146.595 MHz**, and **147.520 to 147.580 MHz**. The National Simplex Frequency, 146.520 is **not** to be used. 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**: 144.2 to 144.275 MHz Only. (See ARRL 2 Meter band plan)

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

→ *Listen for SSB QSO's around 144.2 MHz 30 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:** None. Radios must be run "barefoot." No external amplifiers.

**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 N3ZNI, 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 146.52 MHz and below.
- Intentional interference to non-contesters, established nets, and QSO's
- Intentional interference to other contest operators

**Scoring:** Each Contact: 1 point

**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](http://www.n3sh.org), no later than January 1<sup>st</sup>.

**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 Ed Oelschlager, N3ZNI  
60 Carl Avenue B2  
Eighty Four, PA 15330-2829

Enclose a #10 SASE for return of results.

Entry Deadline: February 1<sup>st</sup>, 2012

**Each log submitted with SASE on or before the deadline will receive a main prize ticket to WASHFest 2012 on February 26<sup>th</sup>**

## 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.

We have been notified that the Western Pennsylvania Repeater Council (WPRC) has issued their own "local" band plan for the 2 meter band, and has elected to withdraw most or all of these dual-use or optional-use frequencies in favor of their being assigned to FM repeaters, primarily those on 1 MHz splits. Although we have not heard of interference problems with any repeater (with ONE exception — the contest participant was notified of interference and immediately moved), good amateur practice requires us to take note of the situation and the potential for interference problems in some parts of Western Pennsylvania where these repeaters exist.

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

146.535 MHz	147.525 MHz
146.550 MHz	147.540 MHz
146.565 MHz	147.555 MHz
146.580 MHz	147.570 MHz
146.595 MHz	

The National Simplex Frequency, 146.520, may not be used. 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.

To be clear, we have no objection to contest participants operating on additional recognized FM "optional" simplex frequencies above 146.520 MHz. Participants who do so run the risk of potential interference with repeaters sharing these frequencies, and therefore do so at their own risk. Again, as per the rules of the contest, if you operate on these frequencies and are notified of actual interference, please exercise good amateur practice and QSY.

We also recognize that the WPRC may continue to be less than happy with this stance. We point out to them that the amateur spectrum is a shared resource. And frankly, if push came to shove, the legality of their "withdrawing" of the frequencies from use by the general amateur population of WPA might be an interesting question before the FCC. (To say nothing of the fact that this change in band plan is probably something most WPA amateurs are unaware of, but that's another story).

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



## FCC News continued from Page 9

and are a model for making more efficient use of radio spectrum by using advanced technologies such as monitoring the quality of the radio link, switching frequency bands, notching out of interfering signals and error correction coding. Testing also demonstrates that the Medical Micropower Network devices developed by the Alfred Mann Foundation are able to operate reliably in spectrum shared with federal government and commercial services."

FCC Commissioner Michael Copps [agreed](#): "Today's action allocates 24 megahertz of spectrum in four band segments for the MedRadio service on a secondary basis. The band here -- 400 MHz -- is well suited for propagation inside the body. These devices employ the latest techniques for efficient use of spectrum and interference mitigation -- tools like spectrum sensing and dynamic frequency selection. The devices' low power means that they themselves won't pose interference to their neighbors."

Sumner, in his June 2009 *QST* editorial, said that the FCC's proposed rules raise two concerns: "First and foremost, the devices would be required to accept interference only from stations authorized to operate on a primary basis. The Mann Foundation has assured us that amateur stations will not cause its system to malfunction, so we see no reason why this cannot be reflected in the rules, even though our allocation is on a secondary basis. Second, while the Mann Foundation researchers appear to have done their homework, others who try to take advantage of the new rules may not be as rigorous."

The ARRL did acknowledge in its comments that it thought the FCC was correct when it stated in the *NPRM* that "[g]iven the low transmitter power and duty cycle limits that would typically be used by either the implanted MMN device or the external MCU, we expect that the risk of interference from MMNs to incumbent operations in these frequency bands would be negligibly small." The ARRL pointed out, however, that no testing has been done to verify this conclusion and "such testing should be concluded and the results analyzed before this anticipatory conclusion can be relied upon."

While the ARRL is concerned about interference from the MMNs affecting radio amateurs, it is also concerned about RF from these radio amateurs affecting the MMNs. "The Amateur Service has a practical inability to protect patients wearing RF susceptible MMNs from interference from ongoing amateur operations in the 420-450 MHz band, and therefore all MMN operation is going to have to be conditioned on the ability to withstand and operate in the presence of such high-power signals, and thus *subordinate* in allocation status to the Amateur Service," the ARRL said in its comments. "Unless this interference rejection capability is demonstrated by MMN proponents in advance, the devices should not be allowed to operate anywhere in the 420-450 MHz band."

On November 18, the FCC released a *Report and Order (R&O)*, defining new rules for the 60 meter (5 MHz) band. These rules are in response to a *Petition for Rulemaking (PRM)* filed by the ARRL more than five years ago and a June 2010 *Notice of Proposed Rulemaking (NPRM)*. In the *R&O*, the FCC replaced one of the channels in the band, increased the maximum authorized power amateur stations may transmit in this band and authorized amateur stations to transmit three additional emission designators in the five channels in the 5330.6-5406.4 kHz band (60 meters).

The Amateur Radio Service in the United States has a secondary allocation on 60 meters. Only those amateurs who hold General, Advanced or Amateur Extra class licenses may operate on this band. Amateur stations must not cause harmful interference to -- and must accept interference from -- stations authorized by any administration in the fixed service, as well as mobile (except aeronautical mobile) stations authorized by the administrations of other countries.

Here is a summary of the changes. Please note that these changes have not yet taken effect. These new rules will take effect **30 days after they are published in the Federal Register**. The ARRL will announce on its website when the rules are published. (They have not yet been published!)

- The frequency 5368.0 kHz (carrier frequency 5366.5 kHz) is withdrawn and a new frequency of 5358.5 kHz (carrier frequency 5357.0 kHz) is authorized.
- The effective radiated power limit in the 60 meter band is raised by 3 dB, from 50 W PEP to 100 W PEP, relative to a half-wave dipole. If another type of antenna is used, the station licensee must maintain a record of either the antenna manufacturer's data on the antenna gain or calculations of the antenna gain.
- Three additional emission types are authorized. **Data** (emission designator 2K80J2D, for example, PACTOR-III), **RTTY** (emission designator 60H0J2B, for example, PSK31) and **CW** (150HA1A, i.e. Morse telegraphy by means of on-off keying). For CW, the carrier frequency must be set to the center frequency. For data and RTTY the requirement to transmit "only on the five center frequencies specified" may be met by using the same practice as on USB, i.e. by setting the suppressed carrier frequency of the USB transmitter used to generate the J2D or J2B emission to the carrier frequency that is 1.5 kHz below the center frequency.

Automatic control on data and RTTY is not permitted; a control operator must be in a position to exercise either local or remote control over the transmitter. The FCC noted that "amateur operators must exercise care to limit the length of transmissions so as to avoid causing harmful interference to Federal stations." This is a very important caveat: If a Federal station requires amateurs to cease using a frequency, the amateur station must be able to do so without delay.

A reasonable person might wonder what the difference is between data and RTTY. According to former ARRL Chief Technology Officer Paul Rinaldo, W4RI, there used to be a difference, but there's not much of one today. "Years ago, a B designator (telegraphy for automatic reception [i.e. narrow-band direct-printing telegraphy emissions]) meant decoding and display on a teletypewriter (TTY) or other mechanical machine," he explained. "A D designator signified transmission of data, telemetry or telecommand intended for data processing or just storage for possible future use. When computers or computer-like devices were introduced to emulate RTTY transmission and/or reception, the line between telegraphy and data transmission blurred to the point of little or no practical distinction."

PACTOR-III and PSK31 are cited in the new rules as examples of data and RTTY emissions, respectively, that will be authorized; however, in paragraph 28 of the *R&O*, the Commission states that amateur stations will be permitted to use "any unspecified digital code, subject to the requirements of Section 97.309(b)." Therefore, as a practical matter it appears that any J2D data emission is to be permitted up to a bandwidth of 2.8 kHz, provided that care is exercised to limit the length of transmissions.

### Amateur Radio and the 60 Meter Band

The 60 meter band is part of the larger 5.060-5.450 MHz band, which is a federal/non-federal shared band that is allocated to the fixed service on a primary basis and to the mobile (except aeronautical mobile service) on a secondary basis. The 5.060-5.450 MHz band is primarily used by federal agencies for ship-to-shore and fixed point-to-point communications. Non-federal use of the 5060-5450 kHz band includes state government licensees and licensees in the Industrial/Business Pool that operate standby and/or backup communication circuits for use during emergency and/or disaster situations, entities prospecting for petroleum and natural gas or distributing electric power, coast stations and aeronautical fixed stations.

The Commission added the Amateur Radio Service as a secondary allocation after determining that such frequencies could be useful to the Amateur Radio community for completing disaster communications links at times when existing frequencies in the 3.500-4.000 MHz (80 and 75 meter) and 7.000-7.300 MHz (40 meter) bands are not available due to ionospheric conditions. It concluded that such an allocation represented the best compromise available to give the amateur service access to new spectrum while assuring the federal government agencies that their use is protected.

At the request of the National Telecommunications and Information Administration (NTIA), the Commission restricted amateur stations operating on the five channels in the 60 meter band to upper sideband (USB) voice transmissions (phone emission 2K80J3E), and to a maximum effective radiated power (ERP) of 50 W peak envelope power (PEP). The Commission adopted these operating restrictions to decrease the interference potential between amateur stations and federal stations.





# WASHfest 2012

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

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

Sunday, February 26<sup>th</sup>, 2012

8:00 AM until 3:00 PM Rain or Shine (or Snow!)

Castle Shannon VFD Memorial Hall

3600 Library Road (State Route 88), Castle Shannon, PA

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



**(800) 545-8881**

**DXCC Card Checking Available!**

Thanks Art Lund NQ3A

Breakfast & Lunch provided by **JACK'S CATERING** of Peters Township

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

## MAIN PRIZES — You've Got to play to WIN!



- 1<sup>st</sup> Prize: Yaesu FT-450D
- 2<sup>nd</sup> Prize: Yaesu FT-7900R
- 3<sup>rd</sup> Prize: 32 Inch High Definition TV
- 4<sup>th</sup> Prize: Astron RS-35M



**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](mailto:n3sbf@comcast.net)

E-mail us directly at [washarc@yahoo.com](mailto:washarc@yahoo.com) Check out our website too! [www.n3sh.org](http://www.n3sh.org)

**Please Note:** Early Table Reservations must be paid in full on or before January 31<sup>st</sup>, 2012. Reservations received after February 1<sup>st</sup>, 2012 must include payment in full. Reserve now... we have sold out in advance three 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 \$10.00 = \_\_\_\_\_

Please make all checks payable to:  
WIRELESS ASSOCIATION OF SOUTH HILLS  
PLEASE MAIL RESERVATION TO:  
**WASHfest 2012**  
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/Renewal for 2012



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**     **2nd Qtr**     **3rd Qtr**     **4th Qtr**  
**Jan-Mar**    **Apr-Jun**    **Jul-Sept**    **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: \_\_\_\_\_

Call Sign: \_\_\_\_\_

License Class: \_\_\_\_\_

Expires On: \_\_\_\_\_

Work Phone: \_\_\_\_\_

Birthday: \_\_\_\_\_

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]

ARRL Member?  Yes  No    Family ARRL Member?  Yes  No

Date: \_\_\_\_\_

Amount Enclosed: \$ \_\_\_\_\_

Signature: \_\_\_\_\_

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: \_\_\_\_\_

Call Sign: \_\_\_\_\_

Address: \_\_\_\_\_

Date of Birth: \_\_\_\_\_

City, State, ZIP: \_\_\_\_\_

Total Enclosed: \$ \_\_\_\_\_

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

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

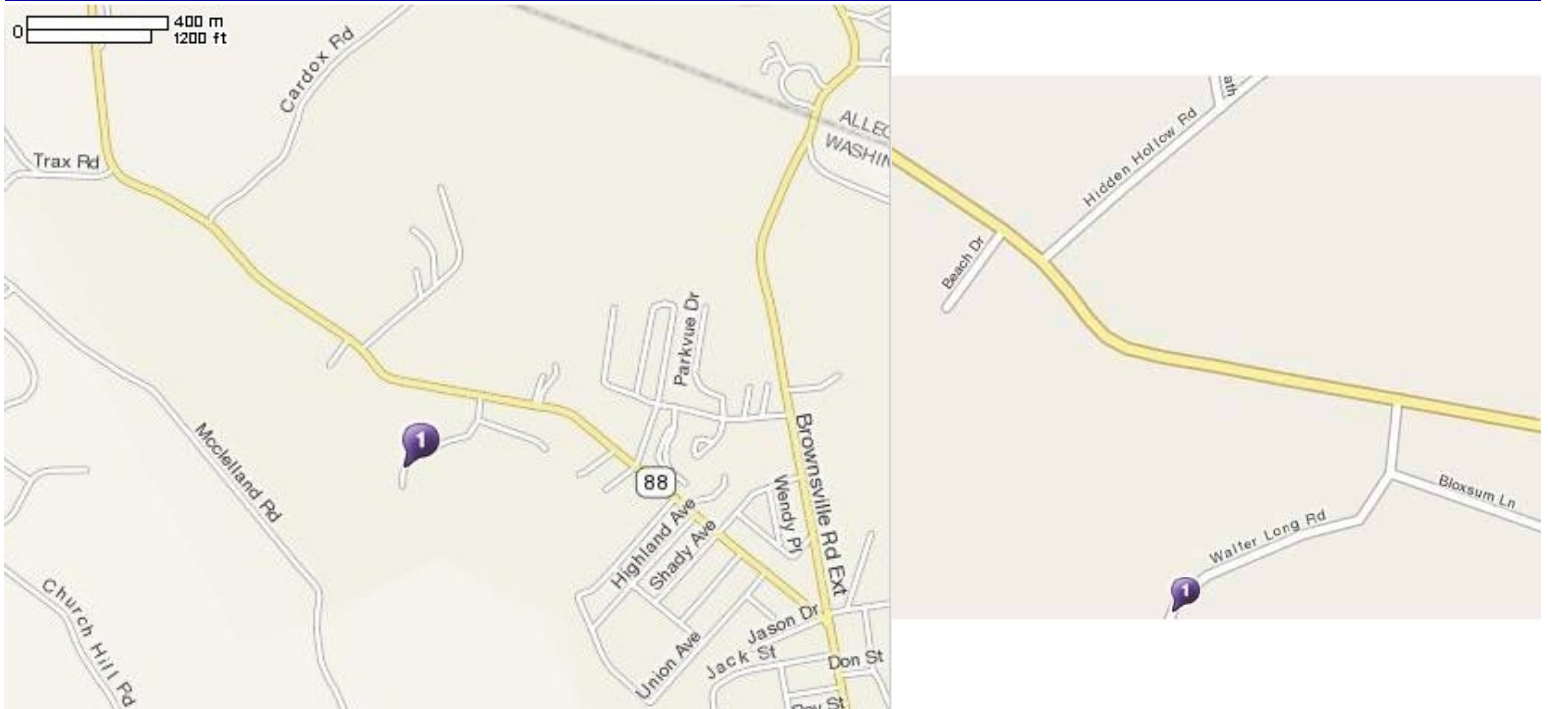
Dues subject to change without notice

Name & Call Sign: \_\_\_\_\_

Name & Call Sign: \_\_\_\_\_

Name & Call Sign: \_\_\_\_\_

# *Directions to Crossroads Ministries Church*



Take Library Road / State Route 88 to Walter Long Road (just past Mineral Beach & The Beach House), North of Finleyville. Turn onto Walter Long Road, follow it back to the church (which should be visible from the road).

## The *WASH*Rag

Wireless Association of South Hills, Inc.  
Ron Notarius W3WN, Editor  
3395 Rosewood Drive  
Castle Shannon, PA 15234-2546



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NP2SH/B

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