



Campo Giorno per l'anno Venti Tredici

(WASH Field Day 2013)

I recently had the pleasure of visiting Italy for an extended amount of time. There were many highlights during the visit such as Saint Peter's Square, the Basilica, the Sistine Chapel, Venice, Firenze (Florence), Roma (Rome), Naples, Positano and the list goes on. However the most interesting and enjoyable place I visited was a little mountainside village called Introdacqua — the birthplace of my wife's grandfather. During a long process beforehand we discovered that we actually had living blood relatives in this village — over 15. What an emotional experience to meet so many relatives, that less than a year ago, were unknown to us.

This small quiet village of less than 1,200 people boasted a very laid-back and relaxed way of life – in stark contrast to how we live here in the states. They also used what they had on hand and enjoyed the "simpler" things in life. They have a somewhat minimalistic approach but still live a full, rewarding and enjoyable life.

So just what does this have to do with Field Day? Well in past years we have

been "caught-up" in having bigger, better, and more sophisticated Field Days. Make more contacts – have more "stuff". Prepare months before. Don't get me wrong – it's OK to want to improve and get better at a Field Day

Continued on page 3

Kevin Smith N3HKQ SK see page 10

Carol's Comments

As you can see by Rick's article on Field Day is upon us, June 22nd &23rd. This is a fun event for all those who attend.

I am looking forward to making contacts, having good conservation, and of course enjoying good food with those who enjoy the same hobby as myself. The shirts are in and they look

We will finalize our plans at the meeting.

Rich and I attended the Breezeshooters Hamfest. Needless to say we did not win a radio but Rich did win a door prize.

I feel the attendance was down a bit especially in the flea market. But there are more hamfests to follow as I am sure is noted in the news letter.

Don't forget the meeting is this Thursday at 7pm (June 13). Hope to see you all there.

Happy Father's Day to all.

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

Next Monthly Meeting: May 9 th, 2013

The next meeting of the Wireless Association of South Hills, Inc. will be on **Thursday, May 9th 2013**, at the Crossroads Ministries Church, 88 Walter Long Road of f Route 88, Finleyville PA, starting at 7:00 PM.

Field Day final plans, the repeater move, summer picnic, and other plans for the summer & fall will be amongst the topics. See you there!

N3SH WA3SH NP2SH/B www.n3sh.org www.washarc.org

"Seen" at the WASH May Meeting







Photos courtesy of and @Copyright 2013 Ron Notarius W3WN





WASH 2013 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 QSL Manager Ron Notarius W3WN Carl Schroeder K9CS NP2SH 2009 QSL Manager VE Team Liaison Ron Notarius W3WN Sean Sleeman N3NWR Webmaster Asst. Webmaster Ben Williams KB3ERQ Harold Rosenberger K3HCR Quartermaster WASH FM Net Manager Glen Roberts KE7FD WASHFest 2014 Committee Kevin Smith N3HKQ. Chairman Carol Danko KB3GMN, Co-Chair

Activities & Operating Events
Ways & Means

WASH 2M Contest Chair
Field Day 2013 Coordinators

Rick Bell KB3IAC
Carol Danko KB3GMN
Ron Notarius W3WN
Larry Comden K3VX
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 443.650 MHz (+) N3FB / R PL 131.8 St. Johns, VI NP2SH/B 28.276 MHz Propagation Beacon 144.390 MHz APRS Digipeater Canonsburg

N3SH / WASH 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

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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.

WASH Amateur Radio Club News Briefs

Field Day

Continued from Page 1

mobilization but sometimes we just miss the basic reason to even have or participate in Field Day.

We all know why we, as a club, should sponsor a Field Day event. And likewise we all know, as licensed Amateur Radio operators, why we should participate in Field Day. So the only thing left for us to do is commit an hour or so to actually do it.

Now we have been talking about Field Day for months. We have been preaching that everyone should "Schedule" some time to be part of this club activity. We have slimmed down the event this year to match the level of participation that we experienced last year. So let's make this easy – with one simple goal:

"Our goal is to keep our three (3) stations manned and operational for 24 consecutive hours."

Do we need to be making contacts at light-speed? NO! We just need to be there and available - Available to answer a call or to place a call. After all in a true emergency mobilization we would only pass traffic as necessary – not continually. The need is for us to be there and ready with operational equipment, diversity in modes of operation, and skilled operators.

If this were a true emergency mobilization your club would be asking you – on much shorter notice - by phone, email or radio when you could be available to rotate into and man an operating station. In a true emergency the first responders (operators) get to the assigned location and get on the air as soon as possible. Follow on operators are contacted and given assignments to relieve operators and/ or add equipment and stations.

It is a process:

Plan

The WPA

ARES

Conference

will be held

on June 15th

at the

Univeristy

of

Pittsburgh-

Johnstown

campus, in

the

Engineering

Building.

ARES

Conference

Agenda &

Registraton

forms are

now available

at http://

Attendees

encouraged

to bring

their Go-

Kits and

especially

any specially

equipped

vehicles.

For more

information

contact

Larry AB3ER

at ab3er @

- Contact
- Schedule
- Assign
- Update

So we are less than two weeks away from a "Planned" exercise. Everyone has had notice – lots of notice.

Sean and Ben have created a real-time schedule that we can all access and will allow us to pick and choose operating modes and times.

We have 72 operating hours to meet our rather simplistic goal (3 stations @ 24 hours each). It's a simple setup, a minimum of stations, a minimum of antennas.

Yes – We will have food and we will discuss this at the club meeting of Thursday June13th.



Now it's up to you if we can meet our goal.

—73, Rick Bell KB3IAC, N3SH Field Day Co-Chair

Saturday, May 25th was a cool, crisp start to another Memorial Day weekend. Looking forward to the monthly gathering of the WASH Breakfast Gang at The Beach House in Finleyville, and we were pleasantly surprised with another large turnout! This month the Gang included W9UK, K3HCR, WB4GCS, AE3DL, W3WN, AD3Q, KB3JHR, KB3JHQ, K3SGT & Barb, and N3HKQ & Peg. (This keeps up, we may have to start wearing name tags! Not that there's anything wrong with that...) Breakfast conversations swirled around Visiting South Carolina, remembering CW, winter coats, the CQ WPX contest, talking with N3RNX, pictures from Dayton & the car with 42 antennas (see N3KFD's pictures!), something involving the "Northern end of a South bound horse", replacing cell phones, updating GPS maps, going to DC via PA 43 / US 40 / I 68 / I 70, working in Baltimore, visiting museums, hooking up an Inverted L, the repeater move, remembering Lightning Bolt antennas, the Gene Kelly awards, attic antennas in the dead of winter, the IEEE standards committee... wow, and that wasn't even a third of it!

Remember that this year, June has 5 full weekends. So our next gathering will NOT be Field Day weekend, but the following Saturday, June 29th, at *The Beach House*, Library Road, Finleyville, just south of Trax Farm, on May 25th. See you there!

We finish this newsletter and this column with a sad & heavy heart. Most of you know by now that our friend Kevin N3HKQ became a Silent Key on Tuesday, June 11th. Information on the memorial arrangements became available just before we went to press (thanks to Jim WB4GCS for getting that for us). This club meant a great deal to Kevin, and more importantly, all of his friends amongst the ranks of amateurs who belonged to it. To say simply that he will be missed is a huge understatement. If it is at all possible to attend the memorial service, we encourage you to do so.

There have been some revisions to the **WASHNet NCS** schedule listed below. Please review it to see if your "slot" has been changed... don't get caught by surprise like Ye Embarrassed Editor was the other night.

What more can we say about N3SH Field Day that hasn't already been said in Rick's column? If you possibly can, please make sure you're signed up on the N3SH web site for setup or operating "slots" so that appropriate plans can be made. Remember, to get an N3SH 2013 Field Day T-Shirt, you need to make at least 20 QSOs. If you're not certain of your schedule (Ye Editor is in this camp), at least let Rick or Carol know that you're planning to attend and roughly when. We want to make certain that everyone who comes has an opportunity to operate, so please let everyone know so that we can plan accordingly!

Not entirely "on topic", but if Ye Editor can drop the editorial "we" for a moment...

You all know how proud Julie & I are of our daughter, "Little Miss Field Day" Jessie. (And, just like 17 years ago, her birthday is the Friday of FD weekend... how do you think she got that nickname?). She's been performing in many school musicals the last few years (some pictures of which have been put to use in recent newsletters). This year, for the first time in 23 years, Keystone Oaks HS received not just one but Eight nominations for the Gene Kelly Awards for (Allegheny County) High School Musicals — and won their first one ever! One of the nominations was for Best Musical, and as a result, the cast of this year's play, The Drowsy Chaperone, got to perform on stage at the Benedum Theatre — the source of the clip on Page 6. Congratulations to the entire cast, and to all of the nominees for this year's awards!

WASHNet 2013 NCS Schedule

06/02/2013 Bob AB3ED 06/30/2013 Jim WB4GCS 06/09/2013 Ron W3WN 07/07/2013 Sean N3NWR 06/16/2013 Bill W3WH 07/14/2013 Fred KB3DCO

06/23/2013 Harold K3HCR 07/21/2013 Larry K3VX

2

Minutes, May 9th Meeting Ben Williams KB3ERQ, VP/Secretary, WASH

Carol KB3GMN called the meeting to order at 19:15 hours. There were 17 members and guests in attendance.

The Pledge of Allegiance was recited by all, followed by introductions.

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

A motion was made by Bill W3WH to waive reading of the February minutes as published in the newsletter. Seconded by Glen KE7FD and carried

Committee reports:

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

Secretary (KE7FD): No report.

VE Team (W3WN): VE Schedule for rest of the year to be set; request for feedback regarding dates & locations. Would like tests to resume in July.

Repeaters (N3FB): Still repeating.

Repeater Committee (KB3IAC):

Net Report (KE7FD): Glen has been working with Ron on names for possible NCS slots, working them into Definites or Maybes. He also asked that everyone be prepared with the preamble in case the scheduled NCS doesn't make it.

Contests (K3VX): CQ WPX CW at the end of this month. ARRL June VHF contest, phone & CW, 2nd weekend. This contest uses grid squares for multipliers, which is an advantage since we live near the convergence of four grid squares. Field Day June 22nd & 23rd.

Field Day 2013 (K3VX, KB3IAC): Larry: Field Day is the most important activity of the year. Has all the elements of the other things we do. This year we will be at Shelter #9 in Mingo Creek Park.

- Transportation
- Rigs from Battery
- What rigs are available? (KE7FD—digital, W3WH—K2, K3VX)
- Antennas: Larry & Rick are scouting antenna locations. We still have the V Beam.
- Operators
- Setup & tear down. Setup starts at 9 AM Saturday
- Food: Motion by Carol KB3GMN, second by Mark N3RDV, for the club to allocate \$200 towards FD Food. Motion carried unanimously
- Software: N3FJP
- T-Shirts: You need to make at least 20 contacts to get a shirt! Motion by Glen KE7FD, second by Ron W3WN, to purchase shirts from Randy N3ZK. Motion carried unanimously.

Public Service (N3IDH): Upcoming events: Walk for the Cure on Mother's Day, Run for Alex on June 1st (help is needed), MS 150 Escape to the Lake June 8th & 9th, Vintage Grand Prix in July, 60 mile bicycle race in September.

Ways and Means: 50/50 tonight.

Newsletter (W3WN): Published.

President's Report (KB3GMN): The club made a \$50 donation to the Bethel Park Library in memory of Harold K3HCR's wife. If anyone who is NOT going to Dayton would like an ARRL Field Day pin, get \$5 to Carol. The club will have it's traditional Pot Luck cookout for lunch at the Breezeshooter's Hamfest.

Old Business: Several members were at the WACOM demonstration of digital modes ("very slick") using NBEMS software. Red Cross drill happened about a week later, everything worked pretty well.

New Business: Motion by Ron W3WN that the club buy \$60 worth of tickets for the Breezeshooter's hamfest prizes. Second by Bill W3WH. Motion carried unanimously.

Good of the order: Richie N3SBF mentioned that the Steel City ARC is arranging a tour of WPXI with Frank N3FB. He suggested that interested club members could join the tour.

Motion to Adjourn by Bill W3WH, second by Larry K3VX and carried.

Meeting adjourned at 20:10 hours.

WASH Spotlight: The Cook



Richie N3SBF grilling, Ron W3WN preparing, Bill W3WH doing quality control at the WASH Picnic at the 2013 Breezeshooter's Hamfest. Photo courtesy of & (c)Copyright 2013 Bob Timmons AB3ED

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

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

AB3ED	KB3ZCX
AB3KA	KC4WTT
AE3DL	KE7FD
K3GW	KJ3D
K3HCR	N2QIV
K3SGT	N3BPB
K3VX	N3DFK
K3WJL	N3IDH
KA3TWI	N3NWR
KB3DCO	N3OVO
KB3GMN	N3RDV
KB3GMP	N3SBF
KB3GUZ	N7TDX
KB3IAC	W3LE
KB3IVX	W3RWS
KB3JHR	W3VFA
KB3MHM	W3WH
KB3TOA	W3WN
KB3YCX	WA3BOJ

WASH FL WB4GCS **Timothy** W4ZE Costello Vincent K3OL KB3IJX Polis Darryn N3ZNI Sleeman **NØVLR**

KA3UPY/M WASH GA WASH ID WASH NE **NØPEU** WASH OR **NØWPV KB3NVL KB3NVM**

WASH OH N8DPW WASH SC N3RNX WASH TN KE3XB N3YPB WASH TX K3LGM Jane Wagner WASH VI NP2JF

Keys K3EED K3LIE **KA3NMG KB3FNX** KB3FNM **KB3FQT** N3FZ N3HKQ N3KEH N3OBD N3SKR N3SRC N3ZEL N3XFE W3ZLK

WA3JPP

Silent

Through June 7TH, 2013 List complied by Mark Stabryla N3RDV, Vice President/Treasurer

2013 WASH Upcoming Events Calendar

Meeting Topics & Other Significant Club Events — Subject to Change

June 2 nd	Breezeshooter's Hamfest	http://www.breezeshooters.org/
June 8 th — 9 th	ARRL June VHF Contest	http://www.arrl.org
June 13 th	WASH Meeting	@ Crossroad Ministries Church
June 15 th	WPa ARES EMCOMM Conference	ab3er@comcast.net
June 22 nd & 23 rd	ARRL Field Day	http://www.arrl.org
July 1 st -6 th	13 Colonies Special Event Stations	http://13colonies.info
July 6 th	North Hills ARC Hamfest	http://www.nharc.org
July 7 th	Somerset County ARC Hamfest	http://k3smt.org
July 11 th	WASH Meeting	@ Crossroad Ministries Church
July 13 th & 14 th	PVGP at Pitt-Race	http://www.pvgp.org
July 13 th & 14 th	IARU World Championship	http://www.iaru.org
July 20 th & 21 st	PVGP at Schenley Park	http://www.pvgp.org
August 8 th	WASH Meeting	@ Crossroad Ministries Church
August 25 th	Skyview RS Hamfest	http://www.skyviewradio.net/
August 31 st	Uniontown ARC Hamfest	http://www.w3pie.org/gabfest.htm
September 8 th	Butler Co ARA Swapfest	http://www.w3udx.org
September 12 th	WASH Meeting	@ Crossroad Ministries Church
October 10 th	WASH Meeting	@ Crossroad Ministries Church
October 5 th & 6 th	California QSO Party	http://www.cqp.org
October 12 th & 13 th	Pennsylvania QSO Party	http://www.nittany-arc.net/PAQSO.html
October 26 th & 27 th	CQ WW DX Contest SSB	http://www.cqww.com
November 2 nd & 3 rd	ARRL Sweepstakes CW	http://www.arrl.org
November 14 th	WASH Meeting	@ Crossroad Ministries Church
November 16 th & 17 th	ARRL Sweepstakes Phone	http://www.arrl.org
December 12 th	WASH Meeting	@ Crossroad Ministries Church

Redefining Mobile

Bob Timmons AB3ED — Photos courtesy of & ©Copyright 2013 Bob Timmons AB3ED

How do you define mobile operating: sticking an HT antenna out of the driver side window in order to tranmit (hopefully, while stopped); or successfully finding a place to stuff a small transceiver into your vehicle's console, or under the seat, or on your wife's lap? When I was assigned to the Pittsburgh Police Mobile Command Center for this year's Race for the Cure, operating mobile was redefined!

Take a look at the attached photos of Mobile Command 200. A small forest of antennas grows on the roof. A folding mast supports a set of remote-controlled video cameras high above the vehicle. A satellite antenna is

mounted on the trailing edge of the roof. Fixed video cameras show the view immediately behind the vehicle and at the entrance steps on the right side. Big Foot stability legs are extended at all 4 corners.

And then there is the inside! On the front and back interior walls, an array of 4 broadcast-TV monitors surrounds a large flat-panel monitor that displays the video from the mast-mounted camera system. Just think - you could watch 4 football games and the bad guys at the same time. 10 computer work stations are positioned along the side walls. Radio operations are conducted at one of these.

The commander is able to program the various radios in much the same way that you would create a network connection on a Windows PC: click on an icon on the screen and type in the frequency – you're in... just like that. Then there's this neat little trick: how about linking the 2 Meter hams, the EMS, the police and the fire department so that everyone becomes part of the same net? No problem. A few mouse clicks and it happens. There is actually room for 2 additional networks to join in as well. Individual speakers are assigned to the various frequencies. Turn them all on and recreate the audio from middle school cafeteria duty.

Additionally, Command 200 has a radio direction finder, GPS, fax machine, printer, large format printer for reproducing maps, plotter equipment, a charging station for 36 HTs, DVD recorder, a video printer that can print out an image from a

single frame of captured video, and numerous antenna jacks at the work stations so that it is very easy to patch in an HT to the antenna system.

This buggy actually trumps the little red car at Dayton.



13 Colonies Special Event Week 2013 віпнії мзwн

Very few special events run for an entire week. Other than the annual Route 66 event this is the only other one that I know of.

The 13 Colonies Event has run for the last several years and has proven to be extremely popular. Last year over 62,000 people contacted one or more of the 13 colonies stations. Each of the original 13 colonies states will have three stations on the air, in addition Pennsylvania will have a fourth, WM3PEN.

This year I am honored to have been asked to be one of the three Pennsylvania 13 colonies stations and I'm very much looking forward to the experience. Several people have expressed an interest in stopping by my QTH to help me operate and hopefully run-up the QSO count. Already Larry Comden, Ron Notarius, Richie and Carol Danko and Harold Rosenberger are expected to come over and operate if you would like to join us please let me know and we'll try to work something out.





The event will begin on July 1st at 9 AM local time until midnight local time on July 6th. In addition to my station, which will sign the call **K2M/W3WH**, the Skyview Radio Society K3MJW, the Two Rivers ARC W3OC, and WX3A will be on the air from Pennsylvania. We will use both single sideband and CW for the event and it should be great fun. All bands other than the WARC bands are eligible for use, as well as Six and Two meters.

Take a look at the official website on the web which will show you the design of the special QSLcards, and it will give you the QSL information for all the stations who will be operating the

event. Please let me know if you have any comments or questions.

CQ CQ 13 colonies special event here is **K2M/W3WH**......

The latest information on the 13 Original Colonies Special Event Stations Week can be found at http://www.13colonies.info/. Information on all of the K2M operations can be found at http://www.13colonies.info/ PA13Col.htm



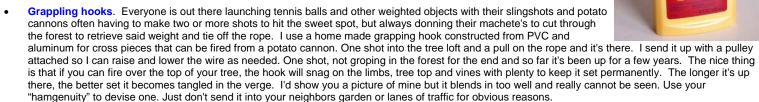
The Wire Antenna Builder's Survival Guide

(Not To Be Confused With An Antenna Builder's Survivalist Guide)

Glen Roberts KE7FD

Over the last hundred years or so of my antenna building experience, it occurred to me that us mold-timers owe it to the younger generation of hams some of the wisdom, great ideas and let's face it, bruised knuckle avoidance techniques we're picked up. So following is a treatise on the topic of antenna building tips, a work in progress certainly.

• Wire. We've all used both poor quality and good quality stranded, bare and insulated wire and "antenna rope" over the years. Wire that is made for antennas is less troublesome over time demonstrating better sheathing qualities and less stretching. Copperweld type (copper coated steel wire) is a pain to work with but once it's up, it's great (it's what I use). The copper skin (remember what skin effect is?) acquires a nice patina over time causing it to blend in nicely against natural backgrounds, lending itself to better stealthy use. With regards to the use of Copperweld wire, I use Brasso to clean Copperweld where I intend to solder it. I could use steel wool but this will remove some of the copper coating on the steel wire. Even though both products leave a residue, Brasso wipes off clean (water based) whereas the steel wool leaves an oily layer. Also, solder over the tip of the wire to prevent the steel from rusting.

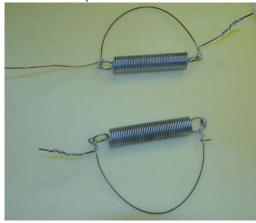


• If you have an abundance of trees to hang portions of your antenna understand there will be movement in the wind by the trees with subsequent tugging on the wire so incorporate some shock-absorption into your anchoring. Using a non-metallic pulley at the corners of a loop will allow the antenna to float



thus reducing the strain on the entire wire and other supports. Do not simply tie off the ropes to a tree trunk or limb; use bungee cords (I've had them last year round through sun and snow), counterweights, or springs. In some cases you may want to try using spring loaded wire with a jumper. This allows the wire runs to give a bit without altering the length of the run. Note this type of tension relief works best when the spring is located close to the end and not in the middle of a run. See picture of two springs I removed that lasted all winter long and were removed only when I altered the design of my 80m loop.

Notice the hub on the pulley to the left. From Home Depot this pulley's hub was ground off, removed and replaced with an axle that can be removed as needed for maintenance. The jumpered springs to the right give your antenna added resilience during high winds.



There's a scene in Dustin Hoffman's 1967 role as Benjamin in the motion picture, "The Graduate" that I think introduces my next topic...

Mr. McGuire: I just want to say one word to you. Just one word.

Benjamin: Yes, sir.

Mr. McGuire: Are you listening?

Benjamin: Yes, I am. Mr. McGuire: Plastics.

Benjamin: Exactly how do you mean?

While plastics are kinda the fabric of our lives anymore, there's another hardware material that hams ought to use more often when constructing for the outdoors. Are you listening? Stainless Steel.

Exactly what do I mean? Zinc plated hardware will sooner or later rust. Despite the claims it rusts out of doors or at least, not the way it's typically made. Zinc plating should protect the base metal (iron or low grade steel) better but due to poor manufacturing controls it does not last as long as you would expect, or at least not 99% of the zinc hardware I've used over the years. For not much more you can upgrade to stainless steel that will at worst gall a bit but if you do intend to unscrew the nuts and bolts later, there are lubricants available to prevent/reduce this affect.

Note that maritime mobile operators use even better hardware like chrome plated products (some of it is a better grade brass that stands up better than the CB grade stuff. So if you really want to protect your investment, talk to someone with both a radio and a sea-going boat. (On a side note: I'm amazed at how often hams will pour out their hard earned cash for mobile antenna hardware made from coated brass and even aluminum only having to replace them after a wet and salty winter. I made this mistake once but returned to Dayton the next year to pick up a stainless steel antenna mount for my Little Tarheel II. Wow, what a difference it made. Absolutely NO ill affects after multiple Pennsylvania winters. Guys, dump the plated and aluminum junk and go stainless steel!)

- Fittings. Use quality fittings; no junk; don't cut corners. I've found that the PL259's that are silver plated, with PTFE dielectric insulators work well. They take solder very quickly and the PTFE withstands a bit more heat than the low grade plastic insulated knock-offs found on eBay, allowing you to terminate your coax runs quickly and on the first try. You still can't be careless but these quality fittings are a bit more forgiving than the junky ones.
- Coax. I'm reminded of my early days working at a premier audio store. Some folks would come in and drool over the high-end stereo systems for hours before buying something very expensive only to tell the salesman, "I already have some speakers my brother gave me that he didn't want anymore..." Two weeks later the customer was back to replace his el cheapo speakers with Polk Audio Super Towers and the zip

cord wire with Monster Cable. You have this great signal you need to get out to the listener; the same is true for your transmission line.

Continued on page 8

The Wire Antenna Builder's Survival Guide

Continued from Page 7

Open wire is great stuff: See the many threads that talk about its use. But with regard to coax, use quality coax, no used second hand, hand me down stuff. Do what our customer should have done and save a bit more 'til the next pay check and get the good stuff. I like LMR400 but that's just me.

- If you use a balun don't go cheap if you want it to be able to endure the unexpected. I know, I know I have my handful of the balun kits too and they mostly work but if you really want to make sure the most RF is transferred to the antenna, get one that was engineered, designed and built in a commercial setting. The better made a product is and is found to have a good reputation the more likely it'll do what it is intended to do. Check out the balun reviews here on eHam. Some kits use components that will fail at normal output of a 100w station even though the balun is rated high.
- If you need to extend your coax run (but try not to introduce more lossy fittings if you can help it) first wrap the joint from coax to coax with tape then a sealant layer, this way you can get to the fitting later without it being gummed up with sealant. Also, protect remote tuners and expensive baluns with a housing if possible. See pictures below:







On the left, the coax connects to the balun and wrapped first with tape then weatherproof sealant. The coax then takes a slight loop then attached to a line affixed to the weatherproof housing to transfer the strain away from the connector.

Droop the coax before running it into the house to keep water from following the coax into the shack-

Hams often gravitate towards antennas that present as close to a 50 ohm match for the transmitter such as dipoles. If you play by the rules you can sometimes use an 80m dipole on 20 meters, a 40m dipole on 15 meters and so on. However, there are enough situations where the rules get bent and you need a tuner or a transmatch somewhere in the system to keep your solid state transmitter from melting down when multiband operation is the intent. The use of tuners and baluns has been addressed by some very knowledgeable authors on eHam which I would encourage anyone to spend time looking over those articles. Also, another very good quick read are the FAQ's at DX Engineering.

These are just some notes I've jotted down in my head which I've pulled out when working on antennas over the years.

So, what are some of the tips you've picked up that you can share?

Hamvention 2013 Pictures courtesy of and ©Copyright 2013 Kevin F. DeRose N3KFD



Above: N3KFD, VK5UDX, N3IDH, KB3IN, VK5AGI

Below Center: Waffle House! KB3IN, N3KFD, Penny (Waffle House hostess), N3FB, KB3GMU

Above Center & Right... Seen in the parking lot. (And after looking at these bumpers & fenders, I'm sure glad that car's not in PA!)





"Seen" At the 2013 Breezesooters Hamfest



Kevin Smith N3HKQ SK

It is our sad duty to report that past **WASH** President Kevin Smith N3HKQ became a Silent Key early on the morning of July 11th. He had been admitted to Jefferson Hospital the day before.

Kevin and Peg decided long ago that there will be no funeral home visitation. There will be a Funeral Mass for Kevin at 10:00 AM on Friday, June 14th at <u>St. Damien of Molokai Catholic Church</u>, 722 Main Street, Monongahela PA.

In lieu of flowers etc., the family is asking that a donation be made in Kevin's name to the American Cancer Society, The Leukemia & Lymphoma Foundation, or the Be The Match Foundation.

Our thoughts and prayers are with Kevin's family.

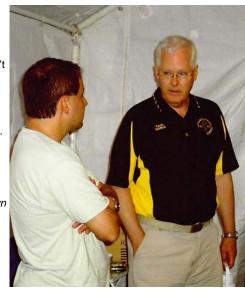
We hope to have more about Kevin in the July issue... it simply wasn't possible to do a proper article for him in the little time available. But we didn't want to put off saying anything until next month, either.

For now, here are a few of our favorite photos of Kevin. Two from N3SH Field Day 2008, and one from our trip to WPXI in March 2008.

RIP Kevin.

— 73, ron w3wn

Photos courtesy of and (c) Copyright 2008, 2013 Ron Notarius W3WN







DX News Briefs

Two members of the Intrepid DX Group, N6PSE & AH6HY, have received visas to visit **North Korea (DPRK)** in early June. They are in negotiations regarding a proposal for a "major" DXpedition from **P5** of over 12 operators, over 30 days. More information at http://www.intrepiddx.com/p5/— DX World

Word at deadline from the **H44IOTA** team is that they drifting, as their yacht's engine has stopped following a severe storm with high swells. They are drifting approx. 75 nautical miles southwest of Honiara in the Solomon Islands. All team members are reported to be fine. The off-island team members are currently trying to organize spare parts replacements. As a result of the conditions, their schedule has been disrupted — H44IOTA

K9EL will be active again as FS/K9EL from a new QTH, 11 - 28 June, 6 - 80 meters. QSL via K9EL — DX World

A group plans to activate both **American Samoa** and **Western Samoa** this November. Look for **W8A** 11 - 22 November, **N8A** 23 & 24 November in the CQ WW CS contest, and **5W8A** 27 November to 2 December. They plan to be QRV 10 - 160 meters, with a "significant effort" on 160 & and emphasis on EU on the high bands. They will be primarily on CW, with some SSB & RTTY possible. More infor at http://www.n8a.eu/ QSL via ZL3CW — N8A

Look for VP2V/W9DR 14 - 28 June on 6 Meters. QSL via W9DR — W9DR

K9HZ is currently QRV as **J68HZ** 40 - 10 meters, CW SSB & RTTY. QSL via K9HZ — K9HZ

EA4GBA will be QRV from Mozambique for 6 months starting 27 June. Look for **C91GBA** on SSB. QSL via EA4GBA — DX World

ZS6RJ will be QRV from Botswana as **A25RJ** starting 15 June, for "four or five" days. He will be focusing on 80—10 meters CW. QSL via LotW or direct via the QRZ.COM address — OPDX

F4GHS will be QRV "holiday style" from multiple Hawaiian Islands as **KH6/F4GHS** 3 - 23 August, 80 - 10 M SSB. QSL via FØGAZ — F4GHS

PJ4D will be DL1DI 22 June - 10 July, 80 - 10 M SSB. QSL via DL1DI only; no LotW or eQSL confirmations — DX World

W5JON will be QRV from his vacation home as V47JA 9 July - 10 August, 160 - 6, SSB & RTTY. He will also be on during the IARU & IOTA contests as V49J. His XYL W5HAM will be QRV periodically as V47HAM. QSL via W5JON — W5JON

IW2NEF will be QRV as **5R8NE** from AF-057 16—30 July. Look for him 40—10 meters SSB, and will be on during the RSGB IOTA contest. QSL via IK2DUW — OPDX

QSL Routes

3D2NB via W7YAQ - JA1HGY 3D2RX via W7YAQ — JA1HGY 4L1MA via ON4RU — W2IRT 5C5W via EA5XX — K9MM 5N7M via OM3CGN - KG4W 5Z4EE via NV7E — LU2DKN 9M4SLL via MØURX — LU2DKN 9XØZM via JO1CRA — JA1HGY A3EAQ via SP5EAQ — PY5EW AHØBT via 7L1FPU — W2IRT C21BN via JH1NBN — JQ2GYU CS2F via UA2F — UA2F D4C via IZ4DPV — D4C H4ØT via DL7DF — JA1HGY H44G via DL7DF — W2IRT JX9JKA via LA9JKA — W2IRT KP2/WH7P via JP1IOF — JA1HGY OL2HQ via OK2PP - W4DN

OX3LX via OZ1PIF — WA8JOC PJ4M via DJ7JC — W4DN PJ4NX via MØURX — KØSR PTØS via HA7RY - N7DC RIØK via RW3RN — JA1HGY T2GM via GM4FDM — GM4FDM TI8M via TI2KAC - JA1HGY TO3R via RW3RN — KG4W TO7BC via DL7BC — PY5EW UK8LA via RW3RN - KG4W UPØL via DL8KAC - W2IRT V31NO via W3NO - W3NO VK9CZ via N3SL — W4DN VKØTH via VK8TH - KG4W XV2DLH via DK8ZZ — JA1HGY XW8XZ via MØURX — JA1HGY Z6ØK via G3XTF — W4DN Z81D via OM3JW - KG4W

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

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See his eBay store for special deals at http:// stores.shop.ebay.com/Randy-George-Custom-Signs W0QQ armrsZ1

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





FCC News

ARRL Web Extra courtesy of the American Radio Relay League

Newington, CT June 7th, 2013 — The FCC this week cited an Omaha, Nebraskabased online retailer for marketing unauthorized RF devices

- including 10 and 12 meter amplifiers capable of putting out up to 8200 W — in violation of FCC rules.

An FCC Citation and Order dated June 6 orders Enterprise Group Inc, doing business as ePowerAmps, to immediately stop advertising, marketing and selling "all unauthorized radio frequency devices, specifically modified Citizens Band (CB)

radios and non-certified radio frequency (RF) amplifiers for use in the 10-12 meter bands." The FCC said continuing to engage in such conduct could subject the retailer to substantial fines and seizure of equipment.

Responding to the citation's release, ARRL CEO David Sumner, K1ZZ, said it's reassuring to see evidence of the FCC's continuing commitment to enforcement relating to Amateur Radio. "It is gratifying to see the Commission's Enforcement Bureau taking action against flagrant violators," he commented. The Amateur Radio community has long complained about interference, mainly on 10 meters, from unlicensed CBers and and so-called "HFers." The FCC once banned the sale of amplifiers capable of operating above 24 MHz, a move that some considered misguided and punitive to Amateur Radio licensees.

The FCC C&O described ePowerAmps as "an online retailer of CB and amateur radios, linear amplifiers, and radio accessories, which specializes in the 'customization of radios." Responding in April to a complaint, an agent from the Commission's Kansas City office observed on ePowerAmps' website "illegally modified CB radios being offered for sale in the United States." The FCC said the retailer also offered offer various modifications and upgrades for 35 makes and models of FCC-certified CB radios. These included swapping out the original final amplifier for a higher-powered replacement. Other mods expanded the authorized frequency range of a CB to include what it called the "26 MHz range and the upper 27 MHz range." Linear amplifiers offered for sale varied between 120 W and 8200 W and ranged in price from around \$140 to nearly \$2600, the Commission said, adding none of the 50 linears offered for sale appear to have FCC certification.

The FCC called on ePowerAmps to confirm "in writing" that it has stopped marketing unauthorized RF devices and to provide certain information to the commission within 30 days of the C&O. The information request, contained in a non-public appendix to the C&O, seeks to determine ePowerAmps' "external RF power amplifier suppliers and sales, as well as the disposition of its illegal inventory," the Commission said. The FCC gave the retailer 30 days to respond to the C&O and even to challenge the FCC's findings.

Editor's note: As of deadline, the ePowerAmps web site was still marketing various RF devices for sale.

A portion of the 902-928 MHz (33 centimeter) band may become less useful to radio amateurs in urban areas as a result of an FCC Order. The FCC has given Progeny LMS, LLC consent to begin commercial operation of its multilateration location and monitoring service (M-LMS) in the upper portion of the band. According to the FCC, Progeny's location service is designed to operate on approximately 4 megahertz — about one-half of the M-LMS portions of the band between 919.750 and 927.750 MHz — where Progeny holds licenses.

"Progeny is deploying a wide-area positioning system to provide more precise location services in areas where Global Positioning System (GPS) and other existing services may not work effectively, particularly indoors and in urban canyons," the FCC said in its Order, released June 6.

The FCC opened the 33 centimeter band to hams on a secondary basis (Amateur Radio is secondary on all bands above 420 MHz) in 1985, provided hams did not interfere with the automatic vehicle monitoring (AVM) service, which the Commission subsequently expanded into the M-LMS, While M-LMS operations, at least on paper, have a higher priority than unlicensed Part 15 devices on the band, Progeny had to demonstrate through field testing that its network would not cause "unacceptable levels of interference" to such Part 15 devices as cordless telephones and baby monitors. This was a result of an FCC policy to promote "co-existence" in the band, while not elevating Part 15 devices to co-equal status with M-LMS systems.

"Instead, the Commission sought to balance the equities and value of each use without undermining the established relationship between unlicensed operations and licensed services," the FCC said in its Order. The FCC asserted that Part 15 devices "will adapt to Progeny's operations because they are designed for operation in an interference environment."

In his June 2012 "It Seems to Us..." editorial in QST, ARRL CEO David Sumner, K1ZZ, pointed out that effectively setting unlicensed services such as Part 15 at a higher priority than licensed services "is the reverse of the usual situation in which Part 15 devices are at the bottom of the pecking order." Federal (military) radiolocation and ISM Part 18 devices are at the top of the 902-928 MHz food chain. Sumner predicted in his editorial that operations such as Progeny's "will pose some new challenges for amateurs in a band that is already impacted by other users." On the other hand, he said,

> sharing bands with the military has helped Amateur Radio to stave off spectrum grabs from commercial interests. The ARRL did not file comments in this proceeding because, as Sumner explained, M-LMS "was already allocated with a higher priority."



Has Roadway found the tower yet?

More Hamvention 2013 Pictures courtesy of and ©Copyright 2013 Glen Roberts KE7FD

















Ten-Tec Announces the 516 Rebel QRP Rig

Photos Courtesy of & ©Copyright 2013 Glen Roberts KE7FD





Editor's Note: Ten-Tec announced the new **Model 506 Rebel**, 2 band "open source" user programmable radio at the **Four Days in May** QRP event, and displayed the prototypes at Dayton Hamvention. The radio should now be in production, and is expected to be on sale in July, for a list price of \$199. For more information, call Ten Tec (800) 833-7373

The Ten-Tec Model 506 Rebel is an open-source (meaning, anybody can program it), factory-built QRP transceiver based on a Chip Kit Uno 32 Arduino-compatible prototyping platform, which serves as the main processing unit that holds the Rebel's program.

And I have to admit, I love the concept: Ten-Tec delivers a factory-built, uber-simple transceiver, with just enough programming to reliably get you on the air with a basic radio (see details below). Users then have full access to develop and program the Rebel via an open-source platform, themselves. No need to wait on firmware revisions; firmware, in a sense, will be crowd-sourced! That's to say, it uses online collaboration—a great idea.

According to Ten-Tec, the programming environment is very safe. Users can tinker with code without fear that they might harm their Rebel 506. The original base program can be re-flashed to the radio at any time. So if you can't get past an error, you can always revert to a safe default copy.

In addition, even if you don't have any idea how to program, someone has already created a web-based email group where users can upload and share code packages, and you can select someone else's programming to test drive. Click here to join the group.

The Rebel is a CW-only transceiver that operates on 40 or 20 meters. The user changes bands by moving jumpers inside the chassis, mounted on the PC board.

The basic Rebel comes with no frequency display. When you turn on the radio, it comes up on the QRP calling frequency of 7.030 MHz or 14.060 MHz, depending on which band is selected. There is no VFO, but a DDS chip that is highly stable and that allows the Chip Kit Uno 32 to select a frequency upon which to operate. Of course, since the Chip Kit controls the DDS chip, you can re-program how the Rebel manages frequencies.

— Tom Witherspoon K4SWL

Full review at http://qrper.com/2013/05/ten-tec-introduces-the-model-506-rebel-an-open-source-qrp-transceiver/

This rig, what is it's intended audience?

I explained it this way at Hamvention.

If you are a died in the wool ham who just wants it to work out of the box and will never dabble in software, then this is still a rig for you. It is a 40/20 meter, CW, QRP (4 Watt @ 135 mA) easy to lug around portable rig. If you like CW, and want to throw a wire in a tree, then \$199 is not a bad price. There are many on the market that are around \$135 that are single band, or more to get dual band. But, that isn't want I was meaning... It's a fun little ham rig that sounds good, good price, enjoy.

If you want to get a \$199 rig that will someday have a built in keyer and other features that software geeks can add to it? CAT control is possible, just need someone who wants to add it to the rig. Me, myself, I'd prefer it to have an existing

Ten-Tec protocol, such as from the Orion 2, but, put in it whatever someone wants that will work with all of the logging programs out there.

Then, you, as a customer, now have a little QRP rig that will have a built in keyer and can connect it to your logging program and where else could you get that for \$199. Don't think it exists.

If you want a little display on it, then for \$9.95 you can get one, then go find a plastic box to put it into, strap that to the top, and you are in business.

Now, of course we will look at future upgrade options for a bolt on battery holder, bolt on LCD holder, etc, but for now, it's a fun little rig.

All of the above are for peeps who don't want to dabble in code, but may want to add functions that others have built into it someday. Heck, it has a 9 MHz spigot so you could add it to LP-Pan and run it as a sweep board receiver with PowerSDR. Know of another QRP rig that offers that right out of the box? Well, I shouldn't be so blatant, some may exist, I myself just don't know of it yet, so please, if it exists, let me know....

Now, for the software geeks, do with it what you want... make it hum so that everyone else can enjoy it.

OK, one further step, we will have it shown at various Maker Faires around the country. This is the group of what I call... the Heathkit kids of today. These guys have competitions on who can make the most innovative products, and we have now given them something they can play with in the RF world. Well, guess what, most of them aren't hams, but, they can purchase this, learn to listen to the ham bands, and make it do different things, and eventually get their ticket so they can transmit. I am hoping it brings new blood into the market so it can prosper from their entrepreneurial flair.

Leads to future options... voice shields, etc.

This is the first of a long line of inexpensive hugely attractive multi purposed multi intended customers line of products from TEN-TEC.

Let's sit back and watch this one run, I'm excited, but oh yeah, eXTREMELY busy.

So, to answer the question, the intended customer? Well, you name it, you dream it, and

Thanks, and 73,

- John Henry KI4JPL Ten-Tec Engineering

(Adapted from an email sent to the Ten-Tec 506 Rebel reflector on YahooGroups by John Henry KI4JPL. Used with permission.

Legal disclaimer: This represents the personal comments of John Henry KI4JPL and does not necessarily reflect any official position of Ten-Tec.)

Above photos taken at the Ten-Tec exhibit at the 2013 Dayton Hamvention by Glen Roberts KE7FD — thanks Glen!



First Impression: Kenwood TS-990S

Pat Bunsold WA6MHZ

They FINALLY got a demo TS-990 up at HRO, and I had just a few moments to sit down and try it out.

There was no antenna hooked to it at the moment (need to find which coax switches do what) so I could only tune around and see how I liked the layout.

There is a FTdx5000 right next to it.

The 990 is much taller than the FT5K, even with the SM-5000 on top of it. I could not squeeze this radio into my current station. I would hafta cut up the shelving to fit it in.

The 990 didn't seem as wide as the FT5K. Maybe because it was so tall.

The displays are brilliant and very pretty. But now it hits me! On the center display is what looks like a Tuning dial, with 1KC calibration marks. It is ALL SIMULATED!!! Same with the S-Meter on the Left display. ALL BOGUS!



I wonder why they did that phony tuning dial. Hams don't tune to those anymore now that they have digital readouts. They watch numbers count up and down. Looks like the dial on a TS-520S. So, WHY didn't they just attach a skirt to the main tuning dial knob??? Musta took alotta programming to come up with this bogus dial! Same with the meter.

So my first impression is that the 990 is a COMPUTER SIMULATED Ham Rig! You are operating a COMPUTER, but you can pretend it is a ham Rig!

The 990 didn't have as many KNOBS. Just buttons. Hmmm... More computer simulation!

Maybe they will have the coax switch set up next time in so I can compare the 990 to the FT5K on inband signals. Would be nice to do that comparison.

By the way, I must say I am NOT IMPRESSED by the FT5K 6 meter coverage. During the VHF Contest, there were LOUD signals on the band that pretty well wasted the radio. Even playing with the attenuators, AGC and IPO/Preamp stuff, I could not get away from the strong signals blasting the band. I don't remember those problems happening on the FT-736R!

Time marches on!

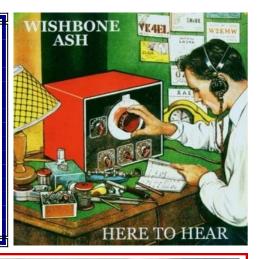


Congratulations to Kevin Smith N3HKQ (SK) for his fine showing in the 2012 ARRL June VHF Contest.

"Sometimes just showing up is all one needs to do. I recall 6 meters was open nearly two days straight and that was the bulk of my score for this contest. But there must not been anyone else in the section competing in this category."

— Kevin Smith N3HKQ (SK)

(This was submitted by Kevin prior to his passing)





Elecraft has released pictures and preliminary specs of their new 100 watt external amplifier, the KXPA100, with built in KXAT100 auto tuner.

The amplifier is designed to be used with any QRP rig, including their own KX3, the Yaesu FT-817, Icom 703, & others.

Preliminary specs indicate it will require a drive of up to 4 Watts input for 100 Watts out, 160 through 6 meters. One RF input, 2 switched antenna outputs. The internal integrated ATU will handle a 10:1 SWR Range.

Availability and pricing will be announced once certification is received by the FCC.



☐ Elsewhere \$62

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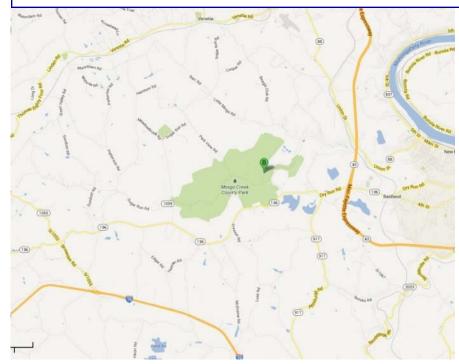


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☐ (F1) Full Membership:	\$20.00	\$15.00	\$10.00	\$5.00
☐ (F2) Full Membership < 18 or > 65 yrs of age:	\$10.00	\$7.50	\$5.00	\$2.50
☐ (A1) Associate Membership:	\$10.00	\$7.50	\$5.00	\$2.50
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Name & Call Sign: _

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Directions to N3SH Field Day 2013





Directions from the South Hills: Take Route 88 to Ginger Hill Road. Take Ginger Hill Road 1.8 miles to PA 136 West. Turn right onto PA 136, 3/4

mile, to Mansion Hill Road. Turn right onto Manion Hill Road. Proceed 3/4 miles then take a slight left onto SR 1059 Mingo Creek Road. Proceed 125 feet back onto Mansion Hill Road. N3SH Field Day will be 0.6 miles ahead on the left.

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

