



WASHRAG™

www.washarc.org



Volume 5 Issue 2

February 2003

N3SH
WA3SH

Wireless Association of South Hills

3 Weeks And Counting!

WASHFest 2003 Update:

Listen to the conversations of any gathering of crusty, seemingly 80-something hams and you'll undoubtedly hear them collectively decry "Hamfests are dying, just like the hobby. They're just not worth going to anymore." Well folks, I'm going to quote a very well-known octogenarian by the name of Harry Morgan who portrayed the gruff but loveable Colonel Sherman Potter on the TV show M*A*S*H. One of Sherman Potter's most famous euphemisms was Quote: "Horse hockey!" End quote.

While I won't belabor the point that the supply of surplus military radio gear and bargain-

priced Collins gear have long been relegated to the foggy recesses of our collectively failing memories, I will take exception to the general statement that hamfests in general are dead or



WASHFest Photo courtesy of & ©2000, 2003 Ed Salva W3VFA

dying. Hamfests are NOT dying, not by a long shot. What hamfests are doing however, they are EVOLVING.

A case in point: In the early 1960's, it was still possible for a teenaged ham to tramp through a local dump, or a genuine "military surplus store" (remember them?) and plunk down a significant portion of his paper-route income to buy that "mint" WWII BC-610 transmitter and then pair it up with that homebrew receiver his "Elmer" helped him build. Well, by the 1980's, that wasn't happening much anymore. The hobby evolved around the dwindling access to such gear and a whole new generation of increasingly sophisticated commercial ham gear hit the shelves. Seemingly overnight, the Drake twins superceded the surplus "bargain-

(WASHFest 2003 Continued on page 6)

3rd Annual 2M Contest: Great Time, Light Turnout

The **WIRELESS ASSOCIATION** held it's Third Annual Two Meter Simplex Contest on January 11th. Early indications from most of the participants is that they had a great time... but...

The early indications are that total number of people operating the contest was down this year, and logs sent in to N3ZNI have been reported as "light" so far.

There is a simple reason, we believe, that this happened: Who knew a year in advance that our little simplex contest would be competing with a **PITTSBURGH STEELER** prime-time Saturday evening playoff game? The contest and the playoffs overlapped for a little over an hour. It was hoped that activity would pick up once the game was over, but this never happened. The unfortunate ending to the Steeler's season left many hams who would have otherwise operated in less than a contesting mood.

This is the first year we added SSB & CW modes to FM. There wasn't a lot of CW activity. Most of those who operated SSB gave good reports, only wishing that there were more on to work!

We also discovered at the last minute that some of this year's contest publicity went awry. For example, we know of one area club who printed **LAST YEAR'S** rules and dates in their newsletter for **THIS YEAR'S** contest!

Despite all this, though, the early word from most who participated is that they had a great time!

Don't forget:

- Logs are due to Ed (at his home address, not the PO Box used last year) by February 6th!
- You can still order a commemorative coffee mug if you made 10 or more contacts!

Inside this issue:

Amateur Radio Calendar	2
WASH Club News	3
Meeting Minutes	4
New Radios & Key Clicks	5
About that SWR Bridge	7
DX News Briefs	8
WASH Classifieds	9
WASHFest 2002 Announcement	10

Next Meeting: February 13th, 2003

The next monthly meeting of the **WIRELESS ASSOCIATION OF SOUTH HILLS, INC.** will be Thursday, February 13th, at the **John McMillan Presbyterian Church**, 875 Clifton Road, Bethel Park, starting at 7:00 PM.

Our special guest speaker will be Larry Comden K3VX, discussing homebrew antenna projects — plus final **WASHfest** planning & preparations.

Talk-in on the 146.955(-) N3RNX/R and 443.650(+) N3BV/R Repeaters (131.8 PL). All members, guests and interested parties invited!

WASH FM Net
9:00 PM ET
Sunday Nights
on the 146.955
and 443.650
Repeaters

**February and
March**

NCS Stations:

02/02 Joseph KB3ENX
02/09 Hank KB3FNM
02/16 Michael KB3HFP
02/23 Bill W3WH


Alternates & Backups
Frank KB3FZU
Dave N3JDH
Ron WN3VAW

Want to volunteer to be
a Net Control Station?
Please contact FM Net
Manager Kevin N3HKQ
for more information.

**LOOKING
AHEAD:**

- Groundwave Contest SSB March 22nd
- Foothills ARC Hamfest, Greensburg, March 2nd
- 2 Rivers ARC Hamfest, Monroeville, March 23rd.

February 2003

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1 Beaver Valley ARA VE Test RA Erie VE Test Somerset Co ARC Breakfast Nittany ARC Coffee Call North Hills ARC Elmer Net
2 Classic Exchange Ellwood City ARA Meeting OCWA Pittsburgh Net South One ARES Net Somerset Co ARC Net North Hills ARC Teen Net WASH FM Net	3 Greater Pgh VHFS Meeting Breezeshooters Net 2 Rivers ARC Net Triple 'A' ARA Net Beaver Co Public Service Net	4 S H B P & M Meeting Butler Co ARA Meeting Skyview RS Meeting North Hills ARC Net WACOM Net SATERN Net GPVHFS Swap 'n' Shop Net	5 Uniontown ARC Meeting Steel City ARC Social Night Allegheny Co ARES Net Allegheny Co SKYWann Net Westmoreland Co ARES Net	6 WACOM Meeting RA Erie Meeting Uniontown ARC Net	7 Elco ARS Meeting	8 Butler Co ARA VE Test Tri-County CW ARC VE Test Foothills ARC Breakfast 2 Rivers ARC Breakfast North Hills ARC Breakfast Quad Co ARC Breakfast
W3C Special Event Station @ Washington Sportsmen's Show						
9 OCWA Pittsburgh Net South One ARES Net Somerset Co ARC Net North Hills ARC Teen Net WASH FM Net QSL W3C via N3ZNI	10 <i>Bum of the Month Lunch</i> ARL Lawrence Co Meeting Breezeshooters Net 2 Rivers ARC Net Triple 'A' ARA Net Beaver Co Public Service Net	11 Foothills ARC Meeting Coke Center ARC Meeting Nittany ARC Meeting Ft. Venango M&K Meeting Punxsataway AARC Meeting North Hills ARC Net WACOM Net SATERN Net	12 North Hills ARC Meeting Laurel Highland VHFS Meeting Steel City ARC Social Night Allegheny Co ARES Net Westmoreland Co ARES Net	13 WASH Meeting Beaver Valley ARA Meeting Horseshoe ARC Meeting Uniontown ARC Net	14 	15 ARRL DX CW Foothills ARC VE Test Nittany ARC Coffee Call North Hills ARC Elmer Net
16 ARRL DX CW Elk Co ARC Meeting OCWA Pittsburgh Net South One ARES Net Somerset Co ARC Net North Hills ARC Teen Net WASH FM Net	17 <i>President's Day</i> Monessen ARC Meeting Breezeshooters Net 2 Rivers ARC Net Triple 'A' ARA Net Beaver Co Public Service Net	18 Steel City ARC Meeting Tri-County CW ARC Meeting McKean Co ARC Meeting Pymatuning ARC Meeting Junista Valley ARC Meeting North Hills ARC Net WACOM Net SATERN Net	19 Huntington Co ARC Meeting Allegheny Co ARES Net Allegheny Co SKYWann Net Westmoreland Co ARES Net	20 Somerset Co ARC Meeting Greene Co ARC Meeting Triple 'A' ARA Meeting Cumberland Valley ARC Meeting Uniontown ARC Net	21 2 Rivers ARC Meeting Quad Co ARC Meeting	22 WASH Breakfast <i>Groundwave CW</i> North Hills ARC Elmer Net
WASHFest 2003! OCWA Pittsburgh Net South One ARES Net Somerset Co ARC Net North Hills ARC Teen Net WASH FM Net	24 Breezeshooters Net 2 Rivers ARC Net Triple 'A' ARA Net Beaver Co Public Service Net	25 Mercer Co ARC Meeting Triangle ARC Meeting North Hills ARC Net WACOM Net SATERN Net GPVHFS Swap 'n' Shop Net	26 North Hills ARC Activity Night Ft. Armstrong WA Meeting Steel City ARC Social Night Allegheny Co ARES Net Westmoreland Co ARES Net	27 WACOM Board Meeting Uniontown ARC Net	28	3/1 ARRL DX SSB WPA Hilltoppers VE Test RA Erie VE Test Somerset Co ARC Breakfast Nittany ARC Coffee Call North Hills ARC Elmer Net

WASH 2003 OFFICERS

EXECUTIVE COMMITTEE:

President Ron Notarius WN3VAW
VP / Secretary Frank Bobro KB3FZU
VP / Treasurer Mark Stabryla N3RDV

AND WE COULDN'T DO IT WITHOUT:

N3SH / WA3SH Trustee Steve Lane W3SRL
N3SH / WA3SH QSL Manager Paul Lusardi NØVLR
VE Team Liaison Jacqué Gosselin N3ZEL
Webmaster Bob Sanford AA3FI
Quartermaster Harold Rosenberger KB3CPI
N3SH/WA3SH WASH Net Managers
FM Net (2 Meter & 70 cm) Kevin Smith N3HKQ
Digital Net (10 Meter) (open)
WASHFest 2003 Co-Chairman Steve Lane W3SRL
(South Hills Hamfest) Bill Hill W3WH
Activities & Operating Events Bill Hill W3WH
Field Day 2003 Chairman Larry Comden K3VX
Ways & Means Carol Danko KB3GMN
Media Communications Kevin DeRose N3KFD
Allegheny Co ARES Representative Ben Williams KB3ERQ

CLUB-AFFILIATED REPEATERS:

Mt. Lebanon N3RNX/R 146.955 - PL 131.8
Mt. Lebanon W3SRL/R 442.550 + PL 131.8
Echo Link #26861 (courtesy W3SRL)
Canonsburg N3BV/R 443.650 + PL 131.8

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 **10 METER DIGITAL N3SH/WA3SH WASHNET** is on Hiatus until further notice. Please contact Paul NØVLR for more information.

THE LEGAL STUFF

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

Published Monthly with occasional Special Editions as warranted.

This issue is © Copyright 2003 by the **WIRELESS ASSOCIATION OF SOUTH HILLS, INC.**

Editor & Publisher: Ron Notarius WN3VAW

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

Ron Notarius WN3VAW
3505 Rosalia Avenue
Castle Shannon, PA 15234-2317

e-mail: wn3vaw@njdxa.org or wn3vaw@arrl.net

"The WASHRag", "The Mariner", SHARCfest, South Hills Hamfest, WASHfest, WASHfest 2003, N3SH Net, WA3SH Net and WASHNet are TM trademarks of the **WIRELESS ASSOCIATION OF SOUTH HILLS, INC.**

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

As always, special thanks to the owners of both the N3RNX/R Repeater System and the N3BV/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 our webmaster, Bob Sanford AA3FI, and to Ed Wolf N3UE for providing space on-line for back issues of **"The WASHRag™"** which can be found at www.washarc.org or <http://doit.pgh.net/~wolfie/washrag.htm>

WASH Amateur Radio Club News Briefs

Next WASH VE Test April 17th!

The Next WASH VE exam sessions will be **Thursday, April 17th, 2002, 7:00 PM**, at the **John McMillan Presbyterian Church**, 875 Clifton Road, Bethel Park, 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 Jacqué Gosselin N3ZEL:

Telephone (724) 746-9235 or E-Mail: n3zel@fyi.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 **\$12.00** (payable to: ARRL VEC)

Future test dates: Thursday, July 17th, 2003
Thursday, October 16th, 2003
Thursday, January 15th, 2004
Thursday, April 15th, 2004

Wireless Association's 10th Anniversary 1993 – 2003

This year marks the 10th Anniversary for WASH. Have any favorite stories or tall tales about the early days of the club? Let us know — we hope to be able to run some of those during 2003!

The **WASH Breakfast Gang** met on January 25th back at the **Ponderosa Steakhouse**. Starting off the new year were NØVLR, KB3IN, W3VFA, W4ZE, K3VX, N3ZNI, N3ZEL, WN3VAW, KB3FNM and Mary Lou Marzina. Topics of the morning ranged from Girl Scout Cookie to dry cereal, "4 Squares" and vertical antennas, club history, relatives, Super Bore, er, Bowl predictions, the weather, mine subsidence, mineral rights, Ten Tec, Dayton, and Digital Photography, and a heck of a lot more too!

Join us next month for these subjects & more, plus a cup of coffee & a good time! The next Club Breakfasts will be returning to at **Dietz's Restaurant**, Caste Village Shops, Grove & Baptist Roads, on February 22nd; and on March 29th back at the **Ponderosa Steakhouse**, Wal Mart Plaza, Route 19 & Murtland Avenue, Washington. See you there!

Reminder Switching breakfast venues: Starting in 2003, we're going to alternate the monthly Club Breakfast site between **Dietz's** and the **Ponderosa**. Even though it's been wildly successful since we started it, some club members simply can't make it every month because of the long drive; this way, we try and give everyone a chance to make it to a more convenient site at least every other month.

Keeping Busy: We recently learned (courtesy of Paul NØVLR) that Paul Jordan NP2JF is now the Incoming QSL Bureau Manager for the ARRL Virgin Islands section! He was last reported to be "weeding his way" through the stacks of cards and making a lot of headway. Good luck Paul! (Does that mean that when we come to visit we get to help?)

Not this year... After the January club meeting, we withdrew our request to the **Nittany ARC** to make N3SH the Special Event Bonus Station for the **2003 Pennsylvania QSO Party**. The original idea was to make the N3SH operation as the Bonus Stations part of the club's 10th Anniversary celebration (similar to what the **Frankford RC** did with W3FRC for their 75th Anniversary in 2002). But with many of the "regular" N3SH & WA3SH operators planning to be on the USVI trip in October, it was felt that there would not be sufficient club members remaining in Pennsylvania to do justice to the proposed operation, based on the expectations that **NARC** will be putting on the Bonus Station in the future. And we'd rather see someone else do a great job than try to do a mediocre job ourselves, on top of the USVI op too. This does not mean that the **WASH** club stations, including N3SH & WA3SH, won't be active in the contest — they just won't be the official Bonus Station.

IARU Results. The ARRL & IARU released the results of the 2002 IARU Championship in early January. In WPA, W4ZE placed First in the Single Op SSB Only category, and WN3VAW placed Second in Single Op Mixed Mode (& is now kicking himself for not really trying too hard!). Congrats!

Under the weather: We've heard that Dave KB3GOT is home recuperating from knee surgery. Get well soon Dave!

Mission accomplished: Early morning on January 31st, Ron WN3VAW contacted HH6/DL7CM on 80 meters for his 100th DXCC entity on 80, completing his quest for both 80 Meter DXCC and 5 Band DXCC. Ironically, he still hasn't worked 5 Band WAC, as he has yet to contact an Asian station on 80! Now comes the fun part... waiting for the last 18 QSL cards to come in. And then maybe he'll send the whole lot in to ARRL and APPLY for all of the DXCC certificates he's qualified for...

Articles Needed! Every month there is an ongoing effort to put articles and other information in the newsletter that will be of real and useful interest to the club members. Oftentimes we use sources including email reflectors and posts from public forums like eHam.net, contesting.com and qrz.com. But the best articles come from you. Do you have a particular interest in amateur radio that we haven't addressed or that you want to talk about? A funny story of what happened to you one day while operating? A question that you need answered? The newsletter is here for just those purposes and more, but it's up to you to provide the articles and pictures — and if you need help putting it all together, no problem! Contact wn3vaw@arrl.net for more information.

January 16th VE Test Results

We had two candidates at our January 16th VEC test session, held at the John McMillan Presbyterian Church in Bethel Park. A snowy night kept several other candidates away, but the VE Team turned out in strength!

Both of the candidates were successful, with one new license and one upgrade earned!

According to the FCC ULS database, the following licenses were issued in late January:

Technician: Mark Cushey KB3JAE

General: Todd Wade W8LEV

WASH VE Team:

Gary Van Balen KB3GUZ
Kevin DeRose N3KFD
Steve Lane W3SRL
Ed Wolf N3UE
Ed Salva W3VFA
Jacqué Gosselin N3ZEL
Ed Oelschlager N3ZNI

Of course, many, many thanks to all of the VE's for coming out and lending a hand at this test session, and special thanks to our newest VE, Gary KB3GUZ.

And Congratulations to all our amateurs, and looking forward to hearing them on the air!

73, Jacqué Gosselin N3ZEL
WASH VE Team Liason

WASHFest 2003 Reminder!

Remember, we expect to have access to the CSVFD Memorial Hall no later than 5 AM on Sunday, February 23rd. As always, we need several people on hand from 5 to 6 to help arrange the tables and set up the hall, from 6 to 8 to help check in the dealers and assist them to their tables, and from 8 on to man the doors, assist ticket sales, and so forth. Plus we need to have N3SH on the air for talk-in starting at 5, and help in the parking lot starting at 6. Please contact Steve W3SRL or Bill W3WH and let them know what you can help with and when you'll be available. Even a few minutes helps!

WACOM will be offering Technician classes the first two weekends in March (1st, 2nd, 8th, 9th) followed by a VE Test session on Sunday, March 9th. Interested individuals should contact Bob Ketzell KB3IN at (724) 228-0425 or kb3in@yahoo.com

Join WASH or Renew your Membership Today! Membership Application on Page 11!

Minutes, January 9th Meeting

Frank Bobro KB3FZU, VP/ Secretary, WASH

Ron, WN3VAW, **called** the meeting **to order** at 19:13 hours. There were 29 members and guests in attendance.

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

A motion was made to **accept the minutes** of the December meeting as published in the December newsletter. The motion was made by Paul, NØVLR, and seconded by Carol, KB3GMN. The motion was voted on and passed. The motion was opposed by Bob, W3RWS.

Committee reports:

Treasurer (N3RDV): Mark reported the club's account balances. Membership dues are now due. Please fill out a membership application each year. As a reminder, in the event that a check does not clear as a result of insufficient funds, the member will be responsible for the fees incurred by the club.

Secretary (KB3FZU): No Report.

VE Report (N3ZEL): The next VE test session is coming up. It will be held at the John McMillan Presbyterian Church on January 16th at 7 PM. The test fee has gone up to \$12.00.

Repeaters (N3RNX & W3SRL): Pete says that they both are still working. Steve is trying to link the repeaters together, so echo link can be used on the 2-meter side.

FM Net Report (N3HKQ): Kevin reports that the nets are going well. The net control stations and alternates are keeping things moving. Is there interest in starting up the digital 10 meter net? If so, he would like to know. Also, if you are interested in becoming net control for the FM net, get in touch with N3HKQ.

Activities: Thanks to Carol for setting up the Christmas party and to Jacque for setting up the Auction.

There will be a DX trip the US Virgin Islands on Oct 4 – 13th. We will be staying with NP2JF at his home. There is a full roster, but if you are interested in the waiting list, please let Bill, W3WH, know.

Greg, KQ3DX, will be finalizing the arrangements for rooms during the Dayton Hamvention. Pricing will be in the neighborhood of \$80 per person for all 3 nights. He has reserved 6 rooms; each room holds 4 people.

Public Service (N3RDV): Looking for volunteers for the St. Patrick's Day parade. April and May will be busy months with the walk a thon, marathon and many other events.

Contests: Mark, N3RDV, reports that the RTTY sprint is on the 24th and 25th of January.

The North American QSO path and ARRL VHF Contest are the weekend after out 2 Meter contest.

Ed, N3ZNI, the club is having its' 2-meter all mode FM contest this Saturday, please plan to participate. The rules are on the website and in the newsletter. Club members are listed on the chart in the January newsletter. Send in your logs to get a main prize ticket for the hamfest. If you make 10 contacts, you are eligible to purchase a mug. The club call signs – Steve, W3SRL, will operate one from his home QTH, and Bill, W3WH, will have the other.

Newsletter (WN3VAW): The newsletters have been printed and they are in the process of delivery. Please let Ron know your e-mail address and we can get the newsletter to you electronically. This is the preferred way to receive the newsletter. The newsletter is available to anyone club member or not.

President's Report (WN3VAW): Thanks to Dan KB3HVN for the new logos - #5 is the most popular so far.

We are beginning to outgrow this room here at the church. There have been a few times that the room has been unavailable; K3VX has reserved the meeting room in the Peters Township Library. It can hold 80 people and has a kitchen. There is no cost for the room. The only requirement is that a library member or a resident of Peters Township must go to the desk to get the room key. We must be out by 9 PM, which is when the building closes.

WASHFEST 2003: Thanks to Jacque & Ed for making the arrangements with the mailing house that sent the fliers. Table sales are still down, but they typically pick up closer to the event. Help will be needed for set up around 4:30 to 5 AM. Free coffee is being provided courtesy of Bill Hill, W3WH.

Old Business: Dan, KB3HVN, went over what he can provide along the lines of shirts and other logoed club clothing. No minimum order and the benefit of on line ordering.

WASH Spotlight: Breakfast & Talk



Ed N3ZNI, Mary Lou Marzina, and Hank KB3FNM enjoying breakfast (out of the sunlight) at the Washington Ponderosa during the January 25th Club Breakfast.

Photo courtesy of & ©Copyright 2003 Jacqué Gosselin N3ZNI

Every month we're going to try and feature a different WASH club member and/or something about them, or a club or club related activity that we're involved in, in the **WASH** Spotlight. Submissions should be sent to Ron Notarius WN3VAW, wn3vaw@arrl.net

Monthly WASH Breakfast Saturday, February 22nd

Please join us for the next **WASH** Breakfast! We 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 together!

Starting in 2003, we will be alternating our breakfast locations every month to make it easier for club members to get to at least one of them:

Join us in EVEN months at **Dietz's Restaurant**, Baptist & Grove Roads in the Caste Village Shops, Whitehall.

Join us in ODD months at the **Ponderosa Steak House**, Wal Mart Plaza, Route 19 (just off I-70), Washington.

Start time is about 8 AM until whenever.

Monitor 146.955 & 443.650 for talk-in or any last minute changes.

All are welcome, **WASH** members or not, amateurs or not! See you there!



Wireless Association of South Hills Membership

AA3FI	KB3FZU	KE3XB	N3RHT	N8DPW	Silent Keys
AA3JS	KB3GMN	KE7FD	N3RNX	W3GEL	K3EED
AB3AB	KB3GMO	KE8RN	N3SBF	W3HND	N3KEH
K3BZW	KB3GMP	KQ3DX	N3SRC	W3JAF	N3OBD
K3LIE	KB3GMU	NØPEU	N3TBK	W3RJM	N3SKR
K3OL	KA3GNT	NØVLR	N3UE	W3RWS	W3ZLK
K3VX	KB3GOT	NØWPU	N3UIW	W3SRL	
K3WR	KB3GZG	N2QIV	N3VEH	W3VE	Color Codes:
K9LZ	KB3GUZ	N3AWF	N3WPT	W3VFA	2003 Member
KA3PPH	KB3HPH	N3BSQ	N3XFE	W3WH	2002 Member
KA3TFB	KB3HVN	N3CZZ	N3XI	W4ZE	2001 Member
KA3TWI	KB3IAC	N3FZ	N3YPB	W8LEV	2000 Member
KA3UPY	KB3IJX	N3HKQ	N3YQY	WA3JPP	
KA3WZO	KB3IRQ	N3IDH	N3ZCG	WB3BPH	
KA3YTS	KB3IVW	N3INT	N3ZEG	WB3GTL	
KB3ANH	KB3IVX	N3KFD	N3ZEH	WN3BOJ	
KB3CPI	KB3QX	N3MJQ	N3ZEL	WN3VAW	
KB3DCO	KC2JJB	N3PN	N3ZNI		
KB3ENX	KC6VLV	N3QMV	N4MIS	Barbara Misic	
KB3EPI	KD3JV	N3RDV	NP2JF		
KB3ERQ					
KB3FNM					
KB3FQT					

Through January 29th, 2003

List compiled by

Mark Stabryla N3RDV, Vice President/Treasurer

(Meeting Minutes Continued on page 6)

Why Your New Radio Has Rotten CW

Tom Rauch W8JI courtesy of www.eHam.net

Key Clicks are often a problem on congested bands, yet with modern radios they don't need to be a problem. In the past, engineers and designers didn't have the easy ability to generate filtered waveforms. Radios lacked wide 2-3 kHz wide SSB filters, let alone narrow 250-500Hz filters. Op-amps were unheard of, and L-C filters were large, bulky and expensive. Today, every radio manufactured has the ability to be very clean.

Modern Radios

Most modern radios include 500Hz and narrower receiver filters that operate at the same IF frequency as their transmitter section. Transmitted signals are often routed through the SSB filters with intentional TX switching, when they could just as easily be routed through CW filters! We will see later in this page that TX signals could be routed through CW filters to eliminate sidebands, yet manufacturers foolishly use the SSB filters. If you examine the bandwidth of a FT1000-series radio, you will find the clicks disappear at the BW limits of the SSB filter. This is because they run an essentially unshaped CW signal through the SSB filter, and that filter sets the bandwidth of clicks.

The sad thing is once you listen to that signal through a 500Hz filter, it sounds absolutely no different **ON FREQUENCY** than it would if it were nearly click free. The only people who can notice the difference between a clicking rig and a clean rig are the people operating on adjacent frequencies! Claims that certain shapes produce certain "bell sounds" or high readability are not correct, they are certainly not based on engineering or actual blind A-B tests.

If you examine the audio output of your radio with a 500Hz filter in use, you will see ANY waveshape transmitter has the same nearly raised-sine shape output to your ear! That includes wide signals and narrow ones. The speed limit you can copy with a 500Hz filter is the same limit you can transmit with. It makes no difference what end of the path the filter is on, or if there is one at both ends, so far as speed is concerned! (This assumes the filters have reasonably good and easy to achieve group-delay characteristics.) We hear a few mS rise, no matter if it is a sine shape or a square, as a "tick". For demonstration, listen to the pure sine wave on WWV that "tics" every second!

What Could Be Done

At no cost to manufacturers, they could build a click free radio. Every component is in the radio, the problem all centers around poor or careless engineering.

Amplifier stages are reasonably linear (so they can amplify SSB), and virtually every radio contains power control circuitry that could be easily modified to provide wave-shaping. Even without wave-shaping, the transmitter could process transmitted CW through a 250Hz or 500Hz filter.

Sadly, most of the commonly used radios have as bad or worse keying characteristics than old rigs. It's as if the manufacturers either don't understand CW, or don't care. The result is we are left with a mess, because many top-of-the-line and very popular rigs have horrible keying sidebands.

On frequency with normal CW filters, we would not be able to tell any difference between the sound of a clicking radio and one that is clean! There is no justification or reason for radios to be 3kHz wide on CW.

How to Identify Click Problems

We hardly notice clicks, and we certainly can not tell a clean rig from a dirty rig, when we are listening right on the CW station's frequency! Even an scope won't tell us much about signal bandwidth, or if the rig has excessive clicks.

In order to check clicks, we must:

- Be sure the receiver is not overloading
- Listen with the CW signal outside the receiver filter's bandwidth
- Listen when the noise is low, and the signal reasonably strong

If we do not follow those three guidelines, we can't tell if a rig is clean or not. If you are testing your own rig, your second receiver must have a narrow filter and be coupled to the rig-under-test through a proper attenuator.

Why Worry About Clicks?

Clicks are most problematic when we try to copy weak signals next to moderately strong signals. If you only operate on empty bands, run low power, and never operate within four or five kHz of weak stations, bandwidth is probably not a concern.

If we contest, work DX, or Ragchew near other QSO's, and especially when we run more than a few hundred watts and have large antennas, we should be mindful of our bandwidth. If you listen to a recording of a clicking radio, you can hear how devastating clicks are to nearby weaker signals. This signal is from Europe on 40 meters, and it is daylight over half of the path!!

For a mathematical tutorial on clicks, visit W9CF's site. Kevin's analysis deals with bandwidth requirements related ONLY to modulation of the envelope. I'll explain the same thing in verbal form, as I discuss sidebands created by rise and fall times. CW keying is really just 100% AM modulation, as you will see!

There are several INCORRECT but popular misconceptions. They are:

- A signal has to be clicking and/or wide to send fast CW
- Clicks or sharp rises and falls aid in weak signal work
- Your CW signal bandwidth changes with the speed you are sending
- A certain shape gives a certain on-frequency sound

What Causes Clicks?

While a fast rise and fall time guarantee excessive bandwidth, **a long rise and fall is no guarantee a radio will be "click-free"**. Some radios switch into transmit while the synthesizer (VCO) circuits are still settling to a new frequency. An IC-775DSP I owned was particularly bad about this, and also had VCO leakage problems. The amount of garbage varied with how I used the radio, including "VFO" frequency settings of unused VFO's!

Radios with VCO or synthesizer settling time problems generally produce a loud "thump" on key closure on the second VCO frequency. That thump will be right on the DX station when the operator is working split. If you listen in pileups, you will hear a small percentage of rigs with this problem. If the operator uses QSK, VCO-switching-thumps can be particularly annoying. Thumps will occur every time the VCO moves from the receive frequency to the transmit frequency, sounding like a leading-edge click!

Rise and fall times are also important. **A long rise and fall time does not always result in narrow CW transmitter bandwidth, even though a faster-than-needed rise and fall time almost certainly results in excessive bandwidth.** Many radios have rise and fall times that are much too fast.

How fast is much too fast? For now let's ignore VCO switching problems, and consider envelope shape.

Rise and Fall

The ARRL recommends a 5 mS rise and 5 mS fall time for CW, based on data in section 2.202 of FCC rules and CCIR Radio regulations. According to professional sources, a 5 ms rise and fall time is not harmful to readability at 35 wpm under marginal (fading) conditions, and 60 wpm when signals are reasonably above noise floor. This rise and fall results in a occupied bandwidth of 150 Hz, although unwanted transient energy caused by the shape of the waveform slope may appear at wider bandwidths.

What Limits Bandwidth?

When determining bandwidth of a stable signal (no oscillator problems), two things come into play in.

- The **slope** of the envelope rise and fall at any point controls the **bandwidth** of the keying sidebands
- The **amount of voltage change** during the slope controls the power **level** of the sidebands (clicks).

The slope (bandwidth) and the amount of change in a sloped area (level) combine to determine how offensive the transmitted signal is. **Very subtle changes in envelope shape have a profound effect on key click amplitude and frequency dispersion.** This makes it nearly impossible to tell if our radios are as clean as they could be by looking at envelope shape.

We can be certain sharp transitions will cause problems, especially if we can actually see them on a oscilloscope. We can also be sure that a rise and fall faster than 2 or 3 milliseconds will cause a bandwidth problem.

Reference Data for Radio Engineers, in the section of Radio Noise and Interference, addresses key clicks in a manner the ARRL Handbook does not. They give an example of multi-pole shaping of waveform. The ARRL Handbook seems stuck with the incorrect notion that a single-pole R/C filter provides proper shaping, something doubtless left over from 1940's technology when better filters were expensive, large, and complicated.

On the chart on the next page are the bandwidth curves of three basic envelope shapes, one rectangular (some radios are this bad!), one for a proper single pole R/C filter with slightly rounded shape (The ARRL suggests this shape. Probably because it was practical in the early years and "stuck" even though it is not ideal), and one for a filtered rise and fall (this would be a sine-shaped rise and fall from a multi-pole filter). We can clearly see a large difference in bandwidth in the curves shown. Most radios, through poor design, fit in the rectangular to slightly-rounded category!

(Key Clicks Continued on page 6)

(Key Clicks Continued from page 5)

What Can Manufacturers Do?

Radio manufacturers can certainly do a great deal more than they are. First, they created the problems through poor engineering and design. Why are we stuck fixing them? Did they take our money and run?

All of the parts are there to make radios virtually click-free, yet the only manufacturer who has taken an active interest in this (and who seems to care at all about our signal quality and frequency usage) is Ten-Tec! To date I haven't found any other manufacturer admitting a problem, or even offering technical support for bandwidth problems.

Let me give an

example of what could be done with current radios:

Virtually every radio contains a CW filter that operates at the IF frequency of the transmitter, yet nearly every radio transmits CW through the SSB filter! Engineers actually **added circuitry and parts**, in many cases, **to steer the CW through the wider filter on transmit!** If you listen to radios, in particular the FT1000-series, you will notice they have an ultimate click-bandwidth of about the same width as the SSB filter. That's because the poorly-shaped CW waveform with excessively fast rise-and-fall is filtered through the SSB filter.

If these same radios immediately turned on the output stages, and held them on for several mS after the key line was opened, they could send perfect filtered CW through the CW filter. A 500Hz filter would cause a steep roll-off in clicks, even if driven by a relatively "square" and very broad CW signal. The resulting waveform would be a slightly modified raised-sine envelope.

The listener would not be able to tell *any difference* between the ON FREQUENCY sound of a 500Hz CW-filtered transmitter and an unfiltered signal with excessive bandwidth, if he used a 500Hz or narrower filter in his receiver! As a matter of fact, I normally transmit through a 250Hz filter in my FT1000D, rather than the 2.4kHz SSB filter Yaesu selected. No one listening on frequency, even DX stations copying my signal near noise level, can tell the difference when I select 2.4kHz or 250Hz bandwidth! The only place transmitter filtering makes a difference is up or down the band from my operating frequency.

THIS IS WHY WE CAN NOT TELL WHETHER A SIGNAL HAS A PROPER RISE AND FALL TIME, SHARP LEVEL TRANSITIONS, OR ANY OTHER ENVELOPE SHAPE PROBLEM WHEN WE LISTEN TO THE ACTUAL CW TONES THROUGH A 500HZ FILTER. EVEN A VERY FAST RISE-TIME, WITH A SPIKED RISE AND FALL, SOUNDS GOOD (AND EVEN LOOKS PERFECT ON A SCOPE CONNECTED AFTER THE RECEIVER'S NARROW FILTER)!

CLAIM'S THAT A CERTAIN SHAPE RISE AND FALL PRODUCE A "PLEASING-SOUND" ARE NOT TRUE AT ALL. FIRST, OUR EARS CAN'T IDENTIFY A SOUND ONLY 5MS LONG, AND SECOND...THE RECEIVER'S CW FILTER (ASSUMING IT IS UNDER SEVERAL HUNDRED HZ BW) RESHAPES THE WAVEFORM TO A PROPER RISE AND FALL!

Why is any of this our concern? Why do we have to work on radios, and suffer with clicks? Certainly not because of a cost issue! All the parts are in the radios. It is a simple lack of good design-engineering, most likely driven by a lack of concern by manufacturers for providing rigs with good signal quality.

What Can We Do?

First, we can let manufacturers know it is **their problem**. Let's ask the ARRL to publish useful reviews with bandwidth pictures showing a spectral display of CW (and SSB) bandwidth. Let's ask them to check for VCO problems, and publish any abnormalities. Let's rate radios as poor, fair, good, or excellent so readers don't have to be EE's to understand what they are buying (and using).

Radios are too expensive, too difficult to work on, and last too long for us to ignore this problem. We need to stop these problems at the design phase, instead of out in the field.

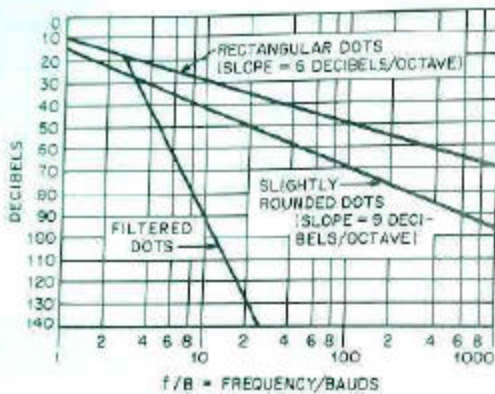


Fig. 12—Curves giving the envelopes for Fourier spectra of the emission resulting from several shapes of a single telegraph dot. For the upper curve the dot is taken to be rectangular and its length is $\frac{1}{2}$ of the period T corresponding to the fundamental dotting frequency. The dotting speed in bauds is $B = 1/t = 2/T$. The bottom curve would result from the insertion of a filter with a pass band equal to 5 units on the f/B scale, and having a slope of 30 decibels/octave outside of the pass band.

(WASHFest 2003 Continued from page 1)

bin" gear, only to be replaced a little while later by the Kenwood 520, the Kenwood 440, the Icom 740, and so on. Now we are seeing the latest versions of microprocessor-controlled rigs such as the Icom 746, Yaesu FT-1000 and even newer gear hitting the hamfest tables, only to be scooped up by buyers every bit as eager as those of 40 years ago. At half the original sale price. At a hamfest.

And once one adjusts the sale prices for inflation, you get the feeling that ham gear, especially USED ham gear has NEVER been more affordable than ever before. Likewise, computer gear, now present in just about every ham shack is even cheaper yet, thanks to Microsoft's planned obsolescence policies and a virtual market saturation for home PCs. Last years' killer PC and software can often be found at a mere fraction of last year's new sales price. At a hamfest.

The Hamfest is far from DYING my friends, it is simply EVOLVING.

This is something that just amazes me; hams as a group are notoriously stingy with a buck. Yet many, if not most of our fellow hams just haven't figured out that they can get more bang for their buck today, than they ever could before. Yes, at a Hamfest. (And if they come to the WASHfest, they can drink **FREE** coffee all day while they try to wait out the seller of that precious horde of rare vacuum tubes over in the corner.) Not to shabby for a paltry few bucks' admission price!

So there you have it my friends, there is absolutely no reason to come to the WASHfest on February 23 at the Castle Shannon VFD. However, keep it in the back of your mind that there IS a hamfest that weekend, and it is the FIRST major event of 2003 so when your XYL gazes soulfully into your eyes and murmurs "home improvement project" you can remind yourself that you would MUCH rather install that organizer system in the hall linen closet than hang out with your buds for awhile and sip **FREE** java down at the WASHfest. That suits me just fine. That just means there'll be one less crusty old curmudgeon there to compete with me for that spotless, vintage Hallicrafters receiver from that estate over on table 39.

Microprocessors and the Internet ruined hamfests anyway don'tcha know? I couldn't agree more. Talk to you later OM, I need go and return some more of that **FREE** coffee and then haul my new boatanchor out to the car.

— 73, Steve Lane W3SRL
WASHFest 2003 Co-Chairman

Dayton Hamvention® 2003

University of Dayton Room Reservations

Greg KQ3DX has reserved six suites again at the University of Dayton for Dayton 2003. Each suite has two two-bed rooms, a kitchenette, bathroom, and living room area, and comfortably holds 4 people. Cost is expected to once again be about \$80 per suite per night (a small increase over last year).

At last report, not all of the spaces had been spoken for yet. If we do not have sufficient reservations, the extra room(s) can be returned, but once they're gone, they're gone (there IS a waiting list for them!)

Also, if you have any preference on who you share the suite with, let Greg know, or ask him who's coming. We want to try and match up everyone who wishes to bunk together if we can!

If you are interested, please contact Greg at kq3dx@hotmail.com. He was expected to have the bill in January and should be able to tell you total costs now.

(Meeting Minutes Continued from page 4)

New Business: Steve was looking for suggestions for kit nights – demonstration night or anything else let him know.

Good of the Order: WACOM special event Feb. 6-7-8-9 at the Washington mall using the call sign W3C.

Paul's shack is finished and he had the photos to prove it.

Motion to Adjourn: Made by Bill, W3WH, and seconded by Carol, KB3GMN, it was voted on and passed.

QSL Manager KU9C Status

Steve Wheately KU9C

I am nearing the completion of the direct QSL cards received for some of the DXpeditions that I manage, and I wanted to give you all an update.

As of January 31st, I will be current with all direct QSL received for PWØT and YA5T as of January 6th, 2003. Please note that this means that if you sent a QSL to me for ONLY PWØT or YA5T (i.e., without another card for a station I manage), it will have been processed and mailed to you. If you do not have your card within a reasonable mailing time from NJ at that time, I'd suggest you resubmit.

The 2002 BQ9P operation will be my next focus, and I expect to have that done in February. It's a bit slow, as it requires a number of log lookups. Other calls I manage have been on the back burner a bit, although I'm mailing them out as I can get to them. If you sent me individual SASEs for these stations, I expect to have them out in the next month or so as well.

Many QSLs will be delayed beyond the above schedule because more than one call have been included in the SASE. If you sent PWØT and YA5T, they should be out quickly. If you sent PWØT with an early BQ9P operation, for example, it will be delayed further, as I don't do the BQ9P cards as often as I do YA5T due to volume.

Statistics: Just under 50,000 PWØT QSO's have been issued. 20,000 YA5T QSO's have been issued. When I take these with the other calls I manage, including bureau mailings, approximately 100,000 QSOs have been issued by me since January 1st, 2002. This equates to over 30,000 envelopes received, and has been nearly a full-time job for me in 2002.

One thing I pride myself, as part of my contribution to the integrity of the various award programs, and in particular DXCC, is the careful check of every QSL I receive against the logs I have on file. If there is a time discrepancy, I check it out to make a determination as to whether you should get the QSO. I check paper logs if available before I send back 'not in log'. This takes time, but I strongly believe that this effort is required to maintain the quality and integrity of my QSL process, which directly affects the quality of the programs we use these cards for. Imagine the consequences if I did not carefully check the cards, especially for operations such as BS7H, BQ9P, YA5T, PWØT.

I appreciate your patience, and I thank all of you that have been supportive in this process. Had I the ability to do it over again, I'd have done things differently, but at the end of the day, the cards are out with the highest level of quality I can provide, and that is what it all about.

"I'm sure many of you old timers remember the Call Area maps that you would hang over your Novice station so you knew what call areas belonged to what states and provinces. This also has a GMT conversion table. I found a 'virgin' copy today in one of my old log books from the mid 1960's, and I have scanned it so everyone can "enjoy" this piece of memorabilia. Download the map at <http://members.cox.net/n7rk/scotradiomap.jpg>"

— Dave Hollander N7RK



David M. Brown KC5ZTC
Rick D. Husband
Laurel B. Clark KC5ZSU
Kalpana Chawla KD5ESI
Michael P. Anderson
William C. McCool
Ilan Ramon
Space Shuttle Columbia Crew
Mission STS-107
Approx. 1400 Z, 1 February 2003

About that SWR Bridge...

Bob McGraw K4TZ courtesy of the TenTec Reflector at www.contesting.com

Most all SWR meters are "relative" devices. If there is any current circulation on the outside of the coax, changing the length of the line will change the apparent SWR.

One source of this current is an induced value from the radiating device itself. (Feedline in the presence of the antenna.) Now, should the line be terminated in a non-radiating load, moving the bridge to a different position in the line will have little if any effect on the indicated SWR value, except the nominal SWR induced from the insertion of the bridge itself and the combined line loss. The lower loss the line, the less effect one will see with regard to SWR changes. The induced SWR from the bridge itself is a constant provided the frequency is a constant as well.

A second factor is the actual source impedance of the device producing the RF. Ideally, we'd like to think the output of a transmitter is 50 ohms. Most are actually lower. Ideally one should isolate the RF source from the bridge by a suitable device as a 6 to 10 dB attenuator of 50 ohms Z.

In this condition, the bridge is actually seeing 50 ohms, or the Z of the coax, on one side and the line/antenna load on the other. For critical antenna adjustments, on VHF I've always used about 50 ft of RG-58 as a "lossy line" between the transmitter output to the bridge. Then the feedline with the antenna can be connected to the output of the bridge with reasonable assurance that antenna adjustments can be accurately made. This is a bit tougher to do at HF.

WACOM is once again running Special Event Station W3C, Commemorating the Washington Co Sportsmen's Show, at the Washington Mall from February 5th through 9th. If you'd be interested in coming down, and help operate the station to demonstrate Amateur Radio, contact Ed N3ZNI at n3zni@arri.net

"Several times when I am traveling out of my home area and I am in unfamiliar territory I give a call out on the 2-Meter calling frequency of 146.52 simplex. This has led me to the main repeater of the area that has the most traffic. Sometimes, I do not receive a reply when calling out on 146.52 simplex. Fortunately, I have always received a reply when when it has been an emergency (this has only happened once).

What I have done, and I ask other amateurs to do, is to program 146.52 simplex into your radio. When you are driving around or sitting in the shack not hamming turn to that frequency or at least put your radio on scan. Even better, program it in the priority location of your radio. My radio has an alarm that alerts me if traffic appears on the priority channel and I can easily switch over there.

I believe this will help hams traveling out of the area and you never know you may help somebody out in a pinch or make an interesting contact. Just by having my radio on scan I heard a call out from an air mobile at 30,000 feet and was able to reply at quite some distance (I was in Wichita and he was over the middle of Missouri at the time I finally made it through the pile up)."

— Matt Sauer KCØLEX

"How many of you remember the USN/USCG RM Rate? You know, those radio operators that could work CW at 30 WPM, typing on a mill (manual typewriter) drink coffee, and carry on a conversation with you at the same time. I remember visiting the old USCG NMC Radio Station on the top of San Bruno Mountain when based at San Francisco Intl Airport before NMC moved to Pt. Reyes and seeing them in action.

It was a couple of years ago that the Coast Guard retired it's last CW key on active duty. RM's were no longer required to know Morse code. Now the RM rate is phasing out completely. They haven't been called RM's (Radiomen) for awhile, the new name is Telecommunications Specialist but they still wore the Sparks on their arm like a RM. But now the Sparks insignia is also being retired.

Telecommunications Specialist 'A' School Class 06-03 is the last class to go through TC training at Training Center Petaluma, CA. The Telecommunications Specialist rating will soon be incorporated into either the Information System Technician (IT) or Operations System Specialist (OS) ratings. These men and women will be the last people to wear "sparks" on their arm."

— Allan C. Zack K6ACZ

DX QSL Card Anxiety ?

Rod Elliot VE3IRF courtesy of the DX QSL reflector

Almost every day on one or more of the DX or QSL reflectors, we see posts like . "I mailed my card x days ago and still don't have a reply / should I re-apply? / the manager's a jerk / etc. etc."

This angst is sparked by our expectations about QSL turn-around time. Fear kicks in as soon as we feel it's taking too long. Not a bad thing if our expectations are realistic. However, there's a problem if the real-world QSLing process is actually slower than we expect. Then, we needlessly pester the managers, spend money on re-submissions, clutter up the various reflectors with extra traffic, and give ourselves heartburn. Not pretty.

It would help if we had an objective benchmark for how long the process really takes. But how do we get that? Being a statistician by trade, I decided to bring some science to the question. Here are some preliminary findings.

1. Multi-operator DXpeditions with managers whose only role is to do the QSLs are extremely reliable at getting the cards out. In my sample of 48 such expeditions, there was a 100% return rate on first submissions.
2. However, not all these cards came back quickly. This is how long they took:
 - 10% of replies received within 31 days
 - 50% of replies received within 112 days
 - 90% of replies received within 257 days
 - 99% of replies received within 417 days

These points give us a probability benchmark for real-world QSL turn-around time. This should be useful for forecasting future QSLing experience.

Interesting numbers. Think of VP6DI and PWØT. Despite earlier (premature?) anxiety, close to 100% of cards for both operations are now out. Both Garth VE3HO and Steve KU9C got it done well within the 417-day time limit predicted by the benchmark. In that sense, both these situations went exactly as we should have expected.

So, should we have worried? Only if we needed to hit the September 30th DXCC submission date about 180 days after the operations. For that time, the benchmark predicts only 70% of cards will be received. It was reasonable for those who didn't have them to ask the managers for special attention

What about K1B? Well, as this was written, it's now only ~250 days since that operation. The benchmark says that about 10% of cards should still be outstanding. It's reasonable to keep the faith a while longer. Don't re-apply just yet unless you're on the lost envelope list.

In general, when should one re-apply? Not until well after the 90% point, 300 days at the earliest. When to write off? Not until the 99% point is passed at 417 days.

If there's enough interest, I'll publish similar analyses for:

- Resident amateurs QSLed direct
- Resident amateurs with QSL managers
- Small DXpeditions where the ops do their own QSLing

Yes, they're all different.

For those who want info about the analysis, here are a few details:

Sample: 150 first-time direct QSLs sent within 30 days of the operation over a 5-year period from 1 January 1997 through 31 December 2001. At that time I was building my DXCC mixed total from 250 to 330 entities.

QSLs: Plain-vanilla one-or two-color cards typeset and printed on my home computer. All sent direct airmail in Bill Plum's nested envelopes with one IRC or US SASE, a very few with a small donation of \$5 or less. All envelopes addressed on my laser printer.

Analysis: Probability plots of turnaround times generated on commercial Weibull analysis software.

Assumptions:

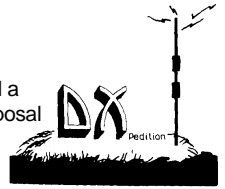
1. In the real world there exists a stable process that determines the probability distribution of QSL turn-around times, and
2. My experience is a representative sample of the results of that process.

Silent Keys



Ron Bradley W3KZE, 91, Crafton, December 21st
Ulysses C. Shaffer K3LIP, 85, Oakdale, December 21st

DX News Briefs



The Environmental Protection Agency (EPA) has approved a plan to permanently close a military chemical weapons disposal facility on Johnston Island **KH3**. The facility is expected to close once the cleanup is completed, and administration of the atoll will be transferred to the U.S. Fish and Wildlife Service (FWS). As part of the closure, Johnston Club station **KJ6BZ** will be dismantled. OH2BH, OH2PM & W3UR obtained special permission to operate KJ6BZ for one week just prior to the demolition. They are now QRV as **AH3D** and are expected to be on the air through February 4th. This may be your last, best chance to work Johnston Island for quite a long time. QSL AH3D via OH2BH — W3UR via ARRL Web, K6GNX, 425 DX News, KE3Q

Members of the Florida DXpedition Group are planning a trip to Antigua from 17— 25 February 2003. W4WX will be operating as **V25WX**, and W1LR has been approved for **V26LR**. They will be on SSB, MMTTY, & PSK-31. Pilot station is W9AAZ kx8nlaf@bellsouth.net. QSL via home calls. — W4WX

The second DXpedition to Ducie Island VP6D should be QRV on March 8th or 9th depending on weather. They are expected to be active on all bands with heavy emphasis on 15 and 20 meters. QSL via JR2KDN — WA2MOE, KF2TI, K9AJ
OM2DX has been very active as **YI9OM** and **YI9BGD**. On line logs are available at <http://www.qsl.net/om2dx>. QSL via OM3JW — OM3JW

Monk Apollo **SV2ASP/A** became QRV again at the end of January. He's reported to be on 40 & 20 CW right now, with the possibility of future SSB & PSK31 activity from **Mt. Athos**. QSL direct only to Monk Apollo, Monastery od Dochiariou, 63087 Mount Athos, Greece — SV1DPI

Many amateurs are becoming impatient waiting for cards from last year's **ZL7C** DXpedition. Log checking of cards received has been ongoing for several weeks. The QSL cards were received from Vertex Standard (Yaesu) at the end of January, and an announcement on when the cards will begin to be mailed should be coming out shortly — ZL4HU, ZL2BSJ

SSB cards for last year's **K1B** DXpedition were originally to be routed to RZ3AA. Bureau cards should still be sent to Roman, but due to postal pilferage, direct requests should be sent to Stephen M. Grose K4YL, PO Box 183, Flat Rock, North Carolina 28731-0183 k4yl@highstream.net. CW and Digital mode requests continue to go to YT1AD — RZ3AA, K4YL, VA5DX, K4SV

Speaking of pilfered mail, **V51AS** has been having the same problem. He recently sent a local newspaper article showing three months of mail that had been stolen, pilfered, and dumped in a riverbed. If you have been waiting a while, you may want to consider re-QSL'ing Frank — WB6RSE

W8TTS is now the manager of the February 2002 **PJ2/N8LGP** Curacao operation. QSL direct or via the bureau — W8TTS

W6RKC has the logs for **VP6VI** (SK) and can confirm QSO's — N4JQQ

The Sir Francis Drake Report:

V31KQ QSL Manager WAØETE reports recent activity is Slim. V31KQ was active 24 April to 02 May 2002, and there are no firm plans for 2003 activity, though that may change — WAØETE, K9RZ

T77GI was QRV on 20 CW in mid-January. The call has not been issued and he is presumed to be a pirate or a busted call — T77C, K4XG

QSL Routes

3D2UM via LY3NUM — S5ØR
3XY7C via DL7UFR — W8GC
5KØC via DH7WW — LU2DKN
5T5JC via F5JJK — WA8JOC
7Q7HB via GØIAS — K4JP
A41KJ via N5FTR — N1NK
AY8A via LU8ADX — W5UR
CYØ/N1NK via N1NK — W4YCH
FOØEEN via LA1EE — KE9KD
FO/HB9B/p via HB9B — ON7YX
FO/SP9FIH via SP9FIH — VK1ZL
FP5KE via F5TJP — LU2DKN
HV5PUL via IWØBET — W9OL
OE6MBG via NR1R — K3AIR
R1ANF via RK1PWA — K3AIR
STØF via ZS4TX — DL-L14/2381499
T88HA via JK1FNN — N5PHT
TR8CA via F6CBC — W4YCH
TU2PA via KEØLS — WA8JOC
UY2VM via DL6MHG — W4YCH
V31DJ via W1LLU — N5PHT
V31JP via KA9WON — N5PHT
VP6BB via JA1SLS — W9OL
YA1BV via JA1PBV — JA DX News
YA1JT via JA1CQT — JA DX News
YBØDPO via K5ZE — W9OL
YV5OHW via EA7FTR — N5PHT
ZD7DP via W1ZT — K4KU
ZD8A via N6CW — KE9KD
ZY7C via PT7WA — W5UR

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 McClenny W3UR / *The Daily DX* for confirmations & additional information.



WASH Classifieds

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

HAM RADIO INSURANCE ASSOCIATES, INC.

P.O. Box 201
 Canonsburg, PA 15317-0201
 Toll-Free 1-800-545-8881

Fax: (412) 746-5944

gallina@usaor.net

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

- | | |
|---|---------------------------|
| Radio Equipment | Computer Equipment |
| Antennas Rotors & Towers | Computer Media & Software |
| Cellular Telephones | |
| Mechanical Breakdown & Electrical Damage Coverage | |



EcoQuest International

"Healthy Living Technologies"

Featuring *Living Air*, *Living Water*, & the soon to be released *WindTree*.

Suffering from Allergies, Asthma, Headaches, Pet Odors, Smoke, or Bad Tasting Tap Water? Call for a FREE in-home demo and 3-day trial of *Living Air* and *Living Water*.

Kevin F. DeRose N3KFD
 1-866-754-1331 Toll Free Overview
 1-724-348-6892 Office

kfderose@ecoquestintl.com
www.ecoquestintl.com/kfderose

OGS Distributing —

Embroidered Apparel, Printed Apparel, Dash Plaques, Award Plaques, Vinyl Graphics, Cyclo Polisher, Car Detailing Supplies. Dan KB3HVN, 6571 Zupancic Drive, Pittsburgh PA 15236, Phone (412) 655-8787, Fax (503) 218-1441, or visit the on-line catalog at <http://www.onlygoodstuff.com>



For Sale: (All prices Firm!)

- Yaesu FT-840 HF Xcvr with FT-747 FM Unit Installed \$450
- ICOM IC-718 HF Xcvr with DSP unit Installed \$450
- Ameritron AL-811H 160-10 Meter Amplifier \$600
- Heathkit SB-200 80-10 Meter Amplifier \$250
- MFJ-962D kW HF Antenna Tuner \$165
- MFJ-1275 Sound Card to Rig Interface (never used) \$70
- Cushcraft A3S 10/15/20 Beam \$300
- HAM IV Rotor with control box & 100 feet of control cable \$300

More Items Available! Call 330-223-2310 or e-mail dynamic@raex.com

For Sale: Kenwood TS-850S with MC-60 Microphone. \$800. Bob KB3IN (724) 228-0425 kb3in@yahoo.com

Computer Repairs, hardware and software upgrades, data transfers, home network installation and configuration and general computer and network service and support. Quality work done right, reasonable rates! Call Ron at 412-352-1561

New Hope for the Flying Horse?

There were reports in mid-January that the venerable Radio Amateur's Callbook will NOT go out of production as originally planned after the Winter 2003 Edition, but will be back under new ownership with a Summer 2003 Edition!

However, follow-up reports claim that this is a hoax and that the RAC web site was hacked by the hoaxers.

Make up your own mind by visiting <http://www.callbook.com>

FCC News

ARRL Web Extra & ARRL Letter, courtesy American Radio Relay League

NEWINGTON, CT, January 31st, 2003 — The FCC has sent warning notices to ten individuals — eight of them Amateur Radio licensees — for operating without a license in the 11-meter band. All but one of the operators live in the Greater New York City area.

"Such operation will subject you to fine or imprisonment, as well as an *in rem* seizure of radio transmitting equipment, in cooperation with the United States Attorney for your jurisdiction," FCC Special Counsel Riley Hollingsworth wrote January 15. He cited "monitoring information before the Commission" indicating that the individuals were transmitting on 26.540 and/or 26.555 MHz--frequencies outside of normal Citizens Band channels and allocated for government use. He noted that fines for such unlicensed operation can run as high as \$10,000.



Receiving warnings were Teofilo Vargas, N2JZQ; Pedro P. Caba, N2ZFL; Antonio Leonor Disla; Hector P. Genao, KC2DPX; Hector L. Vasquez, KB2UFD; Jose A. Tineo, KB2RKF; Doroteo A. Hiciano, KB2YBF; Juan L. Vasquez, KG2PI; Juan C. De La Cruz; and Francisco Martes, KB2RJZ.

In other enforcement actions, the FCC rescinded the automatic control authority of a repeater operated by Daniel Granda, KA6VHC, of Whittier, California. The action means a control operator must be present at all times at the control point of the KA6VHC repeater. FCC Los Angeles District Director Catherine Deaton wrote Granda January 13 to say the action was being taken because Granda's repeater was under review by the Enforcement Bureau for apparent violations of the FCC's rules. Alleged violations include obscene and indecent communications, inadequate station control and deliberate interference.

Deaton told Granda that he may not operate his repeater under automatic control until the enforcement allegations are cleared up. "If KA6VHC is operated under automatic control prior to notification from this office, enforcement action will be taken against your amateur operator and station licenses for KA6VHC," Deaton said. "This action will include designation of those licenses for a revocation and suspension hearing, and a monetary forfeiture."

Last October, the FCC dismissed Granda's complaint against the KD6ZLZ and WA6NJJ repeaters on 223.82 and 223.84 MHz. The FCC told Granda that his 16-year-old coordination document "was insufficient to establish coordination" and that he bears primary responsibility for preventing interference to the two repeaters because he cannot show current coordination. Granda has told the FCC that he's been using the two frequencies "continuously for over 25 years." Hollingsworth told Granda, however, that, even if he were properly coordinated 16 years ago, "coordination is not a lifetime grant" nor a *de facto* frequency assignment.

Hollingsworth said the FCC continues to receive complaints about deliberate interference from Granda's station to the two repeaters as well as allegations of obscene and/or indecent speech. The FCC has asked Granda to respond to the complainants by February 1st. In addition, the Commission wants Granda to provide "a detailed plan" to prevent interference to the KD6ZLZ and WA6NJJ repeaters or risk enforcement action. Noting that Granda's license expires next November 9th, Hollingsworth said the FCC would not act upon a renewal application until the enforcement issues were resolved.

FYI Networks

For Your Information needs

FYI Networks, an Internet Service Provider in Pittsburgh and surrounding areas since 1995, is offering all members of **WASH** their Basic Internet account for only \$18 / month. This includes one e-mail box, 3 MB of disk space, web page hosting, Telnet and FTP access. Call FYI toll-free at 1-877-FYI-4NET, or e-mail them at sales@fyi.net, for more details or to sign up. You must mention that you are a member of the **WIRELESS ASSOCIATION OF SOUTH HILLS** to get the discount rate.

FYI Networks now also provides sDSL service in selected areas. **WASH** Members can get DSL for the discounted rate of only \$47.50/month. A pre-qualification must be done to see if your address is in the DSL coverage area. Call John Vasicek at 412-488-7800 for more information about FYI sDSL services & benefits.

Many thanks to FYI Networks for making these special offers available to us for the past five years!

Now in our EIGHTH big year!



WASHfest 2003

The South Hills Hamfest

Sponsored by the Wireless Association of South Hills Amateur Radio Club, Inc.

Sunday, February 23rd, 2003

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 will be available, thanks to Mike Lazaroff K3AIR

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

MAIN PRIZE DRAWING at 2 PM—You've Got to play to WIN!

- 1st Prize: Yaesu FT-817 HF/VHF/UHF All Mode QRP Transceiver
- 2nd Prize: ICOM IC-207H Dual Band Mobile FM Transceiver
- 3rd Prize: ICOM IC-V8 2 Meter Hand Held Transceiver

Additional Hourly Door Prizes!

Main Prize tickets are \$2.00 each, or 3 for \$5.00 — All Prizes Subject to last-minute changes

For reservations, or information, Contact:

Steve Lane, W3SRL at (412) 341-1043 or Bill Hill, W3WH at (724) 746-1776

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

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 ASSN. OF SOUTH HILLS
897 Lovington Drive
Pittsburgh, PA 15216-1725

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 2003



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

(check quarter →)
(check one ↓)

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

(FM1) Family Membership (F1 or F2 or A1 dues x 20% x No. of household family members): \$ _____

Name(s): _____

Name: _____ Call Sign: _____

Address: _____ License Class: _____

City, State: _____ Expires On: _____

Home Phone: _____ Work Phone: _____

Email Address: _____ 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: _____

Signature: _____

Amount Enclosed: \$ _____

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

Wireless Association of South Hills, Inc.

Order Form for "The TLC Embroidery Company"

Embroidered Shirts and Hats

Quantity	Item/Description	Size	Color	Unit Cost	Net Cost
Sub-Total					
6 % Sales Tax					
Total Enclosed					

<u>Available</u>	<u>Cost (S M L XL)</u>	<u>Cost (2X 3X 4X)</u>
Golf Shirts	\$20.00	\$22.00
Rugby Shirts	\$20.00	\$20.00
Light Jackets	tba	tba
Lined Jackets	tba	tba
Hats	\$10.00	\$10.00

Club logo is not currently available on the hats due to size limitations. Contact TLC Embroidery for more information.

Prices, availability & available colors subject to change without notice.

Use additional sheet(s) if necessary

Make checks payable to Sharon Cox
Mail to: The TLC Embroidery Company
366 Dry Ridge Road
West Alexander, PA 15376

Phone: 724 - 484 - 7703

Inside This Issue:

- You just spent \$\$\$\$ on a new modern solid-state radio. So why does that 40 year old Hallicrafters tube transmitter sound better on CW than it does?
- Ever wonder about your SWR Bridge?
- Get an idea of what a busy QSL Manager deals with every month
- **WASHFest 2003** Last Minute Updates!

All this and more... waiting for your right inside these pages...



“**WASHFest 2003** Is Around the Corner!”

We're just three short weeks away from the Eighth Annual South Hills Hamfest, and the excitement is really starting to build!

Are you ready?

Or can you hardly wait until it's here?

Photo courtesy of and ©Copyright 2002 Mike Serowik N3BSQ

The **WASH**Rag

Wireless Association of South Hills, Inc.
Ron Notarius WN3VAW, Editor
3505 Rosalia Avenue
Castle Shannon, PA 15234-2317



WASHFest 2003
This Month
Details on Page 10

N3SH / WA3SH
www.washarc.org