QRZ NEWS

A MONTHLY PUBLICATION OF
SOUTHERN PENNSYLVANIA AMATEUR RADIO CLUB, INC
PO BOX 422- Mount Joy, PA 17552
(Founded June 1960)
AN AFFILIATED SPECIAL SERVICE CLUB OF THE ARRL, INC.
"Public Service through Communication"
Website: WWW. K3IR.org
Email address: k3ir@arrl.net
Repeaters: 145.230 - 449.975 - Packet 145.030 - ATV 923.250, FN10se
Club site 1715 Breneman Road, Rapho Twp. (Manheim P.O. 17545 NO DELIVERY)

March 2015

President's Message

Usually when a new regime is elected there is the victory lap, the spoils of war, the 6 month vacation... not this board. In its first month we have moved the mailbox. Not only is the Mount Joy box easier to get to and cheaper, but we are hopeful for better performance in the act of mail delivery. After that we attacked the tyranny of Santander. No more leakage of our money, we are now up and running with Union Community National and after meeting the branch manager, and fully understanding the process of getting the next round of officers on as signers I am relieved to report we are in better hands.

So that's it, we are good, we can ride out the next 23 months right? Well we are just getting going. We have our goals set to raise the money we need for the new building, we have projects scheduled to further tie our community into the CPIN network, and let's not forget our service work.

The calendar is filling with event communication gigs. Between the Mount Joy Parade, the Royalton Cropwalk, the Lancaster MS walk, and the Columbia Mardi gras parade in October we are planning to log some good service hours for the year. Event dates are located on the K3IR.org web site along the right pane. This is one of the areas we as a club can shine on within our community. We get a chance to come out of our shacks and show what amateur radio can provide in these situations.

The CPIN network is expanding and SPARC is at the center of many of these expansions. We are redirecting one of our dishes, and adding one more. This will provide data into Lancaster city, out to Maytown, and helping cover even more territory. With these additions we can start to consider adding backfill sector antennas to blanket areas rather than just point to point. One of these fills is to provide a backup data connection to our beloved Rapho Township. This will allow the facility to continue in times of need when we are at our most useful.

All of this brings us back to our site. Though the winter chill has kept most of us away, the site stands strong. The work organizing the racks has given us a chance to make progress in improving our communications system. Next is to reduce our power consumption and recalculate

Table of Contents

our power supply needs. From there we can finish the improvements of the last few years and really make it sing.

From there we move to the operating building. The old tin can is showing her age and we are on the cusp of developing our new facility. I have posted pictures and budget plans for the new building on our website. We are fortunate that many of the jobs needed for this project can be performed by the skills of the membership. It is these skills that we are fortunate to possess as it greatly increases our construction reach. The completion of the operating building marks a huge step in our abilities to host events, provide inclement meeting space, and as a home for truly great stories.

As we approach our trigger point of $11,000 we must continue to do what we can to raise the money needed to complete the build. That said the board will discuss ideas to raise money and close in on the goal.

On our Laurels? not a chance. We are continuing the drive and look to the help and participation of the membership to meet our goals.

73,

Kevin, K3LLC

Coming Events

Tuesday, 24 March 2015, 7:00PM SPARC meeting at the Rapho Twp. Municipal Bldg., 971 N. Colebrook Rd., Rapho Twp. (Manheim P.O. 17545 for GPS).

The March license test session will be at 6:00 PM prior to the club meeting. Those wishing to test should let me know by email at AB3RK@ ARRL.NET so we can be properly prepared.

Rich Kaelberer (AB3RK- CVE)

The program for the evening will be a report by Dave Sarraf, N3NDJ, on his trip to the Ukraine.

A short business meeting will follow.

Monthly Breakfast
The second Saturday of every month at 0800 is a SPARC breakfast at Gus's Keystone Restaurant, 1050 W. Main St, Mt Joy, PA. Contact Gerry Wagner, KB3SSZ, for more details. Everyone interested in Amateur Radio is invited to attend. See http://guskeystone.com/ for restaurant details.

Other Events

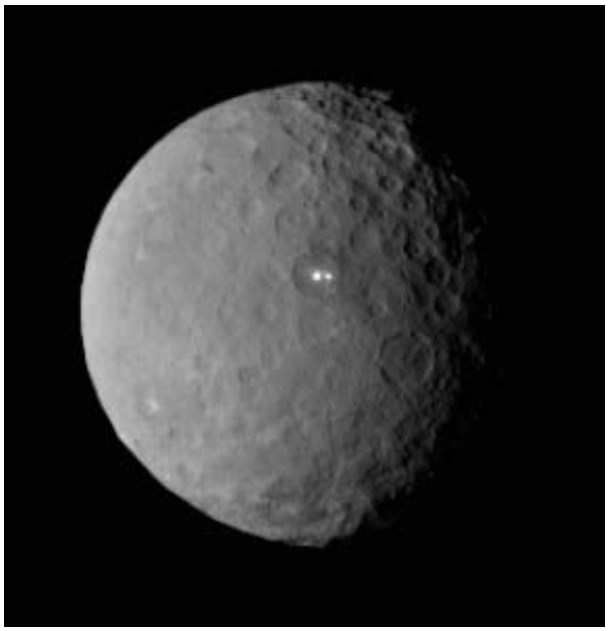
Wednesday, 18 March 2015 Sunrise at the North Pole. There's hope! (The astronomical definition of sunrise is when the first edge of the Sun is visible above the horizon.)

Saturday, 11 April 2015 8:00AM to 1:00PM 2015 York Hamfest, Elicker's Grove Park, 511 Roth Church Rd., Spring Grove, PA 17632.

Tailgating Only. Set up at 6:00AM

Contact Duane Sterner, KB3QLQ, for details.

Tuesday, 14 April 2015 The Dawn spacecraft goes into orbit around Ceres. Ceres is the largest object in the asteroid belt. See http://dawnblog.jpl.nasa.gov/ for detailed prorgress reports and photos.



Ceres from 28,000 miles, NASA photo

Sunday, 19 April 2015 Lancaster MS Walk
This is a joint SPARC and Red Rose Repeater Association project. A registration form is attached at the end of this newsletter. Please fill it out and send it to stacey.derck@nmss.org or FAX to 717 509 0930.

Harry Bauder, WA3FFK, is coordinating this event. Please also notify Harry of your plan to participate. Membership in SPARC or Red Rose is not a requirement to participate.

This is primarily a handheld event. Your HT should be programmed for the Red Rose Repeater on 147.015MHz, tone 118.8. See http://w3rrr.org/ for details.

Editor's Notes

Spring is coming at 1845EDT March 20th, the moment when the Sun is directly over the Equator. For the crew at the South Pole Station, the Sun is setting.

What is the relationship between Amateur Radio and astronomy? There has always been the seasonal effects on propagation, but the relationship really got close when Amateurs started using the Moon as a reflector for long distance VHF and up communications.

It is time to plan your antenna repairs and improvements. June and the VHF conference and Field Day are not that far away. Contesting is recognized as good practice for emergency communicators.

I know this is redundant, but I always need material for publication in the newsletter.

73, George, W3FEY

Six Meter DX Report

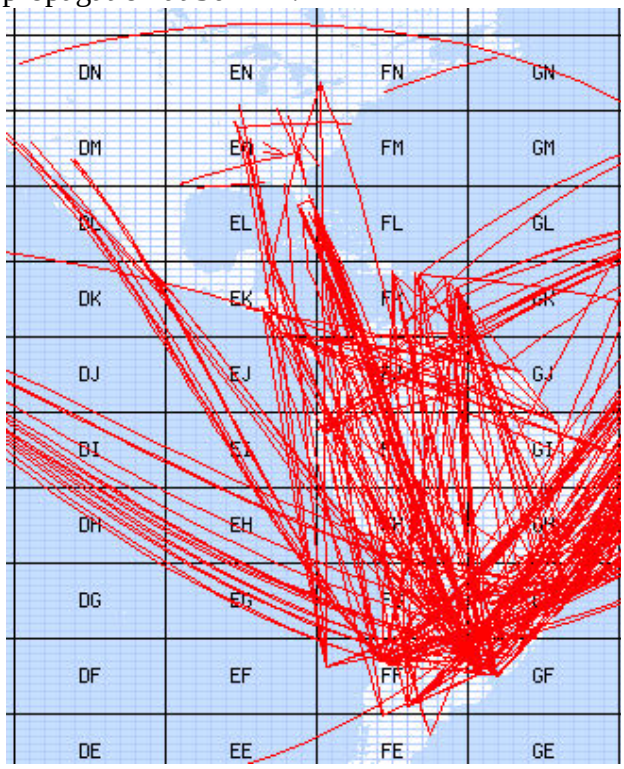
13 March 2015

Brutal describes both the weather around here in February and early March and six meter propagation. With the exception of a couple of single hop E openings, the latest which occurred on 4th March, the band has been as cold as the temperature.

There were a couple of noteworthy DXpeditions that had success on six meters; 3G0ZC on Juan Fernandez Island west of Chile in late February and earlier this month, and 9Q0HQ in the Democratic Republic of the Congo, which is ongoing.

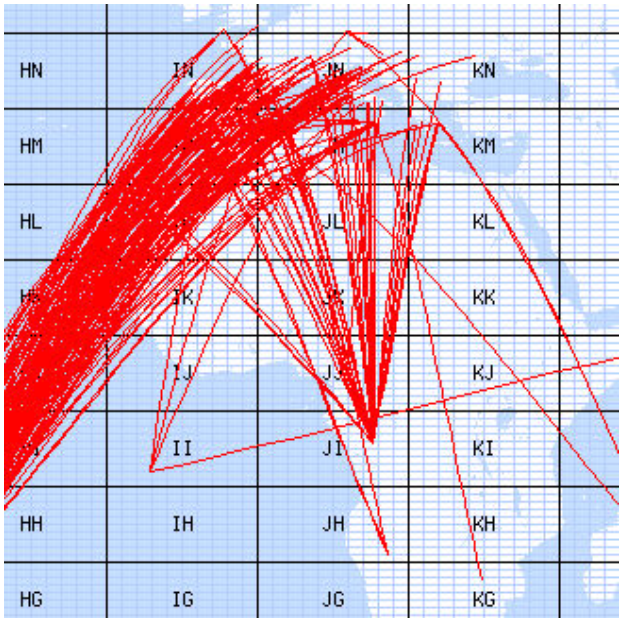
The 3G0ZC group worked many stations in South America, the Caribbean, African and southwestern Europe on six meters. On 2nd and 3rd March a few lucky stations in the lower Midwest were able to work them. On a couple of other nights, stations in Gulf Coast states were able to make contacts with the station. A screenshot of the ON4KST DXmap for 3rd March shows the paths from Juan Fernandez to the Midwestern USA, as well as the massive TEP from South America and South Africa to Europe. What is interesting is that when we

hear absolutely nothing but noise in this area the band is booming in areas where the proximity to the Geomagnetic Equator supports propagation at 50MHz.



ON4KST 3 March 2015 (Full size maps at the end of this newsletter.)

The Italian DXpedition team has been operating 9G0HQ from Kinshasa (grid JI75) in the Democratic Republic of the Congo since 10th March. On six meters the group is using an FT-857 and three element quad. Unlike many HF DXpeditions, has made a genuine effort on six meters and has worked into Europe on several occasions. The northernmost contact that I am aware of is G8BCG. Because we are approaching the Spring Equinox, there is a possibility of propagation to that area in the afternoon. The DXpedition will wrap up on 25th March so there is still time. An ON4KST screenshot for 11th March shows the extent of the six meter openings they have experienced; the QSL card for the DXpedition is also attached.



ON4KST 11 March 2015

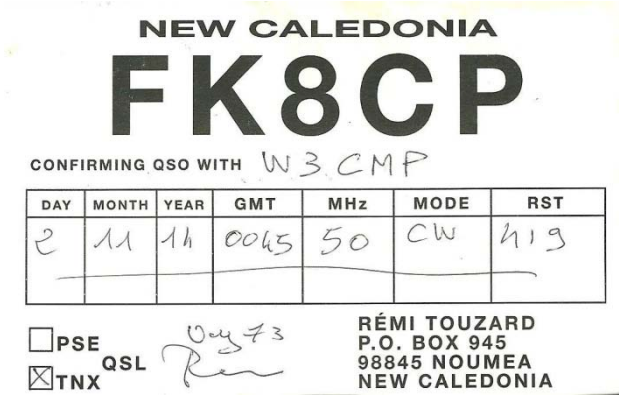
One last note-Dick K5AND, Terry K4RX and I will be travelling to St. Eustatius in late June for a 10 day DXpedition. Emphasis will be six meters although there will be HF operation. Call sign will be PJ5 something; grid is FK87. Because of the topography of the island and our location, we are considering two six meter stations. One station on the eastern side of the island will look to Europe and Africa; a second station on the west side of the island will have an antenna pointed towards the US and Central America. The eastern (main) six meter station will have a seven element yagi and the western (secondary) station will have a five element yagi. Power will be sufficient.

We are also looking at 70MHz operation to attempt the first trans- Atlantic contact on that

band. On 70MHz we should have a 6 or 7 element yagi. We are hopeful that we will be able to make many 50MHz and few 70MHz contacts. More information will be forthcoming.

That's about it for now.

73, Chris Patterson W3CMP


NEW CALEDONIA

FK8CP

CONFIRMING QSO WITH W3CMP

DAY	MONTH	YEAR	GMT	MHz	MODE	RST
2	11	11	0045	50	CW	419

☐PSE
☒TNX QSL

RÉMI TOUZARD
P.O. BOX 945
98845 NOUMEA
NEW CALEDONIA

ARES/RACES

As part of the SPARC commitment to emergency communications, the SPARC repeater system is maintained as available for linking with other area repeaters.

Lancaster County RACES VHF Net is held on the first Tuesday of the month at 2030 hours local time on the 145.310 MHz repeater in Rawlinsville.

The Lancaster County primary ARES/RACES repeater is on 145.310 MHz with minus offset and 118.8 PL.

Pennsylvania RACES HF Nets are held at 3993.5 kHz LSB on all Sundays except holidays.

The statewide net is on the first Sunday of the month at 0800 hours local time.

The Central Area (including Lancaster County) net is at 08:30 local time.

EPA NBEMS Net, Tuesday, 7:30pm local EST,

3.5920mhz Mode: Olivia 8/500 1khz,

Net Mgr: WA3WSJ@arrl.net

SPARC Nets

SPARC holds nets every Tuesday at 2100 local time on 145.230 MHz minus offset and PL of 118.8. The 449.975MHz repeater is linked to the 2m repeater for the net.

Club Officers

President Kevin Lampo – K3LLC
Vice President Scott Lithgow – KN3A
Secretary – Peg Hamm –KB3SCA
Treasurer – David St. Pierre - AB3VJ
Repeater Trustee - Dave Payne - N3LOM

Nearby Nets of Local Interest

If you need information on access tones etc, the referenced web sites below will usually provide the information needed. For more information, see http://arcc-inc.org/arc-fdbas.html

Monday Ephrata Area Repeater Society Net 9:00 PM on 145.450MHz.

Monday Keystone VHF Club
Combined Club & ARES/RACES Net 8:30PM on 146.970MHz.

Monday South Mountain Radio Amateurs
SMRA Club Net 9:00PM on 145.430MHz

SSB net 9:00PM on 146.210MHz. May be slightly delayed by SMRA club net.

Tuesday Digital Net 8:00 PM on the York 146.970MHz Repeater -- This is a busy digital data training net for beginners and advanced users. The primary mode used is MT63-2k. Other experimental modes are also used.

Morse Code Net Tuesday, 2000 local time (8:00p). SMRA repeater 145.430- (67.0 Hz) with alternate frequency of 146.460+ (1,000 kHz offset, tone 67.0 Hz)

Wednesday York County SSB Net 7:45PM on 50.135MHz. Informal net getting started. Contact Steve Cruse, K3WHC, for more information.

NEW
Wednesday Pottstown Area Amateur Radio Club 8:30PM 50.130MHz Contact Leonard, WV3P for more information.

Wednesday Red Rose Repeater Association Net 8:30 PM on 147.015MHz. This is an experiment to see if net attendance improves by starting a half-hour earlier.

Wednesday QCWA Net 9:00PM on 146.97MHz.

Thursday Lancaster Radio Transmitting Society Net 9:00 PM on 145.390MHz

Friday Lebanon County Digital Roundup Net 8:PM on the EARS 145.450MHz (tone 100.0Hz) repeater.

I cover all types of digital/data modes, training on computer/radio interfacing and message handling.

The primary focus is with Fldigi and Flmsg and lots of SSTV, using MMSSTV. The nets are always very informal and have sometimes lasted for 2 or more hours to cover all the evening's interest.

73,
Bob Sanborn/AB3GF

Sunday Info Net
On the N3TUQ 900MHz repeater: 8:30PM
Output: 927.5875MHz Input: 902.5875MHz (-25MHz) PL 114.8Hz.

The N3TUQ 900MHz repeater is located on the LVSRA tower on Cornwall Mountain.

Net control: Bob Howard, KB3QAQ

For more information visit
http://www.n3tuq.com/repeater.aspx

NEW Times and days
PACKRAT VHF/UHF NETS
Visit the Mt Airy VHF Radio Club at:
http://packratvhf.com/airtimes.htm for the latest information on VHF/UHF nets.

NTS Eastern Area Phone net

3.917 at 4:00 PM daily for traffic going to EPA, MDC, WPA and Maryland. We have a callup, pass any traffic, after that a round of comments. Traffic manager is WA3QPX. Net could use more checkins from EPA as we normally only get one checkin from EPA and sometimes none. This is where the Fone traffic for EPA net normally comes from. Any questions I will be on 3.917 at 4:00 PM.
73 , Paul, WA3QPX

Two EPA Nets Now Accessible via Echolink
Posted By: egroups_n3sw egroups_n3sw
Mon Aug 27, 2012 11:40 pm
<>The EPA AA3RG and Echolink Traffic Net (EAETN) has been accessible since its inception via Echolink at node AA3RG-R (#149493). See the group Calendar for more information. [*Thursday 8:00PM*]
<>Now the Capital Area Traffic Net (CATN) is also accessible via Echolink at node N3TWT-R (#743026). See the group Calendar for more information. All (*licensed hams*) are welcome to join in on these nets.
73 -Scott N3SW EPA STM-

<>AA3C note: To visit our group on the web, go to NTS-EPA Group web site:
http://groups.yahoo.com/group/nts-epa/
Both nets will utilize the 146.640(tx-) MHz.
Transmit access tone: 82.5 Hz.
AA3RG Repeater. **http://www.aa3rg.org/**

QRZ News Publication

QRZ News is published monthly. The deadline for submission of items for publication is 11 days before the regular membership meeting on the fourth Tuesday of each month. If material is not copy and paste ready for publication, more lead time is required.

We operate on an exchange basis with other not for profit publications. Articles printed in QRZ News may be reprinted in a not for profit publication provided proper credit is given. QRZ News is archived at
http://www.k3ir.org/

The QRSS Labs WSPR Kit

Kevin Lampo

As one prone to build, I opted to ease into the concept of building a transmitter. The QRSS WSPR beacon seemed like a good place to start.

First let's discuss the WSPR protocol. WSPR is an offshoot of JT65 and JT9. It is another wonderful piece of design from Joe Taylor, K1JT. If you know the odd restrictions of JT65 then WSPR is no different. It is a heavily error corrected digital signal that sends a maximum of 13 characters every 10 minutes. Yep that is 8 bits per minute or .133 BPS. To be fair it only transmits for 2 minutes resting for 8. This allows for more signals to run on a very narrow chunk of band, like 100 Hz narrow.

This protocol allows for a couple of neat features with 2 caveats. First the clock, and frequency oscillator must be very accurate. This is due to the narrow operating band, but also the timing necessary for the listening stations to sync.

This accuracy pays out huge as WSPR signals as low as 100mW can reach around the world. This is due to the massive amounts of error correction and pass after pass of sending data, again at 8bits per minute.

So now that we know there is an ultra low power data transmission, what can we do with it. Enter the http://wsprnet.org website. There you can map and track signals from transmitters to receivers around the world. What this allows is real time sampling of signals and paths as conditions apply across the bands. This allows for QTH to world

propagation mapping in real time. Want to know if it's worth firing up the rig, want to know if DP1POL is up just check your beacon.

The standard kit comes with all the SMD components soldered and the screen mounted to the driver card. The kit leaves the Through hole soldering and the dreaded coil winding to your own doing, but that's not too bad. You order the kit as a single band model, but an expansion daughter board allows for up to six bands from 6M through 2200M, yep that low. Other features are a case and a GPS chip. The GPS provides position, 1pps frequency stability, and time sync. For WSPR this is almost a necessity.

The QRSS labs device will use the GPS module to re-sync after every transmit cycle, ensuring you are at the greatest probability of landing the spot. The above picture is my install. I opted to unstack the board to give it a lower profile, and for the GPS chip in the corner. It is completed with a USB power wire and a SO239 connector. Soon I will move this into a weather tight box so I can mount the transmitter at the antenna point, and feed the DC up to. This should maximize output from 100mW.

Overall this setup is straight forward and provides a useful tool for HF propagation. I suggest anyone looking to embark on this project to go to the QRSS Labs website at qrp-labs.com to look the kit over. Also read the operating instructions for the kit.

Bring in your installs, I want to see pictures, more importantly I will spot you on WSPR to check that the beacon is transmitting.

Cheers

Kevin Lampo, K3LLC

Two Ears, One Mouth

A good way to get involved in ham radio is to listen in on the various activities and learn from listening and exploring. Of particular interest are the Digital nets. To "listen" to these nets you will need some means of getting speaker audio from your radio to the sound card of your computer. One less than ideal method is to simply place a computer microphone near your radio speaker. You can also make a cable to run from the radio's phone output into the microphone jack of your computer. If your radio has a data port you can pick up audio there. See you owner's manual. If you want to get into digital modes a little deeper an external sound card is the route to take. The TigerTronics Signalink is a good choice. It plugs into a computer USB port and you can order cables for most Ham radios. Cost, including cables comes in at a little over $100.

The next thing you will need is some type of digital software. The most popular seems to be FLDIGI. The software is free at www.w1hkj.com. Some antivirus software will choke on this site but I have never heard of anyone having any infections. Just download

and install the version of FLDIGI, FLMSG and, if you are adventurous, FLAMP for your computer operating system. All three install quite easily and don't take much disc space. Once the install is complete open FLDIGI.

Now, tune your receiver to 7.070 MHz, 14.070 MHz or 21.070 MHz, Upper Side Band (USB). You will probably hear a funny warbling sound. Start FLDIGI and look at the display near the bottom, this is called the waterfall. From the pull down menu at the top of the page, labeled "Op Mode" select PSK then BPSK31. If all you see is black your audio level is too low. You may need to adjust the mic input level of your computer. If the waterfall is all yellow your level is too high and needs to be turned down. Once you get it set right you should see a blue background with what look to me like yellow railroad tracks running down the screen. Move the cursor over one of these tracks and click. You should start seeing text on the yellow part of the screen. If you move your cursor to the left edge of the yellow area and position it so you get the double ended arrow then press the left mouse button and slide to the right a white area will appear. After a few seconds all the transmissions in the receiver bandpass will start to print in that area. You should see a lot of activity

There is a pretty comprehensive manual available but that would be kind of wimpy. Just have some fun exploring the menus. Next month we will work on setting up to transmit and at some of the other modes available with FLDIGI.

If you need help we have a pretty good setup at the club site and unless the weather is really brutal there will be someone there with free advice and a demonstration.

I am frequently asked "what are some frequencies I can listen to for digital and voice nets"? Here is a list that I have compiled. It is by no means complete and I haven't been able to verify every one but most are active.

Digital HF Nets

Sunday:

9:30AM Eastern NJ NBEMS net – 7073.0KHz Olivia 8/500 1.5k on waterfall

PA NBEMS net – 3583.0KHz Olivia 8/500

11:00AM Eastern PA NBEMS net – 7072.5KHz Olivia 8/500 1.5k on waterfall

Monday:

7:15 PM Eastern Virginia Digital Net – 3578.5KHz Olivia 4/500 – 1.3k on waterfall

Tuesday:

8:00 PM Eastern Michigan Digital Traffic net 3583KHz Olivia 8/500 1k +/-

9:00 PM Eastern Idaho ARES Statewide net 3578.5 PSK 31 – 1.5 on waterfall

also uses Winmore peer to peer on same frequency

Wednesday:

7:00 PM Eastern US east – 7036KHz Olivia 8/500 – 1.5k; Bulletins via MT-63

Thursday:

7:15 PM Eastern Virginia Digital Net – 3578.5KHz Olivia 4/500 – 1.3k on waterfall

9:00 PM Eastern Michigan Digital Traffic net 3583KHz Olivia 8/500 1k +/-

Saturday:

10:00AM Eastern NY-EBEMS Net – 7036KHz Olivia 8/500 or MT63-1000 both at 1.5k on WF

1:00 PM Eastern Southern Territory SATERN net – 14065KHz Olivia 8/500 1k on waterfall

NOTE: SATERN is Salvation Army Team Emergency Net. They will welcome your check in.

8:00 PM Eastern Michigan Digital Traffic net 3583KHz Olivia 8/500 1k +/-

NOTE: Convention calls for Upper Side Band (USB) on all frequencies in digital modes.

Voice Nets

6:00 AM Daily The Roosters Net – 3990 LSB informal net

6:00 PM Daily PA Traffic Net – 3917 LSB

8:00 AM M-Sa ECARS – 7255 LSB runs until about 2:00 PM

8:00 AM M-Sa Mid CARS – 7258 LSB runs until about 2:00 PM

7:00 AM M-Su Continental Traffic Net – 14.300 USB runs to Noon

12 Noon M-Su Maritime Mobile net - 14.300 USB noon to pretty much the rest of the day, see www.14300.net for all the nets that meet on 14.300 throughout the day.

CW Nets

7:00 PM and 10:00 PM Daily PA Traffic Net – 3585 CW

73,

Harry, WA3FFK

Converting VHS to DVD Progress Report

Floyd Jury, W3OLV, has a collection of old VHS tape recordings of various WWII training films on the SCR270 radar and big bombers. Floyd asked for help with preservation and I agreed to help. I am far from having a complete solution to the problem, but enough has been accomplished to warrant a progress report that will help others with similar projects.

VHS cassettes are analog storage devices with well known failure modes. My first step was to learn how to convert from VHS to DVD discs to get digital format data storable on computer hard drives, thumb drives, etc.

I own a Toshiba DVR620KU cassette/DVD recorder/player purchased because of the advertised capability to convert VHS to DVD. Sounds easy but it isn't. The manual for the DVR620KU is translated from Japanese and shows it. I have personally participated in translating manuals and I know it isn't easy to go from a foreign language to English as we use it. Japanese is especially difficult because of the differences in sentence structure. The manual needs better indexing and organization.

With that caveat, let's proceed to how I convert VHS to DVD using the DVR620KU. (Incidentally, Consumer Reports recommends the DVR620KU as the economical solution to the problem.) I started in early December 2014 and with a lot of trial, error, and help from others, I can report success with the conversion phase of the project.

Look at page 9 of the user's manual for a summary of various DVD formats and their capabilities. The dubbing function of the

recorder is used to convert VHS to DVD which requires the use of rewritable DVDs. From the compatibility list on page 9, I chose DVD-RW discs and the video format. That's all I have experience with and all that I will cover in this report.

You need to be connected to your TV set to see the menus and results of your work. For the dubbing operation, the video input is from the VHS cassette, but the recorder needs to be set to an unused hardware input L1 or L2 as described at the bottom of page 37. Do not select L3.

I will assume that the user will have already done the preliminary set up such as setting the clock. I don't think the dubbing function is dependent on the clock being set, but if it isn't set the date information in the title created for the dubbed copy will be wrong.

Before placing your disc in the recorder, set the recording format as described on page 28 of the manual. Use the video mode. When you put a blank disc in the recorder, it will immediately be formatted in the previously set mode. When formatting is complete, the record mode information will be displayed on the screen.

Next study the information on Recording Mode on page 34 where trade offs between quality and recording time are discussed as well as copy protection information.

If you haven't done it already, go to page 12 of the manual and pay special attention to the buttons on the lower right of the remote between 31 and 36. For the dubbing operation, make sure that you do not accidentally press 33 REC. REC MODE 34 is the button you want for dubbing.

Now proceed to page 50 for dubbing instructions. When you reach step 8 on page 51, the dubbing operation should begin and you should see the output picture and audio from the VCR. If you don't see the picture, you did something wrong and nothing is being copied.

Rewritable discs can be reformatted manually for reuse. See page 29 of the manual.

If your recording exceeds the space available on the DVD, the recording will stop automatically. Because of overhead, the amount of video recorded will be about 4.4GB. If you have enough space left on the DVD, you can add additional titles.

The next step is to edit the title name as described on page 76 of the manual. When you are finished recording and editing, go to page 32 and Finalize the disc. It should now be playable in most DVD players and your computer. BluRay players handle most disc formats and produce the best playback.

Example Title Menu

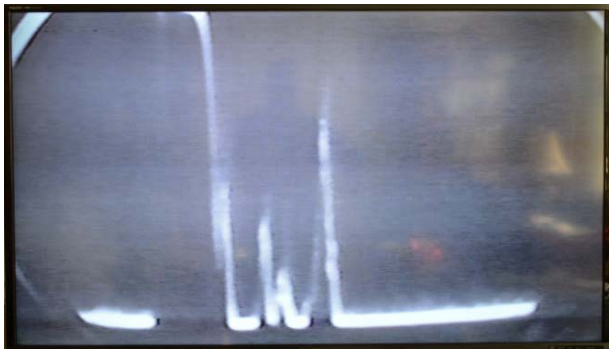
Rewritable discs are made with materials that make them less stable over time. Make copies on DVD-R discs on your computer. I use Roxio Creator for computer disc copies. I store the video files on my computer and on a thumb drive stored in my safe deposit box. I will save the topic of archival storage of digital data for a later article.

Now some tips on how to get free tech support for your Toshiba DVR620KU. Toshiba supports a user community on their web site where users help each other with problems. Go

to http://support.toshiba.com/ and select Community Forums on the right center of the screen. Then enter the model number of your Toshiba equipment. You can enter the forums by other routes, but functionality may be lacking. Now you are on your own. I am not skilled at navigating the forums.

Frequent advisor Rick Langston is an expert on the DVR620KU. Rick is not a Toshiba employee. You will see many posts from Rick.

Now let's take a look at some output from the 1942 SCR270 training film. Six portable SCR270B radars were installed on Oahu on Dec. 7, 1941. The Opana ridge radar detected and reported the incoming Japanese bombers, but the warning was ignored. For a full report, see page 11 of the November 2013 issue of QRZ News.



SCR270 radar display showing multiple targets.

The image above is from the 1942 training film 11629 "Locating and Reporting Targets". The transmit pulse is the large blip to the left. The receiver doesn't recover until the transmit pulse is about 23 miles on its way. Range is measured along the horizontal axis.

The design maximum range of the SCR270 is 150 miles. It is possible to detect large targets beyond 150 miles. See the report in the November 2013 QRZ News.

This display only hints at what Joe Lockard saw on Dec. 7, 1941. A three meter radar cannot resolve single aircraft flying in close formation. Instead he would have seen a large smear of targets near the maximum range of the radar. It is not surprising that he thought there was a malfunction.

I received a lot of help from SPARC and Packrat members to achieve success in this project. Rick Walter and Doug Hengst gave generously of their time, expertise, and equipment. The Packrats were generous in their evaluations of the compatibility of my converted DVDs. They gave me confidence that the converted discs are compatible with all but a few older players.

73,

George, W3FEY

Jim's Miscellany FREE Stuff

By James L. Ibaugh, AA3C, ARRL T.S.

My collection of free software links has been around for several years. Most of the stuff I have on my computer was downloaded from the many free software sites I visit. Of course, I've got a small laptop and cannot try all the free stuff in ten life times. Also shoe string budget causes my interest in free software.

Microsoft Virtual Academy Home Courses

http://www.microsoftvirtualacademy.com/

Free **courses from MS! Who could have known. Stuff you might even be able to use.**

Virtual Academy Home Courses

Exchange Course	Aspiring Technologists
Lync Course	Business Intelligence (BI)
Microsoft Azure	C# / XAML
Microsoft Dynamics	Data Platform
Office 365	Enterprise Developer

Administration Office End User SharePoint SQL Server System Center Visual Studio Windows Phone Apps Development Windows Server Aspiring Technologists Business Intelligence (BI) C# / XAML Data Platform Enterprise Developer Game Developer HTML5 Course Licensing Course Management & Security Managing Desktop & Devices	Game Developer HTML5 Course Licensing Course Management & Security Managing Desktop & Devices MessagingMobileDev Office for Developers Productivity Developer Server Infrastructure Virtualization Dev. Web Developer <>Cloud Courses<> Cloud Developer, Many Other Cloud Courses

Fresh Devices Freeware Programs

100% free software, Showing: 1-10 per page,
Total of ~5558 free programs by Fresh Devices
Latest free library dayly audit September 2014.
Total listing of ~5558 programs on ~555 pages.
Please do not try to print this list out on paper!
Just keep the hyperlink somewhere in a folder on your desktop which would save a ton of memory on your hard drive. Freeware Link>>
http://www.freshdevices.com/list.php?license=Freeware&sort

TOP 100 Free Fresh Devices Programs

Filtered down to TOP 100 Freeware Programs from library ~5558 programs.

< L I N K S >

TOP 100 Fresh Devices Free Programs.
TOP 50 Fresh Devices Free Programs.
TOP 25 Fresh Devices Free Programs.
TOP 10 Fresh Devices Free Programs.
The TOP Fresh Devices Free Program.

<><><>HamRadioSoftware via 'sourceforge.net'.<><><>

<> RTL SDR Scanner <>

A cross platform Python frequency scanning GUI for USB TV dongles, using the OsmoSDR rtl-sdr library. In other words a cheap, simple Spectrum Analyser. Sources are available on GitHub: https://github.com/EarToEarOak/RTLSDR-Scanner
First read INFO:
http://eartoearoak.com/software/rtlsdr-scanner
http://sourceforge.net/projects/rtlsdrscanner/files/latest/download?source=directory

<> Ham Radio Control Libraries <>
Library of programs to control radio transceivers and receivers via computer software.
The Hamlib project's purpose is to develop flexible and portable shared libraries that offer a standardized API to control any radio oriented equipment through a computer interface. Info Source: http://sourceforge.net/projects/hamlib/?source=directory

<> KB1OIQ - Andy's Ham Radio Linux Large Software Group. 1.3 GBytes<>
Ubuntu Linux remastered for Amateur Radio users. This is a remastered version of Ubuntu Linux. There are 32-bit and 64-bit versions available, as well as an (older) image for the PengPod 1000. This version contains a lot of amateur radio software including Fldigi, NBEMS, Gpredict, earthtrack, xcwcp and qrq, XLog and cqrlog, flrig and grig, xnec2c, fl_moxgen, aa-analyzer, owx, VOACAP, glfer, Xastir, gqrx, gEDA, GNU Radio Companion, quisk, direwolf, linamc, FreeDV, wsjt-x, Micro-Fox

15 Config, and a TinyTrak3 configuration program. [Greek to me! - AA3C-Gud Luk]

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TRY THESE FREE SOFTWARE LINKS

Tucows Software Library : Free Software

Browse through more than 30,000 downloads compatible with Windows 7, Vista, XP, 2008 Server, 2003 Server, NT, ME, 2k and even Windows 95 and 98!

100% CompletelyFreeSoftware.com

The freeware listed on this site has been hand-picked, tested, reviewed and rated to bring you the very best software. Windows & DOS freeware.

FRESH AND FREE WEBMASTER TOOLS

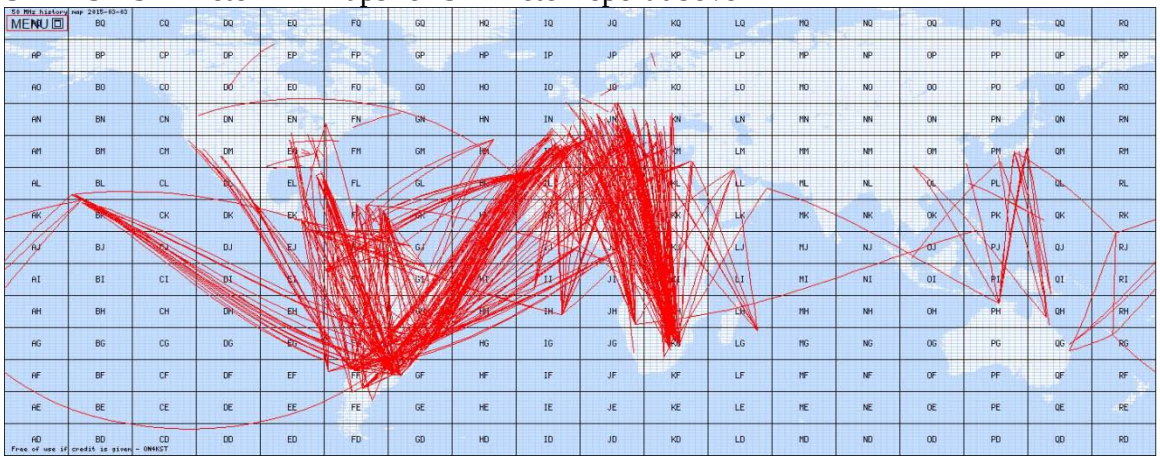
MajorGeeks Tops List Safe Software DL Sites

"MajorGeeks is proud to announce that The Windows Club listed us first in their recent article, Safe Software Download Sites."

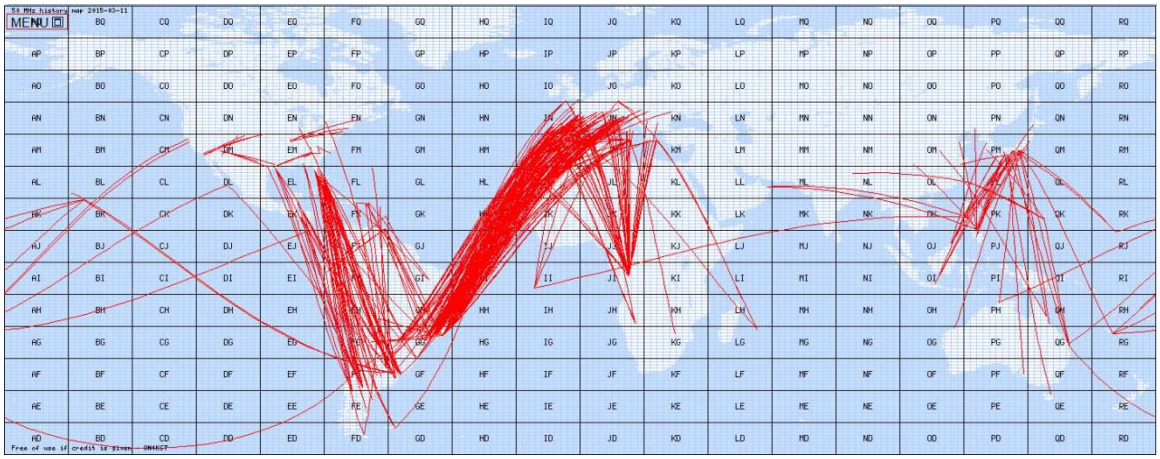
Major Geeks 100 TOP Down Loads.

73, Jim Ibaugh, AA3C SK

ON4KST Six Meter DX maps for Six Meter report above



ON4KST 3 March 2015



ON4KST 11 March 2015

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walk MS 2015

VOLUNTEER REGISTRATION FORM

Name _____
Address _____
City _____ State _____ Zip _____
Home Phone _____ Cell Phone _____
Email Address _____
Date of Birth _____ Gender: Male or Female (Circle one)
T-Shirt Size Team

Please Circle Your Walk Site

Sunday April 19	Lancaster
Sunday April 26	Gettysburg, Hershey
Sunday May 3	Bloomsburg, Lewisburg, Montoursville, West Shore, York
Sunday May 16	Northeast, State College

Please indicate your volunteer choice(s):

_____ Planning Committee
_____ Route Marking
_____ Check-In/Registration
_____ Lunch Server
_____ Support Vehicle Driver
_____ Rest Stop Support
_____ Finish Line Celebration
_____ Medical Support (Are you an: ☐ EMT ☐ RN)
_____ Communications (Are you a Ham Radio Operator?)
_____ Traffic and Safety
_____ Photography
As Needed

Please mail this form to: National MS Society, 2040 Linglestown Rd., Suite 104 Harrisburg, PA 17110 or Fax to: 717.652.2590. Questions? Call 1-800-344-4867