



CHEESE BITS

W3CCX
CLUB MEMORIAL CALL

ARRL
Affiliated
Club



Volume LV

April 2014

Number 4

PREZ SEZ:

April is now here and the first VHF and above event will be the N.E.W.S. conference. I'm looking forward to a fine Packrat showing for our northern neighbors. It's looking like not only a good turnout but a fine lineup of topics and speakers. Though the event is tomorrow, it's still not too late to attend. Let show our support.

Now that Spring has actually arrived, what are your plans for **antenna systems**? I hear plans are being formulated to finish several antenna projects that have been in the works for some time now.

Additionally the Packrat Board of Directors have been in discussions about mounting an effort to see **who needs assistance in getting antenna and other technical projects completed**. We have results of a survey that shows that some of you need work performed, now lets get that quantified and make plans to have the assistance provided. (We just love uses for our new "Survey Monkey" application)

This month proves to be an active one on the air. We've already had the two meter Sprint., It's followed by the 222 and 432, microwave and 6 meter sprints. Remember: now you are allowed to use outside means to set up the contact. This is of particular benefit with activity and participation down from what it used to be. I am told that some

years ago it was not unusual to have 200 contacts on at two meter Sprint; now it is very difficult to get to the 100 mark. Thanks to all of you who maintain the activity at least at the level that it is now. I am a relative new comer to the VHF/UHF world and was not around for such active times. Will it ever return?

April is our ARRL meeting night and we have late breaking news that the ARRL COO, Mr. Harold Kramer will be unable to make our meeting. He graciously enlisted the services of **Ed Hare**, W1RFI to come as our meeting speaker and we look forward to having Ed at our April 17 meeting.

Please come to the "Meet the Speaker" dinner starting 6 PM at Giuseppe's on Street Road just in front of the Ben Wilson Senior Center. We'd love to see you there and welcome our Speaker.

We are getting excited about preparations for the Mountain in June. Get ready and plan to come to Camelback for the June Contest (from the 13th to the 16th). It's always an adventure and a marvelous place to experience the thrill of operating from a superior location with contest grade equipment and power.

I was happy to be able to work as W1AW/3 early this month. We ended up with over 200 contacts on VHF and over 62,000 on all bands. We now hear our northern friends operating as W1AW/1, it proves to be a fun event that is running all year.

Pack Rats **CHEESE BITS** is a monthly publication of the **Mt. AIRY VHF RADIO CLUB, INC.** -Abington, PA.

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PACKRAT 222 MHz REPEATER - W3CCX/R

222.98/224.58 MHz (PL 136.5) Hilltown, PA

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PACKRAT BEACONS - W3CCX/B

FM29jw Philadelphia, PA
50.080 144.284 222.064 432.286 903.072 1296.245 MHz
2304.043 3456.207 5763.196 10,368.062 MHz (as of 1/08)

MONDAY NIGHT NETS

<u>TIME</u>	<u>FREQUENCY</u>	<u>NET CONTROL</u>
7:30 PM	50.145 MHz	K3EOD FM29II WA3QPX FM29di
8:00 PM	144.150 MHz	N3ITT FN20kl
8:30 PM	222.125 MHz	KB1JEY FN20je
8:30 PM	224.58R MHz	W3GXB FN20jm
9:00 PM	432.110 MHz	WB2RVX FM29mt
9:30 PM	1296.100 MHz	K3TUF FN10we
10:00 PM	903.100 MHz	WA3SRU FN20le

Visit the Mt Airy VHF Radio Club at: www.packratvhf.com or www.w3ccx.com

So get out and enjoy the nice weather now and lets work on lots of bands,

Phil K3TUF



The Virtual Rover

With the advent of remotely controlled stations through the internet, the ARLL has established a new class of "Virtual Rover" that will be able to participate in the VHF Contests, starting in June, 2014.

As demonstrated by KRA1ZE at the MidAtlantic States VHF Conference in September of 2012, there are many programs and pieces of hardware that have been developed to facilitate this activity. No longer will rovers need to face the high price of gasoline, Sunday drivers and traffic. They can simply take their computers and connect to at least two of their stations that are in different grids and give out the QSO points.

The rules for the Virtual Rovers and their scoring will be parallel to the rules for other rovers in the classic rover class, limited class and unlimited class.

The Virtual Rover stations will not be geographically limited, except that any which participate in club submission scores must be within the 175 mile radius of the club center location. Virtual Rovers can only work any other rover station up to 100 times. There are no power or antenna specifications, except that all equipment must be under the control of only one call sign and operational center in any given contest.

Several clubs have already staked out sites in rare grids and have started to address the needs of these remotely

operated stations.

The control station, following the rover rules, can only have one or two control operators and each of the remote rover stations must sign the same call sign with the "slash-R" designation. Fixed or other rover stations that make contact with these Virtual Rovers should log them as they would any other rover.

Virtual Recognition Awards will be given to the highest scoring Virtual Rovers where there is sufficient participation and activity in this class. As there is a continued evolution of operating stations in VHF contests, the UVAC will continue to evaluate station classes and operating rules to maintain as level a playing field as possible. Sponsors are now being solicited for **Virtual Rewards**. Comments and feedback are welcome and can be sent to Howeird Fulzya, AP1RL@arll.net

Submitted by K1DS, who sometimes KIDS

New Modulation Scheme

The editors of *Electronic Design* magazine in the February 3rd issue, report on a new modulation scheme that is attempting to take over from QAM, the most common digital modulation scheme in use today. They are skeptical but open minded. To learn more, see http://electronicdesign.com/blog/new-modulation-method-really?NL=ED-04&Issue=ED-04_20140218_ED-04_617&YM_RID=lennyw@comcast.net&YM_MID=1450479&sfvc4enews=42&cl=article_1

MARCH MEETING: HOMEBREW NIGHT

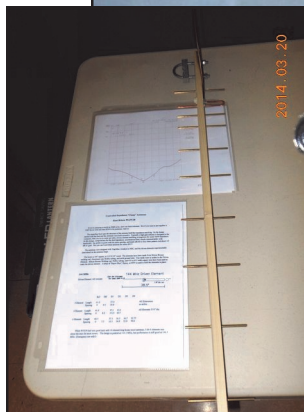
Categories and Winners

Most Unique - Elephant Lifter **Al Sheppard** N3ITT
Best Weekend Project - 1296 MHz YAGI **Tom Frederiksen** KA3FQS
Best Weekend Project - Coffee Can Laser **Bert Soltoff** K3IUV
Best Construction - 1296 MHz Amplifier **Rick Rosen** K1DS
Most Smoke - Pallet Amplifier **Paul Sokoloff** WA3GFZ



Tom's wood & brass 1297 yagi

Jib boom for lifting antennas into place—Mechanical Model



Coffee Can LASER transceiver



Describing 1296 Amp



Paul proves transistors can get hot enough to blow their tops across a room



Al's portable OCF wood and window screen dish. (Goes on airliners ok)



Justin's Beagle Board for hams



Bills NEMA box switches antennas on the tower

Picture credits: K3JJZ & W3GAD. TNX!

K3TUF ARRL DX SSB Results

Got a little time to play on the ARRL SSB DX Contest.

This is what 10 hours allowed me to work.
10 meters was wild
Hope you had a chance to get on too.

Summary

Band QSOs Mults

80:	19	18
40:	91	43
20:	98	66
15:	101	75
10:	239	95
Total:	548	297

Total Score 488,268

Phil K3TUF

Not all the fun is VHF+ -Ed.

2.3 GHz and Up Contest

The revised rules for the 2014 San Bernardino Microwave Society 2.3 GHz and Up Contest are now online at:

www.ham-radio.com/sbms (also at n6nb.com)

Here are the highlights:

*Dates - May 3-4, 2014 (6 a.m. Saturday - midnight Sunday, local time) (operate 24 hours maximum)

*Now there are individual categories as well as the traditional club competition. All-band and single-band scores will be posted along with the club aggregate scores.

*Score 100 points for initial QSO on each band, plus 1 point per km of distance worked. On 24 GHz it's 3 points per km, 6 points per km on 47 GHz and up.

*Stations may be re-worked for additional distance points when either end of the contact moves at least 10 miles (16 km) from any previous location, measured in a straight line.

WA3SRU PA QSO Party Results

Lenny,

I thought you could use a couple pictures of awards I won for participating in the PA QSO Party for 2013. They just arrived in the mail today (3/12/2014).



One is a plaque for working all 67 counties in PA. They said that only 35 entries worked all 67 counties.

The second plaque was for working the contest for the first time. In all my years as a ham, I have never worked the PA QSO Party. There were 10 entries for First Timers and I came in first place.

I also took First Place - Low Power category for Bucks County.

My score was submitted with Frankford Radio Club as my affiliation, and FRC won 1st Place overall in the club category.

73's Joe WA3SRU

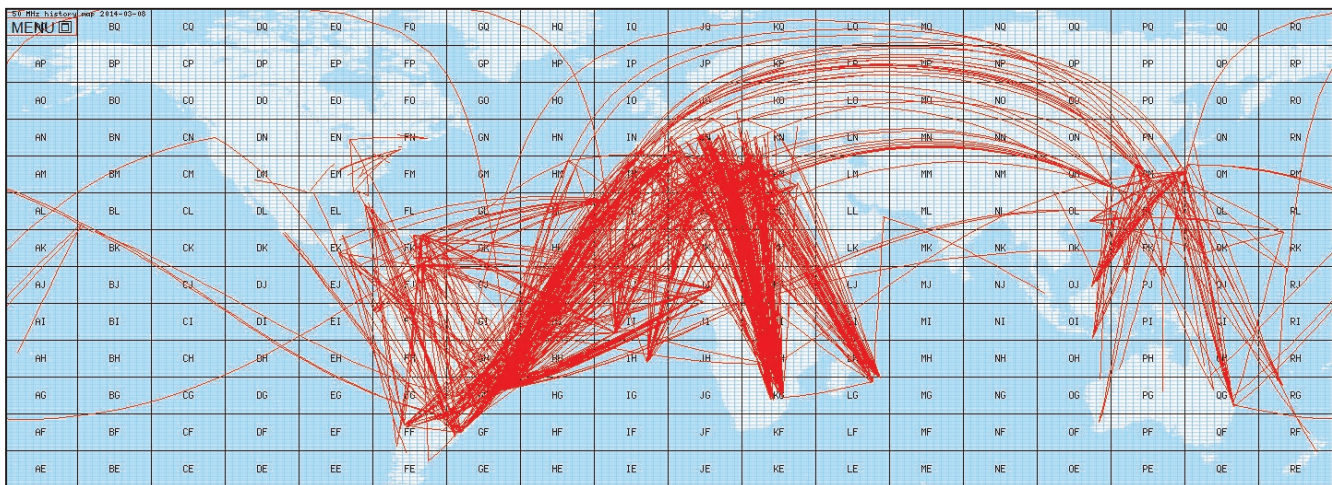
Six Meter DX Report

17 March 2014

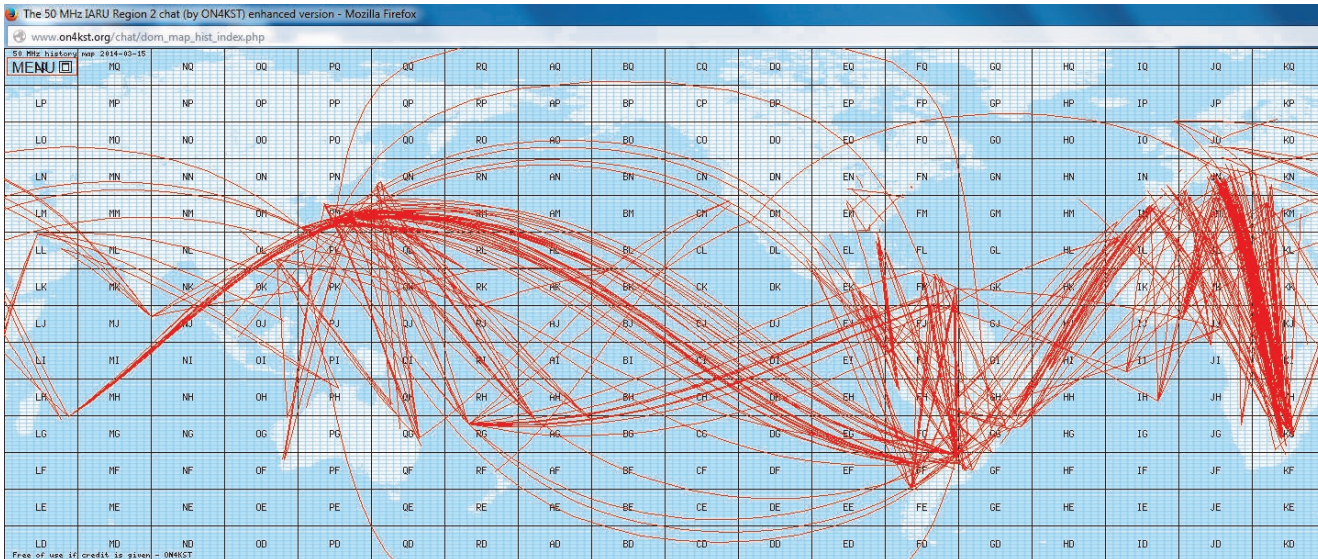
There has been very little on six meters from this area to report about-no Es, no TEP, no good Aurora. The only propagation of any interest, which has been **sparse**, has been confined to Florida, south Texas, and California.

As it seems to be the rule during this low peaking cycle, **east-west propagation** is confined to areas closer to the geomagnetic equator, and **north-south propagation** is generally TEP which has fairly defined limits. Stations closer to the equator have reported a number of outstanding openings and contacts.

Dale Green, VE7SV, who spends much of the year in Vina del Mar Chile (FF47) as CE2AWW, has had spectacular contacts via short path and long path over the past several weeks. Some of Dale's short path contacts (morning/afternoon openings to the northeast) include Italy, Crete, Croatia, Spain, Canary Islands, France, Morocco, Israel, Greece, Canary Islands, Balearic Islands, Sierra Leone and Portugal; on March 8th Dale also had long path (morning) openings to Japan and **China** (BA)! Evening openings to the west have produced contacts with FK8CP in New Caledonia, Hawaii, North and South Cook Islands, hundreds of contacts with Japan, as well as long path contacts to EA8 and other locales. Dale is not the only South American station to get in on the openings, PYs and LUs have also enjoyed the long path and short path openings to JA and BA. The attached screenshot of the ON4KST DX map for March 8th, 2014 shows the long path morning opening from CE2AWW to Japan and China; the attached ON4KST March 15th screenshot shows the massive evening opening to JA.

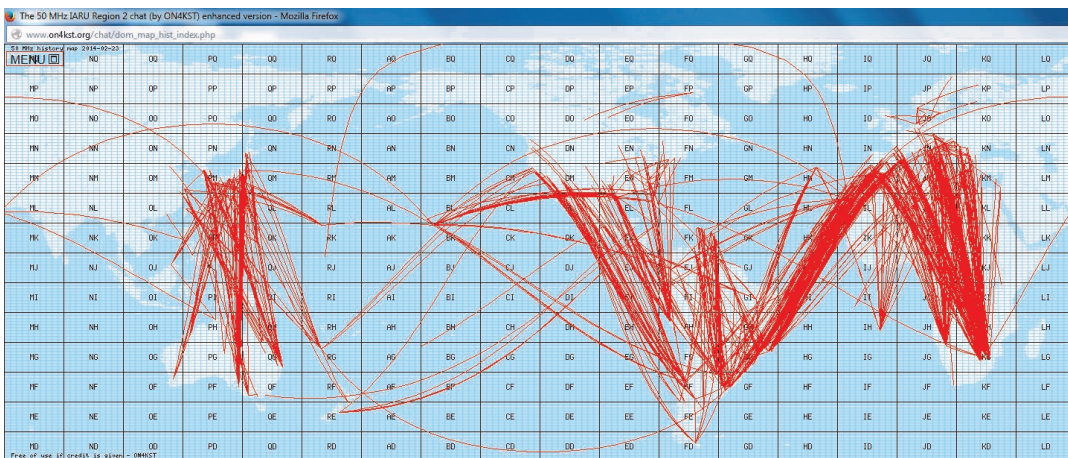


ON4KST map March 8, 2014



ON4KST 50MHz map March 15, 2014

From the south Pacific, Australian and New Zealand stations have worked into South and Central America; occasionally the path has extended across the Central American mountains into the Caribbean. On the evenings of February 23rd and March 2nd, Eden ZF35EJ (EK99) worked into the south Pacific from the Cayman Islands. Stations Eden worked on February 23rd included ZL3NW, ZL3MF, E51CG and VK3DUT; on March 2nd he worked Remi FK8CP in New Caledonia and E51CG again. An ON4KST screenshot for February 23, 2014 shows the opening from the Caribbean into the South Island of New Zealand and Australia.



Other Caribbean stations who have worked into the Pacific during February and March include FM5WD in Martinique, Tot J69MV in St Lucia, FG4NN in Guadeloupe and Chris 9Y4D in Trinidad and Tobago.

Today the Falklands Islands beacon VP8VHF/B in GD18 is being heard in Slovenia, Italy, the Azores, and Croatia. Notice the path follows along the geomagnetic equator. Too bad there is not a real active operator there.

The **only encouragement that I can offer** is that historically the time around the Spring Equinox has produced north-south TEP openings to Argentina, Brazil, Ecuador, Uruguay, Chile and other South American countries. Spring should be here in a few days, and Summer E season is only 3 months away. Happy St. Paddy's Day.

73, Chris W3CMP

KB3MTW Shack



Here is a picture of the final resting place of my shack. With the 6 meter dipole we finally have the lower 4 bands.

First on the left is an Astron PS. I think it's 30 amp. To the right is an Alinco DR-235 223 fm radio. To it's right outside the hutch is a Realistic speaker for the Alinco. You can see my PR telephone directory next to that.

Above the Alinco is my Yaesu FT 857D with it's external speaker. Where the pink Ham is sitting was the borrowed Kenwood 2000X. Hopefully that spot will be filled with a 903 Transverter hooked up to a Kenwood with a 1296 chip in the future. That would give us 6 bands.

73, Michelle London
KB3MTW

24GHz World Record

Hi All

The Youtube video at the URL below gives the background to the recent 24 GHz EME World Record on 5 March between G3WDG and VK7MO.

<https://www.youtube.com/watch?v=XfReoQOWqJo>

73 Rex VK7MO

CSVHFS

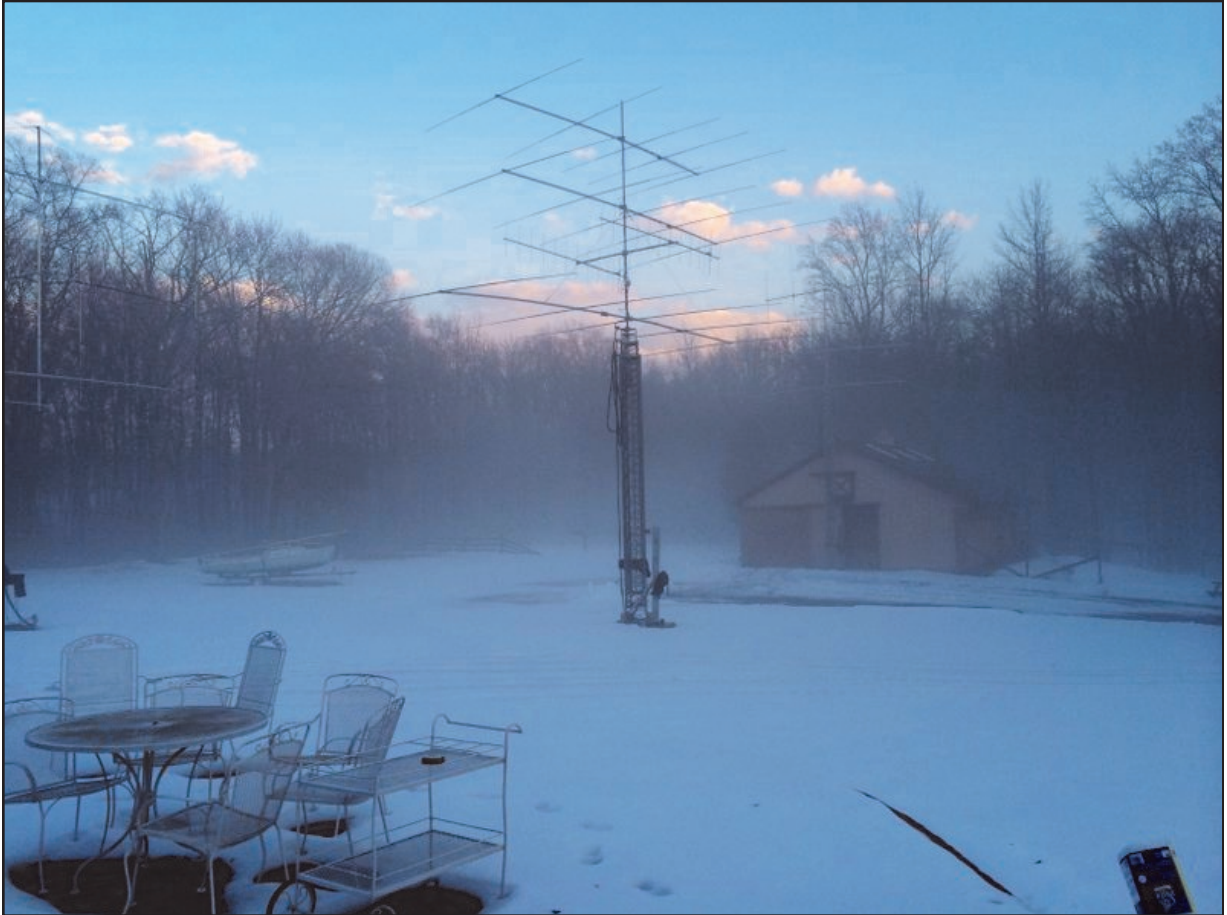
The Central States VHF Society, Inc. is soliciting papers, presentations, and Poster displays for the 48th Annual CSVHFS Conference on 25–27 July, 2014. Papers, presentations, and Posters on all aspects of weak-signal VHF and above amateur radio are requested. You do not need to attend the conference, nor present your paper, to have it published in the Proceedings. Posters will be displayed during the two days of the Conference.

More information can be found at: <http://www.csvhfs.org/2014conference/2014callforpapers.html>

Tom / K5TRA csvhfs2014@gmail.com

WA3QPX Art / Antennas

Paul sent this wistful, artistic (maybe haunting?) picture of his back yard. Clear sky, fog and snow.



Brendan Quest: In search of a Transatlantic 2 Meter QSO

To understand the goal, the attempt, the equipment and the personnel see

<http://rsgb.org/main/blog/news/rsgb-notice/2014/03/18/canadian-hams-attempt-cross-pond-two-metres/>
and <http://www.brendanquest.org/>

Thanks go to Roger , VE1SKY for the info. Here's his comment on the quest: "Only problem is, it will mean two solid weeks of car and ferry travel, and listening to white noise in NF while I could be canoeing in the prime of a Nova Scotia summer." —Roger

Which speaks to how Quixotic some VHF+ quests can get.

Save the Date!

Mid-Atlantic States VHF Conference

September 26-27-28

InnPlace Hotel, Bensalem, PA

Hosted by the Packrats

NOW REQUESTING PAPERS and PRESENTATIONS

Please forward your topic, summary of file to:
rick1ds@hotmail.com

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APRIL 11-13, 2014

* **Sponsored by the Eastern VHF/UHF Society and the North East Weak Signal Group**

* **ARRL-Affiliated**

Official Webpage:
www.newsvhf.com

Conference Agenda : see Web Site

Location:

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Vacuum Tube Amps

Electronic industry trade magazine *Electronic Design* has a current article at their web site on tube type amplifiers (audio) and how they still fill a niche in 21st century electronics. They also have additional resources you can check out. The URL is http://electronicdesign.com/blog/long-live-vacuum-tube-amps?NL=ED-03&Issue=ED-03_20140319_ED-03_708&YM_RID=bsoltoff@comcast.net&YM_MID=1455681&sfvc4enews=42&cl=article_1

Tnx, K3IUV for the hint

Spring Sprints

CSVHFS is pleased to announce the following dates for the 2014 Central States VHF Society sponsored Spring Sprints:

1. **144 MHz:** Monday, 4/7/14 from 7 - 11 PM local. **DONE! Please post your results by going to <http://www.3830scores.com/index.php> and clicking on "144MHz Spring Sprint" in the yellow column on the left**
2. **222 MHz:** Tuesday, 4/15/14 from 7 - 11 PM local.
3. **432 MHz:** Wednesday, 4/23/14 from 7 - 11 PM local.
4. **Microwave,** 902 MHz and up: Saturday, 5/3/14 from 6 AM - 1 PM local.
5. **50 MHz:** Saturday, 5/10/14 from 2300z until 0300z Sunday, 5/11/14.

Rules for the 2014 Spring Sprints will be posted on the following web sites:

<http://www.3830scores.com/index.php>

<https://sites.google.com/site/springvhfupsprints/>

Please let me know if you have any further questions.

The Spring and Fall Sprints are a great way to interest new hams in the world of VHF and above operating!

73, Kent O'Dell

KA2KQM

kotoka2kqm@windstream.net

The Wayback Machine

Gleaned from the pages of
Cheese Bits, March 1964
(Vol. VII Nr. 1)

(Authors comments in *italics*)

- The Phila. Inquirer reported in the 3/10/64 edition that “Two Ham Radio Operators, using stolen wireless, were apprehended by Abington police”. Reading the details, it was not ham gear and they were not hams. Rather, it was gear from school buses, used to communicate with the drivers. Helen in her role of defenders of the term Ham, contacted the paper and explained the difference. A printed correction and apology is expected (*don't hold your breath!*).
- W3LHF, Dave returned from a 2-year stay in Rochester where he was attending college. He resumed his 2-meter activity report, noting that SSB is making inroads in the 2-meter operator group, and he would “soon add this capability to his contest station”, (*Hard to believe what we take for granted, ssb was rare 50-ysr ago!*)
- New Products, by W3NSI, Lyn. Eimac announced a new 250 watt tetrode which reaches 70% of full plate current in 100-milliseconds, using “hot-shot” operation. “Hot-Shot meant applying **3 x rated filament voltage (!)**, switching to normal when current reached the design value.
- The answer to the “who is it?” article last month was W3CL, Harry Stein.

(*But you already knew that, didn't you?*).

- W3HKZ, member Ed Kushner gave a talk on Ham TV at the North Penn Radio Club (*Ed was the Chief Engineer at WCAU*).
 - Health and Welfare. Bad month for the Packrats, with 9 members or XYLs reported ill.
 - Pictures of members of SIRAN, the radio club of India, were published. The Packrats exchanged newsletters and information with this group, supporting them in their radio activities.
 - Several “Medical Emergency” support activities by Hams, were reported in the 2/23/64 Inquirer. (*This time they got it right!*). Common in the 60's, hams frequently made contacts with (and provided information to) hams in foreign countries, for medical equipment, medicine or treatment procedures. (*Now overtaken by more modern communications methods, but then an important part of our public service operation*).
 - NASA reported that the Explorer-18 satellite detected an indication that a third “Van Allen Radiation Belt” may exist. (*Have you seen the recent IEEE article discussing a proposal to “blast away” the Van Allen belts, so as to protect spacecraft from radiation damage? Very interesting. Google it.*).
- *The FCC is expected to add regulatory action concerning inter-state phone-patch operation, within the next 90 days (*wonder if they could have*

foreseen the current VOIP functions, like SKYPE, VIBER, Magic-Jack and others?).

- The book “Two Hundred Meters and Down” by Clinton B. Desoto has been reprinted by the ARRL, in recognition of their 50th anniversary. The book chronicles the history of Ham radio from its beginnings, to 1936. Copies were available from the league for \$1.00! (*Somewhere in the basement, I have a copy!*) (*Reminder. This year they are celebrating 100-years! Have you made your anniversary contact?*).
- Believe it or Not. William Hill, a ham, reported sitting in his dentist’s chair for some needed dental work. He detected a pattern in the Dentist’s drilling. He heard, in perfect Morse, “Y-O-U S-H-O-U-L-D H-A-V-E S-E-E-N Y-O-U-R D-E-N-T-I-S-T L-O-N-G B-E-F-O-R-E.” **Turned out the dentist was a Ham, practicing his sending!!**
- ARRL Bulletin Nr 940. FCC has begun issuing Amateur licenses with its new electronic processing equipment. Conversion to the new system has involved unavoidable (*Unavoidable? Shades of Obamacare implementation?*) delays in handling applications. It is expected that delays will be cleared up in a few weeks”. (*We’ve heard that before!*).
- Home-brew night, another perennial Packrat activity. W2EIF, Jo, showed a homebrew 220 MHz xmtr, 4X150 final. K3IUV, Bert showed a homebrew 80-6 meters SSB xmtr, 6146 final. (*Still have it in the basement.*). W2AXU, Jack, showed “T” pads and Cavity Filters.

- This issue consisted of nine (9) sheets, double-column format, printed double-sided on heavy stock legal size paper. (*Postage 6-cents. Have you checked the current cost to mail a 1-oz letter? Too bad we didn’t have “Forever” stamps then!*).

(As in previous editions, many “folksy” comments about members, their families, and activities were included in this edition of Cheese Bits. If interested, or for more details, visit www.W3CCX.COM and read the full issue posted there by our Webmaster, Ron, W3RJW).



—Thirty— K3IUV, Bert

Kit Nostalgia

Your editors friend W2IOL sent the following info which could be of interest:

I sent a buddy a link to an article about vacuum tube audio amps still hanging in. He responded with a mention of all the old electronic kit companies (... Eico, Heathkit, Knight-kit (Allied/Radio Shack), Dynaco, and Lafayette Radio) and a web link where he spent an hour. I will now likely spend an hour there too.. So, to have some company, here's the link to spend some of your time, too.

Nostalgic Kits Central
<<http://www.nostalgickitscentral.com/>>

73, Ron McConnell w2iol

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Events

For inclusion, please direct event notices to the editor.

Spring Sprints—Contest Early April to early May 2014. See information on page 12 of this issue for details.

Eastern VHF/UHF/Microwave Conference - April 11-13, 2014 Baymont Inn, Manchester, CT See information on page 12 of this issue for details.

SVHFS Conference—April 25-26, 2014. Atlanta GA. See <http://www.svhfs.org> . Conference chair Bob Lear, W4ZST

SBMS 2.3 GHz & Up— Contest May 3-4, 2014. See information on page 7 of this issue for details.

ARRL June VHF QSO Party - Contest June 14-16, 2014. The annual Camelback trek. Details to follow.

CSVHFS Conference— 48th Annual Conference July 25-27, 2014 in Austin, Texas. See <http://www.csvhfs.org/2014conference/index.html> for details

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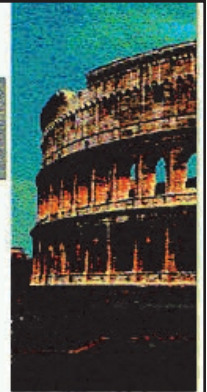
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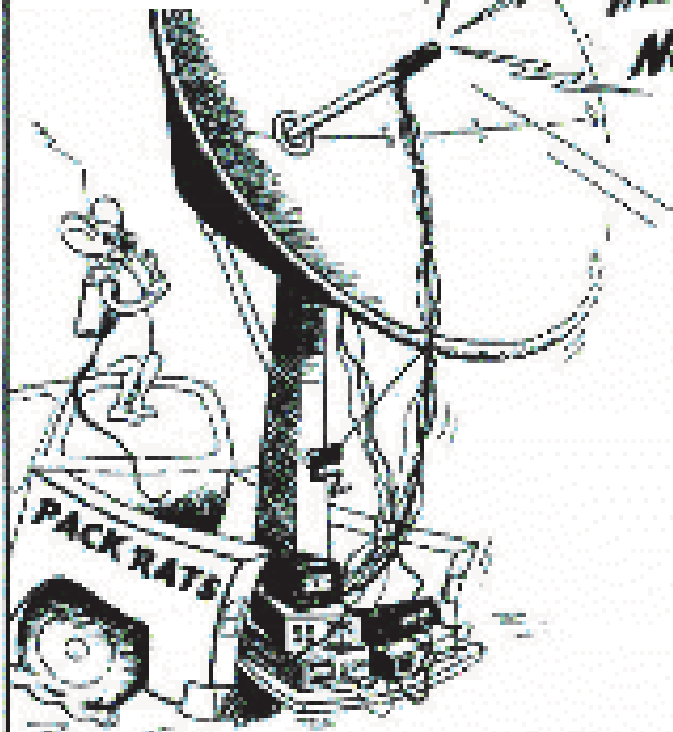
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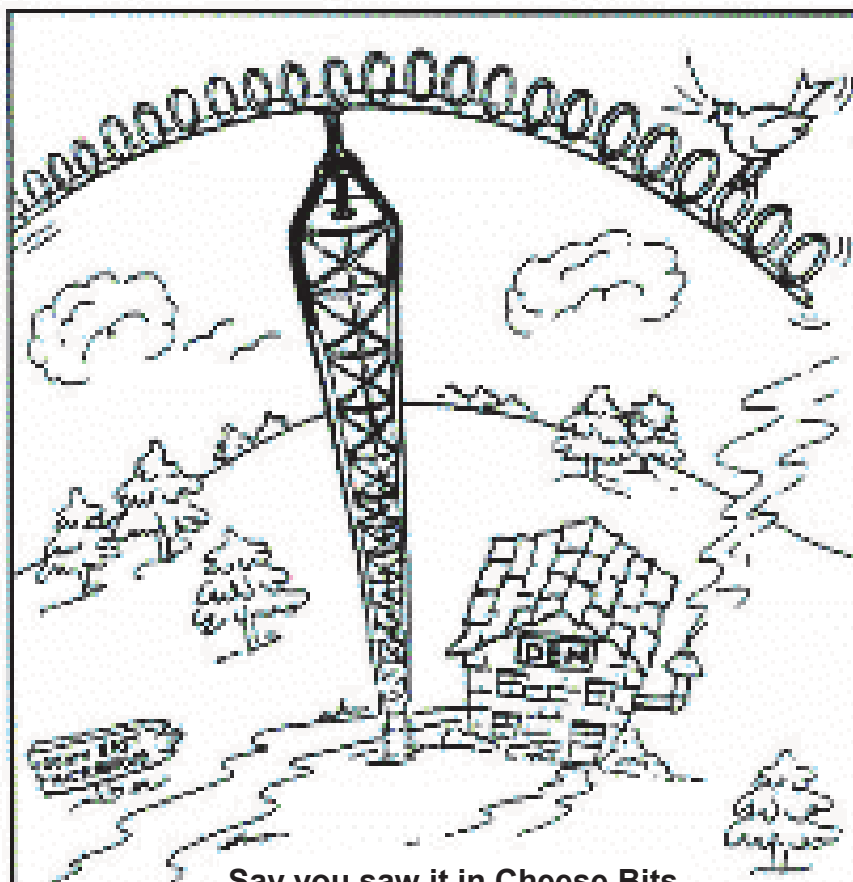
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