

CHEESE BITS



W3CCX

CLUB MEMORIAL CALL

SCANNED TO PDF BY BERT, K3IUV, 2013



ARRL
Affiliated
Club

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August 1996

Number 8

THE PREZ SEZ

Despite the threat of very wet weather the annual White Elephant Sale was a tremendous success. If you were scared away from attending because of the Accu - Guess weather forecast you missed our best auction ever. The rain held off until the final items changed hands and even then, during the brief shower that ended the meeting, some last minute bartering was taking place under cover of Gary's garage. Thanks to magicians El (K3JJZ) and Burt (K3IUV) our premier auctioneers for making an enormous amount of iron and aluminum disappear and of course many thanks to Gary (WA2OMY) and Jennifer for hosting this annual event.

As I write this I have just returned from the second weekend of clearing out the estate of long time Packrat W2E1F who became a silent key several weeks ago. Those of us who knew and loved Joe never fully appreciated his status as a real packrat. That is, not until we showed up to clean up the shack at his family's request. Many years ago W3ZD told me "the worst thing a Packrat can do to his friends is die". I never really understood what he meant until two weeks ago when I and a crew of club members arrived at Joe's QTH and were stunned by the enormity of the task before us. Every closet, every room, even the rafters were piled and stacked with cables, antennas, equipment, books, parts and a ton of aluminum scrap. By the end of the first weekend we had gathered the majority of the usable gear and components, loaded several car roof tops with yagi's and filled a 20 cubic yard dumpster. We hadn't make a dent in the mass of material that existed and due to poor weather the three towers outside were virtually untouched! The next weekend we recruited 3 dB more members to help out, took away several carloads of parts, a trailer full of towers and antennas and stuffed a fresh 30 cubic yard dumpster with everything that remained. The second weekend crew thought we were exaggerating until they arrived and saw for themselves and I'm sure many of you think I'm overstating the magnitude of the job. Unfortunately, the above account is not only true but is probably typical of many of our members. There is a classic story about another tried and true Packrat now departed who convinced his wife that the majority of his junk pile was actually worth a lot of money. His widow is now protecting drawers full of unmarked xtals and boxes loaded with pulled relays as though they're the family jewels. If you find this amusing I'm sure it's because this subject hits close to home with all of us. I know for a fact this past weekends adventure has affected me. When I got home I started looking around my workshop and attic and immediately began making two piles: one for the fleamarket and the other for the trashman. For those of you who say "but I need this stuff in case I ever get around to building that 6 tube 100 watt mechanical filter exciter", all I can say is when you do finally get around to it you'll probably find all of the parts at the next Packrat estate sale.

Continued on page 3

MEETINGS

Third Thursday each month at 8:00 PM
Southampton Free Library
947 E. Street Road
Southampton, PA 18966

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222.98/224.58 MHz, Churchville, PA FN20LE

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WA3AXV Ron Whitsel (2 YRs)
N3OZO Don Schwartzkopf (1 YR)
WB3KRW Steve Dallas (1 YR)

MONDAY NIGHT NETS

<u>TIME</u>	<u>FREQ.</u>	<u>NET CONTROL</u>
7:30 PM	50.150 MHz	K3EOD
8:00 PM	144.150 MHz	AA2UK
8:30 PM	222.125 MHz	WB2YEH
8:30 PM	224.58R MHz	N3IIT
9:00 PM	432.110 MHz	WA3AXV
9:30 PM	1296.100 MHz	WA3NUF
10:00 PM	903.100 MHz	N3AOG

COMMITTEE CHAIRMEN

LADIES' NIGHT: N3AOG 215-443-9965
JUNE CONTEST: WA3AXV 215-355-5730
HAMARAMA: WB3JYO 609-538-1687
VIIIF CONFERENCE: KB3XG 610-584-2489

PACKRAT BEACONS - W3CCX/B FM29JW

432.298 MHz 903.071 MHz
1296.262 MHz 2304.034 MHz



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Thanks to Bob (W3GXB) and the many members who gave up their weekends to help the family of a good friend and a sorely missed Packrat. August 17th marks the date of the annual Packrat Family Picnic. Last years site was so terrific that we are returning to Pavilion #1 in Peace Valley Park near Doylestown, PA. Check last months Cheesebits for the latest internet generated map or check with N3AOG for details. This is a great site with easy access to the lake activities and yet secluded enough to have a quiet Packrat style picnic. Don't miss it!

73, Phil WA3NUF

Calendar of Coming Events - August 1996

- 3-4 ARRL UHF Contest. See June QST, page 108 for the rules.
- 4 The Delaware-Lehigh Amateur Radio Club Hamfest will be held at the Career Institute of Technology in Easton, PA. on PA 191. TI on 146.7R and .52. VE exams.
- 8 Packrat Board of Directors Meeting at the QTH of John, KB3XG. Call 610-584-2489 for directions.
- 12 Perseids Meteor Shower predicted peak at 0653 UTC.
- 15-18 International EME Conference, Bowie, Md. This conference, sponsored by the East Coast EME Group will be held at the Bowie Comfort Inn at the Junction of Rte. 301, 50 and 3 between Baltimore, MD and Washington, DC. For information, contact Willie Mank, W1ZX at 301-645-5584 or via e-mail at xk1z73a@prodigy.com.
- 17 The August meeting of the Packrats will be the Packrats Family Picnic with all Packrats, friends, wives, kids, etc. invited. The picnic will be held at the Peace Valley Park (see map in the July issue of Cheesebits), Pavilion #2 near Doylestown, Pa.. Call Dick, N3AOG, at 215-443-9965 if you wish to bring a covered dish to share. Start time is noonish. Boat rental and a fishing pier are available.
- 17-18 First weekend of the 10th ARRL Cumulative 10 GHz Contest. See page 107 of the June QST for rules.
- 17-18 NJ QSO Party. See July QST, page 115 for the rules.
- 17-18 Hilltop Transmitting Assn/Keystone VHF Club/York Radio Hamfest will be held at the York Interstate Fairgrounds, York, PA. TI on 146.97. VE Exams.
- 18 The Delmarva Hamfest will be held at the Delaware Technical & Community College In Georgetown, Delaware. Talk-in on 147.675/.075, and 224.24/.84.
- 19 Alaska became a state.
- 23-25 The 22 th Annual Eastern VHF/UHF/SHF Conference will be held at the Quality Inn, Vernon, CT. For information, contact Rae Bristol, K1LXD, at 203-742-8650.
- 24 LEAP INTO THE MICROWAVES with the Packrats! 903 and above. Starting on the 4th Thursday of the month and continuing every 4th Thursday of the month operate from 8 to 10 PM local time on any band 903 MHz and above. For coordination on those difficult long haul contacts 144.260 MHz is the suggested liaison frequency. So here's your chance to fix what broke in the contest and work all those stations you missed.
- 24 SCARS Hamfest at the Somerset 4H Center in Bridgewater, NJ.
- 25 Gloucester County ARC Hamfest at the 4-H Fairgrounds in Mullica Hill, N.J. Talk-in on 147.78/.18, 223.06/224.66 and 146.52.
- 14-16 Sept. 1996 ARRL VHF QSO Party See the August issue of QST, page 102 for the rules.
- 5 Oct. 20th Mid Atlantic VHF Conference sponsored by the Mt. Airy VHF Radio Club will be held at the Quality Inn in Horsham, Pa.

Don Hampton, W3CJU

Don, W3CJU was a former member of the Packrats and President of the club in the 1970's. Don died in June and for those who remember him, this brief obituary tells a little about Don. As you will read, Don did a lot of things besides ham radio. He always had a smile on his face and as you can see, he helped out in a lot of activities. He was 73 and was the husband of Virginia Sullivan Hampton. Born in Doylestown, he was the son of the late Cecil Morris and Hazel Kraut Hampton. Don was a graduate of the Elgin Watchmaking College in Elgin, Ill. After graduation from that school he was employed by his grandfather, Rodger W. Kraut. In later years he became the sole proprietor of the Rodger W. Kraut Jewelry Store in Doylestown. He was a fifth generation watchmaker. During World War II he served with the 2nd and 3rd US Marine Corps Divisions. He participated in the landings on Guam and Iwo Jima. He was discharged as a Sergeant in 1945. He was an active Ham Radio Operator and served as president of the Mount Airy VHF Radio Club. He was one of four persons who started the Doylestown Repeater Unit, which was later donated to the Bucks County Civil Defense Unit in Doylestown. As a volunteer for the Civil Defense Unit he assisted in a number of emergencies, including the Johnstown Flood. He had been active in the Boy Scouts Of America and served as Cubmaster to Pack 52 for three years. Don was a member of the American Legion, the 2nd and 3rd Marine Division Association, the Bucks County Kennel Club and the Collie Club of America. In addition to his wife, he is survived by a son, Rodger Dennis Hampton of Clifton, Va; three daughters, Donna Hampton Kirk Of Columbus, Ga, Elizabeth Hampton Tanton of Overland, Mo; and Kathleen Hampton of Doylestown. He is also survived by seven grandchildren.

W2EIF Work Party Results

Believe it or not, all of the towers, parts, and junk at Joe's QTH has been removed. The 2nd effort Packrat crew consisted of N3AOG, WA3JUF, K3JUV, WA2OMY, W3KKN, WA3U, K3EOD, N3DG, WA3NUF, N3OZO, N3ITT, N3EXA, W3GAD, AND W3GXB. The first weekend included W3ITT, W3GXB, N3OZO, N3ITT, K3EOD, N3DG, WA3NUF, and W3KKN. If anyone was missed, please excuse the omission. The help and effort of all of the above members is appreciated by Joe's family.

PACK RATS ANNUAL PICNIC

By: Dick, N3AOG

The PACK RATS ANNUAL PICNIC will be held on the 17th of Aug. with rain date just a short distance from lake Galena, in Peace Valley Park. The Club will supply, soda, hamburgers, and hot-dogs. The attendees are asked to bring a "covered dish" or whatever. Call Don N3OZO @ 674-0405 to coordinate.

Last year we had a terrific turnout. Its a great site, swimming, sailing etc. Super place for the kids. For directions see July Cheesebits.

TID BITS

Packrat George, W3HK ,has just celebrated his 60th year as an ARRL member. Hope he got a Lifetime membership early.

Pat, WB3DNI has a new call. He is now W2SK. This call previously belonged to his grandfather.

Ron, KB3OM has been changing calls on a regular basis. If the UARLR call book server can be trusted, he became AA3NF in early June and in late June became W3OR.

Ron, WA3AXV reports that the club call, W3CCX, has been renewed and is now good until 24 July 2006.

The August issue of the "432 and Above EME Newsletter" reprinted Ron, WA3AXV's article from Cheesebits on making Stripline Power Dividers using waveguide. It also reports that K1FO's Lunar Link 1500 watt amplifiers are available for 144, 222 and 432 MHz. For information, contact Steve at 203-421-3377.

Bob, W3GXB, has re-started the Coffee-Pot Net at 10 AM every morning on the 222 Repeater.

Sept. Meeting Speaker: C. Stuart Nelson from Penn State University, Dept. of Nuclear Engineering, will speak on: "THE HEALTH EFFECTS OF EMFs & MICROWAVES"

In the June issue of QEX, Zach, KH6CP/1 describes 5760 MHz mixers, feed horn and MMIC amplifiers with +14 dBm output for a 5760 MHz Transverter. Artwork and construction details are included.

The Naval Observatory Clock is available on the WWW. Try <http://tycho.usno.navy.mil/what.html?rwin=UTC>. With Netscape, you can get a window clock running on a window displaying UTC in real time (+ or - due to jerks in the signal getting through the network).

Using Yagi Optimizer to Design the New W3CCX 6M Antenna

by Gary Dallas, WA1YHO

For the past few years, the W3CCX June contest effort has used a Cushcraft 617-B6 Boomer antenna on 6M. While it's a fine antenna, the front to rear performance was not what I would have liked. Our contest site in the Pocono Mountains is surrounded by a lot of other contest stations and the QRM can be fierce. Having just a few more dB of rejection off the back of the antenna would be a big help.

I've also wanted to try stacking a pair of antennas on 6M. My experience on other bands is that stacked antennas seem to "play" better than the stacking gain would imply. For practical reasons, this meant that the new antenna would have to be smaller than the 34 foot boom Cushcraft. I set a goal of designing an antenna on a 20 foot boom with a 30 dB front to rear ratio. The following paragraphs detail the design and construction of the new antenna.

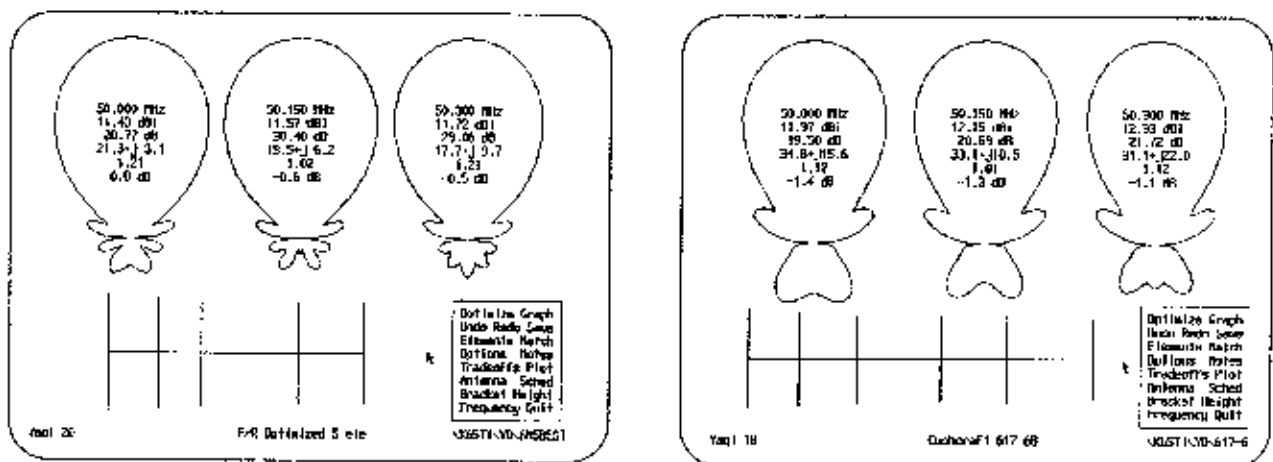
DESIGN

I had been playing with the yagi analyzer program called YA that is included with the recent ARRL Antenna book. It will compute and display antenna patterns for yagi antennas. By moving element spacing and lengths, you can see the effect on the beam pattern. However, this manual process of moving an element and manually noting the results was very tedious.

YA is really just a stripped down version of YO, Brian Beezley's (K6STI), Yagi Optimizer program. (Available for \$60 from Brian, see ads in QST.) YO will automatically optimize a yagi design based on the weighting of three parameters: forward gain, SWR, and front to rear ratio. You chose the weightings you desire. In my case, I was willing to sacrifice forward gain to improve the front to rear ratio. After you set the optimization tradeoffs, the program will reposition and modify element lengths to optimize for the desired performance. No more tedious cut and try! The computer does the work.

Brian includes quite a number of HF and VHF antenna designs with his software and I was pleased to find that the Cushcraft 6M Boomer was there. This was important, as he had already done the work to compensate element dimensions for the boom mounting method. He did this by shortening the inner element section length by 0.4 inches for the purposes of simulation. So starting with the Boomer design, I tried a number of variations. First, I tried using all six elements. The optimized designs always had too long a boom. Next, I just deleted the 4th director from the Boomer element list and ran the optimizer.

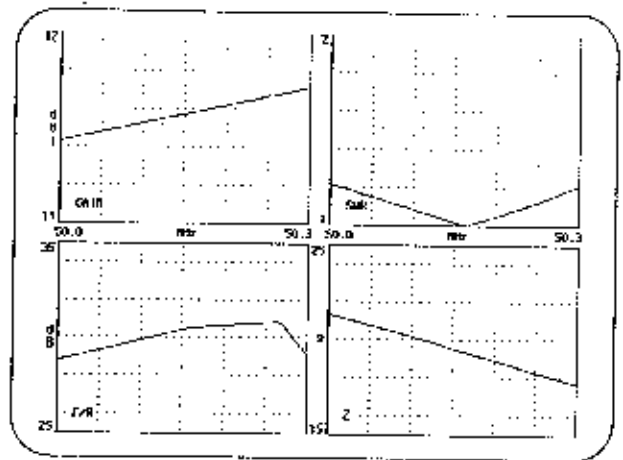
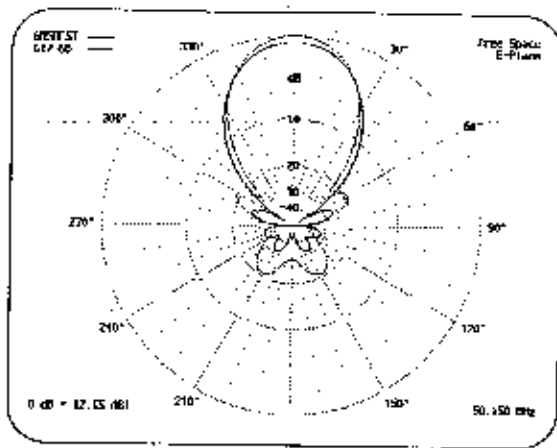
The optimizer came up with a five element design on a 21' 3" boom. From the plots below, it can be seen that the forward gain is only about 0.6 dB less than the much larger Cushcraft and that the F/R is 10 dB better! According to YO's figure of merit number, emphasizing the F/R performance cost about 0.6 dB of forward gain over what could be obtained with the 21' boom length.



The plots shown above are screen dumps of the main YO screen. The numbers inside each beam pattern are, from top to bottom, frequency, forward gain, front to rear ratio, input impedance, matched standing wave ratio, and figure of merit. The plot on the left of the next page shows overlays the two antenna's beam plots. The graphs on the right plot the gain, F/R, SWR, and impedance verses frequency for the new design.

CONSTRUCTION

One of the nice things about the 6M Boomer mechanical design is that it lends itself to modification. The elements are in three pieces. A 48" long section of 0.750" tubing forms the center section of the element. A piece of 0.675" tubing slides into each end of



the center section and is clamped with a stainless steel hose clamp. The elements mount to the boom with U-bolts and saddles. The boom is made up of sections of decreasing diameter tubing telescoped together and held with hose clamps.

The Cushcraft parts were usable in the new design with one close dimension. The new first director was quite a bit longer than the stock Boomer design. However there was just enough of the outer element section to clamp into the inner section. Good enough for a weekend contest effort, but I might get a longer piece of element material for a permanent installation.

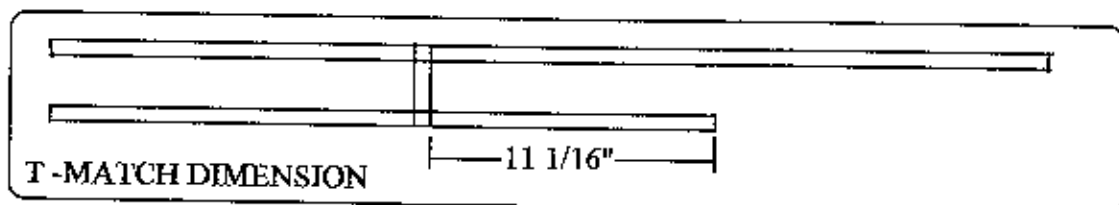
For the temporary contest installation, I didn't use the two outer boom sections and telescoped one of the inner sections in a bit to obtain the desired boom length. For a permanent installation, I would nest all of the boom sections for added strength. The stock 34' boom antenna needed boom supports, but, at 21', the new antenna did not need them.

I knew that the match would be different from the stock antenna given the impedance numbers reported by YO. However, I was sure that I could tune the driven element using the Cushcraft T-match hardware. I had to lengthen the driven element a bit and move the T-match shorting bars, but a perfect match was obtained.

The final element dimensions and spacing are listed below. The outer section length listed below measures the distance from the end of the inner element section to the end of the element.

ELEMENT	SPACING	OUTER SECTION LENGTH
REF	0"	35.095"
DE	50.166"	33.125"
1st DIR	92.890"	30.066"
2nd DIR	188.530"	28.816"
3rd DIR	254.577"	27.600"

The details on the T-match section are as follows: Set the shorting bar 11 1/16" in from the end of the T-match bar. See the crude drawing below:



In summary, the new antenna was easy to build using the stock Cushcraft Boomer parts.

ON-AIR RESULTS

Of course, computer simulations are, well, just simulations. The real test is on the air. And the antennas worked great! QRM was greatly reduced. Much of our local QRM comes from stations east and northeast of our contest location. When operating in the

southwest, as we did a lot of this year, these stations were just not the problem they used to be. And the antennas seemed to work well. The pattern was as clean as the simulation showed and, while it's hard to make measurements with on-air signals, the S meter said the F/R was close to the predicted 30 dB.

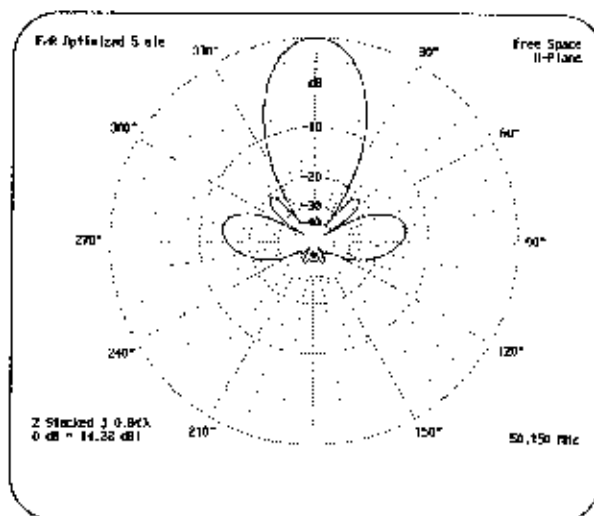
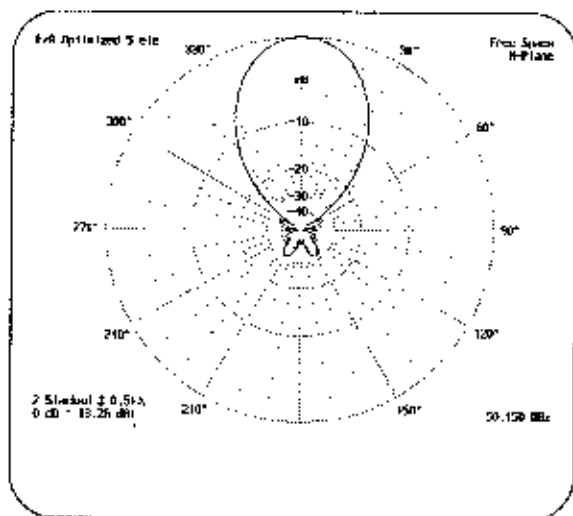
In my opinion, YO is a must have piece of software for anyone who wants to build or modify antennas. While there are many subtle problems in modeling antennas that I did not discuss (and probably a lot more I don't even know about yet), I am convinced that whether you're looking for that last few tenths of a dB of forward gain or a better pattern, this program will help you design a better antenna.

THOUGHTS on STACKING 6M ANTENNAS

Unfortunately, contest time came up quickly this year and I didn't have time to study how best to stack two of these new antennas before the contest. Based on the available 20 foot mast and the mounting position of the rotor in the tower, they could be stacked a maximum of about 17' apart. Lacking any scientific insight at contest time, they ended up about 16' apart.

However, while preparing this article, I did some further investigation. First, I dug back through my VHF reflector archives and discovered a couple of very informative posts from Zaba, OH1ZZA. He recommends a 0.6 wavelength spacing for stacking 6M antennas, especially for antennas with short booms and poor patterns. He states that the 0.6 stacking distance greatly reduces sidelobes in all directions which, in the H-plane, can improve cosmic noise rejection.

I checked this using YO to plot the H-plane free space response of a pair of vertically stacked antennas. Sure enough, there is a large dip in the H-plane sidelobe response at a 0.51 wavelength stacking distance for this antenna. In fact, in free space, the H-plane lobes all but disappear! See the plot on the left below:



Seventeen feet is about 0.84 wavelength. From the plot on the right above, sidelobes at this spacing were much higher and the gain was only 1 dB more than the 0.51 wavelength stack. Next year I think I'll try a closer stacking distance, something around 10 feet. I think I hear the weak ones better already!

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August 1996

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VHF+ NEWS & ACTIVITY

By Jerome Byrd, K3GNC

"IF I HAD A MOUNTAIN, I WOULD HAM IN THE MORNING. I WOULD HAM IN THE EVENING, ON THE 6 METER BAND. I WOULD HAMMER OUT CONTEST. I WOULD HAM WITH RFI FREEEDOM. I WOULD HAMMER OUT THE LOVE I HAVE FOR VHF+ CONTACTS, ALL OVER THIS LAND."

ON THE BANDS:

Records are made to be broken. We will have to wait for the official results, but let there be no doubt, the June VHF contest will go into the record books! The 6 Meter band was on fire! Europe, Caribbean, double hop to the west coast, WOW!!

Reported 6 Meters European Openings: June Contest, July 1, July 8

Reported Activity: (I am only reporting specific contacts (144 up) (that are reported to me, or my own)

<u>Date</u>	<u>Call</u>	<u>Grid</u>	<u>Band</u>	<u>Propagation</u>	<u>Station</u>
6-12-96	k2rth	ei95	144	E	k3gnc
6-12-96	wa9cfd	en40	144	E	k3gnc
6-18-96	kd4fqy	ei96	144	E	k3gnc
6-29-96	w4fso	fm14	903 & 1296	tropo	aa2uk
7-1-96	wa4trv	fm05	222,432..?	tropo	lots of rats
7-1-96	ko4qwz	em66	144	E	aa2uk
7-1-96	kj5f	em45	144	E	aa2uk
7-1-96	wa0sjr	em56	144	E	aa2uk
7-1-96	n5osk	em25	144	E	aa2uk
7-1-96	k5yy	em26	144	E	aa2uk
7-1-96	wm4z	cm25	144	E	aa2uk
7-1-96	k4kae	fm02	144	tropo	aa2uk
7-7-96	wa8wzg	en81	1296	tropo	aa2uk
7-1-96	KP4A	San Juan	144	E	w3zz (fm19)
7-17-96	w4vlh	em95	2304	tropo	aa2uk

WHERE OH WHERE IS CARMEN SANDIEGO?

N4HB, VE3ASO, KMIH, KA3FZF, N8PEK, KA2RDO, KA1ZE, WA8MZQ

LET LOOSE THE DOGS OF WAR:

Ron - WZ1V (Melvin Purvis - GMAN) has a 'RUSSIAN' 4CX400A in his AM-6155, putting out 450+ watts. Ron will also be starting a major antenna improvement project soon! The battle for Connecticut is heating up. I heard rumors that Jeff, WA2TEO (The Godfather) 'is making a few inquiries' regarding taller towers.

Our clubs 'WHITE ELEPHANT SALE' had more cheetas, leopards, and rhinos than elephants. There were power amps and UHF+ gear galore. Come the January 97 contest, it might be a jungle out there!

I heard, from an unreliable source that Tom - WA8WZG, and Jeff - WA2TEO, personally congratulated Joel - WB5IGF on his unofficial 500,000 points in the June contest. Even though Joel's score over shadowed their fantastic 400K+ scores, they said that they had no animosity, he (WB5IGF) was the clear front runner now, and that they would drop out of future contests, and support him fully.

CU on the bands! Please let me know about any openings, nets, propagation, etc.

New Six Meter Amplifier Announced

Command Technologies, Bryan, Ohio has announced limited production on a new 6 meter amplifier. The new amp is specified for 15 to 25 watts drive for 1200 watts pep SSB operation. The unit uses an Eimac 3CX1200A triode. Intermod distortion products are specified at -35 dB or better at 1200 watts pep. An adjustable negative going ALC is provided to use with the driving exciter to prevent overdrive. Weight is 75 pounds with the power supply internal to the amplifier. The power supply is the same as used in their HF-2500 low band amp. For more info, contact Command Technologies at 419-636-2269 or via e-mail at CMDRTECH@MSN.COM

IMPROVED IMD PERFORMANCE FOR THE TS-850 TRANSVERTER OUTPUT

By: Dave Dabell, WA3U

During recent two tone testing, I was surprised how poor the Kenwood TS850 I use to drive my transverters was performing. Third order IMD was only 15 dB down when the transverter output was at maximum. Careful adjustment of the mike gain so there was no saturation only reduced it to 25 dB, still mediocre. Driving the normal HF output to 100W gave excellent results, over 35 dB, so I knew the rig was capable of better performance.

In HF operation, the TS850 uses Automatic Level Control to limit how hard the transmitter can be driven. Forward power is sensed at the output of the final power amplifier, converted to a DC voltage, and fed back to a variable gain IF stage to automatically control transmitter gain and avoid distortion. When using the transverter output, the power amplifier is disabled. No feedback signal is generated, so the variable gain stage is at maximum gain and it's very easy to overdrive the transmitter. Without feedback, the ALC and Power Out meter functions don't work, so there isn't any indication the transmitter is being over-driven.

Other solid state HF radios, such as the Icom IC735, Yaesu FT1000, and Kenwood TS440, have similar ALC schemes.

I first tried a manual level control approach to avoid over-driving the transmitter. I rigged up a relative output meter on the TS850 transverter out signal so I could see the transmit level. Activating the speech processor limited voice peaks, and I used the mike gain control to set the maximum RF output. While the rig is capable of 40 mW output saturated, I had to limit output to about 10 mW to maintain a clean signal. This is a workable approach for someone who doesn't like the idea of poking around inside the rig, but I wanted something more idiot-proof. After all, it was ME operating the rig.

A better approach is to provide a feedback signal to the ALC when using the transverter output that duplicates what it would see during HF operation. A DC voltage of approximately 8.5V at full output is required. Since the transverter output is much lower level than the usual HF output, a DC amplifier is required to increase the feedback signal.

A schematic of the modification is shown on page 10. The circuit I built samples a small amount of RF from the transverter out jack through C1. It is converted to a DC voltage by D1 and C2. U1 amplifies this voltage, with gain set by R4. D2 is used to isolate the output of U1 so it can be placed in parallel with existing circuitry. No switching is required as the rig is moved from HF to transverter operation.

The circuit was constructed on a small piece of perf-board and mounted inside the rig between the RF and IF boards. A short length of RG174 coax was soldered on the bottom of RF board CN25 to sample the transverter out signal. Wires were tacked to traces on top of the RF board for power, ground, and output.

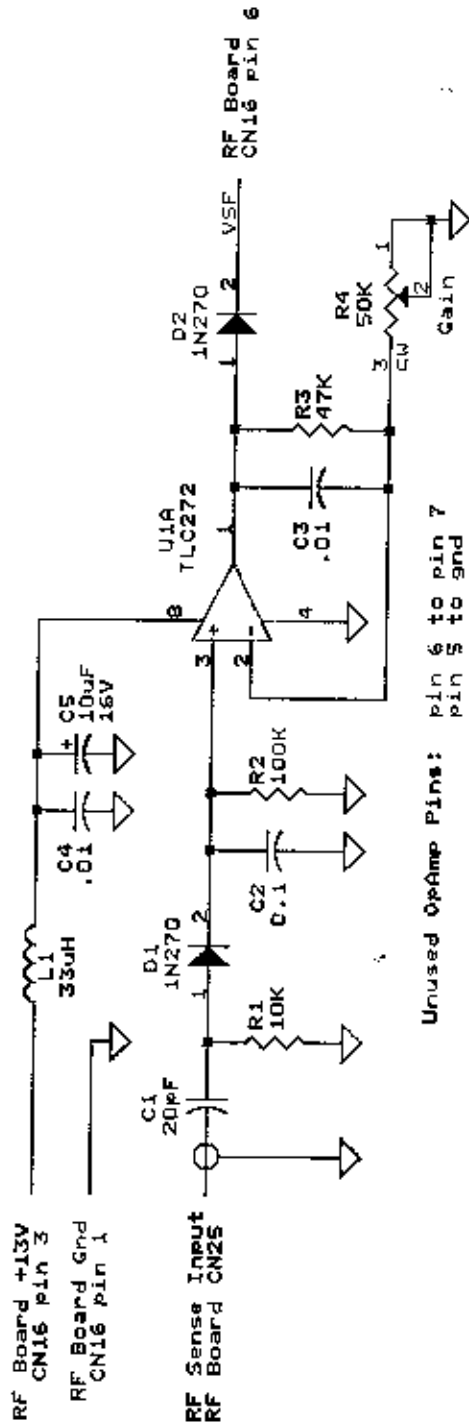
To set R4 for proper gain, first disable the transverter output and transmit on 28 MHz FM into a dummy load. Adjust the carrier level control so that the ALC reading is half scale. Then, enable the transverter output and adjust R4 so that the ALC meter reading is again half scale while transmitting. Do not adjust the carrier level control between steps one and two.

This matches the IF levels between HF and transverter operation. If you have a particular drive level (less than 10 mW) that you'd like to maintain in transvert mode, R4 can be adjusted to provide it. With the circuit installed in the 850, transverter operation is just like HF. The ALC takes care of keeping the output clean, and all meter functions operate normally.

Perseids Info from the VHF Reflector

de: Ken KP4XS/W4. Nice article on "The Discovery of the Perseid Meteors" in the August issue of SKY and TELESCOPE magazine. The experts are predicting a peak most likely on the morning of August 12th (UTC). Peak time is predicted at 0000H UTC and lasting a few hours. Meteors in excess of 100 p/h are possible during this predicted peak. This all assumes ideal conditions and the persistence of a long, narrow dense ribbon of meteoroids that accompanied the 92/93 return of comet Swift-Tuttle. The expected "traditional" Perseids peak is supposed to happen 12 hours later and will favor North America (Yahoo!) They also expect good meteors on the mornings before and after. Expect around 90 meteors P/H under ideal conditions during this peak. The meteors will appear anywhere in the sky so try different directions throughout the shower regardless of what the pundits say! Hope a lot of you guys will be "sick" on Monday the 12th of August! (at least in the morning hours) It sounds like Sunday evening and Monday morning will be tons of fun! I know I'll be active nonstop throughout the night and morning hours!

de Bernie, dk3xl/ab7iy. According to the Dutch Meteor Society (URL : A HREF—"http://www.pi.net/~terkuile/meteors/dms.htm") the expected position of the Perseids 1996 peaks will be August 12th, 1996 / 0500 UTC +/- 1h. An excellent program for calculating various paths, high speed morse code keying and more, is OH5IY's MS-Soft for PC Version 4.3, to be found at URLs : <ftp://ftp.ucsd.edu/hamradio/> or <ftp://ftp.funet.fi/pub/ham/vhf-work/>



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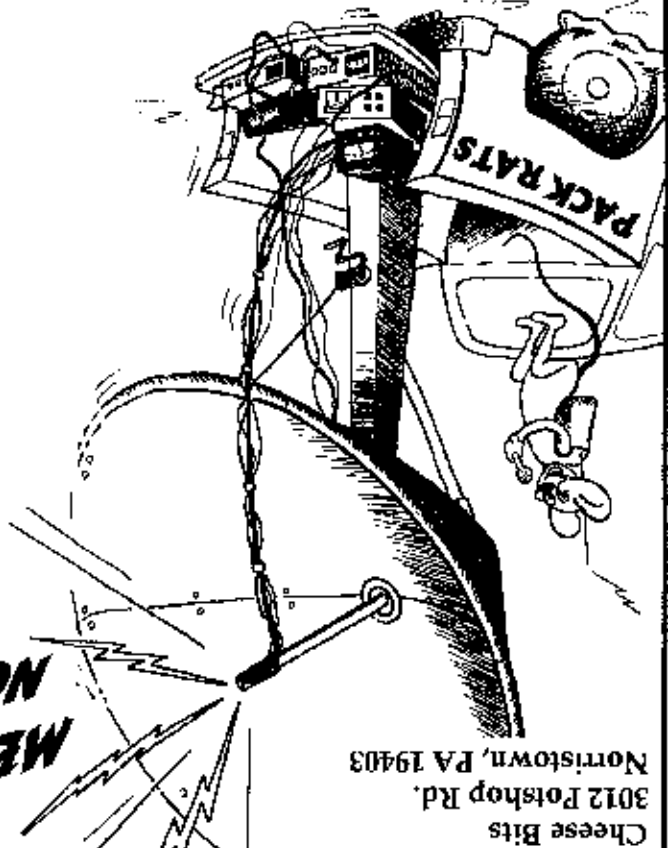
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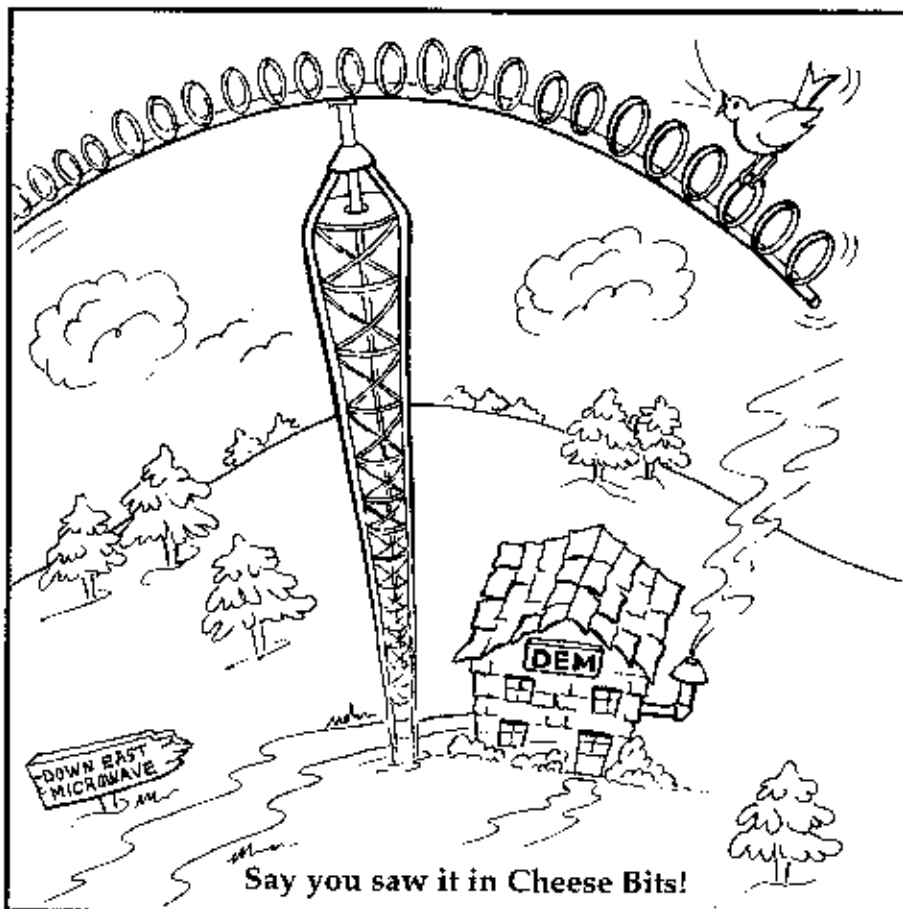
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