

THE VHF JOURNAL

Published by the Rochester VHF Group September 2000 <http://vhfgroup.rochesterny.org>
Club Memorial Call: W2UTH

**10G contest recap
by K2DH**

**Primestar
dishes on
10GHz
by W02P**

**GI JOE WITH KUNG-FU GRIP TAKES ON
1/2" HELIAX BELOW 500 MHz... AND WINS!**
an RVHFG exclusive report from N2GKM

**Perseids? What Perseids?
AU steals the show at 3AM
on 12 August 2000**

**RVHFG Meeting:
08SEP2000
7:30PM
111 Westfall Rd**

The VHF Journal Interview: Mr Aurora, Paul Kelley N1BUG

**Live in Ontario or Quebec? "The Canadian Amateur" magazine sez:
"The RVHFG is the VHF club to belong to"**

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VHFBILL



The Rochester VHF Group

Club memorial call: W2UTH

Club website @ <http://vhfgroup.rochesterny.org>

Welcome to the September edition RVHFG VHF Journal. *I dare you to read it all in one sitting!*

Well, for the second month in a row, the first thing I want to say is **WOW what an opening!** I am, of course, referring to the **AU of 12 Aug 2000**. There are lots of reports herein on it. Of course, you knew it was coming... it was about 30 days after the July 15 AU opening, and what goes around the sun, comes around the sun (but you knew that, didn't you). Well, it wasn't bad on the nite of the 11th either...

How about that **UHF contest?** And the **10G cumulative test?** Lots of activity in both from the north and northeast as far as I could tell. Where were you, eh? Don't forget the **SECOND** weekend of the **ARRL 10 GHz cumulative contest on the 16th and 17th of this month**. Updates on that by **K2DH, K2AXX & WO2P** in the Journal.

Chairman K2AXX takes control of the membership meetings this year, and he actually got started at a BOD meeting on 12 AUG00. We look forward to his monthly rants from now on.

Member Norm Krajkowski, **N2GKM** fills us in this month on GI JOE with Kung-FU Grip, a coaxial cable you need to get to know!

Our **JOURNAL INTERVIEW** returns with a bang thanx to a series of cyberspace communications with Mr. AU, **Paul Kelley N1BUG**.

The **Canadian Amateur** (QST of the Great White North) said in its JULY/AUGUST issue: "**If you live in Ontario or Quebec, The RVHFG IS THE CLUB TO BELONG TO.**" Gee- thanx! But we knew that :^ SO let's emphasize this again for those who haven't been paying attention: **This is YOUR International VHF Amateur Publication... and it IS what YOU make it.**

We're still looking for good monthly and occasional columns... don't say you can't write 'cuz we know better. 73 es DX2U, EH ...*de VE3IEY*

PS: The **Ω** takes on GI Joe with Kung Fu Grip!~~~~>



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Commentary and articles: via e-mail to editor VE3IEY: tantonr@kingston.net. Use standard ASCII text, Corel's Word Perfect or send as a regular e-mail message.

Photos and drawings: via e-mail, and can be sent in any format that is available (JPG, GIF and TIFF are the most common).

Assistant Editor, printer, membership & data-magician: N2KXS

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Jeff, KB2VGH sez:

"There is only *one* mailing list [you'll ever need...]

Rvhfg@vhfgroup.rochesterny.org

It is setup to broadcast to all RVHFG members

Photo, artistic, text credits and apologies (where not otherwise noted):

T. Richmond, Peter Aschwanden, 144 MHz prop logger, NEWS, SEVHFS reflector, Packrats Cheese Bits

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Your Andrew Cable Connection!

TOM WHITTED, WA8WZG

PORT CLINTON, OHIO - EN810M

50 MHZ - 24GHZ

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September Meeting Notice

08 SEP2000 @ 7:30 PM
111 Westfall Road
Monroe County Social Services Building
Be there or be square. Your choice.

Program: 10 GHz demo and pep rally!

Election of a new Vice Chairman is one of the things also on the slate. "Come or be nominated." (*In the words of the immortal Ed Gable, K2MP: "I hear a train..."*)

WEAK SIGNAL NEWS

... de N2JMH

Welcome to the start of another season for the RVHFG. Let's make it better than ever!

August brought the first round of the 10gig cumulative contest on the third weekend with good results being reported from club members and its many new 10gig transverters. K2AXX and K2DH operated from Mark's house under the club call **W2UTH** with 40 watts and a dish at 60 feet and it sounds like they had a real good time **with no mention of "rebel yell"** or temper tantrums from any involved.

Still on the 10gig topic, **K2AXX hosted a transverter tune-up clinic** at his QTH the week before the contest with the help of K2DH and his fine test equipment for those still needing help. If you still need work done to your system, help has been offered from these generous folks and I am sure they would oblige. They would like to see a few more stations on the air for round two of the contest coming up in September.

The UHF contest seemed to not attract a lot of involvement this year, especially from this area, but for those that did operate, it seemed conditions were not favorable. N2WVK and myself tried out my **new rover setup from 8 grids** with the intent of working the bugs out for the September contest. Everything worked well with us working NQ2O from all 8 grids through 1296 on ssb. Look for the "**Blue Whale Rover**" at the club meeting on the second Friday of September.

The September contest is the second weekend of the month. It is a **club competition** so be sure to write in the RVHFG as your club affiliation and also send a summary sheet to September@vhfgroup.rochester.org. Let's try to get on the air for what ever time you have available to you. You can also post your intentions to the club e-mail reflector or any other reflectors you subscribe to.

Time constraints are keeping this article short this month, read that as work. **If you have anything you want included in my monthly ramblings feel free to send them to me at n2jmh@arrl.net** Any help is appreciated!

CHAIRMAN'S RANT

...de K2AXX

What a tough act to follow!

First and foremost, I need to say thank you to Tim Stoffel, NS9E. Thank you for being chairman, and doing such a good job at it. Thanks for letting me help you bring the RVHFG into the 21st century. Above all, thanks for all your years of time and dedication to this organization. You won't be forgotten, just missed. (Visions of a bottlecap bouncing off your head at a meeting won't hurt, either!)

Moving forward. That's what this group is all about. Technically, organizationally, heck, even philosophically! Just think what happened last year alone:

The club activated the club callsign W2UTH as a multiop effort, thanks to N2KG and K1NXG letting us invade the hill in Prattsburg. We came in 3rd, but really showed that the RVHFG is still a force to be reckoned with in contesting!

We had some pretty dynamic presentations at the general meetings. VE3AX about the VE3ONT operation of a 150' dish on EME! WA8WZG about contesting from Ohio – and how he was able to win all 3 major VHF contests from there. K2OS and a primer on VHF operation. The list goes on.

Many of the members built their own 10GHz transverters! A number of construction sessions @ Adaptive Broadband allowed a slew of RVHFG members to discover a new band, rather inexpensively! BIG thanks to K2DH and AB for their time, location and equipment.

The Picnic – WOW. That was a good time, the first in a while. Was a pleasure to see all the folks come out and share company w/o radios (sort of...). The first test of some 10GHz transverters was done here, with resounding success.

W2UTH was once again activated for the **ARRL 10GHz Cumulative Contest**. Another big success. Not only did we make some COOL contacts (TNX WB2BYP), but those that did rove around learned that this band is awesome! Also made some discoveries about offset-fed dishes, wide-band FM contacts on 24GHz, and effective microwave locations.

Like I said, a tough act to follow. I'll do all that I can to make my term successful! **For instance, the first presentation of the year will be a demonstration of the Downeast Microwave 10GHz transverters members of the club have built.** These range from a simple transverter (like mine) to an elaborate roving setup. Some have added amplifiers, preamps and pretty neat dishes to their arsenal – which was proven on the first weekend of the ARRL 10GHz cumulative contest. The weekend after this meeting, we're doing it again! All questions will be answered. We hope this is going to be quite an interesting presentation – may just fire them up as well and see if we can work someone at a distance! Who knows!

As well, we're also sponsoring the 2nd VHF Academy, coming this November. W2EV is chairing and arranging this event, which promises to be THE most important event the RVHFG could provide.

PLEASE let everyone know about this event! This is designed for the relative newcomer to radio, especially VHF operating. **If you know someone who might be interested in this sort of forum, tell them to attend.** Details will be published in this issue. If you operate the local repeaters – let it be known this is happening. Just talk it up. These people may be future members!

I'm also planning on taking this show "on the road". I will be visiting other clubs as time permits, to hopefully talk about the RVHFG. If anyone is a member at other local clubs, please let them know I'd be happy to make a presentation about VHF in general, or some VHF-related topic. **Invite them to attend our meetings.**

In short, we've got a good start to this year already. Let's keep it rolling. If you know someone who might like this VHF stuff - bring them to the meetings. Former members, we need you back. If you can't make a meeting – tell us in print. Write an article for the Journal. Ask questions at the meetings, or online with the RVHFG email reflector. Contribute photos and articles to the website. There's something ANYONE can do, with just a little time.

We're all busy people these days. Believe me, I know. However – if you can, try to make some time for the RVHFG. I hope that we can offer you something enjoyable, educational and interesting. If nothing else, that's what we're here to do.

Recap of The First Weekend of The 10GHz and Up Cumulative Contest

by Dave Hallidy K2DH (k2dh@frontiernet.net)

Well, from my perspective, this was a blast! Mark K2AXX and I set up my transverter and antenna (40W, 2' dish) at Mark's place (don't EVER let anyone tell you that a hilltop is the place to be- Mark has an incredible horizon almost all the way around the compass, and it showed!).

We operated under the club call of W2UTH and made about 26 QSO's, virtually all of them with members of the RVHFG who had built their 10GHz transverters as part of the club project. No, we (W2UTH) didn't work any outstanding DX. No, none of the project builders who were on worked (or even heard, as far as I know) any outstanding DX. But, YES- we all had a great time, and we're all planning on doing it again for the second weekend of the contest in September.

You need to be there! If you built one of these rigs (and they REALLY do work as specified- just ask N2OPW, N2KXS, WO2P, AA2WV, W2DYY, or K2AXX), then why not join us in September and have some fun? We're going to try to change our strategy a bit so more of the "newbies" can maybe get a shot at some real DX, but you'd be surprised at how loud a 10mW rig with a horn antenna sounds at 40-60km (typically S9+!).

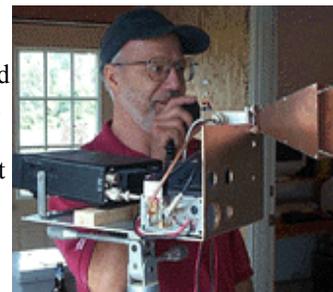


In addition to the 10GHz QSO's, Scott AA2WV had one of George Anderson's 24GHz WBFM rigs, and for the first time in my life I actually had QSO's on that band at distances greater than I could shout- we made it once at 44km, only using two horn antennas! These bands are great- the gear is so small and compact that it's feasible to travel almost anywhere to try a QSO, and the potential for enhancement (at least on 10GHz) is so great, that almost anything seems possible!



The RVHFG had it's best ever 10GHz Cumulative Contest (and it's only half over!) to date, and as long as everyone who participated (including WB2BYP, W2EV/W2AAA and anyone else I've forgotten) send in their logs after it's over, we'll once again be the group that gets noticed.

By the time you see this, the plans and announcement may have been made, but we're planning a second work party to help those who need it get ready for the second weekend of the contest. Plan on coming and making an appearance in the contest- even WBFM- we'll at least be able to work you from the W2UTH site!



222 ETC-

Larry Filby (K1LPS/Vermont) FN34wl, and wherever... [<k1lps@sover.net>](mailto:k1lps@sover.net)

Think you said you needed **FN44 on 222**. If so... I've taken recently to **running from Burke Mt.** again... although the last two outings were pretty much unsuccessful. In fact... in the UHF contest... I managed to blow up both my 222 AND 432 systems before I got to make one single contact! But... those are all put back together... and I am ready to go back again. W1AIM and I went up there a few weeks ago looking for 222 activity... and couldn't even manage to work VE3AX. (???) Discovered some "glitches" with the 222 portable system... and hopefully have those resolved now. **In any case... I'm going to go up there periodically this fall on Tuesday "activity" night... looking for contacts. Probably go with a bigger antenna this time too.**

Have refined my antenna/rotor system on the truck in the course of fitting out for mountaintop microwave operation. Used that yesterday on Mt. Washington (FN44IG) for a day of 10 Ghz contest activity. Tough day though. I think I've had enough for one weekend. We've got a crew going up there again today... but I think the weather is going to be "stinko" for them. I may do a little roving for them.

Anyway... if you're active... I'll let you know the next time I get up to Burke. They're paving the road to the top these days... and LONG overdue. (Last time... 1951!) Hopefully... they'll be done soon. The contacts the 15th of July brought me up to 48 grids worked on 222. (It's been a long, hard road for me.) I worked 10 contacts on 222 in that AU. The most 222 AU activity I've ever heard... and worked all that I heard. I'll be pushing hard for new grids on that band now... however I can get them.

EDITORS NOTE: I know a LOT of you out there need FN44 for your 222 VUCC. **ANYONE THAT CAN HELP OUT LARRY WITH HIS LAST TWO GRIDS FOR 222VUCC CAN E-MAIL HIM AT THE ADDRESS ABOVE.** I am considering a 222 activity night trip to FN05 this Oct or Nov- we can make a wild 2 new grids night of it.

GI JOE W/KUNG FU GRIPS

by Norm Krajkowski, N2GKM

No doubt you must be wondering “What the heck is GI Joe w/Kung Fu Grips?”, or at least thinking “What does GI Joe have to do with VHF weak signal work? . In this case it’s the nickname we’ve given to some surplus low loss coax cable that has been showing up at hamfests since 1997.



This cable assembly is better known to the Military as CG-3443/U NSN 5995-00-144-0228. The 20 lb. 80’ Coax Cable Assembly (shown above) is terminated with very large male connectors. The photo ON THE COVER OF THE SEPTEMBER VHF JOURNAL shows a close up of two of the connector ends, one with, and one without, the attached protective cap in place. I’m told the connectors are a member of the LQ family.



This photo shows one of the four wire-mesh

hoisting support grips installed along the length of the cable. These grips work on the same principle as “Chinese finger cuffs” which get tighter as tension is applied. The cable assembly’s nickname is derived from it’s military (GI Joe) origin and, like the original” 70’s action figure, it comes complete with “Kung Fu” grips!



The coax is 50 ohms and covered with a resilient black poly jacket that is slightly less than 3/4s of an inch in diameter and is of rather unique construction. This photo is a close up of a partially disassembled cable end alongside pieces of 1/2” and 7/8 hardline for comparison. The center conductor is comprised of copper plated steel and is 5/32s of an inch in diameter. The semi-rigid poly honeycomb dielectric is 17/32s of an inch in diameter. Instead of the standard braid, the shield is an impressive **two layers of woven tinned ribbon**. The ribbon can be seen protruding from the sides of the connector clamp in the photo.

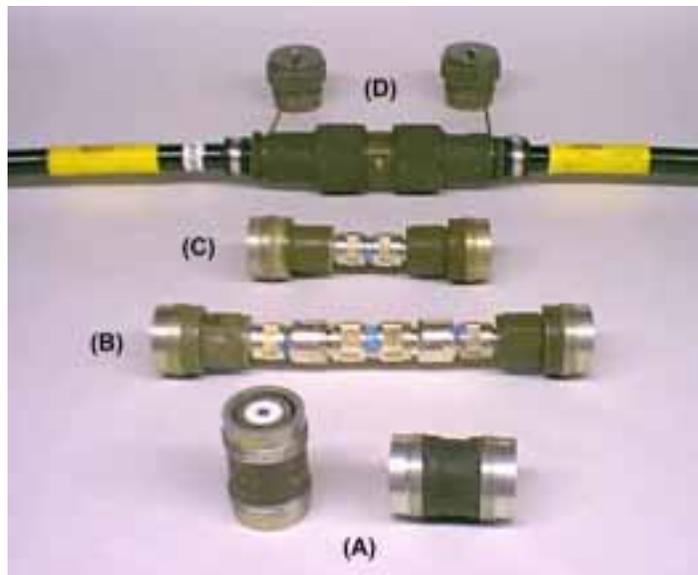
TABLE A
Approximate 80’ Coax Loss Comparison

COAX	RG213	9913	1/2”	LMR600	GIJoe	7/8”
50Mhz	1.05	0.55	0.38	0.40	0.30	0.21
144Mhz	1.84	1.28	0.68	0.72	0.60	0.36
222Mhz	2.56	1.56	1.28	0.95	0.96	0.48
432Mhz	3.95	2.28	1.84	1.40	1.28	0.64
1296Mhz	8.14	4.80	3.24	2.44	3.84	1.25

The loss of the cable, at popular VHF and above frequencies, is shown in Table A. The loss figures for 80 ft lengths of RG213, Belden 9913, Andrew LDF4-50A (1/2”), Times LMR-600 and Andrew LDF5-50A (7/8”) are included in the table for comparison. **GI-Joe” has less loss than 1/2 inch hardline or LMR-600 at frequencies below 500Mhz.** Because of the semi-solid dielectric the loss of “GI Joe” increases at a higher rate than foam dielectric cables for frequencies above 500mhz.

Of course the unique LQ connectors pose some problems. Your first impulse might be to cut off the large connectors and install something more common. Much research has been conducted but unfortunately has not yet identified an economical, suitable connector that could be used without significant modification.

Fortunately, most of the hamfest vendors provide four adapters with each cable assembly. The first type of adapter is a UG-1374/U which has a female LQ end which mates with the connector on the cable assembly and adapts to a female C connector. These are shown on the left of the photo below.



A friend of mine defines a C connector as a BNC connector on steroids that was designed to handle higher power. The adapter in the middle of the upper row of the photo is a UG-1375/U which is a bulkhead version of the LQ to C adapter. The other adapter supplied is a male C to female N which are similar to a UG-565A/U and is shown on the right of the photo. **These adapters make “GI-Joe” usable for most ham applications.**

One alternative we’ve used for connecting “GI-Joe” to our equipment and antennas is to make up pigtails with a C Male on one end and the appropriate PL-259 or N connector at the other in order to eliminate the use of the C to N adapter.

We have contest setups where we need to use several lengths of “GI-Joe” in tandem but found that using four adapters and an N Male-Male “barrel” was not reliable because movement can unintentionally disconnect a C connector. Eliminating the C to N adapters by using a C Male-Male coupler (UG-642 A/U) worked better but the C connectors still occasionally disconnected when moved. **Using a short jumper cable (either C or N Male to Male) seemed to work much better than the “hard N or C couplers as it relieved the stress on the C connection.**

“C” adapters, connectors and pigtail cables can be

found at hamfests but **be cautious as not all pigtail cables are of the same quality.**

The ideal, weatherproof and secure way to join two lengths of this cable is with a **UG-1373A/U barrel”**. This is another GI surplus item that is apparently intended for use with these cable assemblies. Two views of the UG-1373 Coupler are shown in the Photo on the left (A).

Also shown are the two other coupling arrangements mentioned, one comprised of the four adapters and a UG-57B/U Male N to N coupler (B) and another comprised of two LQ to C adapters and a UG-642A/U Male C to C coupler (C). A 1373 coupler in use joining two lengths of “GI-Joe” is shown at the top of the photo (D). It’s obvious that using a 1373 “Barrel” produces the most reliable and weatherproof coupling. The 1373s are in short supply thus keeping their price in the \$20-\$25 range, when you can find them.

Speaking of price, when we first came across these cable assemblies a few years back, Uncle Sam was still buying them for **\$1162.61 each**, without adapters. I guess the law of supply and demand has taken effect as He’s currently only paying **\$402.38 each** for them, without adapters.

The 80’ Cable Assemblies have become harder to find on the hamfest circuit. When you do find them they should be in the **\$50 - \$75 range**, including the four adapters. I’ve seen some 40’ assemblies offered with the LQ to C adapters and C to N pigtails rather than UG-564s with an asking price of **\$50**.

At these prices you get cable with loss characteristics that are better than those of either 1/2 inch hardline or LMR-600, at 500mhz and below, for about the cost of Belden 9913.

We’ve been using “GI-Joe” for several years in various VHF+ contests and field day applications and find them to be very rugged and reliable. All in all, “GI Joe w/ Kung Fu Grips” has been very, very good to us.

Watch the Journal for a future article about our latest find: “Super GI Joe”!!!

***Editors Note:** N2GKM is a member of the RVHFG, a founding member of the Hudson Watershed VHF Society (K2TVI), a longtime member of the Telephone Pioneers, and retired from AT&T where he was heavily involved in the establishment of the company’s 2,4,6 and 11 GHz overland link programs. He lives in North White Plains, NY (FN31).*

Primestar dish sweet spot

Fred, WO2P (FN13hg)

Attached is a picture of the result of our work with the Primestar dishes this past Sunday. The resultant 9 degree down angle seemed to do the trick. Per Mark my 10mw signal went from S1 (at 29 degrees) to a S9+10 (at 9 degrees).



We will be modifying the mount accordingly, including an elevation adjustment for fine tuning. In September we'll be using 17db horns for local contacts, easy to set up and break down, and reserve the dish for possible DX (wishful thinking perhaps). N2KXS and I will be out in September unless the snow is over 5 feet deep... ;^) I also hope to have my Qualcomm amp repaired by then..

Please note how Paul N2OPW (above Right) is attempting use my station to make a contact (caught red handed with the MIC in his hand)

Bumper sticker:

Out of my mind...
Back in 5 minutes.

AUGUST 12 AU REPORT

... de Peter, VE3AX FN03

Quite the day for sure! After hearing little last night on 144.200, packed it in early and went to bed. On the air again at 1000 Z and band was alive with aurora. No sigs on 222 Mhz but was watching closely - finally came alive there too. Interestingly the 1st signal heard was K5CM (Okla) calling K2TXB. I did not work Connie there but caught him back on 144 Mhz with good sigs. Another try at 222 Mhz failed.

Around 1100Z though 222 Mhz got really hot. Worked K5UR in EM35 after K1TEO did, then was called by N0LL in EM09 (Ks). Worked Larry easily, then W5RCI in EM44 (Miss) a few minutes later. KM0T in EN13, and K4QI in FM06 were other notables. Nice to see 222 Mhz activity from all over, including Vermont! (Chip!!!)

Perseids seemed to be a bust. Ran only one sked with W0AH in Colorado - he heard me, but Doug had to resort to a smaller brick and I did not hear anything other than a ping at 2162 km. We will try again! Worked K5CM, like everyone else, on 144.200. Connie, as usual, great signal!

Here's a list of stations worked on 222 Mhz au on Saturday a.m., Aug. 12.

- 1031 K4ZOO FM08
- 1042 KM0T EN13
- 1046 N9LR EN50
- 1049 K3AX FN20
- 1051 W1AIM FN34
- 1055 K3SIW EN52
- 1100 K1TEO FN31
- 1101 K5UR EM35 Arkansas
- 1102 N0LL EM09 Kansas
- 1106 W5RCI EM44 Miss
- 1109 K9DTB EM89
- 1113 K4QI FM06 N. Carolina

On 144 Mhz au worked the following:

- 0409 W4MYA FM07
- 0955 AA4H EM86
- 1004 KA0PQW EN33
- 1023 WC9C EM69
- 1027 K5CM EM25 Okla
- 1035 KM0T EN13
- 1126 K0SM EN10
- 1129 AE0G EN10
- 1130 WB5YWI EM25
- 1132 W5RCI EM44 Miss
- 1137 K3CFY FN00
- 1138 K3XF FN10
- 1140 W3ZZ FM19
- 1142 N2BJ EN61
- 1143 W8CAR EN81
- 1145 W0LER EN35
- 1147 K0MQS EN31
- 1150 N0SM EN30
- 1152 N8BJQ EN80
- 1153 WA8CLT EN80
- 1155 N9LR EN50
- 1244 N9CIQ EN44
- 1250 W8WN EM77
- 1343 W9ZIH EN51
- 1345 WA9KRT EN61
- 1404 AA0AW EN36

(Cont next page)

I ran one MS sked with W0AH in DM78lx at 1339 miles (2162 km). He heard calls from me but all I got was a ping. Turns out Doug's borrowed amp died on the 11th and he had to resort to his 120 watt brick so was relatively low powered. Also worked W5RCI on 144 Mhz. NOLL was running 120 watts and an 8 ft yagi! His 1st FN02 on 222, but he also worked Russ, K2TXB, a few minutes later. Only MS qso made this Perseids was a random with K5CM at 1237 on the 12th on 144.200. I didn't try very hard though.

HOW HOT WAS IT?

It was so hot that...

The AU of 12 August 2000:
an excerpt from the 144 MHz prop logger accessible from
YOUR computer on the WWW.

Aug12 11:29 **K0MQS en31>fn43 Hrd all night, now pure T9 . QRZ West 144.213 WAIT**

Aug12 11:29 K4TAX still hearing AU in EM75

Aug12 11:29 **hearing K5CM .200 with ant. STUCK to the East de N0VSB DM79 CO**

Aug12 11:26 km0t en13 .. k7yvz dn13 au

Aug12 11:26 K9MRI still 57A into DM79 on .216 - W0ETT

Aug12 11:21 W6OAL 41A IN EM69 DE WC9C)

Aug12 11:19 and even visible for first time in over 10 yrs..

Aug12 11:17 **giant AU finally into calif...after all gone to bed hi K6AAW**

Aug12 11:16 Please spot the East Coaster if the happen in again, probably not de N0VSB DM79

Aug12 11:09 K2TXB aurora sigs only in abt 5 min, gone now. Looking east - W0ETT DM79

Aug12 11:09 **Good AU into MS from New England and Midwest de K5YPV**

Aug12 11:07 **Everyone pse spread out. HEARING EAST COAST IN qrm DE w0ah dm78**

Aug12 10:58 Hearing K2TXB 53A on 202.4 - W0ETT DM79

Aug12 10:56 hearing K2TXB .200 de N0VSB DM79 CO

Aug12 10:53 K7TM DE WA7BJU CN85 (r205-satrr.chatusa.com)

Aug12 10:52 Hrg K5CM EM 25 on .198 sigs 55A - W0ETT DM79

Aug12 10:48 **Beautiful visible AU over CN88. Band is wall to wall. DE VE7DXG**

Aug12 10:46 K9MRI en79 sigs 59a on .217 - W0ETT DM79

Aug12 10:42 **k2txb,ve3ax,wa2fgk,ac3a and other on Au de k5cm em25**

Aug12 10:37 W7HAH on .214 still pounding in on Aurora s9 - W0ETT

Aug12 10:34 k7nd cn87 59a into dn30 de nj7a on 222.1

Aug12 10:29 **thought I head N6YM on scatter while amp is warming up de N0VSB DM79 CO**

Aug12 10:21 K2TXB is 30db over S-9 right now in EM69 de WC9C

Aug12 10:21 Heard VE7DXG 55A on .211 but couldn't raise him - W0ETT

Aug12 10:20 **great visual of AU and METEORS in NW IA de km0t en13**

Aug12 10:19 de nj0m, en34, visual AU back, so is SW states.

Aug12 10:12 W7HAH DN26 aurora sig building in Colorado, now 59+20db on 144.211 - W0ETT DM79

Aug12 10:05 worked n5jvhv for a new state NM de km0t en13 - pretty good burn.

Aug12 10:05 K0GU: beam heading was just about 345 degrees, just west of north. GL - Ken W0ETT

Aug12 10:04 km0t de n5jvhv tks that was easy. N0UK are U ready? (

Aug12 10:04 KA0PQW en33 on .216 sigs 57A - W0ETT DM79

Aug12 09:58 Wkd W7HAH DN26 big 59+A sig on 144.208.5 - W0ETT DM79

Aug12 09:53 **K5UR 222.100 AU)**

Aug12 09:50 km0t on 222.1 now into DN30 de NJ7A

Aug12 09:48 ka0pqw en33 144.2 cw into em31 louisiana on tropo (i think) de k5mq

Aug12 09:48 Wkd VE7SL 55A on .200. First VE7 on 2m! - W0ETT DM79

Aug12 09:45 Heard VE7SL on aurora 55A .200 and wkd KM0T EN13 59A - W0ETT DM79

Aug12 09:45 de nj7a 2m Au still, also qrv on 222.1. Dave DN30

Aug12 09:37 N0KE W0TM DM69 NJ7A DN30 just wrkd on Au...VE7SL(CN88) CQ 144.2 CW

Aug12 09:35 Finally worked W7HAH on 144.190 (and HE CALLED ME!) de N0UK/EN34

Aug12 09:32 Au in & out now. Wkd south to FM16. W8WN, EM77

Aug12 09:31 k2txb still LOUD on AU 144.196 de k4sso/em48

Aug12 09:26 Wkd K0MQS en31 59A (144.200) & N0UK en34 57A (144.195). Good Au sigs - W0ETT DM79

Aug12 09:21 NJ0M is 20db over S-9 here in EM69 off AU de WC9C

Aug12 09:17 NJ7A de N0KE DM69 CU 222.100

Aug12 09:12 WB7QBS AU DE WA7BJU CN85 .200

Aug12 09:10 hearing w6oal dm79 on ssb au on 144.180 de k5mq em31

Aug12 09:07 VA7DX DE WA7BJU CN85 .200

Aug12 09:07 de nj0m, en34, w4mya AU-E

Aug12 09:06 heard en10 and another em48 on au into louisiana. no qso. de k5mq em31

Aug12 09:05 de nj0m, **en34, remember this night! AFIT AU-E**

Aug12 09:05 **au is lighting up the entire sky in western ny, lots of meteors too de ac3a**

Aug12 09:02 2m Au into DN30. also qrv on 222.1 de NJ7A

Aug12 09:01 de ka0ggi - UNBELIEVABLE - tropo/AU/MS into EM48 - i'll sleep later !

Aug12 09:01 2m Au into DN30. also qrv on 222.1 de NJ7A

Aug12 08:54 k0mq s en31 55a au into em26 OK de k5ttt

Aug12 08:54 **unbelievable display of overhead AU here in NW Iowa de km0t en13**

Aug12 08:53 n0pb em39 55a au 144.212 into em31 louisiana de k5mq

Aug12 08:50 kw0a em48 55a au into em31 louisiana de k5mq.....what a night!

Aug12 08:43 yehaa - worked nj7a cw AU on 222 - DN30 de km0t

Aug12 08:38 k7ca loud in here also...eh, worked him last time....dek0sm/en10

Aug12 08:38 calling cw Au west on 144.185 de km0t en13

Aug12 08:36 **holy crap!! just worked k7ca in DM37 on CW AU 55A de km0t en13 - pointed 305 degrees**

Aug12 08:35 **Glow on N. horizon with visual meteors....2m ain't bad either! de k0sm/en10**

Aug12 08:34 Em48 now into FM16 de KN4SM on r184

Aug12 08:32 **de nj0m, en34, visual AU overhead and about 10 deg south of straight-up**

Aug12 08:31 just worked n0ke dm69 on 222 AU wow! de km0t

Aug12 08:13 **what a zoo, au, 400 mile+ tropo , and meteor scatter all at once!** de kb0pyo

Aug12 08:10 Hrd km0t into Fm16 Au de KN4SM

Aug12 08:08 **WA2FGK/FN21 CQ AU INTO EN10RT LOUD!!!de k0sm/en10**

Aug12 08:06 n0pb em39 tropo into em31 de k5mq

Aug12 08:04 **AU up/down the band including beacons now de N0VSB DM79 CO**

Aug12 08:03 worked N0KE DM69 on cw AU de km0t en13 -

Aug12 08:03 Stil AU out there, w7xu loud 59a 144210. de k0sm/en10

Aug12 08:03 hearing K0GU 90 miles North on .242 sched AU de N0VSB

(so where was the editor of the RVHFG Journal? On his way to an RVHFG BOD meeting in Rochester... note from the times that this opening occurred 0800-1200UTC. - 4am to 8am EDT!)

The VHF JOURNAL INTERVIEW: PAUL KELLEY, N1BUG

A rambling conversation via cyberspace with the keeper of the N1BUG WWW Aurora Page (<http://www.mint.net/~aumon/aufr.html>) on where the idea for his pet project came from, changes he'd like to see in the future of amateur radio, and what we can expect to see in the future on predicting radio aurora.

How did you get the idea for the Au Monitor? or "How was it born?"

The answer is I was looking for a way to keep myself better informed about possible aurora conditions. A minimal version of the Au Monitor existed only on my hard drive for several months and I often had it running in the background as I did other things. I mentioned it in an EMAIL to a couple of good friends who expressed interest in seeing it, so I cleaned it up a bit and put it on the web site. One thing led to another, stuff got added, the whole thing got reworked, word leaked out, and hits started going up... and here we are. In other words, it was an accident!

What initially piqued your interest in AU?

Near the end of November 1985 I heard a faint whispery CW signal one afternoon. That was W1LKH FN41, my best DX so far on 2 meters. There were several other aurora contacts that evening, best DX being FM19. I think I was hooked on aurora from that first encounter. I was very excited about the DX I had worked so easily! During the years that followed, aurora was responsible for much of the DX I worked on VHF.

From my early involvement with aurora sprang an interest in tracking solar and geomagnetic activity. For several years I kept charts of the WWV numbers and made daily sunspot drawings with my crude projection system. That was long before the days of real-time data via the Internet. I was always looking for signs of a possible forthcoming aurora. I wanted more DX and I was fascinated by the solar origins of aurora.

Do you get a lot of feedback from users of your AU watch website?

Sometimes. It comes in spurts. During and just after a big aurora there is a surge in e-mail. Some from hams, but much of it from folks wanting to see the aurora.

How many "hits" do you get in a day or week or month these days?

As of early July it was running about 8000 hits per month. I experienced problems with my hit counter during the big aurora of 15 July and haven't been counting hits since then. I never



expected that kind of traffic to the page. It's an amazement to me!

Tell us about your first VHF QSO.

I suppose you mean non-FM. I had bought a 2 meter all mode rig at a hamfest in August 1985. The first SSB signal I heard (and worked) was AD1G in FN66 during the contest that September. I had 100 watts but only a quarter wave ground plane and was amazed to hear a signal from so far away.

Did you have a VHF "Elmer"?

No, not really. I had some interest in VHF because of things I had read in magazines and so on, but there weren't many VHFers in my area. I did talk to Joe K1RQG about VHF a few times prior to buying that first 2m all mode rig, but I really didn't have a clue what it was all about.

Say something about your involvement and interest in VHF HSCW / HSMS.

There's not much to tell there! I had an intense interest in it several years ago after Keith G4FUF and Ian G4EZP (both of whom I had worked on EME) visited my QTH. Years later when it finally got started here in North America the prevailing attitudes toward speed and related matters dampened my enthusiasm and I haven't made much of an effort toward getting on the mode.

How about your most memorable VHF QSO, or best DX (or both)

Oh my gosh! When you say that a dozen QSOs come to mind immediately. It's hard to pick one! There was that incredible night in March 1989 when aurora suddenly became intense

sporadic E and the W8/W9 stations were literally pinning the S meter here. I finally worked Dale W0IZ (EN42) who I had been trying to work for a couple of years. That was certainly memorable! So was the only double hop Es QSO I ever made on 2 meters, with WB4MJE (EL94) in July 1989. At 1575 miles that is my best terrestrial DX on 2 meters. Or the QSO with WB4EFZ (EM94) also in July 1989. What's memorable about that is he was using an ICOM 202 portable rig... 2 watts with the built in telescoping whip antenna and he was easily S9. 1989 was a magic year for VHF and many QSOs from that year are permanently burned into my brain.

Of course if you want to talk about EME that's a whole new ball of wax. Certainly the first ever EME QSO... and some of the QSOs with single yagi/brick stations I will never forget, as well as a few contacts with DXpeditions that I really had to work for. Time will tell, I suppose, but very likely a recent EME QSO may live on to be the most exciting, if not most memorable, moment in ham radio for me.

If you could change one thing about ham radio, it would be:

I have thought about it a lot lately. I don't know how to change the one thing I would most like to change about ham radio. Perhaps it isn't possible. I would like to see more hams take the time to learn CW and become proficient at it. I don't want to use CW as a barrier to keep people out of this great hobby and I don't want to force it on everyone, but I can't help wondering how many non-CW operators would come to enjoy ham radio more by taking up the mode. And that's especially true when it comes to VHF.

Let me relate a little of my own experience. I had to learn CW at 13 and later 20 words per minute to get the license I wanted. I hated CW and couldn't imagine that I would ever use it on the air. I struggled with it for many months and finally got it down.

Once on the air, I found that many of my greatest ham radio moments centered around CW. I was shocked! It is now my favorite mode and so much of what I have accomplished wouldn't have been possible

without it. So I have to wonder when someone says they hate CW and have no use for it... I'm afraid there may be a lot of hams missing out on some great fun. I shudder to think that had things been a little different, I could have been one of them!

What rule change would you make to the ARRL VHF and up contests?

Well, I'm not a "real contester". That is, I enjoy the fun of working contests and it's a great opportunity to exercise the equipment but I'm not into it competitively. It seems that many who go to the trouble to put rare grids on for us want to return to the old rover rules, so I'd support that.

Any good stories from the recent Perseids / Au event 11- 13AUG?
Sorry to disappoint you. I was so tired I just let the whole thing slip by this year. Looks like I missed some great aurora, darn it!

What do you do out in the "real world?" (I mean, FN55 is WAY up there... what could anyone do to support themselves other than logging up there? :^)

There's a world outside of cyberspace? Just kidding! :) I'm disabled, but I manage to keep busy what with rebuilding the old house I moved into last year plus the Internet and radio projects.

What was the last piece of ham gear that you acquired, and what do you think will be the next one?

The last acquisition was a 432 MHz transverter, so I'm at last up and running on that band! And a little excited about it, too! The next I suppose has to be a 2 meter FM rig. I'm spending too much time repairing my aging HT lately. You see, I also maintain the only repeater serving Piscataquis County, so I feel the need to maintain some sort of FM capability on that band. After that... who knows?

What's going on in the future of the N1BUG Aurora Page?

In the short term I must decide whether to keep the STD Visible Aurora plot. It was a really nice resource in the beginning but they made some changes that seem to make it less useful (for our purposes).

I do have some long term plans to expand the Aurora Monitor. As you know, all the charts and stuff comes from other sites now. I've always wanted to go one step further. This winter, when I have more time, I will be trying out some experimental data products of my own. Some things won't be possible over a dial-up connection but let's see what I can do.

The page is starting to feel a little stale to me. It needs something. Hopefully some new stuff will help when I find time to do the programming for it. I don't think I mentioned that, but the new stuff I have in mind involves some programming (as in writing software) in addition to some HTML and Javascript tweaks. That's why I expect it to take a little time.

2000 RVHFG FALL ALL-BAND SPRINTS ANNOUNCEMENT

... de Jim Howard <n2jmh@arrl.net>

OBJECT: 1) To work as many stations as possible on our VHF allocations in a 5 hour period.

2) To have fun!

DATE: Thursday, November 09, 2000

TIME: 7 PM to Midnight local time. Stations within 50 miles of a time zone boundary may adjust their operating time to that of the adjacent time zone if they wish. You may operate all 5 hours of the event.

BANDS: All above 50 MHz, including laser.

CLASSES: Single-op, all band only. While there is no rover class per se, a station may change grids, and submit a separate log for each grid operated from.

SCORING: 1 point for contacts on 6 and 2 meters.

2 points for contacts on 222 and 432 MHz.

4 points for contacts on 902 and 1296 MHz.

8 points for all bands 2304 MHz and above.

Multipliers are 4 digit maidenhead grid squares.
(January VHF sweepstakes scoring.)

OTHER RULES: All other rules are the usual rules for VHF contests (Note to those outside the US: use ARRL January VHF SS rules for all classes worldwide).

AWARDS: Certificates will be issued to the top 5 finishers at the National level. We are open to alternative award ideas for next year!

REPORTING: Logs are due three weeks after the contest date.

Electronic: Submit log and a suitable summary sheet to:
vhf@vhfgroup.rochesterny.org

Log should be in ARRL standard file format.

Mail: Log and suitable summary sheet to:
Rochester VHF Group, P.O. Box 92122, Rochester, NY 14692

Elmira, Hamfest

Saturday, September 30, 2000

6AM-3PM

Chemung County Fairgrounds, Horseheads, NY
(unfortunately this conflicts with Microwave Update 2000, but if you're not going to Philly, it's amazing the stuff that comes out of the hills on this one!)

Bumper sticker:

I Used to have a handle on
life, but it broke.

MICROWAVE UPDATE 2K

IS ONLY 3 WEEKS AWAY!

Microwave Update 2000 will be held on **29 through 30 September 2000** at the Holiday Inn Select, Bucks County just north of Philadelphia, PA.

This year, Microwave Update will be hosted by the Mt. Airy VHF Radio Club, Inc. ("The Pack Rats"). The Holiday Inn Select, Bucks County will be providing accommodations for the event. This is a 215 room full service hotel with a restaurant, lounge, indoor pool, fitness room, etc. It is centrally located between the Bucks County countryside and historic Philadelphia. We will have full use of the conference center Friday and Saturday. Two smaller meeting rooms will be available for the evening flea market(s).

Call for Papers: Anyone wishing to present and/or submit papers equipment design, construction, and propagation at frequencies above 900 MHz for inclusion in the printed copy of the proceedings should contact John Sortor, Conference Chairman at JohnKB3XG@aol.com. The deadline for papers is Monday, August 7, 2000.

For those of you that are unfamiliar, the Pack Rats are a group of VHF and Above enthusiasts with a 44 year history. The club was started by a small group from Philadelphia with the sole purpose of promoting VHF activity. The club has sponsored one of the area's best hamfests (Hamarama) for the past 28 years and has hosted the Mid Atlantic States VHF Conference since 1975. The Packrats provide beacons on 10 VHF/Microwave bands from 50 MHz through 10 GHz and are active in all VHF contests.

Room rates will be in the low to mid \$80's. There is no additional charge for double occupancy. We have blocked out 100 rooms under the key code "Microwave Update" which will be held for us until September 7th. This might sound like a lot of rooms but don't wait until the last minute to make your reservation. This is a busy area.

Holiday Inn Select, Bucks County
4700 Street Road, Trevoise, PA 19053
(215) 364-2000 or (800) HOLIDAY
www.basshotels.com/holiday-inn

In addition to ham activities we are tentatively planning some extra curricular activities for stranded ham family members. Most attractions can be reached in less than 1 hour. A list of activities will be included with the registration package to see who might be interested in what:

Atlantic City Casino bus trips; Franklin Mills Outlet Mall; Liberty Bell & Old Philadelphia

NJ State Aquarium; Philadelphia Park Race Track; Sesame Place; Valley Forge National Park

Of course it wouldn't be Microwave Update without the surplus tour. There are more new and surplus houses within a 50 mile radius around the Holiday Inn than you will be able to visit in one day. I said new equipment because Down East Microwave Factory Tours will be on the list. There will be evening flea markets at the hotel and don't forget Hamarama on Sunday. Please add flashlights to your packing list. The doors to the Pack Rat hamfest (Hamarama) open Sunday at 8 am but Hamarama has always been known for the "Flashlight Shoppers."

Noise Figure testing will be provided as well as an equipment tune-up clinic.

Advance Registration is \$40.00 with forms available at the web site below. Send registration to Microwave Update, PO Box 682, Hatboro, PA 19040. Hamarama and Dinner tickets will be available at the door.

For more information contact JohnKB3XG@aol.com and visit the Packrats web page for the latest news on Microwave Update 2000 at:

http://www.ij.net/packrats/MUD_2000/mud.html

From the Treasurer: By Paul N2OPW August 22, 2000

CHECKING ACCOUNT

Previous Balance..... \$821.30

Income:

Dues collected..... 57.00

50/50 profits..... 00.00

Mug Sales..... 00.00

Expenses:

Newsletter Supplies..... -00.00

Picnic expenses..... -198.30

Current Balance..... \$680.00

SAVINGS ACCOUNT

Previous Balance.....\$1258.07

Income:

Interest:..... 4.72

Expenses:..... 0.00

Current Balance.....\$1262.79

Balance on Hand:

Checking..... 680.00

Savings..... 1,262.79

Total..... \$ 1,942.79

NOTICE.....DUES FOR THE NEXT YEAR ARE NOW DUE! Pay at the September 8th meeting.

Bumper sticker:

**I'M NOT A COMPL T OT,
SOME PARTS R M SS .**

THE VHF JOURNAL ADVISOR

While reading *VHF Journal Advisor* responses to questions about on-air-etiquette, I was surprised at the way you use the terms "QSO" and "contact". I object! The use of the term QSO should indicate an exchange of friendship and fraternity; But your use of it to indicate a "RR FN13 FN13 73 73" type exchange degrades the readers and writers' professionalism. It makes the *Advisor* writer out to be a cheap "grid collector" to expect a QSL for a contact like this. It seems that you don't know the difference between a real QSO and a mere contact.

HMH, LA

The Advisor is well aware of the difference. You contact when you're sweaty; you have a QSO after you've had a shower. You contact in a cheap motel room; you have QSO's in your shack. You contact on a hardwood floor; you QSO on carpeting. You contact on a swing set; you have QSO's on a porch. You contact in the woods; you have QSO's on the beach. Or vice versa on any of those, depending on your mood. The difference between contacts and QSO's is between your ears, and everyone's Ham life should have a little of both.



K2DH's 40w 10G rig

Every now and then, I get a letter from a friend of mine in the merchant marine. The last one came from FN31 and contained reference to something called the Dancing Rover Trick. He assumed I knew what it was, and I don't. Can you give me the details?

Sure. Rover #1 sets up in a grid near the corner of 4 grids, and Rover #2 works them from four other grids (the one that Rover #1 is in included). Then Rover #1 goes to another grid, maybe only a few hundred yards away, and the pattern begins anew. When Rover one has been in all four grids, Then the pair goes to another 4-grid intersection and begins anew.

It's not as exciting as being spun in a basket suspended from the ceiling, but it does rack up

contacts and points, especially when on multiple microwave bands. It can skew club competition contest results, and it was utilized to excess by some members of the Hampden County Radio Club (CT) in the late 1980's.

This "grid circling" was outlawed by The League after that, and at that time they also changed a bunch of other rover rules... This is where the term "old" or "classic" rover came into being. So we can pretty much trace this entire controversy in rover scoring to that incident, which and denied another deserving Group it's chance at an unlimited victory that year. Coincidentally, The Hampden County Radio Club (CT) has never again entered the ARRL VHF contests club competition.

So kids- don't try this at home... or on the road! You never know what the consequences might be! The fate of the free world may rest on YOUR shoulders!

Got a question? Made any good ones up lately? We have an answer, even if we have to swipe it from somewhere else!

send yours to The VHF Journal Advisor at:

tantonr@kingston.net

(This months column comes in part with apologies to HMH publishing ;^).



THE ROCHESTER VHF GROUP

INDIVIDUAL \$10 ARRL MEMBER Radio Amateurs of Canada Member
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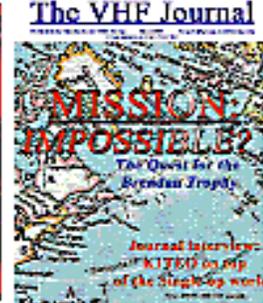
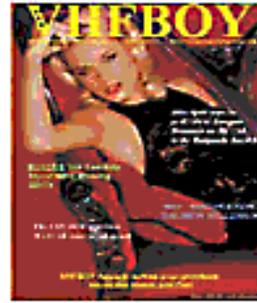
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