

# *The VHF Journal*

Published by The Rochester VHF Group

March 2001

<http://vhfgroup.rochesterny.org>

Club Memorial Call: W2UTH

*April Awards Banquet Info*

**AURORA  
MECHANICS  
& SUN FLIPS**

*N2PA  
On the  
Moon*



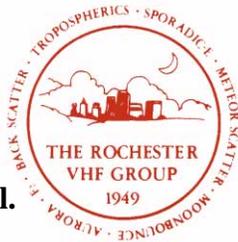
**5 GHz, here we come!**

**Central States & MUD 2001 Announcements**

**NEW EN-93  
BEACON**

**CABRILLO! CABRILLO! CABRILLO!  
ARRIBA! ARRIBA! ON DELAY!**

# VHFBILL



Welcome to the March 2001  
edition of the RVHFG VHF Journal.

Well, here we are- The January Contest well behind us- the Spring Sprints approaching and the June Contest only about 12 weeks away. Are you building furiously? How about building happily?

After all- that's what it's all about, "**Advancing the radio art**" as it sez in the FCC regs. How is it going at your place? Is the "radio art" advancing or retreating? If the latter, is it a tactical retreat, so you can fight again another day? What do you need to recharge your batteries or interest in everyday operating?

How about your fellow VHF Group members? To paraphrase what Chairman K2AXX had posted on the website: "you may have known the folks in the Group for decades, but what do you really know about them? what are their other interests, hobbies, or what do they do at work? The better you know what drives your co-members, the better you can assist them, and the better they can assist you. And more importantly- the more fun you ALL will have as a result of it.

Remember those meeings each Saturday at **Don and Bob's Restaurant in Brighton** at Noon by the Old Timers of Rara and Rrra (sometimes known as the "liars club")? Well, some of those guys were also in the Masons together, the Grange, whatever. They did charitable work and public service together. They worked and chewed the fat together.

In this spirit of "getting to know you," let me say this: **This Edition of the JOURNAL composed while listening to: Hole: "Celebrity Skin"; The Cure: "Wish"; "Gone in 60 Seconds" Soundtrack; Hits Post-M odern Syndrome: "Fall Classic" and drinking: Chambly "Maudite"**. It took 15 hours interspersed with a trip to Ikea in Ottawa, watching the 2-year old for about 8 hours, repairing crayons, a trip to the dump, & installing trim on the windows of the computer room / shack. I got three service inquiries related to work (electrician) while composing the Journal. When condix are right I love getting WBER 90.5 in Rochester. So what makes me tick? It's tough to say.

I know that Judy, N2KXS, sings in a locally-renowned choir that will be touring England this summer, and sails on the lake in the summer. Fred WO2P Homebrews BEER and actually has time to do some sailing too. How about you? Why do I care? Wait til next month! You'll see! Oh- and the Quote of the month: "**Life is not a dress rehearsal**"  
*73 es DX 2U, eh! ...de VE3IEY*

**To Subscribe:** Send your address, call, e-mail address and \$10 US funds (or \$15 CDN funds) to: The Rochester VHF Group, PO Box 92122, Rochester, NY, 14692. You may elect WEB or MAIL delivery for the same price. You will be notified the very day it is available for download. If you elect delivery by mail, copies are in Black and White- sorry!

**-Commentary and articles:** via e-mail to editor VE3IEY: [tantonr@kingston.net](mailto:tantonr@kingston.net).  
Use standard ASCII text, Corel's Word Perfect or send as regular e-mail.  
**-Photos and drawings:** via e-mail, and can be sent in any format that is available (JPG, GIF and TIFF are most common).  
**-Assistant Editor, Printer, Membership & Data-Magician:** Judy, N2KXS  
**-Production Czar and Supreme Downloader of the Word:** Fred, WO2P  
**-Advertising space** is now available in the Journal. Contact the editor for One thru Twelve month rates. Layout services are free of charge.  
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## The Rochester VHF Group

\*Club memorial call: W2UTH\*

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



Our "Who's Who":

### Officers:

Chairman: K2AXX Mark Hoffman  
(716) 243-5606 [k2axx@arrl.net](mailto:k2axx@arrl.net)  
Vice Chairman: W2DYY, Russ Schroder  
[w2dyy@rochester.rr.com](mailto:w2dyy@rochester.rr.com)  
Secretary: N2JMH Jim Howard  
(716) 637-4554 [n2jmh@arrl.net](mailto:n2jmh@arrl.net)  
Treasurer: N2OPW Paul Meyers  
(716) 425-1301 [N2OPW@qsl.net](mailto:N2OPW@qsl.net)  
Director (Even year): KB2VGH Jeff Luce  
(716) 424-8406 [kb2vgh@amsat.org](mailto:kb2vgh@amsat.org)  
Director (Odd year): K2DH Dave Hallidy  
(716) 728-9517 [k2dh@frontiernet.net](mailto:k2dh@frontiernet.net)  
Past Chairman: NS9E Tim Stoffel  
(775) 972-9470 [lionlamb@servtech.com](mailto:lionlamb@servtech.com)

### Appointees:

Contest Chairman: N2JMH Jim Howard  
(716) 637-4554 [n2jmh@arrl.net](mailto:n2jmh@arrl.net)  
Awards manager: N2JMH Jim Howard (see above)  
Club memorial Call Trustee: N2WK Wayne King  
[N2WK@arrl.net](mailto:N2WK@arrl.net)  
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Membership Manager: N2KXS (see above)  
Internet Webmaster: K2AXX  
Mailing list Majordomo in charge: KB2VGH (see above)



**Jeff, KB2VGH sez:** "There is only \*one\* mailing list [you'll ever need...]" [Rvhfg@vhfgroup.rochesterny.org](mailto:Rvhfg@vhfgroup.rochesterny.org)  
It is setup to broadcast to all RVHFG members

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The World's Image Capital**

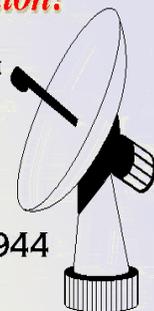
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E-MAIL: [WA8WZG@WA8WZG.COM](mailto:WA8WZG@WA8WZG.COM)



**March 2001  
Meeting Notice**

**DATE: 09 MAR 01 7:30 PM**

**PLACE: 111 Westfall Road, Rochester, NY**

**Subject:** Nominations- be there or be elected in absentia to the nominating committee .. a fate worse than being a regular officer, I assure you! (I hear a train, eh!) Positions up for election this year will include ODD-YEAR Director (currently K2DH), Chairman, Vice-Chmn, Secty, Treas, among others.

**APRIL AWARDS BANQUET  
ANNOUNCEMENT!**

**When: April 28, 2001**

**Where: The Burgundy Basin Inn, Bushnell's Basin, NY**

(located conveniently between RT96 and RT 31 on Marsh Road)

**Time: 6PM (?) DTF!**

For the banquet, same dinner buffet as last year, same place, same room, \$20. Includes dinner, snack table, service charge, tax. Cash bar.

Tickets available at the March RVHFG meeting or from WA2ZNC

or K2AXX. Be there and help do a little headhunting among the RDXA crowd- and bring the SO /XYL/ XYM along- the food was fabulous last year... (and the folks from the FLAT EARTH SOCIETY in the next room were great entertainment!)

**SO... the word is: Be there or be next door and be flat.**



Steve liked this ad so much last month that we'll use it again!

So what if Valentines day has come and gone?

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# Chairman's Rant

...de K2AXX

We are holding our **Annual awards banquet** in conjunction with the Rochester DX Association. The location is the Burgundy Basin Inn, April 28th, 2001. More banquet details to follow, but the price appears to be \$20 per person. We'll share the same room, both have our awards presentation, and hopefully have a really kick-butt time. We should expect about 80 people from both clubs to be there - what a better way to get to know other local amateurs, whose interests ain't that far off from our own! They contest, we contest. They build antennas, we build antennas. We rove, multi-op and do January VHF SS, they do Dxpeditons, Field Day and November SS.

The first 5GHz construction session @ MDS was a success! Many LO boards are now squeaking out power, the remainder of the construction will be done soon! Hopefully before June we'll have a BUNCH more people on the air on 5760!

The newest Membership roster has been posted to the "members only" portion of the RVHFG website

## A Little Cross Border Stress, eh?

During the April, 2000 Meeting near Colonie, NY, the UNYREPCO, Inc. Council voted to amend their Band Plan to recognize that long term coordinated Canadian repeaters using UNYREPCO Simplex Frequencies would be protected from interference by recognizing their repeater status and requiring that all US Amateurs desiring to comply with our bandplan (and good amateur practice) refrain from operating in such a manner that interference could be caused to Canadian repeaters.

Riley Hollingsworth, K4ZDH, of the FCC recently supported area band planning in a letter published in ARRL's QST magazine (January, 2001 Page 75), "When such bandplans are not followed and harmful interference results, we expect very substantial justification to be provided..."

Hams in the UNYREPCO, Inc. service area who DESIRE to COMPLY with our bandplan as amended last April, will REFRAIN from using simplex frequencies (such as 146.460 MHz) in a way that can interfere (channel block, etc) with repeater operations across the border in Canada.

*(Editors note: In return for your cooperation in this matter, the Editor of the Journal will refrain from re-routing your UPS packages to some third-world DX locale while he continues to use 220-222 MHz north of the border :^ ).*

# From the Treasurer:

By Paul N2OPW February 12, 2001

## CHECKING ACCOUNT

Previous Balance..... \$ 386.96

Income:

Dues collected..... 10.00

50/50 profits..... 00.00

Mug Sales..... 00.00

PHEMT Sales..... 60.00

Awards Income..... 180.00

Expenses:

Newsletter Supplies..... -116.36

Current Balance..... \$478.60

## SAVINGS ACCOUNT

Previous Balance.....\$1272.37

Income:

Interest:..... 0.00

Expenses:..... 0.00

Current Balance.....\$1272.37

Balance on Hand:

Checking..... 478.60

Savings..... 1,272.37

Total.....1,750.97



The N2JMH "psycho Rover" team of Jim and Todd in some remote location, January VHF SS2001

# February Meeting Minutes

Mark, K2AXX opened the meeting at 7:35pm with introductions and post contest war stories and crying towel episodes by all the members in attendance. He then motioned to accept the Secretaries and Treasurers reports as printed in the Journal. Fred, W2OP moved to accept and Judy, N2KXS seconded.

Old Business: The RVHFG will be holding a mini-vhf academy at the hamfest this year and it appears that the line-up of speakers is all set. We also plan to have a hospitality tent set up outside near the other local clubs along with our usual table indoors

Jeff, KB2VGH announced that there are a limited amount of collector's edition mugs available. Paul, N2OPW has preamps and also reminded everyone of the first 5-gig build session to take place at MDS. He also asked that anyone interested in another club DEMI purchase should contact him as soon as possible.

New Business: This years Banquet will be the 28<sup>th</sup> of April at the Burgundy Basin with more details to follow. An interesting topic of discussion then came up, the Cabrillo format for contest log submission and its headaches. Rus, K2UA discussed why the league did this and what it had hoped to accomplish.

Mark, K2AXX motioned to close the meeting at 8:45 and Dave, K2DH accepted and Jeff, KB2VGH seconding.

Jim N2JMH Secretary

---

## RRRA AUCTION

RRRA has a last moment change in the March Auction location it will be in the Roberts Cabin in the Henrietta town park  
19:00- 22:00 March 16th doors open @ 18:30.

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## FN44 Dxpedition

(Better late than never- see the website  
and see if he's going to do it again!

I'm going to be up on Mnt. Agassiz, New Hampshire, FN44DG @ 2415' ASL + about 35' AGL again! I'm currently planning on another overnight up there, see photos from last weekend: <http://www.timhavens.com/n1rz/mnttopping/index.html> (click on photos to get larger images). I can only work one band at a time....so will alternate bands... Tim Havens / N1RZ

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## NOTHING FORSALE THIS MONTH- SORRY!

Boy- I was amazed too!  
(Lenny must have been on vacation or something!)

CU next month!

# N2PA on the moon



## The Target

Lunar photography by WA2LVY

## The QSO



**Mark N2YB and Russ N2KG working a DL on 144 MHz the weekend before the 2001 January VHFSS. It was the first EME contact for the Mountain Group at the N2PA group site near Prattsburgh in FN12.**



Photos by Jeff Tewksbury

## The Kudos



# Microwave Update 2001

**When:** September 27 through 30, 2001

**Where:** Four Points Hotel Sunnyvale, California (near San Jose/San Francisco)

**For reservations call toll free 1-800-325-3535**

1250 Lakeside Drive

Sunnyvale, California 94085-4010

The Four Points Sunnyvale (formerly the Hilton Sunnyvale) will be providing accommodations and rooms for this event. This is a 375 room full service hotel with a restaurant, lounge, pool, fitness room, etc. It is centrally located in the Silicon Valley near Highway 101 and Lawrence Expressway. Complimentary shuttle to the San Jose International Airport is provided.

We will have full use of the conference center on Friday and Saturday. **A package rate of \$237 for Thursday, Friday, and Saturday is available.** Wednesday night rate is \$289. **We have blocked rooms under the key code "Microwave Update".**

This is a very busy area. **The entire Silicon Valley sells out every Tuesday and Wednesday night at rates from \$150 to \$300.** For those arriving Wednesday, we will have recommendations for more affordable places on Wednesday night. Those driving in may want to stay just out of town on Wednesday night.

Travel Info: San Jose Airport is 10 minutes from the hotel and a free shuttle for hotel guests is available. San Francisco Airport is about 40 minutes from the hotel. This is the main airport for international travel and usually has cheaper flights. However, taxi fare or shuttle fares run between \$40-50. (Flying from SF to SJ is not recommended. The flight is only about 10-15 minutes, but you have to get on/off and through terminals, etc.)

Key Events:

Thursday, Sept 27	Surplus Tour
Friday, Sept 28	Conference
Saturday, Sept 29	Conference
Sunday, Sept 30	Antenna Measurements

## SURPLUS

There are a number of surplus houses within a 10 mile radius of Sunnyvale. Maps will be provided for those interested. Local hosts may be available, make your plans early.

## PAPERS and PRESENTATIONS

It's never too early or late to start asking for papers! If you would like to present a paper at microwave Update 2001, please contact us. We will provide a list of papers/speakers as it is available.

Chairmen:

Will Jensby, W0EOM/6 [w0eom@aol.com](mailto:w0eom@aol.com)

Jim Moss, N9JIM/6 [n9jim@aol.com](mailto:n9jim@aol.com)

Visit "The 50MHz and Up Group" website at <http://www.qsl.net/50up> for more info, including non-ham activities for MUD 2001 families.

# MORE! Cabrillo format

The big word from the ARRL Atl. Div. CAC rep

K2UA "Rus Healy" <RHealy@microwavedata.com>

For those who may be interested, the NEWS VHF club Web page has two Cabrillo file-format conversion utility links you may want to check out: <http://www.qsl.net/vhfnews/vhf-soft.html>

The Cabrillo Converter here also looks like it can swallow just about any ASCII format and chug out a Cabrillo file: <http://www.wt4i.com>

The catch on this last one is that it costs \$15 to download. But, it's also available in a trial (free) version that handles up to 70 QSOs.

And here's a follow-on to (the last RVHFG meeting) night's animated, highly elliptical discussion of this topic. I'd like to clarify things, if possible, about the Contest Branch's approach to the Cabrillo format. The reason the League has gone the extra step of requiring logs to be submitted in the Cabrillo format is best understood with a bit of background information in hand. Almost ten years ago, the ARRL Contest Branch developed a file format for electronic log submissions and asked people to use that format for all electronic file submissions. They propagated this format to all of the logging software vendors and to the contesting public. It was fairly well accepted.

At first, most logs continued to arrive on paper. Electronic files started showing up on floppies- boxes and boxes of them for every contest (that's where all those recycled AOL floppies really went!). As the Internet lit up, more log submissions started to arrive by email. (Today, I doubt the League gets a dozen floppies for even the major DX contests, where almost 2000 entries are common! Who wants to pay postage and buy a diskette and envelope when they already subscribe to an ISP?)

About two years ago, Trey, N5KO, along with a group of people involved with contest logging programs, and contest sponsors, got their heads together and figured out a file format that is standardized across sponsoring organizations, covers just about any conceivable contest, and that was agreeable to the major sponsoring organizations (primarily ARRL and CQ, though many others now use it as well). The beauty of this format is that it embeds the summary sheet information in the log file, so that there's no need for a separate summary sheet. This was a big problem with the previous file format- very often the summary would be separated from the log, and chaos ensued. Some people have complained that this format doesn't have provisions for claimed multipliers, points, or a band breakdown. The reason is simple: The log checking software used by the sponsoring organizations takes the Cabrillo-formatted log and scores it for you- finding all the mults, determining the QSO points, band breakdowns, etc. The best thing about this process is that every single electronic log is subjected to the same exact scoring process.

After all these years using the old ARRL log format, the

League was still getting a lot of logs in other formats. This is the root of the problem that led them to finally require computer-generated logs in a specific format. Specifically, the Contest Branch spent an inordinate amount of time converting every Joe Blow's Contest Program file format to something they could use- and that time was essentially\*totally wasted\*. It added nothing to the League's contest program at all, and in fact, took away from it. It kept them from doing

a better job of log checking, vetting the club competitions, getting results into the magazine in a timely fashion and with minimal errors, proofreading copies before publication, and so forth. In short, all the administrative BS, which we were paying for with our ARRL dues, was a huge \*waste of time\* that they wanted to avoid.

Over a year ago, specifically, in the 1999 November Sweepstakes announcement, the Contest Branch finally decided that it was worth the small imposition on individuals submitting logs to require that, if they use a computer-logging program, they must submit files in Cabrillo format. If you think about it, this is really no different than the IRS asking you to submit your tax return on their standard forms. The beginning date for this requirement was ONE FULL YEAR later. So the software developers had time to implement the changes, work the bugs out, and so forth. Again, this was announced a full year before it took effect.

So here's where we are today: Many people still use logging software that doesn't support Cabrillo formatted output. That is changing, but for this year, many of our January VHF SS logs need conversion. The club has stepped up to help out. I've given you more resources here to use as well. In the future, you shouldn't even have to think about the impact of the file format of your logs-just make sure you're using current software. Using the analogy above, how often do you have to think about the IRS's electronic file format if you file electronically? Basically, never.

I hope this gives you a slightly better-informed perspective on what drives the League to make administrative policies the way they do. They're really trying to do a better job, and they sure get a lot of hogwash from the contest community about it. That's a shame. Hopefully this helps you understand how and why things got to be this way and what we can do to make life a bit easier for our friends at the Contest Branch. (And these days they really are our friends.)

## MORE INFO on DEMI club order discounts!

Some of you have indicated that there is an interest in placing **another order** with Down East Microwave and as a club and qualify for the club discounts. The details can be read on the DEMI website [www.downeastmicrowave.com](http://www.downeastmicrowave.com) along with the catalog and price list.

Everyone who's interested should contact me with what you want and send me a check made out to the RVHF Group. I'd like to get it placed by the end of Feb. and hopefully you'll all have your stuff at the next meeting. (Paul's contact info is on PAGE 2 of the Journal)  
Thanks and Best Regards, Paul Meyers, N2OPW, Treasurer RVHFG



# The Sun Does a Flip

A NASA PRESS RELEASE... February 15, 2001

You can't tell by looking, but scientists say the Sun has just undergone an important change. Our star's magnetic field, which extends through the distant reaches of interplanetary space, has flipped. The Sun's magnetic north pole, which was in the northern hemisphere just a few months ago, now points south. It's a topsy-turvy situation, but not an unexpected one. "This always happens around the time of solar maximum," says David Hathaway, a solar physicist at the Marshall Space Flight Center. "The magnetic poles exchange places at the peak of the sunspot cycle. In fact, it's a good indication that Solar Max is really here."

The Sun's magnetic poles will remain as they are now, with the north magnetic pole pointing through the Sun's southern hemisphere, until the year 2012 when they will reverse again. This transition happens, as far as we know, at the peak of every 11-year sunspot cycle- like clockwork. Earth's magnetic field also flips, but with less regularity. Consecutive reversals are spaced 5 thousand years to 50 million years apart. The last reversal happened 740,000 years ago. Some researchers think our planet is overdue for another one, but nobody knows exactly when the next reversal might occur.

Although solar and terrestrial magnetic fields behave differently, they do have something in common: their shape. During solar minimum the Sun's field, like Earth's, resembles that of an iron bar magnet, with great closed loops near the equator and open field lines near the poles. Scientists call such a field a "dipole." The Sun's dipolar field is about as strong as a refrigerator magnet, or 50 gauss (a unit of magnetic intensity). Earth's magnetic field is 100 times weaker.

When solar maximum arrives and sunspots pepper the face of the Sun, our star's magnetic field begins to change. Sunspots are places where intense magnetic loops - hundreds of times stronger than the ambient dipole field- poke through the photosphere.

"Meridional flows on the Sun's surface carry magnetic fields from mid-latitude sunspots to the Sun's poles," explains Hathaway. "The poles end up flipping because these flows transport south-pointing magnetic flux to the north magnetic pole, and north-pointing flux to the south magnetic pole." The dipole field steadily weakens as oppositely directed flux accumulates at the Sun's poles until, at the height of solar maximum, the magnetic poles change polarity and begin to grow in a new direction.

Hathaway noticed the latest polar reversal in a "magnetic butterfly diagram." Using data collected by astronomers at the U.S. National Solar Observatory on Kitt Peak, he plotted the Sun's average magnetic field, day by day, as a function of solar latitude and time from 1975 through the present. The result is a sort of strip chart recording that reveals evolving magnetic patterns on the Sun's surface. "We

call it a butterfly diagram," he says, "because sunspots make a pattern in this plot that looks like the wings of a butterfly." In the butterfly diagram, pictured below, the Sun's polar fields appear as strips of uniform color near 90 degrees latitude. When the colors change (in this case from blue to yellow or vice-versa) it means the polar fields have switched signs.

The ongoing changes are not confined to the space immediately around our star, Hathaway added. The Sun's magnetic field envelops the entire solar system in a bubble that scientists call the "heliosphere." The heliosphere extends 50 to 100 astronomical units (AU) beyond the orbit of Pluto. Inside it is the solar system - outside is interstellar space. "Changes in the Sun's magnetic field are carried outward through the heliosphere by the solar wind," explains Steve Suess, another solar physicist at the Marshall Space Flight Center. "It takes about a year for disturbances to propagate all the way from the Sun to the outer bounds of the heliosphere." Because the Sun rotates (once every 27 days) solar magnetic fields corkscrew outwards in the shape of an Archimedian spiral. Far above the poles the magnetic fields twist around like a child's Slinky toy.

Because of all the twists and turns, "the impact of the field reversal on the heliosphere is complicated," says Hathaway. Sunspots are sources of intense magnetic knots that spiral outwards even as the dipole field vanishes. The heliosphere doesn't simply wink out of existence when the poles flip - there are plenty of complex magnetic structures to fill the void.

Or so the theory goes.... Researchers have never seen the magnetic flip happen from the best possible point of view- that is, from the top down.

But now, the unique Ulysses spacecraft may give scientists a reality check. Ulysses, an international joint venture of the European Space Agency and NASA, was launched in 1990 to observe the solar system from very high solar latitudes. Every six years the spacecraft flies 2.2 AU over the Sun's poles. No other probe travels so far above the orbital plane of the planets.

"Ulysses just passed under the Sun's south pole," says Suess, a mission co-investigator. "Now it will loop back and fly over the north pole in the fall. This is the most important part of our mission," he says. Ulysses last flew over the Sun's poles in 1994 and 1996, during solar minimum, and the craft made several important discoveries about cosmic rays, the solar wind, and more. "Now we get to see the Sun's poles during the other extreme: Solar Max. Our data will cover a complete solar cycle."



**"Paranoia is just  
reality on a finer scale"**

Strange Days, 1992

...the following was forwarded by J.Barry Ludwick of Apalachin, NY

## *You might be from Western NY if:*

1. You've never met any celebrities.
2. Your idea of a traffic jam is ten cars waiting to pass a tractor on the highway.
3. "Vacation" means going to the Finger Lakes, Adirondacks or grandmas.
4. You've seen all the biggest bands... ten years after they were popular.
5. You measure distance in minutes.
6. You know several people who have hit a deer.
7. Your school classes were canceled because of cold.
8. You've ridden the school bus for an hour each way.
9. You think ethanol makes your truck run better.
10. You know what's knee-high by the Fourth of July.
11. Stores don't have bags; they have sacks.
12. You've seen people wear bib overalls at funerals.
13. You see a car running in the parking lot at the store with no one in it, no matter what time of the year.
14. You end your sentence with an unnecessary preposition.  
Example: "Where's my coat at?"
15. All the festivals are named after a fruit, vegetable, grain or animal.
16. You install security lights on your house and garage and leave both unlocked.
17. You think the four major food groups are beef, pork, beer and Jell-O salad with marshmallows.
18. You carry jumper cables in your car.
19. You know what "Cow Tipping" and "Snipe Hunting" are.
20. You only own three spices: salt, pepper and ketchup.
21. You design your kid's Halloween costumes to fit over a snowsuit.
22. Driving is better in the winter because the potholes are filled with snow.
23. You think everyone from a bigger city has an accent.
24. You think sexy lingerie is tube socks and a flannel nightie.
25. The local paper covers national and international headlines on one page, but requires six pages for sports.
26. You think deer season is a national holiday.
27. You know which leaves make good toilet paper.
28. You find 20 Degrees F "a little chilly."
29. You know all 4 seasons: Almost Winter, Winter, Still Winter and Construction.
30. There is a Dairy Queen in every town with a population of 1000 or more.
31. Coke and Pepsi are "Pop" and a soda has ice cream in it.
32. Any car over two years old is rusted because of the salt on the roads.
33. You know the names of all the towns that are stops on the NYS Thruway.
34. You have shoveled snow off the roof. And had snow in October and May. And the snow total per year is over 100"
34. You actually get these jokes and forward them to all your friends from Western NY.



"Geez I'm glad I grew up in WNY!" VE3IEY, ex- WB2IEY of Pumpkin Hook, NY

## Letters, Letters, we get letters...

RE: MICROWAVE RADIATION HAZARDS article in FEB Journal Norman Fitch <G3fpk@compuserve.com> V/UHF editor for RSGB

Just a few lines to say how much I appreciate receiving the Journal each month. I usually quote from it in my monthly VHF/UHF column in RadCom (RSGB).

I was very interested in the **Kolata/Adair item in the February issue**. Over here, there are endless articles about this topic. The mobile phone companies are putting up TX masts all over the place and, so long as the mast doesn't exceed 15 metres in height, they don't need planning permission - unlike we poor hams!

Now these companies are installing masts on school and hospital premises and this has incensed many people. Masts seem to pop up over night outside peoples' homes, too. Some local councils have put a block on these developments due to possible damage to those living/working nearby.

We are talking here about VHF 'bat phones', as we call them, which over here are on 900MHz and thereabouts. Mums insist that their kids in schools with nearby masts are complaining of headaches. The phone companies say these alleged effects are nothing to do with them and that if folk want mobile phones, they'll have to put up with an increasing number of masts.



Now, along comes TETRA, a whole new ball game with its pulsing technique at brainwave frequencies. This system is being used by public services, including the police. But officers are being told NOT to use the handsets in hospitals and some other 'sensitive' places. This makes a mockery of TETRA: the police say that, when they follow up a bad road accident into the hospital, they have to resort to the twisted pair to communicate with their stations. Crazy!

73 es GL DR OM - as we say on CW! Remember that mode?

Norman Fitch G3FPK

Editor VHF/UHF in RadCom (RSGB)

## More stuff from the SETI LEAGUE guys!

The FCC has assigned the callsign W2ETI to the SETI Leagues' Moonbounce Beacon now under construction. A special QSL Card will be provided for reception reports. Unfortunately construction of the station is running behind schedule and will not be in operation before the spring.

(all you guys out there in orbit- hold the phone, eh!)

# CENTRAL STATES VHF CONFERENCE

The 2001 CSVHFS conference is July 26-29 at the Centreport Marriott near Dallas Fort-Worth airport.

This year the Central States VHF Society will meet in Fort Worth. Although strictly speaking the NTMS is chartered for bands above 900MHz and CSVHFS is chartered for the VHF and UHF bands, in point of fact there is considerable overlap in interests and membership between the two groups.

Since the meeting rotates among the member areas and Canada, this is a rare opportunity for those in the area to attend one of the prime technical forums.

For more information, you can visit the CSVHFS website or the NTMS website.

## New 2m Beacon in EN93

"The radio is running at 10 watts out, to a turnstyle antenna at 30 feet above the ground. It is located near Parkhill, Ontario, EN93. The frequency is 144.279-cw. The id will include all this information, as well as an e-mail address, for reports. Thanks for your interest."

Glen Lee VA3ARC/VA3MBB/b <jalee@mnsi.net>

## RUMOR OF THE MONTH:

### Stock up on MMIC's!

"I ran across a notice from Agilent (used to be called HP) that they are obsoleting a number of the familiar MMIC's that we have all used in our various transverter projects. The MSA-xx04, MSA-xx35, and MSA-xx36 series of MMIC's will cease to exist beginning July of this year. This also affects a number of popular silicon devices and GaAs FET's (ATF-10135) that use the same package styles. Most of the products will continue to be available in smaller surface mount style packages. Also, Mini-Circuits intends to continue their MAR equivalent MMICs from all indications so far."

## NOT TO WORRY!

The big word from Steve, N2CEI of DEMI: "All true! But not a problem. There is a Ton of new stuff to be used in place of (the phased-out parts). We have been "Phazing" this line of stuff out. We haven't used the ATF10135 in 3 years. All of the standard MMIC's will still be sold by MCL, HP/Avantek/Agilent's largest customer for MMIC's. We never bought that stuff from anyone but MCL. It was the best price and still is!"

So there you go- the truth is much less frightening than you thought!

## Aurora Mechanics

Our Physics and Astronomy lesson for March  
by "Max Kok"  
m.r.kok@hccnet.nl  
via the Aurora  
Listserver

Q: "By what mechanism do cosmic rays actually affect the Earth's Magnetic Field? I am told that the particles incident on the ionosphere cause the effects, but how?

And why are aurora found more commonly at extreme attitudes?"

A: Aurora is caused by solar particles, not by cosmic rays. Cosmic rays come from outside the solar system.

Solar particles collide with atoms in the ionosphere. These become excited but fall back to their ground state while emitting energy in the form of light of some specific colours / wavelength and so give visual aurora.

Radio aurora is caused by higher levels of ionisation in the ionosphere as a result of the incoming solar particles stripping of electrons. Visualize this as a normal TV yagi antenna becoming a satellite dish, so reception of higher frequency signals becomes possible.

Solar particles are guided into the ionosphere via the magnetosphere / magnetotail of the earth, that extends to behind the moon. The magnetic field lines that lie outside in the magnetotail region and catch the bulk of the solar particles are the ones that intersect the ionosphere at the higher latitudes.

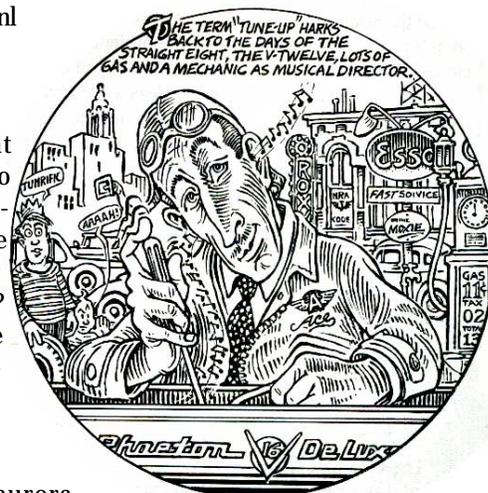
The sun's magnetosphere, the heliosphere, bends off cosmic rays but this changes over a solar cycle. This could be one of the mechanisms involved in solar heating of earth's climate.

*(Editors note: and I had never heard of the earth's Magnetotail region before... I would have guessed it was somewhere near Menlo Park, NJ!)*

## K2DH on the air!

(from the 432+ EME newsletter by K2UYH)

"K2DH reports good condx (on 1296 EME) during the SW, but had problems with the cold. Dave eventually got things thawed out and was able to QSO WA1JOF - very nice signal, KA0Y and WA6PY for an initial. He reports K5JL was the loudest signal on the band"



**WHERE IS THIS COMMUNICATIONS COMPLEX LOCATED?**  
( *Hint: it is NOT W2FU's New Station- Jeff's is bigger than this!* )



**RVHFG Meeting: Friday, 09 MAR 2001, 7:30 PM, @ 111 Westfall Road, Rochester, NY**



**The VHF Journal**  
**The Rochester VHF Group**  
**PO Box 92122**  
**Rochester, NY 14692**