



CHEESE BITS

W3CCX

CLUB MEMORIAL CALL

ARRL
Affiliated
Club



CELEBRATING 50 years of VHF/UHF and MICROWAVE
DEVELOPMENT and COMPETITION in 2006

Volume XLVII

DECEMBER 2006

Number 10

COMING SOON.. VERY SOON!

It's that time of year again, the days are getting shorter and the nights are getting colder. All the yard work is done and now full focus can be put toward the January contest. By now everyone should have their calendar marked and a list full of things that must get done before the big weekend. Is your station ready? There is still time, but not much!

I know sometimes I sound like a broken record but I cannot stress how important it is that every member put their station on the air for this event. In past years we have squeaked by with just over 50 entries, and every year brings the question, "Will we have enough logs"? To continue our winning history **everyone** must participate, the club needs your log even if you only make one contact!

There are many rovers taking to the road for the contest, please plan early and post your operating

schedule on the Packrat email list for all to see. In the event of inclement weather please post any changes to your schedules at least 24 hours prior to the contest start. Everyone should check your email for rover updates the day before the contest. Remember the contest clock! When six meters is open and the multipliers are flying it is easy to forget the clock. The truth is, you are greatly increasing both your and the club score when packrat works packrat on the higher bands, especially when it is a new grid for both stations.

Like last year, the contest package will be available electronically for everyone with internet access. The site is faster than last year and a small version will be available for dial up users. Look for the contest package after December 1st at www.kernsracing.com/packrats. As usual, hard copies of the 2007 Contest Package will be available at the December meeting for those without internet access.

I'll see everyone at the December meeting...
Steven Kerns, January Contest Chairman



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PACKRAT BEACONS - W3CCX/B

FM29jw Philadelphia, PA

50.080, 144.284, 222.065, 432.295, 903.071, 1296.251,
 2304.037, 3456.220, 5763.190, 10,368.140 MHz (as of 3/1/01)

MONDAY NIGHT NETS

<u>TIME</u>	<u>FREQUENCY</u>	<u>NET CONTROL</u>
7:30 PM	50.150 MHz	K3EOD FM29II
8:00 PM	144.150 MHz	N3ITT FN20kl
8:30 PM	222.125 MHz	K3TUF FN10wme
8:30 PM	224.58R MHz	W3GXB FN20jm
9:00 PM	432.110 MHz	WA3GFZ FN20kc
9:30 PM	1296.100 MHz	WA3NUF FN20le
10:00 PM	903.125 MHz	W2SJ FM29lw
10:30 PM	2304.085 MHz	

& go to 3.4G & up after

Visit the Mt. Airy VHF Radio Club at:

<http://www.ij.net/packrats>



Editor's Column

Well the Holidays are upon us and soon to follow will be the winter contesting season. That means Saturday morning activities hours every weekend to iron out those little problems with all the transverters, switching and antenna problems. Lots of equipment will get shuffled amongst the club members to help each member do a little better than in past years.

With the 11 year sun spot cycle near it's lowest point there will likely be no special enhancements for this years contest so perhaps we should all look forward getting familiar with digital modes like WSJT to add a few grids to our logs and better our scores.

But, putting first things first. It's almost Christmas and the twelve days of Christmas has rained upon CheeseBits with a bit of decoration scatter within the pages. It also means you had better be certain you have been extra nice so Mrs. Santa looks kindly on your gifting yourself with what ever widget you need for your ever improving station

It is also a good time to start getting into the habit of getting enough rest so you are healthy for the winter months ahead and the 33 hours of the contest with only a few hours of sleep. You also best be sure the kitchen pass is in order. The hunny-do list can be devastating to contest plans if you fail to get those little promises fulfilled before the third weekend in January.

My Station is still struggling with a few improvements and I hope to get time free in the next few week to make some significant progress with the stubborn, nagging problems with station switching, unstable LO'S, and amplifiers that need to be installed and tested. Right now my personal "ROUND TO IT" has a flat. I guess I had better get the inside painting done before the holidays so I am free to play too.

Don't forget to check into the nets each week. Working the new members and checking in regularly can help you get a better bearing how you station is performing and where your fellow PACKRATS are located.

Have a very blessed holiday and...



Listen for the WEAK ONES

73

W3GAD Doc





PREZ SEZ

with the Elecraft rig and transverters. Not only was the info derived from some excellent references and benchwork, but the slide show was complete with a cheese-bit screen of cubes of Swiss cheese! Well done and greatly appreciated. We all hope to continue to benefit from your expertise.

Microwave Update 2007 is in the active planning stages and set for Thursday, October 18, Friday, October 19 and Saturday, October 20, 2007. We have signed a contract with the Hilton Valley Forge, a full service hotel facility as the meeting place, and now various club members and committees are at work designing the web site for sign-up and information, marketing, prize solicitation, program speakers and paper solicitation, hospitality, family and spouse programs, proceedings, technical measurement, audio-visual support and registration processes. Everyone's cooperation is needed, as this will be a big meeting (we hope to have 150+ registrants including *all* the Pack Rats and their spouses, family members or significant other for the banquet). A special package price is being designed for the event. And who knows. We might even have the special guest Pack Rat make a return visit!

Everyone has been asking about getting new club shirts, and the research has been done and the ordering is about to commence. See details inside this issue. The Board of Directors is favoring the burgundy color shirt for the club standard, but to allow for some options, we are also able to order the shirt in navy blue. Personalization is a few dollars extra for your name and call sign on the right side. These are nice quality cotton polos, 2 button collar, with the logo embroidered on the left chest above the shirt pocket.

Are you all set for the January contest? We rovers are charging our batteries, making our routes, and testing our gear. You should be checking into the Monday night nets and running up the bands to assure that the rigs are in order, the rotors are calibrated, and the receivers are sensitive. It's late, but if you need technical help, tower or antenna assistance, or need to borrow or loan a rig, let your fellow 'rats know as soon as possible. The contest weekend is January 20-21, 2007.

A big welcome back to George Fazio, WB3IGR, whose has returned as a club member. We look forward to your ongoing contributions to the club, especially from FM18. It's essential that we have all of our new members active for the January contest. Our club roster needs to be updated with everyone's bands, and new addresses and phone numbers as we are ready to publish our 2007 membership roster and phone card. Send changes to W3KM@verizon.net and to harry-hbrown@earthlink.net. Looking forward to seeing you all at the December contest prep meeting, and working you on all of your bands in January. 73, Rick, K1DS

We're on a roll! We have had excellent programs for the past several meetings and are about to enter the meeting series of contest prep, analysis and the "Crying Towel", followed by Homebrew Night and then K1TEO's visit. Ton, KA3FQS gave a very enlightening talk, complete with a well researched background on bandswitching

Re: ARRL EME CONTEST

Thanks to all for another highly enjoyable EME contest weekend!

I operated my small 2m EME station on both JT65B and CW. No loggers, no clusters, no internet, no telephone, no skeds. I finished with 93 QSOs (84 on JT65B, 9 on CW) and 47 multipliers.

If anyone tries to tell you a small station can't make EME QSOs without assistance, don't believe them. It's not only possible, it's a *lot* of fun!

A comment on operating procedure: using a Linrad receiver for the first time in a contest, I found that it is *much* more efficient for me to work in Search and Pounce mode than to call CQ. To put it simply, I can find you more easily than you can find me.

As shown in the following table, nearly all of my QSOs were made in S+P mode:

QSO initiated by	JT65	CW
------------------	------	----

S+P, I called someone:	71	9
------------------------	----	---

Someone answered my CQ:	4	0
-------------------------	---	---

Someone tail-ended my QSO:	9	0
----------------------------	---	---

If those using the loggers to arrange QSOs -- presumably "just for fun," rather than as contest entrants -- would develop the habit of staying on frequency after a QSO, I estimate that I could have made another 10-20 QSOs.

I will look forward to working old and new EME friends alike -- in the next contest, or any time!
-- 73, Joe, K1JT 144 MHz: 2x10 xpol, 1.2 kW

FN42 903 MHz Beacon on the air

The K1TR 903.060 MHz beacon in FN42IV is back up and running thanks to some hardware improvements by Brian, WA1ZMS.

Same great location (thanks Larry K1CA) with slightly more power (15W at the Big Wheel antenna).

Signal reports appreciated.

Happy Thanksgiving!

73, Ed K1TR

A THANK YOU NOTE

Just a quick note to thank the Packrats and their friends, for the many notes and emails I received with condolences on the passing of my Mother.

They were greatly appreciated.

Bert Soltoff, K3IUW



PACK RAT VHF Contesting

Survey Results

I volunteered to collate the responses of the Pack Rats to a recent email survey conducted by Steve Hicks, N5AC, regarding certain aspects of VHF contesting, emphasizing concerns about rover rules. There were 22 Pack Rats who responded, with an additional two members who are out of the area and members of other clubs. Pack Rats represented 6% of the total of 374 responders. Of the responders, 21 were from fixed stations, and one rover -- yes, me. Here are the results and some discussion:

Issue	Yes & %	No & %	No Opinion & %
6. If grid circling is permissible, would you support a separate class for grid-circling rovers	17 (77%)	5 (23%)	
7. Instead of a separate class for circling rovers, would you support abolishing the practice?	9 (41)	8 (33)	5 (26)
8. Allow rovers to use APRS?	15 (68)	3 (14)	4 (18)
9. Allow Pack Roving to continue?	8 (33)	9 (41)	5 (26)
10. Acceptable rover options? (21 respondents)	Additional assistance 15 (71)	No limit on # ops 5 (24)	Limit hrs of operation 1 (5)
11. Establish a home station QRP category?	17 (77)	5 (23)	
12. Are captive rovers an issue in your area?	8 (33)	14 (67)	
13. Do you feel you have a say in how contest rules are made?	Average score=3	on scale 1-5	
14. Do you know who your VUAC rep is?	12 (55)	10 (45)	(FYI it's K1JT)
15. Have you been contacted by VUAC rep for your opinion?	7 (32)	15 (68)	
16. Allow youth ops at station without changing station class?	11 (50)	3 (14)	8 (36)
17. Allow new op at station without changing class?	10 (46)	4 (18)	8 (36)
18. Favor population density handicap?	7 (32)	11 (50)	4 (18)
19. Rover band leader certificates?	20 (91)	2 (9)	Separate category

The issues around rovers doing grid circling, pack roving, and the introduction of more ops to VHF contesting appear to have been the central themes of this current survey. The results are being digested by various VHF clubs and likely to be presented to the VHF-UHF ad-hoc advisory committee. Joe Taylor, K1JT, is the representative to this committee for the Mid-Atlantic Division, and any and all suggestions for contesting issues should be brought to his attention.

Over the years, the attitude of the club members has been that pack-roving and grid-circling by rovers was a tactic that was unacceptable, anti-competitive, and generally unsportsmanlike conduct for contests. Despite the rarity of the occurrence, in recent years these types of operations have recurred, for the express purpose of inflating scores and record setting. Not all of the effects have been negative, as there has been some additional activity generated and more rovers on the road. The ARRL rover rules do not ban any of the suspect rover practices. In order to distinguish those who contest from those who go "fishing in a barrel" there has been the suggestion that a separate class be created for rovers who rely on the rather artificial generation of scores. Although not a scientific, comprehensive or statistically valid survey, results are equivocal about abolishing the practice, but of the 374 total respondents, 211 (57%) said yes and 163 (43%) said no to question #6 for a separate class for grid-circlers, if it is allowed. Of 85 rover respondents alone, 52 (61%) said yes and 33 (39%) said no to the same issue. In relation to the issue of abolishing grid-circling, of the overall respondents 102 (27%) said yes, 182 (49%) said no and 88 (24%) didn't care. If the popular vote matters, it appears as if we may be stuck with this type of activity for the foreseeable future. As far as the rover rules limiting rovers to 1-2 persons, the field in general appears to be in favor of allowing additional assistance to rovers. Perhaps this will finally encourage separation into a single-op and a multi-op rover category. Coupled with this change could be a rule limiting total hours of operation for a single rover for safety reasons.

It appears that everyone seems to favor allowing youth and/or new operators at the station without changing operating class. For the "single operator" category, the restriction of operating a single signal at any

time would need to be strictly adhered to, as a second op at a station could easily be working a different band and turn the station into a multi-op pretty quickly. A more controversial issue is the possibility of having a population density scoring factor. Those in favor of a field-leveling factor were 131 (35%), those opposed numbered 191 (51%) with 52 (14%) responding they didn't care. This result was very similar to our club's respondents.

On a personal note, I'm all in favor of everyone getting some recognition. Remember the years that everyone in the club submitting a score for the January VHF SS got a certificate? In the write-ups that I have done for contests in QST, I tried to emphasize the fact that the vast majority of logs submitted have a limited number of QSOs. In June 2006, 50% of all logs entered had less than 100 QSOs. It's often the occasional op, the limited equipment op, or the geographically disadvantaged op that makes it fun for the big guns, and vice-versa. I do feel sympathy for the station that has limited bands, power, antenna and geography when they think that they are trying the hardest that they can to create a score, competing against a 20 year veteran who has maximum power, huge towers, big arrays and bands through the millimeter wavelengths. One of the reasons that we have ARRL Divisional awards is to recognize geographical differences. There is also the difference between A and B power, multi-limited and unlimited. Having a home QRP category is a nice way to get the newcomers started. Perhaps we ought to also consider some bonus points like those applied on Field Day for QRP stations that head to mountaintops and use battery or natural power, or stations who are adding a youth or newcomer to VHF operations. We must be careful though, as there are barely 1000 entries for the June VHF, and having too many categories for awards is mind-boggling. There are already 80 possible ARRL sections with 5 categories of stations, so there are 400 potential records to be set or broken, aside from each of the certificate categories with recognition for the top 3 in each section, and the top five in each division in QST write-ups. On the other hand, many are jaded by seeing pictures and write-ups of the same perennial winners, and the greater post-contest reading interest is often with the smaller stations, rovers, and mountain-toppers.

Don't shoot the messenger. Do make your thoughts heard by the VUAC by sending them to K1JT. Recognition for effort, time committed, equipment investment and novel approaches, including bringing in new stations to VHF-UHF-microwaves should be encouraged through the contesting write-ups, certificates and plaques. Communication and contesting on bands above 50MHz is different than the HF bands. Scheduled contacts, beaconing, APRS, WSJT are what makes a lot of the progress in amateur radio communications. Change is more than part of life, it is life. That's what my Chinese fortune cookie said last week. 73, Rick, K1DS

W2AXU SK

John Power W2AXU a PACKRAT since 1957 passed away Sunday morning 10 December 2006. Services were held 12 December in Ewing, New Jersey. Our sincerest sympathies go out to Dave Power, WB2VLA and his family.

Dave can be reached via e-mail at jdavid-power@gmail.com

New sub-millimeter wave QSO & DX claim...

Brian Justin is obviously not one to let a new frequency go unused as he reports the following.. CONGRATULATIONS

Hi everyone-

I'd like to report some new DX on 322GHz, and claim a new DX record overall for traditional RF operations above 300GHz. (i.e.: excluding light) The QSO was made by WA1ZMS & W4WWQ using slow speed CW and Spectran software.

Details of QSO:

Date: Dec 10, 2006 Time: 02:16z
Mode: FSK-CW Frequency: 322GHz

Distance: 7.3km

W4WWQ/4 was located in FM07 at: N37-21-13.8
W79-10-15.0

WA1ZMS/4 was located in FM07 at: N37-23-09.8
W79-14-33.9

The weather at the time of the QSO was:

Temp: -2C Dew Point: -17C
Relative Humidity: 31% Station pressure: 1004mb

These weather conditions resulted in an atmospheric loss of 4.13dB/km due to oxygen and water vapor.

The gear used for this QSO was the same gear used previously on 241/322/403GHz; that being harmonic mixers and 12" parabolic dish antennas.

This latest QSO exceeds our former DX of 1.4km as well as makes a claim for best DX on any amateur frequency above 400GHz (except for visible light).

I hope to have some photos posted on the web at www.mgef.org over the next few days.

SOME COMMENTS: A note to US amateurs that last year the FCC changed the amateur allocations from 300GHz and above to now read: "275GHz and above".

It is also my understanding that Germany remains the only country with a segmented amateur allocation above 275GHz, that being 411GHz. Can anyone confirm this?

Lastly, the ITU over the next several years will be reviewing and possibly making dedicated amateur band allocations above 275GHz. That should promise to be a positive event for amateurs worldwide.

Remember when the US ham bands used to be 30GHz and above? Look how far we as hams have come!

73, Brian, WA1ZMS/4

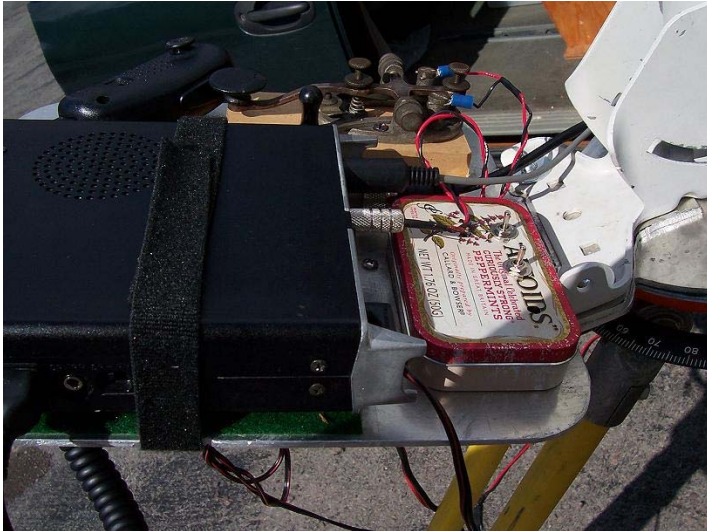




AUTO DASH SENDER

I wanted to solve a problem that I have for contests. I frequently have to send dashes on my 10 GHz rig to allow another station to find me and peak my signal. For the last few years I have done this by hand with a straight key. Often, I have to communicate

on the liaison radio while still sending dashes. This is difficult because the microphone for the liaison radio is usually too far from the key to



do both. I needed a way to send dashes automatically.

Figure 1 The Dash-Sender in the Altoids box keying my FT-817 in the 10 GHz contest 2006.

I could have just used a commercial keyer but, in my career as an engineer or with my hobbies, I have never turned away from a chance to apply a microcontroller to solving a problem. An inexpensive 'computer-on-a-chip', microcontrollers are incredibly versatile. I thought about using a 555 timer for this project instead of a microcontroller but during contests many other hams have asked me to send a letter instead of a dash: a 'V' for example. This would be hard(er) for a 555 timer to do. Besides, I could use an 8 pin microcontroller which is the same size as a 555 timer and far more flexible. It would also be nice to have a beacon capability: a key down period followed by my call. Mountains get crowded and in the Northeast sometimes it can almost sound like November Sweepstakes CW. A beacon mode for the Dash-Sender would help others to know who is who.

Transmit Set Select	Transmit Select		
B	A	X	Y
0	0	Letter Z (no character spacing)	Slow Dashes
0	1	Letter V (with a character space between)	Slow Dashes
1	0	Key down for 5 seconds DE YOUR_CALL	Slow Dashes
1	1	Slow Dots	Slow Dashes

Table 1 Dash-Sender Transmit Sets

I threw together a circuit and had a PCB made in time to be ready for the second weekend of the 2006 10 GHz and up contest (see Figure 1). The design is simple. I allow the straight key to drive my FT-817 or the output of the NPN transistor of the keyer. One set of inputs to the microcontroller is a two position switch. Each position selects one of two different transmit sets. For example, one position may send

dashes and the other, a letter. I have added two dip jumpers which are optional but will provide a way to select up to four different transmit sets. As of this writing, the current transmit sets are shown in Table 1. These can also be connected to external switches if you want to change the transmit set at will.

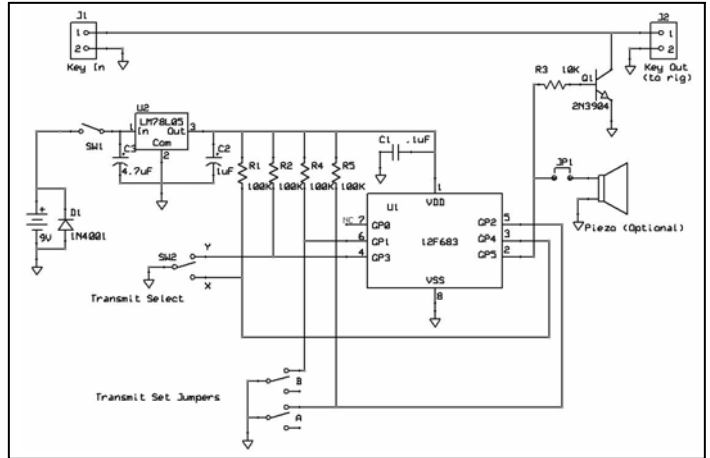


Figure 2 Dash-Sender Schematic

The schematic can be seen in Figure 2. When the Dash-Sender is powered off, the straight key will key the rig. If the Dash-Sender is transmitting, the NPN output transistor keys the rig. This is like the open-collector approach of ORing multiple outputs.

While I was at the New England Convention in Boxboro this year I was at a QRP booth being shown a switched capacitor filter project that was available in kit form. One of the guys at the booth said, "It's easy to build and test...and of course, you have to put it in an Altoids box." The Altoids box has in fact become very useful as an enclosure for small projects (and I may be the last to know about this). Other boxes could have worked but I used an Altoids box for the Dash-Sender because, well, "you have to." It's also smaller and lower profile than most commercial aluminum enclosures.

Power is supplied by, in my case, a 9 volt battery which fits inside the Altoids box. Power can also come from whatever you like up to the limits of the 78L05 regulator. The 1N4001 diode is to protect against momentary reverse polarity which can occur very easily when using 9 volt batteries. If you use external power (like a 12 volt gel cell) make sure you use a fuse too.

As I write this it is the Saturday night between the last two 10 GHz and up contest days. So far the little Dash Sender has worked out very well. I can send dashes while I wander around waiting for a reply on the 2M liaison or take a sip of a soda or a bite of my sandwich. Very helpful.

If anyone is interested in a programmed chip for this project send me an email at w1auv@arrl.net. There may also be boards available so ask just in case.

Tommy W1AUV 12-10-2006

WB3IGR FM28

New/Old member



George Fazio"
[wb3igr@goeaston.net](mailto:w1auv@arrl.net)
 bands ABCDE
 XYL Katherine
 General License
 29709 Lakeview Ct
 Easton, MD 21601
 410-820-0552

Fire Safety!

Something to look into...

CLOTHES DRYERS

I had a wonderful morning, the heating unit went out on my dryer!

Why does everything seem to fall apart this time of year!???

The guy that fixes things went in to the dryer pulled out the lint filter. It was clean. We always clean the lint from the filter after every load of clothes.

He told us that he wanted to show us something. He took the filter over to the sink, ran hot water over it.

Now, the lint filter is made of a mesh material - I'm sure you know what your dryer's lint filter looks like.

WELL.....the hot water just sat on top of the mesh!!! It didn't go through it at all!!!

He told us that dryer sheets cause a film over that mesh that's what burns out the heating unit. You can't SEE the film, but it's there. This is also what causes dryer units to catch fire - - - potentially burn your house down with it! He said the best way to keep your dryer working for a very long time (& to keep your electric bill lower) is to take that filter out & wash it with hot soapy water & an old toothbrush (or other brush) at least every six months. He said that makes the life of the dryer at least twice as long! How

about that???!?! Learn something new everyday! I certainly didn't know dryer sheets would do that. So, I thought I'd share!

NOTE: I went to my dryer & tested my screen by running water on it.

The water ran through a little bit but mostly collected all the water in the mesh screen.

I washed it with warm soapy water & a nylon brush & I had it done in 30 seconds. Then when I rinsed it the water ran right thru the screen!

There wasn't any puddle of water at all! That repairman knew what he was talking about!

Just a bit from the INTERNET ..ed

FOR SALE

Hello Rats, I made up a number of WR42 to SMA adapters (for use at 24 GHz) and offered these at Microwave Update. Have a few left if anyone's interested.... \$55 each - Paul w2ped



24 GHz WR42 to SMA Adapters
 >17 dB Return Loss typical @ 24 GHz
 0.2 dB loss typical @ 24 GHz

AN ANECDOTE ABOUT ALBERT EINSTEIN.



It's been said that when his assistant noticed that Einstein had administered the same test two years in a row to one of his Princeton graduate classes, he asked, "Isn't this the same test you gave last year?" Dr. Einstein said yes. When the assistant asked why he did that, Einstein responded, "The questions may be the same, but this year the answers are different."

Don't be afraid to ask dumb questions.

They are easier to handle than dumb mistakes. . . anon

Joel Knoblock W3RFC

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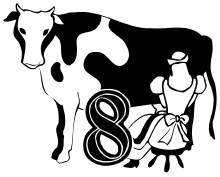
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NE3I



WHAT'S HAPPENING

A LISTING OF INTERESTING EVENTS

2 DECEMBER 2006 MICROWAVE ACTIVITY DAY (MAD) 8—1300 hrs—With the contest fast approaching get on the air 903 and up, Test your gear and adjust your antenna pointing.

10 TO 18 DECEMBER 2006 WSJT METEOR SCATTER CONTEST—See announcement on page 9 This competition is during the GEMINIDES METEOR SHOWERS

14 DECEMBER 2006 MEETING OF THE PACKRATS BOARD OF DIRECTORS At the QTH of K3EGE, Bill Shaw, 1612 Lynnewood Drive, Havertown, PA 610-789-8976

15 DECEMBER 2006—HANUKKAH BEGINS

21 DECEMBER 2006 MEETING OF THE MOUNT AIRY VHF RADIO CLUB — 8 PM at the SOUTHAMPTON PUBLIC LIBRARY—Steve Kerns, N3FTI, January contest Chairperson, will be handing out contest packets. We will review any last minute wants and needs before the final push for the January contest.

25 DECEMBER 2006 MERRY CHRISTMAS!!

29-30 DECEMBER 2006—SPECIAL EVENT FOR THE ARRL HELLO RADIO CAMPAIGN—See the ARRL Web site of December QST for Details—This aj HF (DC) event.

31 DECEMBER 2006—1 JANUARY 2007—STRAIGHT KEY NIGHT - No paddles, no keyboards—back to the basics and have fun too

1 JANUARY 2007 HAPPY NEW YEAR—ARRL Straight key night

6, 13 AND 20 JANUARY 2007 MICROWAVE ACTIVITY DAYS (MAD)- not Just any Saturday morning but the first MAD for 2007. As has been the practice in recent years we will have MAD each Saturday until the contest including the contest morning. 8 AM until?? The customary MAD will resume on 3 February 2007

11 JANUARY 2007 MEETING OF THE PACKRATS BOARD OF DIRECTORS

18 JANUARY 2007 MEETING OF THE MOUNT AIRY VHF RADIO CLUB Ben Kessel WA3RLT will give us his analysis of the log submitted for the 2006 contest—This is an excellent opportunity for us to see just how important each persons efforts are for the success of the club during the contest. Ben also offers insight on the importance of following the contest clock. See you there.

20 TO 23 JANUARY 2007 ARRL JANUARY VHF SWEEPSTAKES—This is it—the major contest for the PACKRATS to start off another year of success for the Mount Airy VHF Radio Club. Get on the air, work your fellow PACKRATS and everyone else, too. More from N3FTI on page 1

19-20 OCTOBER 2007 MICROWAVE UPDATE RETURNS TO PHILADELPHIA.

This is a multi club event and we are looking for full participation from the PACKRATS to make this the very best MUD ever. When called please take the challenge.

All meetings are announced on the regular Monday Evening Nets. (See Page 2) - Board meetings of the Mount Airy VHF Radio Club are open to all members. Teleconferencing for members is usually available. Regularly scheduled meetings of the PACKRATS are held at 8 PM in the basement meeting room at the Southampton Public Library on Street Road in Southampton, PA. Meetings are open, not only to the membership, but to any party interested in VHF/UHF/Microwave contesting, equipment design and construction for use on the VHF/UHF and Microwave Frequencies or amateur radio in general.

CONVERSATION

Assisting The Confusion

What confusion might that be, you ask? Well, I will try to describe it without creating more of it. (Disclaimer - these are my personal opinions and not ARRL policy from the Chair of the Contest Advisory Committee.)

The word "assisted" means two things in contesting. First, there is the upper-case version; the category defined by the contest rules as "Assisted." Then there is the lower-case "assisted" that refers to the rendering of help to an operator. One is Assisted and the other is assisted. They are mostly different, but not completely. Is that clear? That's what I thought...

In the spirit of topsy-turvy, let's start with the lower-case version of "assisted". The ARRL's HF Rule 2.1 for the Single-Operator category requires that "One person performs all transmitting, receiving, and logging functions as well as equipment and antenna adjustments." Similarly for CQ WW rule III.A.1 - Single-Operator category consists of "Those stations at which one person performs all of the operating, logging, and spotting functions."

It doesn't matter whether somebody else fixes your broken radio on Friday evening, pulls up the antenna wire that fell down Saturday, or pokes you in the butt when you've fallen asleep Sunday morning. As long as they don't tune the bands for you, enter your log information, or push the memory keyer buttons, you are complying with the rules for Single-Op category. We can all kvetch about how N0-so-and-so has his butler adjust the shack temperature and whether his 100 Gbyte network connection allows him to observe the latest sunspot in high resolution, but those have *nothing* to do with any contest category.

Now to ask, "To what does the Assisted category actually apply?"

Here is the ARRL definition of Single-Op Assisted from the HF Rules Web page (<http://www.arrl.org/contests/announcements/rules-hf.html>), "Rule 2.2.1 - Use of spotting assistance or nets (operating arrangements involving other individuals, DX-alerting nets, packet, etc) not physically located at the station is permitted." How about CQ's Worldwide Contest (<http://cqww.com/WW%20Rules%202006.pdf>)? "Single-Op With DX Spotting Net" is defined as "Same as [Single-Operator High Power] except the passive (self-spotting not allowed) use of DX spotting nets is allowed."

So the definition of the category known as "Assisted" is really quite narrow (even when it carries the label "Unlimited" as in Sweepstakes). It only pertains to the use of spotting information; regardless of whether it comes from the Internet, packet radio, or a 2 meter voice spotting net. The Assisted category does not apply to all possible forms of assistance. Perhaps it would be better to rename the category "Purple" or "17" or Xed-farg" so as to reduce the confusion over "help rendered to the operator."

I hope that helps with the lower-case and upper-case definitions of "assisted". Now you'll have to excuse me so that I can start to record all the contest records in a complete record while I listen to a record or two.

73, Ward N0AX



DECEMBER METEOR SCATTER CONTEST

North American Meteor Scatter Contest--any mode, sponsored by the WSJTGROUPE from 0000Z Dec 10 to 0700Z Dec 18 during the Geminids meteor shower. Frequencies (MHz): 50, 144, 222, 432, via meteor scatter. Categories: Unassisted, Assisted or Rover. No QSOs with your own or adjacent grid squares. Exchange: full call signs, grid square and QSOs must be acknowledged. QSO Points: Assisted--50 MHz 1 pt, 144 MHz 2 pts, 222 MHz 4 pts, 432 MHz 10 pts; Unassisted: 50 MHz 2 pts, 144 MHz 4 pts, 222 MHz 12 pts, 432 MHz 30 pts;. Score: QSO points times unique grid squares from all bands. For more information:

<http://www.ykc.com/wa5ufh/Rally/NAHSMS.htm>
Logs due 19 Jan 2007 to wa5ufh@ykc.com.

CONVERSATION and the contest announcement are from:

CONTESTER'S RATE SHEET
29 November 2006
Edited by Ward Silver N0AX
Published by the American Radio Relay League



NEW CANADIAN RECORD FOR RED LASER

On Wednesday 15 November 2006 08:31, VE2PIJ FN35 wrote:

New canadian record (Red Laser)

VE2BP <-> VE2JWH

Lat 45° 21' 39.8" - Long 72° 47' 58.0"

Lat 45° 21' 37.0" - Long 72° 37' 49.6"

13.2 km (7.9 miles)

20h40 13 nov 2006 local

01h40 14 nov 2006 utc



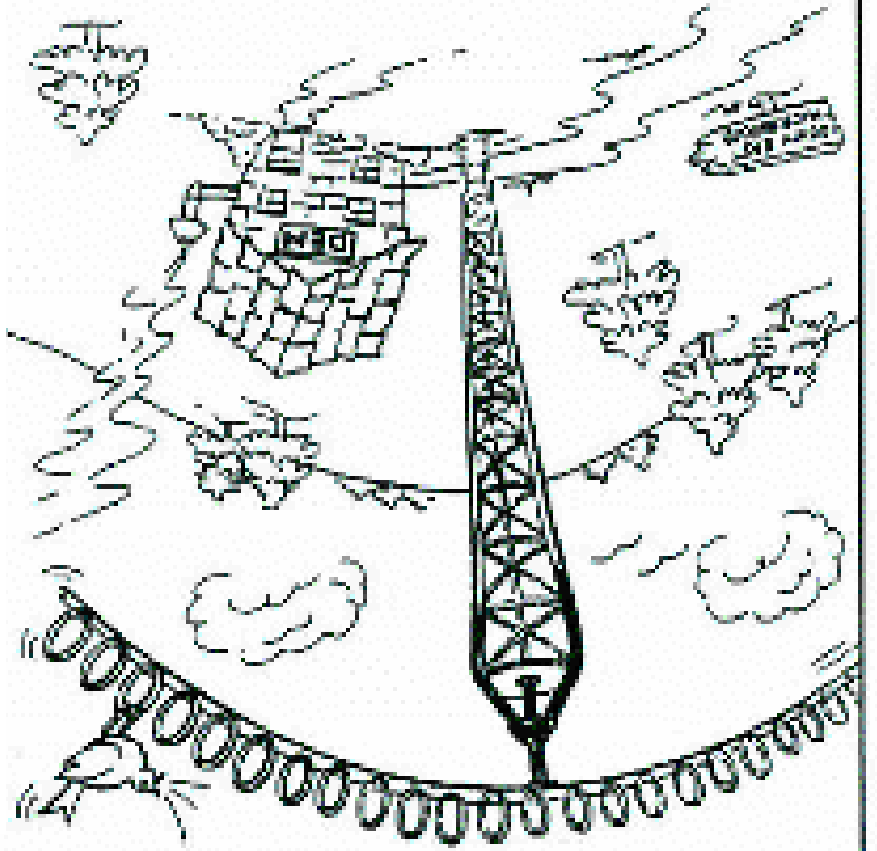
Say you saw it in CheeseBits

<http://www.downeastmicrowave.com>

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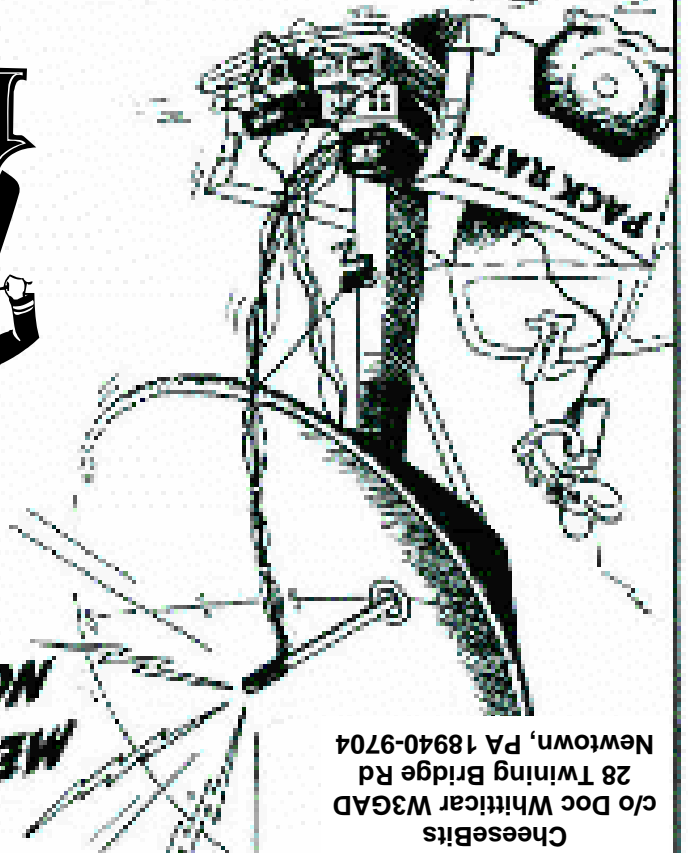
DOWN EAST MICROWAVE
Manufacturers and Distributors
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50 to 10,368 MHz



MT. AIRY VHF RADIO CLUB, INC.

FIRST CLASS

LOOKING AHEAD: 20, 21, 22 JANUARY VHF CONTEST
INSIDE:
PreSez
Dash sender for Rovers and test bench
Assisted confusion
W2AXU—SK



Happy Christmas

MEETING NOTICE

CheeseBits
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