



# SWOT BULLETIN

THE OFFICIAL NEWSLETTER OF THE  
SIDEWINDERS ON TWO RADIO CLUB

PROMOTING SSB, CW & DIGITAL OPERATIONS ON 144Mhz AND UP

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## S.W.O.T. GENERAL INFORMATION

- Send renewals and new applications for membership to Howard Hallman WD5DJT (See address above). Please make all checks payable to SIDEWINDERS ON TWO. Include your SWOT # for your renewals.
- Send your SWOT "members worked" from your log to, SWOT Awards manager, Wade Massey, 1016 Weiss Ave, Princeton, TX., 75407 \$1.00 fee for certificate and your certificate number would be appreciated, also SASE.
- Send all applications for County Awards and County Awards correspondence to the SWOT VUCA Awards Manager, Len Parsons W5AL, 11361 Tascosa Rd. FM 1061., Amarillo, TX. 79124
- E-Mail all articles and reports to the Editors' Web addresses listed above or you can mail them to KA5DWI, 6516 Simmons Rd, NRH, TX 76180-4243.
- **MERCHANDISE:**  
Decals and listings available for \$1.00 each for shipping and handling from the Secretary/Treasurer.  
SWOT PATCHES ARE AVAILABLE AT PRICE OF \$4.00 EACH + \$.50 FOR MAILING  
Badges are available from "The Sign Man", Rick Pourciau NV5A, <http://www.thesignman.com/menu.html>

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## **The Chairman's Corner**

**By John Petersen "KM5ES"**

The icicles have melted from my nose and I have gotten thawed out from Texoma Hamfest. I enjoyed seeing a few of the guys and meeting some new faces also. The weather was typical Texoma. Rainy, cloudy and cold. There was quite a bit of VHF gear there for the taking.

One thing I would like to bring up again to the membership of SWOT is please help us in our quest for electronic emailing your newsletter each month. This saves the organization a lot of money which we can use for other administrative stuff and add additions like contests and other club activities.

I would also like to remind the members that you can download from [www.swotvhf.org](http://www.swotvhf.org) the monthly newsletter in the members only section.

Also, I would like to thank the ones who have sent in donations for the website. The hits continue to grow on [www.swotvhf.org](http://www.swotvhf.org) and we have plans for more goodies to offer the membership soon, so keep checking it out.

On one note, I would like to announce we have dropped the Eastern Oklahoma SWOT Net due to anyone being able or taking the reins to keep this net alive. The Eastern Oklahoma Net was one of the longest running nets in our club history. Also, we are pleased to announce the North Central Missouri SWOT Net is moving to 8 P.M. on Monday nights this will help in keeping down the confusion on Tuesday nights since we had back to back nets in the region.

Also, we plan in the next month to combine the county awards and worked members awards to one award manager. This will hold down on confusion.

Until next month 73 and good DX.

John Petersen KM5ES  
SWOT Chairman #3331

## **From the Editor's Desk**

**By Art Jackson, KA5DWI**

I should never say that things have returned to normal. Just as things do, they get a bit crazy.

The tower project is going a little slow. I am taking my time amongst a number of interruptions. Being a spendthrift really makes things progress at a snail's pace. None of the VHF/UHF antennas are new. I am removing them from one mount and placing them on the tower. The 2-Meter antenna is a rebuilt KLM 16LBX. The

feedlines are being replaced and being rerouted to the shack. On top of everything, I have had Panamanian inlaws and relatives here for the past couple of weeks. I think a Panama (HP) DXpedition is in my future for my efforts.

By the time you all read this, hopefully we are having a great Leonids meteor storm. I hope to do much better this time. Last year I was up on 6 Meters working a fabulous European opening while 2 Meters was full of DX as well. Lightning better not strike twice. This time, I have jury duty the day before (November 18) this event. I believe that everyone should do their civic duty, but I hope I get out of this one so I can enjoy the opening. Oh well....

Glad I got the chance to see some friendly faces at Lake Texoma. Like John, the weather was exactly like the last time I went. A bit cool, windy and a few drops of rain. The Texoma Hamarama always brings in fall. One of these days I will get to go to a Hamfest with perfect weather.

Anyway, this month has been a bit on the busy side. Besides the antenna and family situations, a few personal issues took a bit of my available time. My creative ability was placed on the afterburner. This month's issue is a bit thin compared to the past few. Hopefully next month I'll make up for some lost time and maybe will probably release it a few days early. I plan to take a little trip around December 12 to DM75 (Santa Fe NM) for a few days. Sorry, no radio is in the plan. The YL would kill me.

This month's issue highlights an article from our Chairman, a meteor scatter contest, a Texoma recap and a few announcements from our members. I have also have cleaned up the document and significantly lowered the file space. It will download much quicker.

As I always mention, I cannot do this without your input. Keep the articles and letters coming.

73's

Art Jackson KA5DWI #2497

## **Texoma Hamarama and SWOT Gathering**

**By Art Jackson, KA5DWI**

If you heard it once, you have heard it a hundred times; Oklahoma's and Texas' beginning of fall seems to occur during this Hamfest. Yours truly has only made three of them, the last one 15 years ago. All I remember was being cold at each one. I do not know how attendance

was the past several years, but this year was down compared to those I remember. I guess the Hams around Oklahoma City, Tulsa and Dallas/Fort Worth don't like getting up early and hitting the trail like we use to. One thing I did notice was that the flea market had a good collection of VHF-Weak Signal stuff. If you were in the market for a good rig this was an opportunity missed.

I was the first SWOT delegate to show up. John had to drop off the YL at work and Howard slept a little late. I showed up just before dawn and made the rounds as well as registering. I set up a table for SWOT members to sign in and advertise to some prospective new ones. Howard showed up with copies of the October bulletin and we few were passed out. Also, they came in handy to cover our head as a brief rain shower passed thru. John brought a few articles to sell. He even sold the Squalo on his truck.

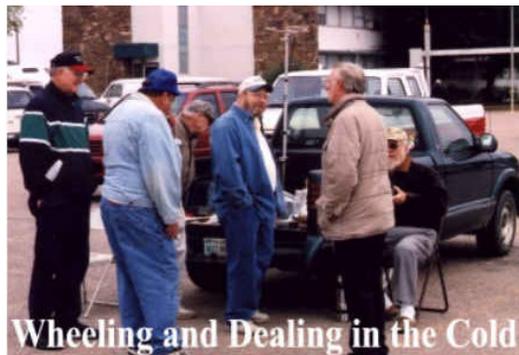
Despite the gathering's low turnout, a good number of members and non-members signed in:

<u>Call</u>	<u>SWOT#</u>	<u>Name</u>
K5OPS	3108	GENE HODGE
K5YM	3071	DAVE BOOTH
K5ZSJ	3388	ROSS POUNDERS
N5TIF	3319	LEE KEMP
W5PJB	3155	PAUL BIRYON
KM5ES	3331	JOHN PETERSEN
K5SW	34	SAM WHITLEY
WA5JW	3212	JOHN WHEAT
K5LOW	3194	DON SIMINTON
KC5KLY	3364	T.J. CHRONISTER
WD5DJT	893	HOWARD HALLMAN
KI5UB	3127	BOB WALDICK
Non Members Visits:		
AA5HW		CHARLES NEWPORT
W5AI		JAMES SPECK
K5QC		C. BUTCHER

A few pictures:



Howard WD5DJT and John KM5ES



John's truck before he sold the Squalo.

By noon all the bargains and the coffee was gone. We made our way back home.

Thanks to all of you for dropping by. We should try to do this again at future Hamfests.

## The World of Digital Communications on VHF – Part 1 of 3

By John Petersen KM5ES

For many years on FM, the Packet craze hit the bands especially on 2 Meters. This went on for several years.

People used TNCs for automatically hooking up with friends and other distance stations. Most used Packet radio back then for mailboxes. This was very popular before the Internet was available to the public. Instead of EBay, we used BBS's to look for equipment. Now with the age of the Internet, you see very little activity as far as Packet is concerned except for some stations using APRS.

On 2 Meter SSB in the earlier days, there was some use of RTTY. It didn't last long and there was not enough interest in it as in HF operation.

About 3 years ago, I was introduced to meteor scatter on 2 Meter SSB. Using SSB was pretty neat, but the success rate wasn't that great. Then came out a program that changed the face of meteor scatter communications. *Winmsdsp2000* was a program which you could interface your radio and computer with a sound card. Back when this was first available, most people that used their soundcard had to build their own interfaces. Most of the time it consisted of switches and one transistor with 2 isolation transformers.

Using HSCW (High Speed CW) worked very well. Contacts were made up to 1300 miles on 2 Meters, but skeds would last sometimes into a couple of hours. It worked, but the ham public, especially the newcomers using meteor scatter and HSCW didn't like using CW, no matter what speed. You still had to slow it down to be able to copy the CW. Many people lost good contacts due to their CW copying speed.

Also during the time that *Winmsdsp2000* was available to the ham public, interfaces between the soundcard, computer and radio, like Rigblaster were developed. This made using any digital program a snap to automatically switch the TX and RX.

Also a few new modes came out not only for VHF, but HF like PSK31, Hell and Throb, just to name a few.

With *Winmsdsp2000* I probably completed in the neighborhood of around 30 contacts and several new grids by using it.

The best was yet to come.

Part 2 next in next month's issue.

## **December 2002 North American Meteor Scatter Contest**

**C/O: Joe Taylor, K1JT and  
Tip Tipton, WA5UFH**

We seem to become the unofficial "trustees" charged with making sure that a VHF/UHF meteor scatter operating event will take place, timed to coincide with the Geminids meteor shower in December. Rules for the event were worked out on a sort of consensus basis, adopting many ideas that appeared on the HSMS reflector after the informal Rally held last May. Rules for the December event are appended below.

This MS Contest is scheduled for December 14-16, a weekend that includes the peak of the Geminids shower.

(You can warm up with the Leonids, which are predicted to be spectacular this year and expected to show several peaks at "storm" levels between 0300 and 1100 UTC on November 19.)

We hope that you will be active in the December 2002 North American Meteor Scatter Contest. If you do make some QSO's then, PLEASE send in your log or at least your summary sheet!! We would like to have a reliable record of the activity level in the event.

### **December 2002 North American Meteor Scatter Contest**

1. **PURPOSE:** to promote activity using meteor scatter propagation on the amateur VHF/UHF bands.
2. **CONTEST PERIOD:** starts on Saturday, December 14, at 0000 UTC and ends on Monday, December 16 at 0700 UTC (Friday evening through late Sunday evening, North American time.) The dates have been selected to make good use of the annual Geminids meteor shower.
3. **ENTRY CATEGORIES:** You must specify Low Power or High Power, Single Band or Multiband, and Assisted or Unassisted operation. This means that there are a total of eight categories in all.

Low power means less than 200 Watts output was used at all times.

"Assisted" stations may use the internet, email, telephone, or other non-meteor-scatter communication to make schedules or solicit contacts.

"Unassisted" stations must make their QSOs by calling CQ, answering a CQ, or tailending on another QSO. There are two exceptions to this rule. It is permissible for a Multiband Unassisted station to move a QSO partner to another band. For example, if you are working someone on 6 meters you might send "QSY 144.113" instead of "73". In addition, an Unassisted station may make schedules with other stations so long as the schedule is arranged before the contest has begun and the other station is at least 1300 miles distant (as determined by the six-digit grid locators of the two stations). This rule is to encourage efforts to push the envelope of meteor scatter communication.

Entrants in the Assisted categories may make any normal use of Email, Ping Jockey, or other scheduling aids during the contest, but of course they must not exchange any significant QSO information by non-meteor-scatter means while a QSO is in progress.

4. **EXCHANGE:** full callsigns, four-digit grid squares, and final rogers must be exchanged. Any

communication by non-meteor-scatter means during a contact invalidates the contact.

5. MODE: any transmission mode (for example, CW, SSB, HSCW, FSK441) is permitted. QSOs with the same station count only once per band, regardless of mode.

6. OPERATING PROCEDURES: QSOs will be much easier to make if everyone adopts conventional procedures. In general, the westernmost station should transmit in the first sequence. On a directly north-south path, the southern station goes first. You may find it desirable to use 15 second sequences in FSK441 mode rather than the conventional 30-second sequences.

All participants are encouraged to listen for "tailenders" after completing QSOs, and to listen on the standard FSK441 calling frequencies (50.270 and 144.140 MHz) for CQs. The preferred method of calling CQ is the form "CQ U5 W1ABC", "CQ D13 W1ABC", or "CQ 113 W1ABC", indicating that W1ABC will be listening for replies "Up 5 kHz" or "Down 13 kHz" from the CQ frequency, or, in the third example, on 144.113. In each example the subsequent QSO would take place on the reply frequency, NOT the CQ-calling frequency.

For example: W1ABC in FN42 beams southwest and calls "CQ D10 W1ABC" on 144.140, transmitting in the second half of each minute. W4XYZ replies on 144.130 and thereafter listens 144.130. As soon as W1ABC hears a reply, he QSYs to 144.130 to send "W4XYZ W1ABC FN42", and the two stations complete their QSO on that frequency. When the contact is complete W1ABC can go back to CQing on 144.140, knowing that a tailender might call him on 144.130 as well as someone answering the new CQ.

If the preferred CQ frequencies become too busy, move up or down by 5 or 10 kHz.

As a further aid to stations operating in the Unassisted categories, all participants are encouraged to look for requests to QSY to another band. After receiving RRR from W4XYZ, instead of sending "73" W1ABC might send "QSY 50.265". When W4XYZ receives this request she immediately QSY's and starts calling on 50.265. W1ABC moves over to 6 meters when he hears no further pings on 144.133, and the pair then complete a QSO on 6.

7. SCORING: each QSO counts 1 point on 50 and 144 MHz, 3 points on 222 MHz, and 10 points on 432 MHz. QSOs originating by any of the permitted methods -- pre-arranged schedule, real-time schedule, calling CQ, tailending, or requesting a QSY to another band, are all

scored the same way. Your final score is the sum of all QSO points multiplied by the total number of unique 4-digit grid locators worked, per band.

8. REPORTING: Log information must contain the following data: Date and time of QSO, callsign of station worked, frequency, grid square, claimed QSO points, and new grids by band.

For example:

Date	UTC	Call	Band	Grid	Pts	Mult
Dec 14	0103	W1ABC	144	FN42	1	144-1
Dec 15	1237	W4XYZ	50	EM83	1	50-1
Dec 15	1252	N4XYZ	222	EM83	3	222-1
Dec 16	0203	W9JKL	144	EN62	1	144-2

The following information should be contained on the summary sheet accompanying the log: Callsign used, Grid Locator, Power Category, Assisted or Unassisted, Single or Multi-Band, Name, Address, and Email Address (if available).

Callsign used: K0ABC  
Grid Locator: EM48  
Power (High or Low): Low Power  
Assisted or Unassisted: Assisted  
Single or Multi-band: Multi-band

Name: John Doe  
Address: 1234 Main Street  
My Town, State, Zip

Email address: [k0abc@isp.com](mailto:k0abc@isp.com)

The summary sheet should include a table of the following form:

Band	QSOs	Points	Grids
50	1	1	1
144	2	2	2
222	1	3	1
432	0	0	0
-----			
Totals:	4	6	4
Total Score = 6 x 4 = 24			

Logs must be postmarked or email dated no later than January 15, 2003. Email logs should be sent to:

[wa5ufh@ykc.com](mailto:wa5ufh@ykc.com)

Paper logs should be sent to:

Louis R. Tipton  
778CR123  
Edna, Texas 77957

Please, please send in your score! It's very easy to do,

and we want to have a good record of the level of activity in the event!

9. RESULTS will be posted on a pre-announced web site. Scores will be listed in rank order of total score, and there will be an indication of the entry band (50, 144, 222, 432, or M for multi-band) and category.

10. Certificates? Would anyone like to volunteer to do this?

73 from Joe, K1JT, and Tip, WA5UFH

## **Weak Signal Technical Tip - Coax**

**By Jim Kennedy, WH6LR**

Stolen from the W5KS Newsletter and VHF+ Notes.

This month we are going to talk about something that you absolutely have to have right or you can't talk on the satellites. COAX! I'd like to thank W4MVB in assembly of this article.

As the name of the game with satellite transmission lines is low loss, I have become fond of Belden's 9913 coax. Sure, hard line is better, but 9913 is easier to work with. Once you pick up a few tricks and skills you will agree that installing "N" connectors on 9913 is much easier (and less lossy) than using the standard so-called "UHF" PL-259 connectors. To make a successful "N" coax connector fitting you must:

1. Use the proper type connector with an oversized center pin (like Amphenol's 8202-1006),
2. Use vinyl plastic electrical tape (3 to 5 inches, 7.5 to 13 cm) wrapped around the coax end up against the "N" connector's shield clamp ring to provide a snug slip fit when assembled,
3. Take your time and carefully make all cuts to a 1/64 inch (.4 mm) tolerance or better, then double check your dimensions when done,
4. Use a small tube cutter so your cuts are all perfectly square and clean, leaving the shield un-nicked, by ever so slowly tightening the roller blade as you cut (so you can stop just before you touch the shield), and
5. Take your time fanning and trimming the shield so it lies evenly and smoothly over the entire clamp surface, but not beyond it to where it will interfere with assembly. No strands should cross.

Cut your coax a few inches longer than you need so you will feel free to cut off a fitting you are not happy with and try again until you get it right. Use what is referred to in ARRL publications as the "improved clamp" (like

the Amphenol 82-202-1006) as it is easier to fabricate. Detailed fabrication illustrations with exact dimensions can be found in publications like The ARRL Handbook, The ARRL Antenna Book and The ARRL Electronics Data Book.

Stiff 9913 does not wear well where it must flex a lot, like where your coax leaves your boom up to your fixed attachment point on your mast or tower. Here a short run of RG-8/U will do better. If you already use 9913 for these flexing areas, you will eventually find kinks appearing at the points of most bending stress. This can be rectified by cutting 3 staggered lengths of RG-8/U that will go from the boom to beyond the kink. Secure them to the boom and the flexing 9913 with tape so they will take the bending stress and "round" the bend radius. Make these coax stiffeners long enough, with each piece at least an inch (2.5 cm) longer than the previous one so you are not soon faced with a new kink where the RG-8/U stiffener section ends.

My first circular polarized beam had the coax routed forward along the antenna boom to the elevation rotor boom up to the mast, where I had a small flex section. It is claimed that your circular polarization pattern is better if the coax is not attached along the boom but instead hangs from the boom's rear end and loops forward to the main mast. I did it this way on my next two beams. But I found no noticeable difference in performance on the air (where it counts) between these two coax routes. This is probably because we rarely get a perfectly circular polarized downlink signal. But I did notice more flexing problems with a long 9913 coax loop off the rear of the booms. A poorly made "N" connector may slip apart from the extra weight it must support on beams that have their coax connectors mounted 90 degrees to the beam's boom. Also I can no longer track an overhead pass horizon to horizon by tracking 180 with the elevation rotor. I am now limited to 90 degrees elevation and must change the azimuth heading 180 degrees at mid pass.

Although "N" connectors are said to be waterproof, I still feel better wrapping the connectors with sealing tape, like Coax-Seal (tm) which you can then mold after wrapping to exactly the way you want. This moldable tape is great for any coax weatherproofing; such as coax BALUN ends or feed points. Use several layers so the surface cracking that will occur with age will not go all the way through to the coax and connector. Linerless rubber splicing tape made for electricians by Scotch 3M (tm) is better for coax fittings, as it will not crack with age and is not so messy to remove. The overlapping rubber splicing tape flows together as it cures to become a solid rubber covering that needs to be slit lengthwise and peeled off to remove. Silicone outgases corrosive

vapors that hasten shield corrosive damage. This will shorten the lifetime of your coax connectors.

Secure your coax, rotor lines and control cables with self-locking plastic "zip" ties that are made for outdoor use, and are UV resistant. They are usually black. The white ties commonly used are for indoor use only. They will eventually break on their own if used outdoors. I like to use these ties at the end of my tape wraps to keep the end of the tape from lifting up with age.

## **Reports from Our Members**

### **Relayed From Lee Kemp, N5TIF**

#### **W3ZZ, To Become New "World Above 50 MHz" Editor**

A venerable QST institution is getting a new editor. Starting with the December issue, Gene Zimmerman, W3ZZ, of Gaithersburg, Maryland, will take over the reins of "The World Above 50 MHz" from Emil Pocock, W3EP, who has handled the column for the past 10 years.

"The VHF and above area has been an interest of mine since I was first licensed," says Zimmerman, a ham since 1956.

Among other accomplishments, Zimmerman has logged several national top-10 finishes in the ARRL November Sweepstakes (both modes) as well as a second-place North American finish in the CQ World Wide CW event (from VP2MDD). He's also bagged several national top-10 finishes in ARRL VHF parties and in the ARRL VHF Sweepstakes.

After his forays into HF DXing and contesting, Zimmerman returned to VHF in the early 1980s. Operating from his home in Maryland, he's progressed to a setup that covers 6 meters through 70 cm with full legal limit amps plus gear for 903 MHz through 10 GHz-"when it all works," he quips.

Even in "the world above 50 MHz," Zimmerman says he's more of a DXer than a tester. He holds VUCC on 50 through 1296 MHz with more than 800 grids confirmed on 6 meters alone and 250 on 2 meters. He's also a frequent participant on the VHF convention scene.

A Life Member of ARRL, Zimmerman has served on the ARRL Contest Advisory Committee, edited the VHF contesting column for CQ Contest magazine during its five-year lifespan and was director from 2000 until 2002 of the CQ VHF Contest.

QST Editor Steve Ford, WB8IMY, credited Pocock, the retiring editor, with popularizing VHF operating for the non-VHF community. "Emil used his column as a forum to encourage interest among beginners," Ford said. He also broadened the column's scope to embrace activities not often described in the amateur press and described propagation phenomena in a way that all hams could understand, he added.

*Editor: I met Gene in 2001 at Central States. He is a top-notch VHF'er. This is a good addition.*

### **From Don Ross, NL7CO**

Some gossip.

October has been a quiet month here in EM04 with most of us awaiting resolution of the current political situation to see if we will still be here, or trying to operate as portable A9 or HN. All but two of the local VHF-ers are checking on reciprocal licensing procedures. The other two do not have the same travel agents.

My second 2M18XXX is here, but I am leaving for Kirkland AFB on Thursday so it will have to wait until my return to go up. It will definitely be in the air (caveat to the above paragraph, of course) for the Leonids.

Maybe this will be the little bit of added oomph to get me checking in to the Denver and Memphis nets. Next is the SSB MHP-145 mast mount preamp and then the Commander II amplifier. I also received the information from Dick, K5AND, on converting a Kenwood TS-850 to something useful by installing a transverter inside of it.

WO7GI is on temporary assignment to Fort Knox, KY for the next five months, so he will not be here for either the Leonids or the January contest. Speaking of the January contest, I am planning on returning to DM85, DM86, DM95, DM96, EM06 and EM16 if the weather cooperates. If you need the grids, send me an e-mail in December and we'll try and set some skeds.

*Note: Don will not be available for the Leonids meteor shower.*

## **On the World Wide Web**

A few sites Weak Signal operators may be interested in. Send in your favorite non-commercial sites and they will be listed here.

### **From Joe Taylor, K1JT:**

I am pleased to announce the availability of an upgrade to WSJT Version 2.9. The upgrade provides most of the features of the soon-to-be-released Version 3.0; I am releasing it now as Version 2.9 because many users have

asked for early access to its new capabilities. A full release of Version 3.0 must await some updating of the Users Guide and Reference Manual. Probably a few additional features will be added by then, as well. Please be patient!

Version 2.9 is available only as an upgrade. As usual, it can be downloaded from the WSJT web site, <http://pulsar.princeton.edu/~joe/K1JT>, or from the European mirror site <http://www.dk5ya.de>. New features of the program include the following:

*Editor: Abbreviated list*

1. EME Echo mode now works on certain computers (generally older, slower ones) that previously refused to run Echo mode properly. The new version runs fine under Windows 95 on my ancient 100 MHz Pentium with 32 MB of RAM.
  2. A new feature known as "Measure" can be selected from the main screen in EME Echo mode.
  3. A pop-up utility labeled "EME Calc" can be selected from the EME Echo screen.
  4. The program is much better behaved when operating at higher frequencies, in particular 1296 MHz and above.
  5. The amount of programmed frequency spread of your transmitted signal (the "Dither" magnitude) can be set to any value in the range 0 to 500 Hz. Instead of accumulating average echo parameters indefinitely, you can set a parameter "Tavg" that specifies a time constant for averaging.
  7. Information sent to the main text window every 6 seconds now accumulates, with the text window scrolling as necessary.
  8. In JT44 mode, if the "Grid" box is left empty then no EME Doppler shift will be displayed.
  9. The minimum "Dsec" increment has been reduced from 1 second to 0.5 second.
  10. JT44 messages are always exactly 22 characters in length, and any additional characters are ignored.
  11. In Version 2.3.0, hitting the F4 key while in echo mode would cause the program to crash. Fixed.
  12. Switching between modes could cause the Auto Period button to be stuck in the disabled or "grayed out" state. Fixed.
  13. The last character in a manually edited FSK441 message was not sent if the default trailing blank and "<" character were erased. Fixed.
- 73, Joe, K1JT

## **DX Reports October 16-November 15**

By Art Jackson KA5DWI

Each month we will attempt to let you all know what has been going on 2 Meters and give you an idea what you can expect in the next month.

Please Mail or email your DX reports to me and we will get them in the newsletter.

## **DX Reports**

All dates are based on UTC.

### **Meteors:**

No major showers last month, but numerous reporting of "pings" around 10/25 then on 11/09

### **Moon:**

Heightened activity reported during the ARRL EME contest 10/26-27

### **Aurora:**

10/24: Light activity reported from the NE US.

### **E Propagation:**

#### **Tropo:**

#### **Very quiet month, no major openings.**

10/19: Enhanced signals FL, GA, NC

10/20: Enhanced signals S.TX & E.OK

10/24: Scattered reports MS & GA

10/27: N.TX to KS, MN to MO,

10/29: S.KS to Central CO

10/30: Good Net for K5MQ, LA to S.KS & Central TX

11/09: Enhanced signals IA & MO, LA to FL

11/10: N Texas to MS

11/11: Scattered reports East Coast

11/14-15: Scattered reports SE US.

10/11-12: Central Plains to Central and West Texas

*Sources: DX World 144 Propagation Logger and SWOT Group Page*

## **What to expect November 16 - December 15:**

**It is time to be alert to produce results.**

### **Meteors:**

**1. The Leonids** on 11/19 UTC is also a very good North/South path shower. If we have another storm, directions will not matter. The best times are 0200-0600 and 0900-1200 *Local* Time for N/S paths.

It appears that you will need to be on very early on the morning of 11/19. Single sideband will be the most productive mode during a storm. Two peaks occur, one at 0400 UTC, the other at 1040 UTC.

**2. The Geminids** start 0100 UTC on 12/13 and end 0400 UTC 12/16. The shower peaks on 12/14 at 1000 UTC +/- 6 hours. The shower can be fairly productive from beginning to end. This is a good shower for WSJT, HSCW and SSB schedules.

It also favors North/South paths.

Best N/S times, 0500-0900 & 2100-0100 *Local*. Look for E/W paths in between N/S peaks.

### **Aurora:**

Not bragging here, but we came close on last month's report. A touch of aurora occurred on Oct 24. Overall, we may be seeing thing quieting down. The solar cycle is supposed to be on the way down.

The potential source of CME's are coronal holes and an active developing sunspot. Be sure to monitor *Spaceweather.Com* for possible events.

### **Tropo:**

An El Nino year is not good for Tropo. A highly active jet stream is not conducive to its development. It appears so far that this occurring.

The Gulf States and East Coast will be the focal points for future opportunities. Events prior to frontal passage and cool dry weather systems changing to warm ones are the points to look for.

All tropo conditions result from an upper air high-pressure system capping the release of heat from the surface.

### **E-Layer Propagation:**

We are now into the Winter "E" season. This tends to be more of an evening event when it occurs. Anything can happen. Keep an eye for "short skip" activity beginning on 10 and 6 Meters.

### **Moon:**

Good days: 11/24-12/01

Bad days: 12/05

Based on low sky noise and path loss readings (DEGR) less than 3dB. Bad days are those with a 10db plus reading.

## **Lunar, Solar and Astronomical Events**

**Lunar:** Apogee – 12/13

Perigee – 12/01

New Moon – 12/04, Full Moon – 11/19-20

**Solar:** Overhead 11/16: - 18.8°S, 12/15: - 23.3°S

**USAF Predicted Solar Flux Average:**

11/16-12/15: 172

Slightly down

### **Meteors:**

All Showers: 11/16-11/30, 13 Active, 8 Peak  
12/01-12/15, 23 Active, 11 Peak

Major Showers:

Leonids peak twice 0400 & 1030UTC 11/19

Geminids peak 1000 UTC 12/14 +/- 6 Hours

More meteor info at:

<http://comets.amsmeteors.org/meteors/calendar.html>

## **SWOT Classified Ads**

**From: KC5KLY (good in QRZ)**

**T.J. Chronister**

918-465-2685

Icom 271 A 2 Mtr All-mode

9 out of 10 in appearance, 25 watt. 10 of 10 in operation .Has added on internal PS, added preamp, added voice synthesizer, tone board, original operator's manual, never used dc power cable hand Mic. \$400.00 + shipping in 48

Icom 751 HF All-mode 100 watt

8 of 10 in appearance 10 of 10 of operation has all

filters except narrow CW, modified for Pass Band Tuning, full transmit coverage , (very easy to change back to original) W7FG Manual has new lifetime ram board (not installed)

(cost \$60.00) hand Mic. \$450.00 + shipping in 48. I upgraded my station, and no longer need either radio, this is not junk, or Hamfest equipment everything is as described.

## **Event & Contest Calender 2002**

November 23-24 ARRL EME Contest

January 18-20 ARRL VHF Sweepstakes

## **SWOT Net Announcements**

**From: Phil, N0PB**

The Northern Missouri Net has moved to 8:00PM CT Monday.

**Also:**

The 9:00 PM CT Monday night Eastern Oklahoma SWOT Net is no longer in operation. We continue to look for a new NCS.

**From: John, KM5ES**

Starting soon for those of you that have 160 Meters we will be meeting on 1.982 nightly. This doesn't replace any nets or discouraging VHF. It's just for ragchewing and keeping up with what's going on in SWOT. Again watch between 1.975 and 1.982. You do not have to be a member of SWOT to join us.

**From: Bob, K0NR**

The Monday night Colorado Net listed has been corrected. It is the Rocky Mountain VHF + Net. Also all the current NCS are listed.

## **SWOT Net Reports**

Here are the net reports for June and July. The first figure listed for each date is the number of check-ins and the second is the number of grids.

**Northern California (Sunday):**

**Month of October**

10/06/02...79 10/13/02...72

10/20/02...81 10/27/02...72

105 stations/ 16 grids

**Central Louisiana (Tuesday)**

09/17/02...No Net 09/24/02...6/6

10/01/02...9/7 10/08/02... 7/7

**Northern Missouri (Tuesday)**

09/03/02...17/10 09/10/02...29/17

09/17/02...16/7 09/24/02...20/12

**North Texas (Wednesday)**

09/18/02...29/13 09/25/02...33/17  
 10/02/02...33/14 10/09/02...43/18

**East Texas (Saturday)**

09/14/02...17/8 09/21/02...13/5  
 09/28/02...16/7 10/05/02 7/5  
 10/12/02...19/8

**SW Oklahoma (Thursday)**

09/19/02...4/2 09/26/02...6/4  
 10/03/02...6/3 10/10/02...7/5

**SIDEWINDERS ON TWO" ENROLLMENT OR RENEWAL FORM**

NOTE: Though your membership and number are good for life you must renew annually to receive the newsletter and stay on the active list..

Enclosed find check/MO. to: New member---\$12.00\_\_\_\_\_ Renewal---\$12.00\_\_\_\_\_

Howard Hallman WD5DJT, Sec.Treas.

3230 Springfield Lancaster, TX 75134-1214

**New Member.** I have worked the following members:

Call: \_\_\_\_\_ SWOT No. \_\_\_\_\_ Call: \_\_\_\_\_ SWOT No. \_\_\_\_\_

Renewing: My SWOT No. is \_\_\_\_\_

Name: \_\_\_\_\_ Call \_\_\_\_\_ Grid Square \_\_\_\_\_

Street address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

Telephone Nos. \_\_\_\_\_ E-mail \_\_\_\_\_

***SWOT NETS***

Day	Local Time	Area	Net	Frequency	Net Control Station
SUN	8:30A	TUCSON AZ	ARIZONA	144.250	N7SQN AL
SUN	8:00P	VACAVILLE CA	NORTHERN CALIFORNIA	144.250	W6OMF LARRY
SUN	9:30P	HOLLAND MI	MI SWAM	144.155	K8NFT
MON	7:30P	ALBUQUERQUE	NEW MEXICO	144.200	N5XZM BOBBY
MON	8:00P	COLORADO	ROCKY MT. VHF +	144.220	N0VSB W6OAL N0POH
MON	8:00P	N. CENTRAL MO.	N. CENTRAL MO.	144.250	N0PB PHIL KB0PE DAVE
MON	8:00P	SANDUSKY	E. MICHIGAN VHF	144.250	W8IDT BART
TUE	8:00P	CA.NO CTYS	NORCAL	144.250	KF6BXH BILL
TUE	8:00P	EM31 LA.	CENTRAL LOUISIANA	144.250	K5MQ DAVE
WED	8:00P	IA-MO-IL	TRI STATE	144.250	WZ9D N9CXO
WED	9:00P	NO TEXAS	NORTH TEXAS	144.250	W5FKN BOB
THU	8:00P	CA SO CTYS	NORCAL	144.250	KA6CHJ PAUL
THU	7:30P	LAWTON OK	SOUTHWEST OKLAHOMA	144.250	WH6LR JIM
THU	9:00P	TENNESSE	UPPER CUMBERLAND	144.225	N2BR BOBBY
SAT	7:00A	EAST TEXAS	PINEYWOODS	144.250	K5LOW DON