

# SWOT BULLETIN

THE OFFICIAL NEWSLETTER OF THE SIDEWINDERS-ON-TWO RADIO CLUB

# PROMOTING SSB, CW & DIGITAL OPERATIONS ON 144Mhz AND UP VISIT US ON THE WORLD WIDE WEB AT:

## www.swotvhf.org

# http://groups.yahoo.com/group/sidewindersontwo

BULLETIN # 299 <u>SECRETARY-TREASURER</u>: Howard Hallman/WD5DJT 3230 Springfield Ave. Lancaster, TX 75134-1214 PHONE:(972) 224-5964 EMAIL: <u>wd5djt@swbell.net</u> WEBPAGE: <u>http://home.swbell.net/wd5djt</u> MARCH 2004 <u>CHAIRMAN & EDITOR</u>: Art Jackson/KA5DWI EMAIL: <u>ka5dwi@sbcglobal.net</u> PHONE: (817) 485-4977 <u>VICE-CHAIRMAN & WEBMASTER:</u> John Petersen/KM5ES EMAIL: <u>km5es@lakewebs.net</u>

# 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.
- E-Mail all articles and reports to the Editors' Web addresses listed above or you can mail them to Art Jackson KA5DWI, 6516 Simmons Rd., North Richland Hills, Texas 76180-4243.
- MERCHANDISE:

Decals and listings available for \$1.00 each for shipping and handling from the Secretary/Treasurer. SWOT Patches are available at a price of \$4.00 Each + \$.50 for mailing Badges are available from "The Sign Man", Rick Pourciau NV5A, <u>http://www.thesignman.com/menu.html</u>

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# The Chairman's Corner

By Art Jackson, KA5DWI

#### I thought I would raise a stink. No one took a deep breath.

I tried to raise a few issues on the last Bulletin to get a feel for what you all might be thinking. What did I get in response?

One irate Email and about 1000 virus infected ones. Obviously and honestly I am getting deaf ears or no one really cares.

I have accepted that this is the way things are and what I will do is go with the flow. As long as I get contributions from members of this organization I will do the best I can to keep it moving forward.

Unfortunately, my time is now much more sparse than it once was. It is difficult to produce this newsletter and to take care of SWOT business matters is much more difficult. I believe to grow and develop; we need an active and involved Chairman. I would be lying to say that I could continue in that capacity. The Bulletin is one objective, the Business of the club another.

Come June, we will gather at HamCom and will attempt to resolve a number of these issues and move on. I believe our club has a great purpose; we need to find out where we can produce the best results.

#### **SWOT Homepage:**

It was good to see that a few of you are using the SWOT Homepage. Our hosting company managed to wipe out the index for the second time in the late January. A member alerted us to the condition. After going through that again, we have decided that it was time to find a new home.

David Vondrasek, N5ITO has offered to host the Homepage in the future. David works for a major Internet Service Provider and has the facilities to host our site. This will definitely resolve our past issues we have had with HostOnce. Our maintenance agreement ends in September and the move will be done sometimes during the summer. We owe a lot to David for his contribution.

#### This Month's Issue:

No DX, the Holidays and maybe a little general disinterest has resulted in a smaller Bulletin this month.

I wish to thank Randy "Tip" Tipton WA5UFH for his contributions this month. WSJT continues to develop and bring in new participants. WSJT provides VHF and

UHF DX digital QSO's in less than adequate conditions with modest stations.

#### Great News!!!:

The strength of SWOT is our Nets. Be sure that you check out the Net Reports at the end of the Bulletin. Here we are in the middle of winter and lousy propagation and look what happens: Phil Baldwin, NOPB's Northern Missouri set a new record for check-ins. Also Bob Landrum - W5FKN's North Texas SWOT Net consistently had a large number check-ins. Of course, our NORCAL friends' numbers were also and always impressive. Thank you all for your hard work. Thank you Don (K5LOW) for gathering the numbers. Don't forget to support your area 2 Meter Net, SWOT or not. Remember that I will gladly report on non-SWOT Nets in this Bulletin.

#### Next Bulletin:

The next bulletin will be published after my college finals are completed. Expect it around Memorial Day. It should contain where and when we will meet during HamCom. I consider this meeting to be most important and wish that you all would be able to attend.

# <u>Meteor Scatter and VHF Activity Periods</u> <u>i.e. Random Hour / Fall-Winter WSJT</u> <u>Sprints</u>

By Louis R. Tipton (Tip) WA5UFH for the WSJTGROUP

VHF Meteor Scatter QSO's and Random Hour are occurring on Saturdays. What! You don't know what they are? Many VHF operators have neglected or failed to realize the adventure of "Activity Periods". Let's starts off with a brief explanation about meteor scatter so that we can better understand the philosophy of "Activity Periods". There are two types of Activity Periods in NA today, Random Hour and the Fall / Winter WSJT Sprints. Chances are, if you have an ssb capable station on two or six meters and some computer skills you can be joining in the "Activity Periods" with a little preparation.

FSK441 and JT6M are the new WSJT meteor scatter modes. These two modes have changed meteor scatter and now the older HSCW techniques and Analog meteor scatter are in less use as the popularity of WSJT increases. JT6M is designed for the propagation scatter characteristics found on the Magic Band but FSK441 is also used on 50MHz and is the standard for activity periods. Most meteor scatter stations today consist of a single yagi antennas and somewhere around 100 watts or more of power. Some degree of success can be achieved by even QRP stations with smaller horizontal Loops or Dipoles. The FSK441 mode has been used by stations like W1LP maritime mobile, KD5IUG & WZ8D automobile mobile and by rovers like WB2FKO in New Mexico.

Meteor scatter is always there and available but there are limitations and optimum times to operate. The meteor scatter operating range is normally less than 1200 miles but contacts are possible extending that distance by a few hundred miles. Because the VHF bands are not always open for DX communications the VHF operator can use the propagation mode meteor scatter using daily sporadic meteors to make contacts. Optimum times are mornings and certainly during major meteor showers but again; sporadic meteors are always available and contacts are always possible. This is proven each Saturday during Random Hour where numerous meteor bursts are decoded by the WSJT application as operators exchange random contacts.

All contacts made using high speed meteor scatter require special procedures because of the short duration of meteor refractions. With high speed FSK441 the data information that is transmitted can become enhanced by reflections from under-dense columns to complete a contact with a distant station. This necessitates the use of Standard Operating Procedures which when followed by both partners usually ends up with a completed contact. A completion must contain all the elements of a contact; both-calls, reports and acknowledgement of reports. Seventy three's are sometimes exchanged but not required for a "legal completion". This mode is also good for VHF contesting where Grid Squares are used for the exchange instead of the standard meteor scatter reports. (R26 or R27) The Standard Operating Procedures are explained on several internet sites and a link is provided on the Ping Jockey Page plus hitting the F5 Key in WSJT brings up the Standard Operating Procedures in easily understood terms.

Timing is very important with WSJT modes. Programs like Dimension 4 will keep your PC clock accurate while connected to the internet or more complicated systems like GPS can be used if portable or mobile without an internet connection. Having an accurate clock is important for all High Speed Meteor Scatter work including "Activity Periods".

The best VHF bands for working meteor scatter are 50, 144 and 222 MHz. There have been only a few meteor scatter contacts on 432MHz and the majority of operators are using 50 or 144MHz however 222MHz is growing in popularity and should be considered.

After an operator has become familiar with the Standard Operating Procedures and sets up the hardware and learns the software he or she wants to make contacts. Random Hour provides the best opportunity for testing the WSJT receive decoding but more on that latter. The most commonly used contact method and the most likely to end in a completion are those which were prearranged. Prearranged schedules, called skeds, are made in real-time on the internet using the Ping Jockey. Here two operators agree on the frequency, start time and other QSO details prior to starting the contact. As the contact attempt progresses they remain silent on the internet about the exact details of what is being sent or received if it is to be considered a "legal contact". Prearranged schedules are the easiest to complete and thus the most popular. Harder contacts, longer in distance, or trying to work a new state or grid should always be attempted using prearranged schedules in order to increase the probability of a completion.

What about calling cq? Calling cq is part of amateur radio and like any other mode amateurs use, FSK441 using the propagation mode meteor scatter can be employed for random calling. This method of making contacts is without a doubt a little harder than a prearranged schedule. To start off with, if another station is listening he has to gleam from your meteor scatter ping your call and where you are listening. It could be forward scatter of back scatter and you do not know where to point your antenna until determining the location of the station calling you. Because of this it is much easier to make contacts answering and calling cq during "Activity Periods" where the focus is for many stations to use the call frequencies at a agreed time and format.

Activity Periods in North America were started by the WSJTGROUP which also sponsors the NAHSMS Contests and Random QSO Award. Stations WA5UFH, KD5IUG and WA3LTB started promoting what is today called Random Hour. Random Hour was initially started on Jan  $25^{th}$  2003 and it continues today with now well over 70 unique calls recorded heard during the activity periods. Random Hour is weekly at 1400 – 1500UTC for two meters and 1500 – 1600UTC for six meters. The recognized call frequency for FSK441 on two meters is 144.140MHz and 50.260MHz for the six meter band.

During the winter months when it gets darker earlier operators often times have more indoor time only to find dead bands on two and six meters. So another activity period was started last October which is called "The Fall / Winter WSJT Sprints" and they are scheduled for the last Wednesday of the Fall/Winter months. The Sprints are not contests however the spirit of competition can be felt as operators go about making meteor scatter contacts.

With participation now growing during activity periods new challenges have surfaced. Like any new process, procedures have to be learned and new techniques have to be employed. Random Hour is still an evolution and adjustments are made as the circumstances dictate.

Let's review a few processes relating to Activity Periods. From the above discussion you should now have an idea of meteor scatter processes that can be applied to "Activity Periods".

#### **Message Format:**

The Standard Operating Procedures are modified for "Activity Periods". This is necessary because of the philosophy of Random Hour, which is to have multiple QSO's occurring simultaneously on the call frequencies. It is necessary for each message send to be recognizable by any station receiving it to know if the decoded text was intended for them. So every message is addressed to someone; except for messages calling a cq. To accomplish this change of messages each operator prior to the start of the activity period goes to the toolbar <SetUp>and from the dropdown menu clicks on the Options selection. At the message cells they insert there callsign or suffix in the leading edge of messages 3,4 and 5. Now when UFH R27 is received by K4FJW whom has been sending both calls and reports, K4FJW now will know that UFH R27 was intended for him. If K5CM was in QSO with another station and he copied the UFH R27 Ping he would know it was not his report. If he were to receive the single tone message or the standard report "R27" without the "UFH" no one would have any ideal whom it was indented. So message formats for activity periods are very important and anyone using the Standard Operating Procedures designed for schedules will cause confusion for operators during "Activity Periods" such as Random Hour.

Examples of set message for WA5UFH & AF4O...

WA5UFH :	AF4O:		
Message Received Text	Message Received Text		
UFH $R\%R = UFH R26$ or $R27$	AF R%R = AF R26  or  R27		
UFH RRR = UFH RRR	AF RRR = AF RRR		
UFH 73 = UFH 73	AF 73 = AF 73		

After the Activity Period is over, it is simple to return to the NA Default by going back to Options and clicking on NA Defaults.

#### Answering a CQ:

When you hear a ping, note the time if possible but also be aware you might hear many pings in a 30 second receive period from several stations. Use the mouse clicks on the green line just as you would normally during scheduled contacts. When you get a decoded CQ message look for the callsign and notice if the other station is indicating he is listening up or down frequency and note what transmit sequence he is using. If he is using the first sequence for calling make sure you call him on the second!

Examples of a decoded CQ You Decode ..... What it means..... Q WA5UFH CQ = Calling & listening on the call frequency. CQ U6 WA5UFH CQ U6 WA5 = Listening for replies on Call Freq + 6 KHz CQ D10 WA5UFH = Listening for replies on Call Freq - 10 KHz CQ .144 WA5UFH = Listening on Call Freq. XXX.140 (where xxx = 50 or 144MHz)

If the station is calling using the Up | Dn format then call him on that frequency and when he hears you he will move his transmit from the call frequency to your frequency which he designated with his cq.

#### **Calling CQ:**

The frequency to call for random contacts during activity periods are the calling frequencies. Your choices are which sequence to transmit on and what frequency you will listen for replies on. Some thought should go into each choice you make. If you hear local activity via tropo / line-of-sight that is still ok provided you use the same transmit sequence as the station you are hearing. By doing so you will not interfere with the other station provided you both have the right time.

After choosing the sequence to transmit on you must decide if you're going to listen on the call frequency for a reply or indicate another frequency for the contact to occur. If the call frequency is not very busy, remembering the purpose of the activity period is to provide numerous pings during a specified time, you might decide to call and listen on it. If there is a 'birdie' on the call frequency it might be better to listen up or down frequency. If the local activity is heavy and numerous pings are being heard you might choose to call using the Up | Dn method. This is not operating split because when you hear a station calling you on the specified listening frequency you move your TX frequency to that specified frequency with the calling station.

#### **Tail-Ending:**

Activity periods allow you hear a lot of meteor pings so copying other stations as they progress thru a QSO is easily done. This can be fun to listen for stations completing QSO's and them calling them as they complete. This procedure we call "Tail-Ending" and it works well during Random Hour. When you decode a message indicating the QSO is near completion, start calling that station and he may just respond if he hears you.

The Tail-ending response might even be in combination with his other QSO partner messages. This might look like this: UFH R27 SNX RRR (where W5SNX is sending his RRR to someone else but acknowledging he heard WA5UFH calling him. After receiving that WA5UFH could start sending WA5UFH 27 W5SNX 2727 and when W5SNX does complete with his original partner he will start sending SNX R27 back to WA5UFH! Tailending and working multiple stations is certainly possible during Activity Periods and is a good exercise to keep the saw sharp; it's just fun!

#### **Reducing QRM:**

Activity periods are not designed to be QRM free. In fact a good activity period will be one where pings are colliding in the pass-band and locals may be heard. There could be many pings in a 30 second receive period from several stations and this is not interference since each ping generally stands along. However, no interference should ever be deliberate and attempts should be made by each operator to reduce conflicts so that everyone can enjoy the Random QSO Hour or Sprint. Areas that present the biggest challenge are highly populated areas.

If you live in a location where many operators are likely to hear you on tropo or ground-wave then you probably should consider turning off the High Power Amplifiers or reducing power significantly. Most contacts during activity periods will be less than 1100 miles and will be workable with 50 - 200 watts.

Listen before you transmit applies for every mode including FSK441. If you hear your neighbor calling (line of sight or tropo) using a certain period, don't answer a cq on the call frequency or start calling using the opposite sequence because he will only hear you! Use the same transmit sequence and he will never know you're their until he see pings being decoded on his screen that are meant for you instead of him. Yes, he may just have to click on pings intended for you to find his partners messages! This is some of the thrill of "Random Hour".

Never use single tone message during activity periods! Although the temptation is there to end a contact quickly using the single tone messages, it only spoils it for others who are using the correct message formats. If the band opens, this applies especially to six meters, consider terminating your Random Hour activity if it is a strong opening. FSK441 was not designed for strong signals and will in fact decode very poorly under these conditions. Remember that it is unlikely that the band will open over all North America at the same time and others may still be operating using meteor scatter. Use sound judgment; some openings are short in time so you may want to continue listening.

Options if six meters is open or happens to open up during an activity period:

- 1. Go to 50.290 and use PSK31 or RTTY
- 2. Point your antenna a different direction from the E-Cloud and try calling for meteor scatter contacts.
- 3. Go back to two meters 144.140 and call cq there.
- 4. Go back to Ping Jockey and return to making schedules including skeds using JT6M or JT44.
- 5. Pick-up the Mic and talk to someone.

#### **Getting Started:**

If you're a newbie and want to test the receive side of your equipment, the Random Hour should provide you with an opportunity to experience many pings. First time operators of

WSJT are welcome to answer and call during Random Hour. The Activity Periods are often times very fast paced so some might rather make a few schedules first to familiarize themselves with the software and operating procedures before jumping into the Random Hour or Sprints. Activity Periods are always interesting and fun. Often time's stations continue well into the next hours calling and making contacts. Join in and start working toward achieving the Random QSO Award. We will be looking for your calls on the bands, meteor scatter propagation mode that is during an Activity Period.

WA5UFH email : <u>wa5ufh@ykc.com</u>

WA5UFH webpage : <u>http://www.qsl.net/wa5ufh/</u> WSJTGROUP :

http://www.qsl.net/wa5ufh/WSJTGROUP/WSJTGROU P.htm

Ping Jockey: <u>http://www.pingjockey.net/cgi-bin/pingtalk</u> Activity Period Manual :

http://www.qsl.net/wa5ufh/WSJTGROUP/randomhour.h tm

#### **Editor's Note:**

The Spring North American Meteor Scatter Rally is to occur May 1–May 9. The rules are being discussed and refined now and should be released soon. Be sure to check the links above for the latest on this outstanding event.

# **Internet Links**

A few links that are of interest to the Weak Signal enthusiast:

WSJT Downloads (Now at version 4.5.1) http://pulsar.princeton.edu/~joe/K1JT http://pulsar.princeton.edu/~joe/K1JT/UPD451.EXE

# January VHF Contest Report From Lee Kemp N5TIF

For those that missed it, you missed a good one. The conditions weren't great but weren't that bad either. Here in North Texas it started out fast with many locals. I have never heard so many on the bands for this contest!

For the 2 Meter band it is what you expect at this time of the year with just a lot of locals. But as the day went on, the band seemed to open up. The best contacts to the North were: EM07, EM17 and EM27. To the Northeast: EM36. This is a rare one for this contest and was very pleased to get it. To the east was EM32. For some reason there are not many that way for any contest. To the South, I found EL29 and a host of others. I did hear EL17, but was not able to work him. To the West DM93 was my the best.

Not bad considering this is January! But wait, on Sunday around 3:30 PM local time, a big surprise happened on 6 Meters. It opened to Florida. It was in and out for about one hour, then suddenly opened up with many "5 by 9 reports.

I worked the following grids: EL88, EL86, EL98, EL97 and EL94. The one that was a big surprise was working EL94. His call was NL7RN, go figure.

My final score was not the best I have ever done, but I think that I did the best for the January contest. So if you missed this, you should be kicking your self.

I will be looking for you all in the June contest. You never know what will happen. Maybe we will get some 2-Meter Es.

Editor: We are overdue!!

# DX Reports January 4 – March 14

By Art Jackson KA5DWI This was no doubt the deadest DX period in a long time. It is winter.... Aurora: Reported on the following dates:

01/22, 01/24, 01/26 and 03/10

**Meteors:** 

No reports.

Sporadic E/ FAI:

No reports, an intense and short 6 Meter opening occurred on 1/26.

Tropo:

One opening reported!!

3/03 PM - 3/04 AM

Southern Florida to Northern Alabama and Central Tennessee.

For this winter we have had a very active Sub-Tropical Jet Stream. The result is a total lack of stalling weather systems. Low-pressure systems enter at the California coast and progress right through the middle of the U.S. Nothing has stalled out this winter to provide a significant cap in the atmosphere. There has been good low level enhancement, but no good upper air inversions.

# What to expect

<u>March 15 – May 15:</u>

Things can only look up. Finish those antenna projects now!! Meteors:

Finally after a couple of quiet months, we see our first active period since New Years.

The April Lyrids is classified as a good Minor shower with close to a 10-15 ZHR. It will peak on 05/05 at 1625UTC.

Next we see our first major shower since New Years appear soon after the Lyrids. The Eta Aquarids begin on 4/21 and continue till 5/12. It is expected to peak on 5/05 at 1625UTC. This shower produces good paths to all directions. And it is best from early to late morning. You do not stay up all night for this one. Just get up a little early and go to work late.

# Aurora:

#### Still signs of life.

Every time that you think that the Sun is about to finally slow down, a new region develops and produces geomagnetic activity.

Predictions for possible disturbed conditions: 3/27-28, 4/06-08, 4/24-25

#### Tropo:

This can be on of the best time of the year. Look for the following:

- Upper Air High Pressure systems building from Northern Mexico, the Gulf of Mexico or Southern Florida.
- Pacific Fronts passing across the U.S. with a strong High Pressure ridge wedged between them.

The first one produces excellent Tropo for the Southeast corner of the US. The second one produces strong North to South paths from the Central Plains to the Midwest.

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

#### Finally back by May!!

It was a good Winter Es season.

Hope that it brings a good spring and summer one. E Season begins the end of April and continues into August.

There are probably a thousand different theories to its cause, but look for disturbances in the solar wind to kick off early season opportunities.

#### Moon:

Good days: 3/18-20, 3/30-31, 4/01-06, 4/15-17, 4/27-30, 5/01-04, 5/12-14

Bad days: 4/10, 5/07

*Good* days are based on low sky noise and path loss readings (DEGR) less than 3dB, *Best* days at/or below 1dB. *Bad* days are those with a 10db plus reading.

# Lunar, Solar and Astronomical Events

Lunar: Perigee – 4/07 & 5/05 Apogee – 3/26, 4/23, 5/21 Full Moon – 4/05 & 5/04 New Moon – 3/20, 4/19 & 5/19 Highest Declination (Elevation): 3/28, 4/25 Lowest Declination (Elevation): 3/15, 4/10 & 5/08

**Solar:** Overhead: 3/15: - 1.9°S, 4/15: - 10.0°N, 5/15 – 19.0°N Spring/Summer Es threshold begins 4/30

#### **USAF Predicted Solar Flux Average:**

3/15-4/14: 107 4/01-4/27: 104

(Little change from current levels)

#### Meteors:

3/15-3/31: 21 Showers active, 12 Peak 4/01-4/15: 22 Showers active, 8 Peak 4/16-4/30: 21 Showers active, 11 Peak 5/01-5/15: 26 Showers active, 14 Peak

#### Meteor info at:

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

## Event & Contest Calender 2004

Month	Day	Event
March	27	NORCAL SWOT
	Meetin	ng at M <sup>2</sup> Sacramento CA
March	27-28	Kansas VHF-UHF SSB Contest
March	31	Six Meter WSJT Sprint
		01:00 - 05:00 UTC
		http://www.qsl.net/wa5ufh/
April	23-24	8th Annual Southeastern
_		VHF Society Conference
		Atlanta, GA
		http://www.svhfs.org/
May	22	Belton, TX HamExpo
June	12-14	ARRL June VHF QSO Party
June	18-19	HamCom
		Arlington, Texas

Send me dates that are important to you all.

# **SWOT Announcements and News**

#### From Dave Powers, KA0KCI:

March 27-28 KANSAS VHF-UHF SSB OSO CONTEST, from 1800-1800 UTC Bands 6m, 2m, 220, 432, 902, 1296 NO FM - NO Satellite Digital modes allowed Basic Contest rules apply Log Submittals will be accepted from Kansas and 4 surrounding states Kansas - Colorado - Nebraska -Missouri - & Oklahoma (I guess other states don't count...Editor) 3 Categories - Rover, Single-op, Multi-op I prefer standard electronic log submittal (Cabrillo) I WILL accept PAPER logs Sponsor - Dave Powers - KA0KCI --email ks vhf-uhf gso party@att.net All hams submitting logs will be invited to participate in the next years contest planning. This is the first in what I hope to be an annual event (hopefully the last full weekend in March) There will be Certificates to all that submit logs. There will be a small amateur related prize to the top submittal in each I would appreciate it if you would post that the previously planned prizes are not available and I am looking for new prizes --http://www.ourtownusa.net/~bears/index.html

#### **Balloon Flight: from Don Pfister KA0JLF**

I plan to fly another high altitude balloon the morning of 3/20/04.

There will be Packet/APRS data on the balloon on both 2 M and 440. It is possible to send up 6M.

Flights are about 4 hours (1.5 hrs up/1.5 hrs down). IT would be possible to send a little simplex repeater up. We have successfully sent data (packet and/or APRS) thru it (requires a little longer TXdelay – takes about .5 seconds to hear the signal and start recording). Not to mention voice (FM), and it could be all the above depending on what stations were to transmit. With about a 400-500 mile radius - this could approach the 1000 mile range between stations. You would even hear yourself (could be an interesting station test).

We (balloon groups) keep various records on our flights (<u>http://users.crosspaths.net/wallio/RECORDS.html</u>). One type of record is long distance data reports (Greatest Telemetry Downlink Reception Range). Anyone that might be interested, let me know.

At about 100,000 ft. the range from/to the balloon is over 400 miles. So it is possible to get a 1000 mile contact (both stations at opposite limits of range).

While this won't be SSB, it will be very QRP (weak signal). I'm still in the planning stages as to what equipment I'm going to fly. I hope to encourage participation from the most people, so please let me know if you have an idea. 73 de Don KA0JLF

#### Arizona Net:

We recently received an Email that the Sunday Morning Arizona Net listed is still going strong. NCS is Al, N7SQN. I have requested additional information.

#### Silent Keys:

We express our condolences and best wishes for the family and friends on the passing of these SWOT Members and Weak Signal Pioneers:

- KE6EVX Tom Altenburg Pacific Grove CA SWOT #3161
- W5VAS Hank Arsaga Metairie LA

# **SWOT Net Reports**

Here are the net reports for January, February and March. Unless noted, 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 January: Week one 75 Week two 79 Week three 82 Week four 78 38 checked in all four weeks, 35 for three weeks, 13 just twice and 23 wandered by once.. A total of 110 diffent stations checked in...

#### Month of February:

A good month for the winter... Rain Rain Rain...UGH! Only 4 nets this month... The lovely bride took me to Bakersfield, CA for the weekend... Buck Owens and the Buckeroos at the Crystal Palace...

Totals for those nets run 75, 80, 0, 83, and 76 36 stations checked in all 4 nets 30 stations checked in for 3 of the nets 23 stations checked in for 1/2 of the nets and 30 stations checked in once... A total of 131 different check ins...

A great time and thanks to all for helping... We are preparing for the March 27th gathering at the M<sup>2</sup> Plant, and Mike Myrna and Staff are hoping you get a chance to come by.... see <u>www.m2inc.com</u> and click on the amateur direction and then the cow... hi hi BBQ, SWAP, and Drawings. Come on down...

#### Northern Missouri (Monday) Month of December: Date/Check ins/Grids

\*\*1/12... 51/20 1/19... 49/20 1/26... 18/6 2/02... 38/18 2/09... 38/18 2/16... 44/22 2/23... 44/21 \*\* New Record. Great job Phil!!

#### North Texas (Wednesday)

1/07... 35/14 1/14... 30/16 1/21... 39/16 1/28... 34/15 2/04... 33/14 2/11... 29/15 2/18... 35/14 2/25... 36/19 3/03... 23/15

#### Southwest Oklahoma (Thursday)

2/27...5/4 3/05...3/1

#### East Texas Pineywoods (Saturday)

1/03... 9/6 1/10... 13/8 1/24... 14/7 1/31... 15/6 2/07... 14/5 2/14... 11/04 2/21... 15/7 2/28... 13/6 3/06... 19/7

# SIDEWINDERS ON TWO" ENROLLMENT OR RENEWAL FORM

NOTE: Though your membership and number and	re 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	2.00 Re	enewal\$12.00	
Howard Hallman WD5DJT, Sec.Treas.			
3230 Springfield Lancaster, TX 75134-1214			
New Member. I have worked the following mer	nbers:		
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_		
Receive Newsletter By Email: YES N			

# SWOT and Selected 2-Meter Nets

Day	Local Time	Area	Net	Frequency	Net Control Station
SUN	8:00P	VACAVILLE CA	NO. CALIFORNIA	144.250	W6OMF LARRY
SUN	8:30A	TUCSON AZ	ARIZONA	144.250	N7SQN AL
SUN	8:30P	ZEBULON NC		144.220	N1GMV
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
MON	8:00P	NE MISSOURI	NORTHEAST MISSOURI SWOT	144.250	NOPB PHIL
MON	8:00P	SANDUSKY	E. MICHIGAN VHF	144.250	W8IDT BART
MON	9:00P	TIDEWATER VA		144.230	
TUE	8:00P	CA.NO CTYS	NORCAL	144.250	KN6NG TONY
TUE	8:00P	GREENSBORO NC		144.225	K4HC
WED	9:00P	NO TEXAS	NORTH TEXAS SWOT	144.250	W5FKN BOB
THU	8:00P	CA SO CTYS	NORCAL	144.250	KA6CHJ PAUL
THU	9:00P	LAWTON/ DUNCAN OK	SOUTHWEST OKLAHOMA SWOT	144.250	W5SSG JIM
THU	9:00P	TENNESSE	UPPER CUMBERLAND	144.225	N2BR BOBBY
SAT	7:00A	EAST TEXAS	PINEYWOODS SWOT	144.250	K5LOW DON

**SWOT Nets in Bold**