

Chairman's Corner

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The Chairman's Corner

By Jimmy Johnson KD5ZVE



Hello every one. My name is Jimmy Johnson, KD5ZVE. I am the net control for the Eastern Oklahoma SWOT Net and Net Manager for SWOT and at the

request of Art and the Board members I have taken on the job of Chairman.

From the time the board was first set up we have had three conference call meetings. These have been very productive meetings. As every one knows that belongs to SWOT, the overall objective is to promote activity on Two Meter Single Side Band. In our first meetings we have set some short term goals to keep the club headed in that direction.

First we have a large member roster that we need to update. Then we need to get some help from our older members to get on the air and make some noise ,no one wants to spend what it takes to buy an all mode

NORCAL awards commendation to KA5DWI

The biannual gathering/meeting of the NORCAL SWOT Chapter occurred on June 7, 2008. We like to keep our meeting short and sweet so as to get to the real business of Gripping and Grinning, swapping, and gossiping. But!!!!!!

This year was a bit different. Our good friend K6QXB and SWOT #3360, Herb Sullivan brought new business to the group with a motion of acknowledging our outgoing Chairman KA5DWI, Art Jackson. If not for Art's outstanding service to the organization we could not be what we are today. This suggestion by Herb was unanimously approved by the eighteen members present. Herb is a great member, always active for our nets, meeting, and members. He not only offered the new

radio and tune to two meter ssb and listen to white noise. Also we have started plans to have tables at hamfest around the country. We will need the net controls and members in their prospective areas to be involved in this project. There will be more on this as the program is developed.

If there are any questions or comments please feel free to e-mail me at kd5zve@arrl.net - this is your club, help us keep it going.

And with that, I want to say a quick word about Art KA5DWI on a great job as Chairman and to Howard Hallman WD5DJT who without his diligent work for many years we probably would not have a SWOT Club - "THANKS GUYS"!

I am dealing with some family sickness and my time is scarce right now. I will let every one know what is going on in my shack at a later date.

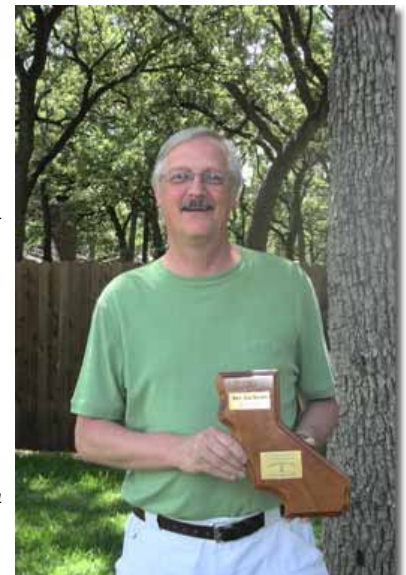
73's Jimmy KD5ZVE SWOT Chairman #3458

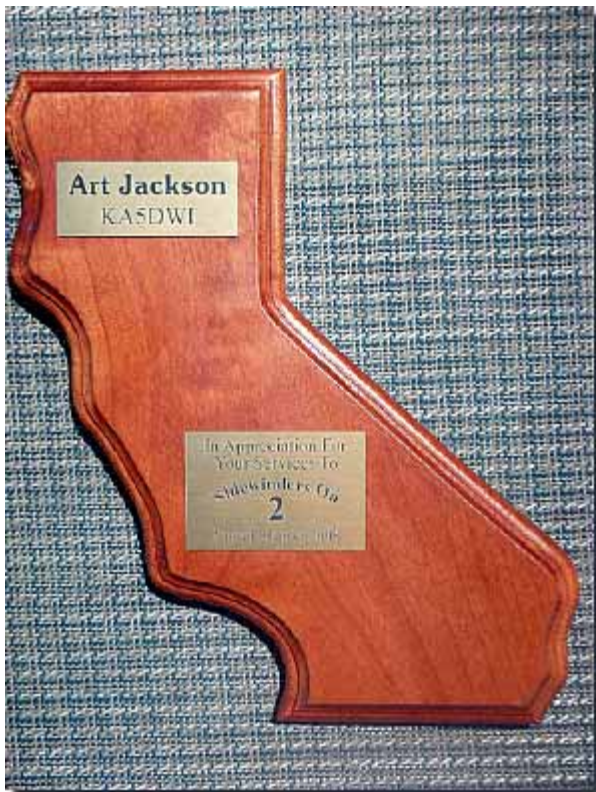
business but came ready with the proclamation honoring Art. Sue and I follow up with the offering of a Plaque.

Art, again thanks for all that you have done, did, and continue to do for the SWOT members. The best to you always...

73,
NORCAL MEMBERS.

Please see plaque and proclamation on next page!





Be it Resolved That:

Whereas Art Jackson, KA5DWI, has for many years held the helm of Sidewinders on Two and;

Whereas he has spent many unappreciated hours working to improve the organization and;

Whereas the Northern California Group of Sidewinders on Two appreciates these efforts and hopes he will continue to serve the organization in some official capacity and;

Whereas we wish to express our thanks and appreciation for those efforts and;

Whereas we say Thanks to you and a very hearty 73!!

Approved and submitted by the assembled Norcal group this 7th day of June in the year 2008



Commendation awarded by NORCAL to Art Jackson, KA5DWI

E-skip report from WB2CUT

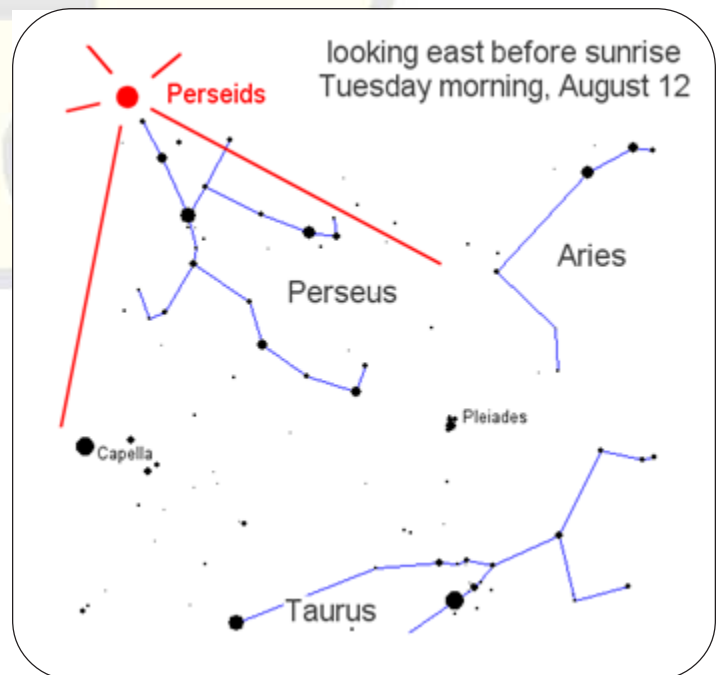
It was an exciting 30-some minutes between 23:23 and 23:55 Z this date. I heard a station in LI on the calling frequency calling CQ Eskip. Then BANG! Some QSB, but in the 32 minutes I heard 7 DX stations and GOT ALL 7! KU4IU EM54 Red Bay Alabama (new grid), AG4V EM55 Memphis TN, K5YPV Ripley, MS EM54 (same new grid), K4KOR Murfreesboro TN EM65 (new grid), KG9D Paris TN EM 56 (new grid), K5RUS West Monroe LA EM 32 (new grid) and K4XR Hartselle AL EM64 (new grid AND SWOT #). Not sure about the counties yet; have to check. It's been a good year ALREADY, what with Essex county, NY in the January contest (as well as a new VE2, both QSLd), VE1WLC and VE1HD in an April tropo (WLC has QSLd) and now a NICE Eskip in MAY! Hope they all QSL. 73 and great DX

WB2CUT SWOT #90

SWOT Bank account balance [July 17 2008]
\$2,879.02
Howard Hallman, S.W.O.T. Secretary/Treasurer

The 2008 Perseid Meteor Shower

Mark your calendar: The 2008 Perseid meteor shower peaks on August 12th and it should be a good show.



VHF signals reflect well off long meteor trails. Listen to 50.125 & 144.200 for the action or browse what the 'ping jockeys' are doing at: <http://www.pingjockey.net/cgi-bin/pingtalk>

**From Larry, W6OMF
and the California
SWOT world.**



Our June gathering of the SWOT members and weak signal clan garnered 34 showing at Bakers Square in West Sacramento.

Donation of Cab wine from our good friend Steve, WA6KTK,

SWOT # 3476 Fred, KLYQP, SWOT#3514 donated 20ft of new 1/2 hardline with connectors, Sue #162 and I #155 donated 50 ft of RG8 coax and 2 Amphenol 1/2" connectors. Cash donations this year from KF6LFO, SWOT#3325 KF6PFT, SWOT#3358 W6PQL, SWOT#3311 and K6SUE, SWOT#162 rounded out the great support for the brunch.

Winners:

20ft of Hardline went to N6ORB, SWOT#3506
50ft of RG8 went to KF6PGT, SWOT#3303
Amphenol Connector went to K7NOM, SWOT#3307
Wine to NR6A, SWOT#3353 W6IZU, SWOT#3290 W6VNQ, SWOT#3281 WV6F, WD6CHL, SWOT#1431 AND KJ6KO.

Other SWOT members attending, Bill, WA6CAX, SWOT#3400, WA6ZKY, Gordy, SWOT#3397, K6DME, RUFF, SWOT#3352, WD6AFR, Jerry, SWOT#1419, KB8VAO, Steve, SWOT#3473, Herb, K6QXB, SWOT#3360, K6QG, Lyle, SWOT#3324.



Left to right KB8VAO, Steve (3474) K6QXB, Herb, (3360) unknown person, NR6A, Dean (3353) the back of K6DME, Ruff (3352) then Catherine, KG6HXI Mike, K6NC, and way in the back Lyle, K6QG, (3324) Norm, N6JV, Rick, W6SR, K7NOM, Bill (3307) and Pete, W6DXJ, and his lovely bride.



WD6AFR's wife Alice, N6ORB, Dave (3525) against the wall, WA6CAX, Bill (3400) in front of him, Vern, WD6CHL, (1431) hand in front of his face is WV6F, He's very camera shy person, I should check the pictures at he post office. WD6AFR himself, (1419) then K6DME, Ruff (3352) with David W6VNQ (3281) next to him and way in the back is KF6PGT, Alan (3303), WA6ZKY, Gordy (3397) W6IZU, Ken (3290) KF6LFO, John (3325) and Tom, W6HMB

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The Guest Editorial published in the last SWOT Bulletin "My Perspective on SWOT" by K3HS, Harry Schools prompted some response. Here is one write up from John Wisyanski, KG6WLV – Editor.

I think K3HS, Larry Schools' comments in the last SWOT newsletter were spot on. As a newer member/NCS, I've been having some random thoughts about our SWOT nets and ways we can improve participation as well as improving the consistency of our procedures. These are just some suggestions, and I welcome ANY questions/comments about the following. These are by no means a criticism of anyone's operating practices or the SWOT organization – I'm just tossing out these ideas for your input. Some are applicable to SWOT as a whole and others are more meaningful to each of us at the local level.

1.) Shouldn't net control stations have a standardized preamble that we all use? Here are elements that I think would be helpful to include, some of which we already mention:

General call for news from anybody on the nets that would be of interest to other 2-meter sideband operators such as swapmeets, VHF/UHF band openings, mobile or portable operations planned, SWOT get togethers planned, upcoming contests, local ops who are upgrading their stations, etc. K3HS made the observation that the nets should provide useful information to those who are interested in 2-meter sideband, and I agree. If we provide good information to interested operators FIRST, it would be ideal.

Solicit wants, needs, equipment for sale. Larry, W6OMF, includes this, but I sometimes forget it; good idea.

SWOT nets are open to all licensed amateurs, and exist to encourage use of 2-meter sideband. W6DWI, Robin, says this and I think it's a good idea; I always give my SWOT number.

SWOT website link or membership information.

A solicitation to contact the NCS via email with any information of interest to the net.

Some indication of the NCS' monitoring/rotation technique. I think we all do this.

Zero beat with net control, turn off RIT(!). It's amazing how many experienced hams don't know how to zero-beat to a conventional sideband signal. The problem is exacerbated when someone insists that their display is "right" and the net control is off-frequency. Given the variation from rig to rig, announced frequencies are nominal, not absolute. The only absolute is that everyone should be on the SAME frequency – the net control's. For newly licensed Tech operators joining the net, this is their first experience working in the sideband mode, and with much more variation than they will experience on HF [FM?]; we should help them learn to use the mode correctly.

Relays always appreciated.

Give new check-ins some rough indication when they are likely to be called when added to roll call list. I also tend to forget to get a new check-in's grid locator.

Local ragchew frequencies and/or call frequencies. In Northern California, quite a group of us hangs out on 144.225 – anyone looking for a contact should check both 225 and the call frequency. Finding actual ragchews and roundtables on 2-meter sideband is a great incentive to use the mode for many of us. My first DX contact on 6-meters was a half-hour QSO to Texas, which was a great thrill. The simple exchange of grid locators and signal reports is not enough for many of us, as K3HS pointed out. It's also surprising how many operators who have fine setups for 2-meter sideband never seem to ragchew or contest. I hear them check into our nets, but never hear them otherwise. I suppose they are waiting for an occasional band opening, but this means our frequencies lie fallow most of the time.

Other SWOT net days and times. Many of the stations that check in to my net can work all three of our Northern California nets.

It might not even be necessary to include all of these items every week, but these were just some ideas I had about what to include.

2.) Toward increasing check-ins, I would suggest the following, some of which are just basic common sense approaches to publicity:

Post flyers about SWOT nets at HRO, AES and other Amateur Radio retailers.

Include a blurb about SWOT with M2's and Cushcraft's 2-meter antenna assembly instructions, especially those intended for 2-meter SSB. Elk Antennas is local to me, and I'm sure they'd be interested in doing something like this, as their 2-meter log periodic is an ideal small beam for sideband experimentation.

Email a press release about SWOT nets to QST, Monitoring Times, etc., and send a flyer to the local clubs and college stations containing the same information. Herb, K6QXB, worked a bunch of us on 144.225 from the station at Santa Rosa Community College where he is an instructor. I worked KI6IIO, Gil, via the station for his first QSO, which was pretty neat. I made a point of sending him a QSL card, too, welcoming him to our service/hobby and apprising him of the SWOT nets.

Demos of 2-meter sideband with local clubs, at conventions and on Field Day. I know this is being done here locally. I worked Loren, WA6LMZ, during my net as he was demonstrating 2-meter sideband to a club meeting up in Sacramento.

3.) Activities and awards. These would be something we could do once in awhile just to jazz up things, and keep things from getting stale:

Roving, for net control and/or check-ins. I'd love to do the net from up on Mt. Diablo some time. With some forward promotion, it might give me a shot at working the LA area, Nevada and Oregon, which I can't do right now with the terrain I have. Needless to say, this isn't as big a problem for W6OMF as it is for me! If someone roves to a rare grid, we could give ops the information they need to pick it up. This might be a good incentive for people to check into the net, if they know they might pick up a rare grid once in awhile.

Off the (electrical) Grid Nights. Nothing as earthshaking as Field Day, but just something to stretch out our operating procedures by using battery or alternative power sources. I run barefoot, so I could do this easily. It might be a kick for some of the ops to run off the grid when they check in. We could also do QRP nights.

Build an HO Loop Day. Would it be possible to add this to the activities for some of the grip and grins? The more HO loops we have out there, the more potential sideband

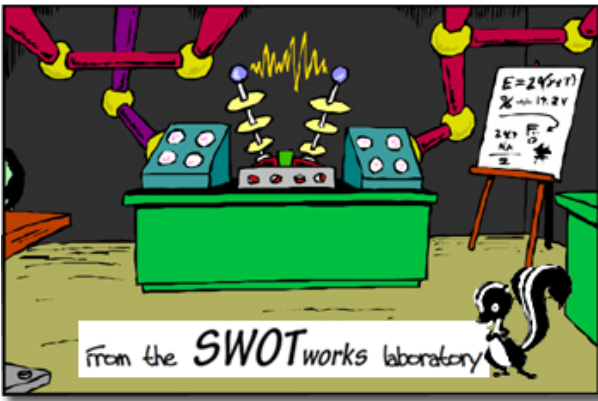
ops we'll have. For many of us, building antennas is limited by our workshop capacity, the tools available, or the lack of a visual demonstration or assistance. This is a link for a loop design: <http://www.hamuniverse.com/loop.html> This would be a simple, inexpensive project for potential sideband ops to try, and they can be hidden easily in CC and R neighborhoods. It's also quite rewarding for new sideband ops to hear what they've been missing trying to make do with verticals. Phasing harnesses to stack the loops could also be a useful project. If operators pay in advance for materials, it might be possible to obtain a discount on them at suppliers or local hardware stores.

Certificates for a given number of check-ins. K3HS alluded to this, and the Western States Weak Signal Society used to do it. It's not my cup of tea, but some people enjoy getting a certificate as a reward for their dedication to the net, and many really deserve one. Perhaps we could also do something for off the grid activity, putting on a rare grid square during the net, a Watts Per Mile Award for longest contacts for a given period or during a QRP night, or introducing a new operator to the net.

We have the potential to generate excitement in 2-meter sideband and in our organization if we dedicate ourselves. Many of us gravitated toward this mode because it made use of the band in a more creative way than simple repeaters. Repeaters are useful, but pushing the limits of a band and learning its full potential is much more satisfying to me. We need to attract more operators who find the same satisfaction and excitement. SWOT and our nets is the ideal way to do this, if we make the effort.

73,
John Wisyanski
KG6WLV
SWOT #3524





Working with circuit boards

By KM5PO-Jim

Last issue we were playing with the RF sniffer. I want to introduce a design that is more capable at 144 MHz but that will have to wait 'til the next issue as some hurry up projects have kept us busy in the lab on other things. For this issue I would like to show you the ease with which a homebrewer may create a printed circuit board without pouring one chemical.

I like to tinker around making my own circuit boards at home but there comes a time when you need some things done that are beyond what you are able to do yourself. For instance, a double sided printed circuit board can be hard to get right as the signal traces of copper must be registered near perfect on both sides of the board so that when holes are drilled, they allow components to connect correctly. Also, 'vias', which are top to bottom connection points, are important on two sided boards and typically represent areas where the signal is required to change board sides. In addition, vias sometimes just connect ground traces from one side of the board to the other in an effort

to reduce ground inductance or capacitance. This is more prevalent with higher frequency signals. These vias are usually plated-through holes but when home-brewed, typically consist of rivets or simply wire that passes through the board and is soldered to traces on both sides. Homebrewing at this level is more than I can do so I turn to the readily available make-to-order manufacturers for help.

You would start with one of the PCB layout software programs. There are many out there and they can be had for free. I use two different programs, ExpressPCB and Eagle. We will look at ExpressPCB for now.

The software is freely downloaded and takes about 1 hour to get familiar with. It consists of a schematic capture part and a circuit board layout part. We will discuss the layout part but the schematic drawing capabilities are great as well. The resulting schematic can be later linked to the pcb layout for guidance through the wiring process. So the usual steps would be:

1. Draw the schematic using ExpressSCH (optional).

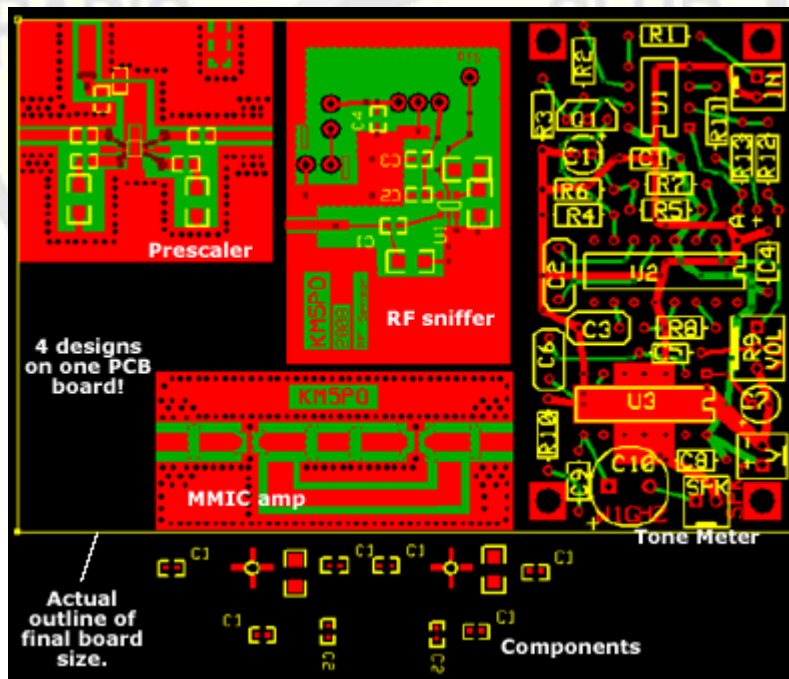


Fig 1 - The completed PCB layout as seen in the ExpressPCB window. The boards will be manufactured to the design contained within the thin yellow border which physically measures 2.5" x 3.8". The tiny objects at the bottom are the parts required on the lower-center design and have been intentionally moved off the circuit to make the task of placing the vias holes easier.

2. Use the ExpressPCB program to lay out the PC board. Link the schematic (if drawn).

3. Determine the exact cost of manufacturing using the Compute Board Cost command.

4. Order the boards using the on-line dialog built into the program.

5. Wait 2 or 3 business days later to receive the boards by courier!

You can easily start with step 2

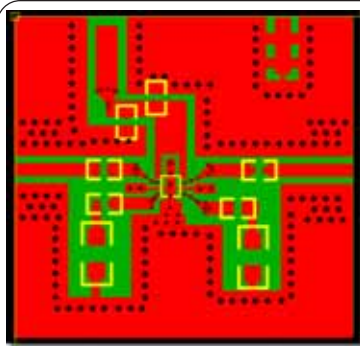


Fig 2 - this closeup of the design screen shows the top layer (red), the bottom layer (green), and the silkscreen layer (yellow) which identifies the parts placement including the 8 legged chip in the center. Can you see the schematic in your head? Gozinta from the left, Gozouta to the right with both legs passing through a single coupling chip capacitor each. Power is coming down from the upper left zig-zagging on a wide buss and splits in two, snuggling a ground trace, in order to reach opposite pins (1 & 5) on the left and right of the chip. The buss has chip capacitors also, but they're not coupling, they're *bypassing* possible transients to the ground plane. Savvy?

without doing a schematic capture with ExpressSCH and that's what we'll do right here. Before starting the on-screen layout, I will pencil sketch my general idea of how the parts should fit and how the traces need to be routed. Some things need to be located in specific places on the PCB, like LED's, mounting holes, a switch that must pass through a cutout in the enclosure, connectors. I will try to leave plenty of space between integrated circuits, at least 3/8" but more like 1/2".

Once the layout is pencil-whipped, I'm ready to turn on the computer. First order of business will be to verify that all the components exist in the library. The program installs with a great library of parts but if the one you need is not found, then it's time to build a custom component. This is an easy task of 1) being sure you know the measurements on the real part [use a dial caliper or refer to the part datasheet] 2) setting up a snap-to grid on the screen to assist with drawing 3) laying down the 'pads' that represent the pins of the part 4) drawing the outline of the part 5) grouping all

the parts of the drawing together, saving your new creation with a given part name.

With all components ready to go, it's time to draw. The program treats the printed circuit board as three layers. The Silkscreen layer is where you will see the outline of components (in yellow), the Top Copper layer is where you see the signal and power/ground paths that lay on the top of the pcb (in red) and the Bottom Copper layer is where you see the signal and power/ground paths that lay on the bottom of the pcb (in green). Some designs will require the bottom of the board to be one continuous plated ground plane.

Drawing in different layers is easy. Referring to the pencil drawing, I will first place the components in their approximate positions. Then using the 'Place a trace' function, the wiring will begin. On most designs it is helpful to use the 'Place a filled power or ground plane' function where you can draw a polygon area that will represent a large buss conductive path. A good example of this is the design in the center-bottom of Figure 1. This is a two stage MMIC amp where the RF signal travels along the center trace that has gaps (where components will bridge) but see all the holes? These are the ground planes created as a 'filled power or ground plane' in the program. To switch which layer you are working on, you use toolbar buttons. These buttons will turn on or turn off the various layers.

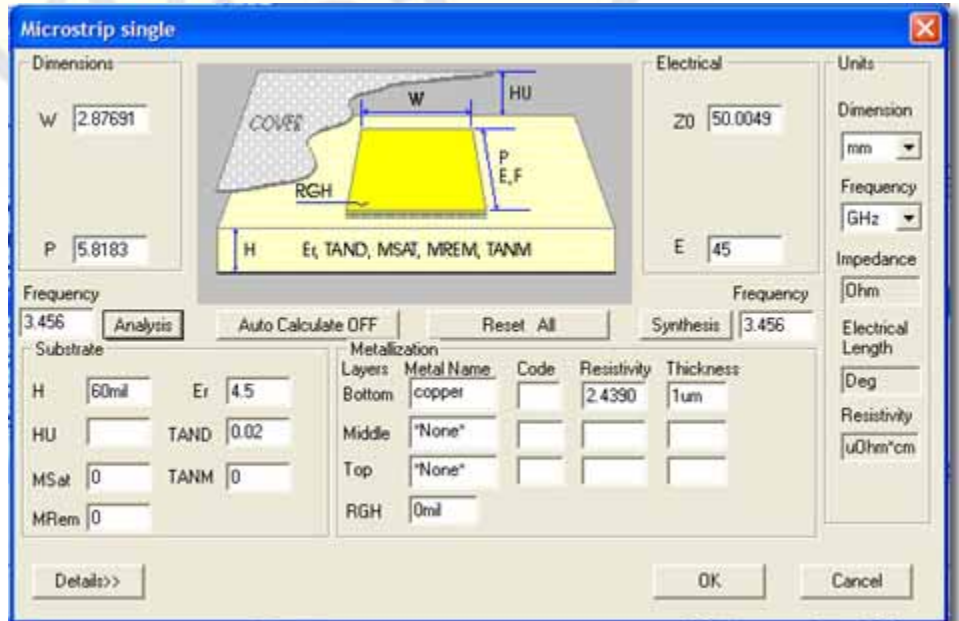


Fig 3 - Ansoft Designer's TRL calculator showing the dimensions (2.8 x 5.8mm) for a 50 ohm signal trace (at 45 degrees electrically) for 3.456 GHz.

Getting the board just the way you like it is an iterative process. Once I think it's about right, I will print out the design true to scale and try to fit the actual parts over the printed PCB. Usually this exercise results in one more pass over the on-screen design. Once the trial fit is good, I'm ready to add vias where needed. There are program rules as to how close these holes can be placed. There are also warnings that as the inside diameter gets small on a vias that it may be 'filled' with plating during the manufacturing process so if you plan to insert a component lead through the hole, there is a minimum diameter you would need to impose. To the super high frequency designer, I will also try to ensure that my RF paths are as close as possible to proper impedance. This involves the use of the TRL calculator in the Ansoft Designer (See figure 3) which is a whole 'nother story we'll leave alone for now.

Ordering the boards comes next and here you can pick from various services, the lower cost ones will provide double sided boards but without the silkscreen layer and without solder masks. A click or two plus your credit card number and your boards are on their way.

For purposes of illustration I am showing you a microwave prescaler in Figures 2,4,5 & 6. A prescaler simply divides the input signal by some factor and usually buffers and amplifies the output. Using a prescaler is a way to extend the ability of a frequency counter or spectrum analyzer. So for instance, if you have a test instrument

that can count or receive up to 3 gigahertz and you add a divide by 4 prescaler to it's front end, you can now count or receive up to 12 gigahertz signals (in theory). CEL (California Eastern Laboratories) has several nice prescaler units available and I wanted to try them. The chip pictured here is a divide by 4 and can resolve input signals up to 13 GHz!

So that about wraps things up from here for this round. I hope you will try to create your own circuit boards some day and get the kick out of it that I've found.

I've heard of entire crews of engineers and helpers who were employed full time to create designs like these shown here which nowadays are well within the reach of the amateur. Another example of how technology has changed our society!

-Jim, KM5PO

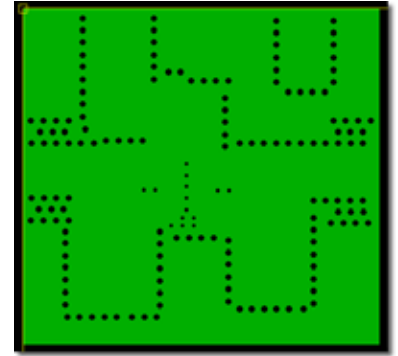


Fig 4 - The bottom 'ground plane' design as seen from the top with X-ray vision. Can you see the tiny holes in the center in a cross shape meant to tie the top surface traces (see Fig 2 red layer) to the bottom around and under the tiny chip. These measures help to reduce stray inductance and capacitance.

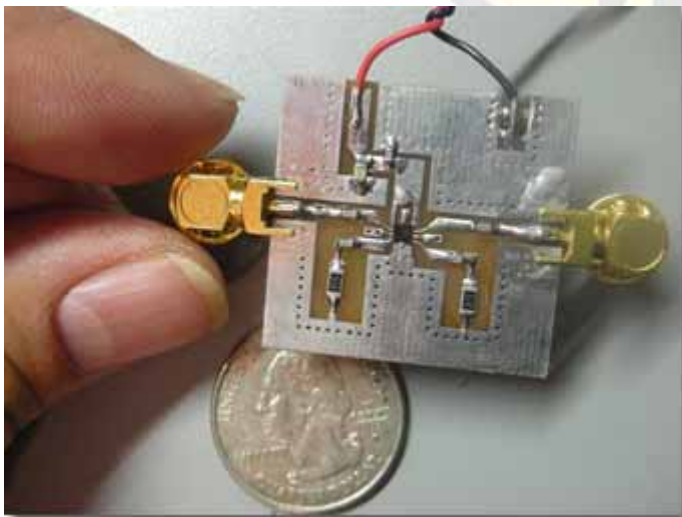


Fig 5 - The completed circuit. The gold items are SMA connectors with their end-launch center pins soldered to the trace.

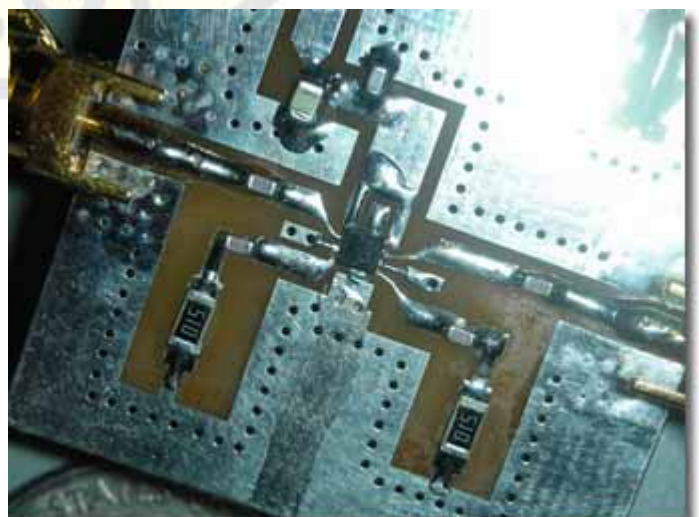


Fig 6 - A closeup of the circuit shows the components mounted in the correct locations as designed (see Fig 2).

A Blast from the Past

from Rich, WB2CUT
SWOT#90



[An] item in the [last] bulletin was a request for retrospectives, and that is "The Perfect Month" - July 1982. Fortunately I keep all of my logbooks. July started out slowly, though I worked new NCs on both the 5th and 6th. Then came the 11th and a nice Eskip. I caught 5 MN and a WI. I also heard people saying that Wyoming was on. "Sure," I thought. "Even if I hear him, I'll never actually WORK him." But I did, and easily, too. My first 7 and my first double-hop Eskip. To make matters nicer, my Elmer, WA2GFN, was visiting and sitting next to me when I did it, so, though he didn't get to work him himself, he did HEAR KOWLU/7, and heard me make the contact.

There was a steady flow on new SWOT #s - this IS 1982, after all, but aside from coastal tropo on the 15th and a phone AU contact the next day, I waited until the 21st. MORE Eskip - 7 TX contacts, ALL with SWOT numbers.

The 24th and 25th both had nice tropo, producing 2 MI, an IL, then an IA (yes, on tropo!), two more IL, an OH, a WVA, and finally on the 29th another OH.

But the 24th - less than 2 weeks after the Wyoming - had a special treat before the tropo. There was an Eskip going on between WNY and MN. People out here had their beams toward the NW, hoping to catch some action, but heard nothing. Then suddenly, the skip spread out on both ends for a few minutes. I heard a station claiming to be VE4MA, so I called him, worked him, and eventually got a QSL from him. Only one other station in NJ got him after I did.

So July of 1982 produced 3 Eskips, one with double hop, and a never to be repeated NINE US call areas - AND Manitoba. Unlike most hobbyists, I do not have to wonder if I will ever catch lighting in a bottle, because I did, and twice in the same month, too. My Drake line did it again.

I have attached a JPEG of the two QSL

cards, as well as the front and back of my current QSL card. It's been modified a bit - obviously there would have been no mention of grid squares in 1982 (and why I have little interest in them. Neither the Wyoming or the Manitoba would count.) And I have added things such as "QSL card collector!" and the texts on new county - that's my big thing - etc, so I no longer have to write those in, but the "Scissors" design has remained basically unchanged since I first designed it (and WA2GFN drew the scissors for me) in 1972.

Hope you find this of interest. 73 es
good DX WB2CUT SWOT #90 Rich



SWOT Net Reports

Here are the net reports for
May & June 2008

Northern California W6OMF (Sunday)

May was a good month with
weird weather and reasonable
checkins...:

89 different stations
10 different grids

38 checking in all four
times
13 checking in three times
21 checking in twice
17 checking in once

June:

Week one 50
Week two 55
Week three 44
Week four 58
Week five 49

20 checked in all five times
11 checked in four times
22 checked in three times
12 checked in twice
20 checked in once

86 unique calls

North California KG6WLW CM87 N.Cal/Bay Area (Tuesday 8pm)

Date Check-ins

MAY (4 dates):

05/07 24 check-ins
05/14 21 check-ins
05/21 26 check-ins
05/28 22 check-ins

4x check-ins = 11
3x check-ins = 7
2x check-ins = 8
1x check-ins = 7

SWOT check-ins = 6
Total 35 different stations
Total states = 1
Total grids = 6

JUNE (4 dates):

06/04 22 checkins
06/11 25 checkins
06/18 26 checkins
06/25 22 checkins

4x check-ins = 9
3x check-ins = 11
2x check-ins = 9
1x check-ins = 7

SWOT check-ins = 6
Total 36 different stations
Total states = 1
Total grids = 6

NORCAL W6DWI (Thursday 8pm)

April
Check-ins 28,26,21,19
SWOT 9,7,7,5
States 2,1,1,1
Grids
CM88,CM98,CM99,CM89,CM87,CM97,CN82

Thanks to K6NC for filling
as NC 3 April and 10 April

May
Check-ins 28,30,16,*,23
SWOT 10,8,5,*,6
States 1,1,1,*,1
Grids
CM88,CM98,CM99,CM89,CM87,CM97

*22 May-The net was run from
Lookout Mt. in Mono Co. Cal.
East of the Sierras. 10
Check-ins !

Northeast Missouri NOPB (Monday 8pm)

Date Check-ins/Grids/
States/SWOT

05/05 no net school activity
05/12 23 - 16 - 08 - 05
05/19 19 - 14 - 06 - 05
05/26 22 - 15 - 07 - 06
06/02 24 - 15 - 07 - 05
06/09 no net
06/16 20 - 12 - 08 - 04
06/23 23 - 16 - 07 - 07
06/30 24 - 13 - 07 - 06

North Texas W5FKN (KM5PO sub) (Wednesday 9pm)

Date Check-ins/SWOT/Grids/
States

05/07 22 - 10- 14 - 02
05/14 20 - 09 - 13 - 02
05/21 high winds
05/28 26 - 15 - 16 - 04
06/04 high winds
06/11 24 - 14 - 16 - 04
06/18 32 - 13 - 15 - 04
06/25 20 - 12 - 12 - 04

Southeast Ohio AB8XG KD8DJE Sub)

(Tuesday 9pm)

Date CheckIns/States/Grids/
SWOT

05/60 12 - 02 - 02 - 06
05/13 11 - 02 - 02 - 08
05/20 11 - 02 - 02 - 07
05/27 15 - 02 - 02 - 08

06/03 05 - 02 - 02 - 05
06/10 13 - 02 - 02 - 08
06/17 12 - 02 - 02 - 06
06/24 06 - 02 - 02 - 06

E. Oklahoma KD5ZVE (Thursday 8pm)

Date CheckIns/Grids/States/
SWOT

05/01 18 - 10 - 04 - 12
05/15 18 - 10 - 05 - 10
05/22 16 - 08 - 04 - 13
05/29 16 - 08 - 04 - 13

06/05 thunder storms
06/12 15 - 06 - 02 - 09
06/19 11 - 07 - 03 - 08
06/26 14 - 10 - 04 - 09

Daytona Beach W2RAC/W1LVL (Wednesday 8pm)

Date Check-ins

No Data

E. Texas Piney Woods KM5PO (K5LOW -N5TIF sub) (Saturday 7am)

Date Check-ins/Grids/SWOT/
States

05/03 18 - 08 - 10 - 06
05/10 25 - 14 - 13 - 09
05/17 20 - 10 - 12 - 09
05/24 24 - 13 - 12 - 10
05/31 20 - 10 - 11 - 08

06/07 17 - 09 - 11 - 09
06/14 12 - 05 - 05 - 06
06/21 19 - 10 - 12 - 10
06/28 12 - 06 - 05 - 07

Southern California WB6NOA

(Sunday 7:30pm)

Southern California SWOT net
is Sunday evening, 144.240-
7:30pm. At 7:50 we move up
to 144.250 and say hi to
Larry W6OMF in the Bay area.

-Gordon West WB6NOA

Event and Contest Calendar:

Aug 2-3 ARRL UHF Contest
 Aug 16-17 ARRL 10 GHz and Up Contest
 Sep 13-15 ARRL September VHF QSO Party
 Sep 20-21 ARRL 10 GHz and Up Contest
 Sep 20-21 ARRL EME contest
 Oct 18-19 ARRL EME contest
 Nov 15-16 ARRL EME contest

What to expect May-July Meteors:

Delta Aquirids July 28/29, 25 zHR

Alpha Capricornids Aug 1,2,6-14 zHR
 Southern Iota Aquarids Aug 6,7, 7-8 zHR
 Perseids Aug 12, 105 zHR
 Northern Iota Aquarids Aug 25, 5-10 zHR

Full Meteors calendar:
[W8WN](#)
[Gary Kronk](#)

Aurora:
 Watch:
<http://umtof.umd.edu/pm/latest2day.gif>

Tropo:
 Always keep an eye on:
 the [Hepburn Forecast](#).

the [APRS Real time VHF propagation map](#).
 the [Presence of radar reflectivity \(false echos\)](#)
[HERE](#)
 the [Green Page \(144 Mhz Propagation Logger\)](#)
 the [Surface Map](#) (there are many choices)

www.spaceweather.com

**From Howard Hallman, SWOT Secretary.
 Membership updates and new members**

SWOT#	Call	Name	City	State	Grid
3545	NM1K	Russell	Enfield	CT	FN31
3533	N8TJC	Tom	McArthur	OH	EM89
2421	W5DBY	Gerald	Arlington	TX	EM12
2837	KB4OOW	Richard	Wedowee	AL	EM73
3546	WA5LFD	Rich	Garland	TX	EM12
1419	WD6AFR	Jerry	Oroville	CA	CM99
3281	W6VNO	Harry	Arbuckle	CA	CM98
3307	K7NOM	Bill	Elk Grove	CA	CM98
3465	WF6J	Carl	Ranco Cordova	CA	CM98
3511	W6PQL	Jim	Fremont	CA	CM97
3516	KI6MPQ	Ross	Galt	CA	CM98
3517	KI6BEW	Oscar	Galt	CA	CM98
2013	WD4KTY	Jim	Wedowee	AL	EM73



Accurately detect tropo by observing "false" echos on National Weather Service maps such as this one which you can link to at http://radar.weather.gov/Conus/RadarImg/latest_Small.gif Watch for light blue and gray areas turning darker.

SWOT and Selected 2-Meter Nets

Help improve our listing of nets! If you find errors or omissions or know of other two meter nets being conducted, please send email to either the bulletin editor: km5po@arrl.net or the SWOT Net Manager- Jimmy Johnson, jjohn357@swbell.net

Day	Local Time	Area	Net	Frequency	Net Control Station
SUN	8:00 pm	Vacaville, CA	NORCAL	144.250	W6OMF Larry
SUN	7:30 pm	Costa Mesa, CA	South California	144.240	WB6NOA Gordon
SUN	8:30 am	Tucson, AZ	Arizona	144.250	N7SQN Al
SUN	8:30 pm	Zebulon, NC		144.220	N1GMV
SUN	9:30 pm	Holland, MI	Michagan SWAM	144.155	K8NFT
MON	7:30 pm	Albuquerque, NM	New Mexico	144.200	N5XZM Bobby
MON	8:00 pm	Colorado	Rocky Mt. VHF +	144.220	N0VSB W6OAL
MON	8:00 pm	Midwestern United States	Northeast Missouri SWOT	144.250	NOPB Phil
MON	9:00 pm	Tidewater, VA		144.230	
TUE	8:00 pm	Bay Area, North California, West Nevada	Northern California SWOT	144.250	KG6WLV John
TUE	9:00 pm	Greater Ohio area	Southeast Ohio SWOT	144.250	AB8XG Kenny KD8DJE Russell
WED	8:00 pm	Florida	Daytona Beach SWOT	144.250	W2RAC Richard W1LVL George
WED	9:00 pm	Texas, Okla, Ark, Louisiana	North Texas SWOT	144.250	W5FKN Bob
THU	8:00 pm	Bay Area, North California, West Nevada	Northern California SWOT	144.250	W6DWI Robin
THU	8:00 pm	Oklahoma, Texas, Ark, Missouri, Kansas	Eastern Oklahoma SWOT	144.250	KD5ZVE Jimmy
SAT	7:00 am	Texas, Okla, Ark, Louisiana	Piney Woods SWOT	144.250	KM5PO Jim

SWOT Nets are highlighted

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: **Howard Hallman WD5DJT, Sec.Treas.**

NOTE: do not make checks out to SWOT. Make checks out to Howard Hallman

**3230 Springfield Lancaster, TX
75134-1214**

New member: \$6 - receive bulletin by email
 \$12 - receive bulletin by US post office

I have worked the following SWOT members:

Call: _____ SWOT No. _____ Call: _____ SWOT No. _____

Renewing: \$6 - receive bulletin by email
 \$12 - receive bulletin by US post office

My SWOT No. is _____

Name: _____ Call _____ Grid Square _____

Street address _____

City _____ State _____ Zip Code _____

Telephone Nos. _____

Optional: I check into the following nets: _____

E-mail _____

Receive Newsletter By Email: YES _____ NO _____

Note: Send all forms to the Secretary-Treasurer at top of this form.

SECRETARY - TREASURER :

Howard Hallman/WD5DJT
3230 Springfield Ave.
Lancaster, TX 75134-1214
Phone: (972)-224-5964
Email: wd5djt@swbell.net
Webpage: <http://home.swbell.net/wd5djt>

SECRETARY - TREASURER

Art Jackson/KA5DWI
Email: ka5dwi@sbcglobal.net
Phone: (817)-485-4977

SWOT WEBMASTER (www.swotrc.net)

Tom Childers/N5GE
Email: n5ge@n5ge.com

CHAIRMAN & SWOT NET MANAGER:

Jimmy Johnson/KD5ZVE
Email: jjohn357@swbell.net

BULLETIN EDITOR:

Jim McMasters/KM5PO
Email: km5po@arrl.net
Phone: (817)-563-2720

Webpage: <http://www.james-randall.com>

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 Howard Hallman 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.

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, [http://](http://www.thesignman.com/menu.html)

www.thesignman.com/menu.html

