Bacon Bits

Flying Pigs QRP Club International, W8PIG
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FPQRP membership is open to all licensed QRP operators who reside within 12,000 nautical miles of Cincinnati, Ohio.

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NETS:

DAY	TIME	FREQ	NCI
Sun	0000Z	14.062	KC8NYW
Mon	0100Z	7.047	WB8ICN
Thurs	0100Z	7.047	KE1LA

(All days/times listed are UTC)

CLUB FREQS.

1,814 kHz	3,564 kHz
7,044 kHz	10,110 kHz
14,062 kHz	18,100 kHz
21,064 kHz	24,910 kHz
28,064 kHz	

ALL FPqrp frequencies are UP 4 kHz from the standard qrp frequencies except for 20 meters.

In this issue:

Ramblings

Welcome again everyone! Hope everyone is having a great summer so far. Well another Field Day passes into history, and of course, the Flying Pigs were on the air with W8PIG. How did we do? Look in this issue and for our FD01 report.

72, oo
Dan, N8IE Ω

Review: Keylight Keyer

By Ron, N8VAR

When I read about the Keylight keyer by the Knightlite QRP club I had to have one. I also read that Bob Kellogg would be at the Dayton Hamvention with kits for sale. I knew the time was right because it would also save me the shipping. ☺ When I saw Bob I promptly bought one. The next week I got it out and started on it knowing if I put it off I might never get one of those 'round to-its' to get it built. This is a nice kit and I had a good time putting it together. It should be easily do-able for first time kit builders.

When I opened the package everything I needed was there including all connectors which are board mounted and the power plug. I was happy to see the power plug because there are so many flavors of the barrel connectors that finding the right one might be a chore. All the parts were packed nice and neatly inside the case. Yes, you even get the case. The boards are designed to fit the case to make it even easier to put together.

I separated the parts and put them in a little plastic container that has small compartments just right for all those little parts. Then I inventoried them. There wasn't a parts list with my instructions but by reading the assembly instructions it was easy to see that I had everything. This is not a complex kit to build. It does get pretty tight in some areas so careful soldering is a good thing to guard against solder bridges.

Two hours later all the parts were stuffed and soldered. I carefully read the instructions a couple of times for the headers for the display and then did it wrong. ☹ The board is good quality with plated through holes. It makes it a bit tougher to unsolder parts but I managed to do it without destroying the display board.

Once they were correct I checked for visible shorts and checked the power plug for obvious shorts with an ohmmeter. All checked OK so I plugged the power in. The display came to life and the version number displayed just as the instruction said. Typing on the keyboard displayed characters on the display but there was a distinct lack of audio from the speaker. I knew some trouble shooting was in order but went ahead and checked things out. All the commands worked per the instructions. I plugged the key-out into a radio and it didn't key the radio either and I noticed the back light wasn't working. And also the paddles didn't work. I was starting to see a pattern so I looked at my instructions again. I like to mark the steps off as I do them with a yellow highlighter. I saw that the step instructing me to install the 3 2N7000 FETs was not marked off. Sure enough I had 3 FETs laying in my parts box. I guess the excitement got to me and I didn't check that all the parts were used. ☺

Putting in the FETs fixed the back light, audio and keying the radio. The last problem was the paddles. The dit paddle worked fine but the dah paddle caused things to reset so I guessed there was a short somewhere in the dah paddle. Checking the resistance on the dit and dah paddle showed a difference. The dit paddle showed 10k and the dah paddle showed 2k. I unplugged the ICs and the display to remove them as problem sources. The problem was still there. There wasn't anything left that would cause the problem. I carefully checked for solder bridges and didn't find anything that was visible. I couldn't see under the paddle jack so removed it. Bingo! There it was as bold as could be. I don't know how it got there except that I got a little carried away with the solder when soldering the jack. There are 2 caps across the jack that are tacked underneath and I may have caused the problem putting those on. Any way I found it and when I put the jack and .01uf caps back in and checked it the paddles now worked correctly.

The next step was to mount the assembly in the case. The only thing I changed was the standoffs for the board. There are 4 standoffs on the bottom of the board to set it up 1/4 inch off the bottom. This serves to set the display high enough to fit snugly when the top is screwed down. The kit comes with 4 plastic standoffs that are glued on. I replace those with 4 aluminum standoffs that were a little shorter and used 4-40 screws to hold them to the board. The heads of the screws lengthened them just enough to be right.

The ARCI Hootowl sprint was scheduled for Sunday May 27 which was just right to try the Keylight out. I programmed the memories with CQ in the beacon memory, exchange and call in 2 other memories. I set the speed to 18wpm and was ready. Due to another activity I didn't get started until 9:00pm. The Keylight worked great. I could type in the RST then hit the memory and set back. I did the hunt and pounce thing for most

of the time and ran CQ with the beacon the last 30 minutes bagging 3 extra contacts.

The operation of the Keylight is pretty easy with the cheat sheet so I can remember what the function keys do. I also noticed that the functions keys are grouped. The first group (f1-f4) is memory, the second group (f5-f8) is for variables that accept values and the third group (f9-f12) is for toggle switches. Changing the speed is quick and easy, updating memories is easy and I played with the back light turning it off and on to see how it looked both ways. With the light in my shack it was easy enough to see without the back light that I didn't use it part of the time. This should save on battery life. I did have my battery run down while getting ready for the sprint and the Keylight died as expected. Another battery brought it back to life ready to go without any memory losses. The options such as back light and speed were reset to their defaults.

The one thing I missed was a tune feature where one of the function keys would key the rig for tuning the antenna. Since I first wrote this review Steve Carr, one of the designers, tells me this is an undocumented feature and can be accessed via left-control (or either shift key) followed by the function key associated with key enable (F9). Esc turns tune off. I've tried it and it works great. I am really amazed at the quality of work that comes from the ham community. I think we have come to expect commercial quality in the club projects because we have received it in the past. It's amazing that hams do this for the community at a real reasonable price. The Keylite is a good example. As I look at it and show it off to my friends I continually see features that took some real thought and planning. These projects are not trivial to produce and simplicity of construction was carefully designed into this kit. I wish to express my thanks and appreciation to the Knightlite QRP club for an outstanding project.

You can find the Keylite on the Knightlite website at:
http://www.knightlites.org/new_page_9.htm

Ya done good guys! Thanks for sharing your talents!
Ron Doyle
n8var@arrl.net Ω

My brother showed up early Sat. morning from Kansas and was anxious to get going. Got the boys moving and loaded up the gear and figured out who was riding with who and set off for the river. The water was low and had to push the canoe what seemed like half the river and thought I was going to be skunked on catching fish (finally caught one). All in all a hard float for me but the boys had a blast. Really looking forward to setting up camp and working a little radio after dinner.

Set up the tents, had a nice hot shower, the boys made a great fire and had a nice meal and then it was time to play. Got the crappie pole out and found a nice place to set up the dipole. We were in a valley with 2-300 foot walls so expected NVIS propagation but fun anyway. Went to get the briefcase and it wasn't there!!! After making sure someone didn't unload it and put it in the wrong spot, I am sorry to say that I said some rather unpleasant words. My brother who is a ham also thought it was funny. My boys knew enough to leave me alone for awhile. One year in the planning really stewed up the rest of my night.

Had a nice time today and when we got home found that the XYL had put my old briefcase under the desk where it usually is, not where I had left it out to be sure I would see it when loading the van.

I now need help from my fellow piggies. Dr. Joel can probably help with some anger management and the Rev. piggies should help me seek some forgiveness for some of the poorly chosen French spoken Sat. night.

Next trip the bag is going in the night before.
oo Jim KJ0C Ω

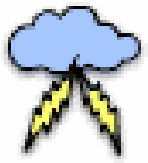
As seen on our reflector!

Deliverance III

This was the weekend of what has become known to my family as D3 (the annual float trip with my brother, his son and two of my sons). The first year we went was the first float trip for my boys and it couldn't have been worse, hence the term Deliverance. Last year was better, we stayed dry.

In anticipation for the trip, I had prepared a portable setup. Got the ZM-2 finished at about midnight Friday, packed up the SGC2020, the battery, the assorted wires, cables and connectors, everything I could think of that might be needed into a nice old briefcase. It fit perfectly. Been planning this for a year.

AMAZING ELECTRONIC FACT:



If you scuffed your feet long enough without touching anything, you would build up so many electrons that your finger would explode! But this is nothing to worry about unless you have carpeting. Ω

DIPOLE FALLS

By Arnold CW Timm

If what I read is not a lie,
or some hocus-pocus hype;
then if I raised my tenna high,
on fishing rod -- at height?

I'll be able to dit some dahs,
way down the garden path;
and my neighbors "oos es ahs",
won't be only while they laugh?

A fifty dollar current drift,
high gain -- quarter waved;
another (dandy) dB gift,
apartment power -- saved!

A telegraphic finger drums,
pounding in my ears;
poetry gets (way up) thumbs,
for bending basic gears!

All depends on solar wind,
and who is hearing well;
if they have a quip - Chagrin,
arthritic hands do swell!

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Website Spotlight

By Dan, N8IE

The harnessing of solar energy is not new in fact, development of solar energy dates back more than 100 years, to the middle of the industrial revolution. Around that same time, Henri Becquerel discovered the photovoltaic effect; that is, the production of electricity directly from the sun. Becquerel's research was investigated and extended by, among others, Werner Siemens. Photovoltaic power remained a curiosity for many years, since it was very inefficient at turning sunlight into electricity.

Early photovoltaic applications were geared more towards sensing and measuring light (such as a camera's light meter) than towards producing power. With the advent of the transistor and accompanying semiconductor technology, however, the efficiency of photovoltaic power increased dramatically.

Today's solar panels are up-to or even higher than 12% efficient! Once used almost exclusively in space, photovoltaics are used more and more in less exotic ways. They could even power your house. How do these devices work? Let's swing over to "Howstuffworks.com" and find out:
http://www.howstuffworks.com/solar-cell1.htm

For an even more in-depth look, try solarexpert.com:
http://www.solarexpert.com/Photovoltaics.html

READY TO BUY?

Try these links:

Solar4Power.com
http://www.solar4power.com/

Plastecs: PDA and PC Solar Chargers and small Solar Panels
http://www.plastecs.com/

Mr. Solar: Your one stop source!
http://www.mrsolar.com/

Silicon Solar: Panels, kits, education, and more!
http://www.siliconsolar.com/

AJL Solar Electric: Interested in solar electric but don't know where to start, they can help!
http://www.ajlsolarelectric.com/

If you're interested in giving Solar Energy a try, you better hurry! Scientists predict that our sun will run out of "Fuel" in another 15 billion years!

72, oo
Dan, N8IE Ω

TX TX IN MN

By Arnold CW Timm

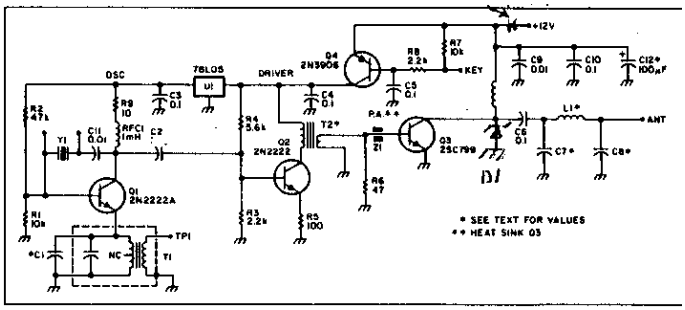
[From Summer 1994 Common Ham]

Throughout the years, writing about" simple " circuits, I think I've found an example of my ideals. When extra money is at hand, I frequently think of kit assembly. The Sony ICF-2001 portable receiver needed kneading, so I mailed off an order for MXM Industries TX TX. [This kit outlet -- may now be out of business?]

As sort of a 47th birthday gift and a chance to do my wireless keyer idea, the little transmitter purchase was twofold. Bruce, WA6IVC, sent along a letter of disclaimer, reminding me " you can't beat Ohm's Law! " Bruce said, " your idea for the remote transmitter -- I think is good. You have a major problem to solve, however. I designed the simple SupeRX to op 9VDC, but the TX requires a 12VDC source to produce 2-3 watt output. Nine-volt batteries provide only about 180mAh. That is, it will provide 180mA for one hour, 360mA for a half-hour, etc. The TX draws about 300mA at 3 watts, so the 9V battery will last about a half-hour. Remember that the voltage goes down as the battery is depleted, which could be a gel cell battery with a solar charger. I see 12V gel-cells at flea markets for $1. The 9V battery will power the SupeRX for only about 5 to 6 hours (drawing about 30mA at low volume, 50mA on peaks)."

Following the assembly instructions to the letter helped me avoid many pitfalls. " Don't make the mistake of trying to assemble the entire transmitter and then testing it as a unit. Build one stage and check it before proceeding to the stage.

Trying to troubleshoot the entire board will drive you nuts, and could easily damage or destroy some of the components. "



Schematic for the Simple TX TX.

All the parts provided in the MXM TX kit are magnifying glass or microscope small. Aside from the final power amplifier, other pieces were specially selected to fit upon the 3-1/2" x 1" PCB. Thirty-two particles make up this powwow. Comparing schematic to photocopy requires good eyes. I turned my binoculars around to use the microscope image to attempt identification of R6 and placement of 0.1uF monolithic caps. Using the old kit assembler logic -- process of elimination -- I managed only to misplace resistors.

Winding the miniature wideband balun core was simple. I guess after winding cores for a decade, one finds less apprehension doing so. For what those inter-stage coils do for the overall circuit, versus impedance/reactance anomalies possibly encountered. I merrily wound them. Five turns #28 x 1 turn #24. Output filter 14T #24 (size of wire not marked for beginners).

After QSO with WB0L, I found that spreading the #24 coil on output filter increases output from 2-3 watts (13.8VDC). Jay gave me 429 from 22 blocks south (approaching thunderstorm-hampered copy). We have found the qrp cw signals improve in moist air, fog, or snow-covered trees. Leaves are just now emerging to stifle our groundwave pipeline. Mounting the little transmitter up above the impervious foliage may improve radiation, but also avail copper span to lascivious lightning strikes!

I placed my MXM concentric concoction inside a discarded Altoids "curiously strong" peppermint tin. It seemed like a most appropriate qrp cw project box. Once elevated and bolted into place, the 3-watt transmitter appeared (situated offside) ready for vest-pocket qso! There was room for a midget antenna tuner, vswr bulb, and str8 key, but my mind was still imaging treetop trajectories.

With Sony portable receiver sidetone ringing in my ears, I pictured Sunday morning mist imbuing my park bench station. High in the evergreens -- MXM xmtr, lashed to a limb. Thirty-two feet of 2-conductor or 4-conductor insulated speaker wire trailing 12VDC and off/on keying to infantile item spouting 3 watts AC into 32' quarter wave dipole at 40 feet!

I am saving for a MXM SupeRX now [1994 - never did get one]. Instructions for the rcvr are effectively included with xmtr, causing yon enthusiast to save for it. I have all kinds of throwaway metal boxes saved from landfill electronics. MXM kits are simply my salvage job, for my Common ham hand-me-downs. Baby bridges bending the edges of economy and serving forth fusillades forced to the roadbed of the information highway. Joining my "time bomb" arsenal, assembled under severe setbacks, the MXM xmtr, RCA jacked to an indoor loop certainly amounts to something special, for when 40m opens again!
[Appropriate timing -- 2001 Hi]

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FP Net

6/3 (30M)

Mikey Mikey, I couldn't find you. i started calling you ten minutes before the net?? Thanks guys for the checkins and I hope I didn't miss anyone. The noise was awful! Really sri Jay for making you repeat your call 80 times. ☺
AB8DF Ed with the MI qrp club. 599 and great to meet you!
WV9N Randy, same FB 599 as on 40m great to meet you also!!
AJ4AY Jay...339 to a 559, but the noise was really getting you bad. Tnx for putting up with my hearing loss!!

And agn I hope I didn't miss anyone, the noise was Star wars level stuff!
72/OO Rob. kc8nyw #186

6/4

For those who ventured out tonite on the net...you know the contesters seemed to be running more than 5 watts HI HI HI. But after about 10 minutes after the hour, things seemed to get better.
Ten checkins:
N8IE DAN 569
KB9BVN BRIAN 579
K9UT JERRY 579...NEW PIGGIE OUT OF RICHMOND, IND...WELCOME JERRY
KC4URI STEVE (WITH A NEW PIGGIE MUG) 559
NV4T BILL 569
WV9N RANDY 599
AF4PS MAC 559
KC8NYW ROB 599
KD8HT DARYL 579 AT CHECKIN..BUT LOST HIM DURING TRANSMISSION

SEVERAL OF THE PIGGIES FROM THE NET MEET ON THE FP QRP CHATROOM ON IM DURING AND AFTER THE NET. .... don't know why I left my CAP KEY on, sorry...anyway, I encourage those of you who have internet connections to download AOL's IM and create a screeen name using your callsign and join in the fun in the chatroom with us. Lots of DX spotting help from Mac, Aron, Dan, etc!!!!!

For those that use AOL for their internet connection, to get into the chatrooms, you need to download IM and make up a screen name that isn't used for your AOL sign-on that way you can use a single window for person to person chats and also able to get

into the various chat rooms we use and make up as we go. A lot of the MP20 on line help was done in this fashion.

As for the net tonight...seemed that several stations over ran the 0100Z time limit (contest ending time) and we had to just be patient till the band settled down...good practice for a QRP'er anyway <grin>.

Hope to see all of you this coming Wednesday nite with Joel, KE1LA as the NCS. Joel will also be handling next Sunday nites net as I will be on my way to San Jose, CA to teach some laser classes the following week. I will be taking a rig and will post date/times/freq's if anyone is interested in som 6-land QSO's, QRP style.

Thanks to all who came out tonite and see ya'll down the log!!!

Dah-Dit-Dah.... 72's/73's es oo's, Mike...WB8ICN

6/7

Highest Y'all
computer went boobs up.... just getting back on line
WED JUNE 6, 9PM EASTERN.... 7.047.5 CW CHECKINS
WB8ICN
KC4URI
KC8NYW
WV9N
K9UT
N8IE
W8DIZ.... BY PROXY... HE HAD LIGHTNIN STORM
KE1LA NCS

tHANKS TO JERRY FOR FIRST TIME CHECK IN?
SRY TO CUT IT SHORT... 200 MSGS BEHIND

KE1LA JOEL
NCS
OH.... DON'T FORGET SUN NITE 9PM.... SAME DEAL...
OO, 72

6/11

WOW, great net tonight!

New checkin for me...Dave, KB8RRG and also got Andrew out west, AC7CF.

N8IE DAN 567, with no pants on (again)
AF4PS MAC 569, on his SW40 and IAD
W8DIZ DIZ 579, Mac is cranking out band modules for every band
NV4T BILL 559
KB8RRG DAVE GOOD SIGNAL, BUT HAD A SLIGTH BUZZ ON IT..AND IT'S NOT FROM THE POWER SUPPLY
KC8NYW/8 ROB 559, ROB WAS PLAYING OUTDOORS AND SOUNDING GOOD HERE
KE1LA DR. JOEL 589 AT CHECK IN BUT HE WAS GONE AT TRANSMISSION
TIME..JOEL, WHAT HAPPENED?
WV9N RANDY LOUD...599, WE GOTTA CHECK OUT HIS ANTENNAS ONE OF THESE DAYS
K9UT JERRY 599, HMMMM, MAYBE IND HAS GOOD DIRT FOR RF!!!!
AJ4AY JAY 579, GOOD SIGNAL FROM LA
AC7CF ANDREW 449 BUT GOOD COPY...ANDREW KEEPS SURPRISING ME WITH HIS
CHECK-INS
NW7DX via AF4PS...BEN WAS IN THERE BUT LOTS OF NOISE ALSO..THANKS BEN FOR
THE ATTEMPT!!!

Had a ball tonight...thaks to all for being there! Hope to hear all of you and more on Wednesday nite...same freq and time, but with Dr. Joel at the helm!!!! See ya....

Dah-Dit-Dah.... 72's/73's es oo's, Mike...WB8ICN

6/18

Oink Oink to all you fathers out there....

Good net tonight...even with the one station who was sending "like a little girl", or at least according to Brian (Dan, put your pants on and make him take that back). I suspect Dan's XYL made him wear his pants all day and that had an effect on his fist...LOL. Seven checkins and all had good to outstanding signals. I must mention this...I think I have offended Dr. Joel as he has again not checked into my net. What ever I did, Brian and Mac are sorry for it...<grin>. Joel, I hope you had a grand day and all is well way up there in cold country. Enough of that...here is the net rundown for this evening:

W8DIZ PAPPA DIZ 589
WV9N RANDY USUALLY 599
KC8NYW ROB EXCEPTIONALLY STRONG SIGNAL TONIGHT...599
N8IE DAN 579, WITH A SOFT FIST
AF4PS MAC 579...BY THE WAY, MAC GOT A RARE DX Q TODAY WITH OUR YOUNGEST LOOKING PIGGIE (SLY), WAY OVER SEAS
KB8BVN PB BRIAN WAS THE LOUDEST ON THE NET AND THE LOUDEST I HAVE EVER HEARD HIM...EVEN LOUDER THAN HIS SNORING I EXPERIENCED AT FDIM....599+
KC4URI STEVE LIGHTER THAN USUALLY SIGNAL BUT STILL 569 AND GOOD COPY

THANKS TO ALL WHO MADE IT OUT TONIGHT.

With Field Day being next weekend, I may not make it back in time for the net. If you don't hear me on at 9:00 pm, take the reins and run the net for me. If I'm still on the road, I may surprise you with a WB8ICN/mobile 8 check-in.

That's it gang, gotta go pack for this week's road trip...Lapeer, MI;
Cleveland, OH; Erie, PA and then Detroit. Tomorrow will make eight days straight that I have been working and it looks like it will be at least ten days in a row before I get a day/weekend off. For those who won't be able to join us at the FP FD site, please try to work W8PIG and join in the fun that way.

My best to all and to all good night, I gotta get up at 5:00am for a two hour drive and then catch the first of several planes.....

Oink Oink and 72's....Mikey

Dah-Dit-Dah.... 72's/73's es oo's, Mike...WB8ICN

6/21

High Y'all
Well I made contact this wed... nice signal guys...so nice to feel wanted... fd should be good to all if the signals tonite is any indication....
Check ins Wed 7.047.5 CW 9pm eastern June 20th
KC4URI
W4STX
N8IE
WV9N
AJ4AY
KE1LA....NCS...Strong, Maine...

ke1la joel in maine

6/25/01

High Y'all
Yea it's me again piggies...Mike couldn't make it tonie so ah done done the net for him...he's my ncs idol u kneaux...ah is just so thrilled.... oh mommy...
Everybody was strong tonite a good 58 to 59 ....
Sunday June 24 9PM 7.047.5 mhz CW
KC8NYW
KC4URI
WV9N
AF4PS
KE1LA JOEL NCS

THANKS U SWINE... WAS A GREAT NET... C U WED...
JOEL
ke1la joel in maine

Member Spotlight!

This month were spotlighting:
Matt Powell, K8KLP FPqrp #-69

Matt was born in Idaho Falls, Idaho on 10/11/80 in a cabin he helped his dad build. Matt spent most of his early years on his belly. One of his favorite activities as an early teen was standing at the balcony at the top of the stairs, trying to pee on his brother at the bottom of the stairs. He was often successful. Matt has a daughter, Kristine Leah Powell who was born on June 15, 1999.

Matt is a member of the Queen City Emergency Net (QCEN) here in Cincinnati. Through the QCEN Matt is an American Red Cross Disaster Volunteer.

"I first go interested in Ham radio because of my dad, WB6JBM/8, about 4 years ago, but I didn't get my license until September 1998."

Matt went on his first real field op for Field Day 1997 with the Athens County Amateur Radio Association (ACARA) during which he logged for cw, and operated 6ssb, and 2ssb.

(Matt in blue shirt, far right)

This year Matt manned the digital (2M, 6Mssb, and 2Mssb) operations for the Flying Pigs QRP Club's Field Day 2001 adventure.

Matt is currently working hard on his code and plans to test this month. We all wish you luck! Ω

FD2001 Summery de W8PIG

Operating Class: 4_A

Check if set-up prior to 1800 UTC __
Number of participants _24_

Summary for CW mode of operation

BAND	QSO-Pts	X	MULT	=	TOTAL
160	4		5		20
80	50		5		250
40	136		5		680
20	114		5		570
15	68		5		340
10	1		5		5

373 X 2 pts X 5 = 3730

Summary for DIGITAL mode of operation

BAND	QSO-Pts	X	MULT	=	TOTAL
2	13		5		65

13 X 2 pts X 5 = 130

Summary for PHONE mode of operation

BAND	QSO-Pts	X	MULT	=	TOTAL
80	1		5		5
40	64		5		320
20	112		5		560
15	13		5		65
10	3		5		15
6	18		5		90

211 X 1 pts X 5 1055

Total Score (Less Bonuses): 4915

BONUS POINTS (Check all that apply and make appropriate attachments):

Emergency Power _X_
Media Publicity __
Public Location _X_
Information Booth _X_
Message Origination __
Messages Handled __
Natural Power _X_
W1AW Message __ No.___
Satellite QSO __
Non-Traditional Mode _X
Other:_____

WANT TO ASSEMBLE A ROCKLOOP?

By Arnold CW Timm

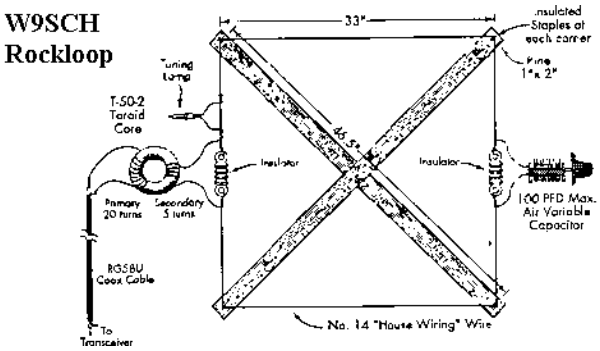
You can do it easily on any old, dreary Saturday afternoon. The wood strips you may already have lying around the house; the wire can come from any hardware store for a couple bucks at most. Or, talk nicely to your electrician friend, he might have a scrap lying about his truck/shop that he'll give you free. The vari-cap might present more of a problem, however. (Being long in the ham game, I had an old "Bud" capacitor lying around.) Some "antique radio " dealers may still stock these; or try the next Flea market. Toroid coil forms are still available at some ham radio jobbers. [Palomar/RFI kit] You'll need a type (T - 50 - 2) a common size. So this whole project never cost over a sawbuck or two -- "Peanuts" by today's expensive radio standards!

NOW SOME CONSTRUCTION HINTS

Saw the wooden "cross-buck" members neatly. Mortise each of them at its' center and nail/screw them firmly together at right angles. Then stain them neatly (so that "The Lady Of The House" will let you bring the finished loop into your shack.) Fasten the wire firmly, at each corner with an insulated staple from the hardware store. Make sure that you connect an insulator squarely in the center of each vertical side of the wire. (The diagram shows how.) I used old antenna insulators from my "radio treasure-trousseau" but, homemade plastic strips a half-inch wide and three inches long will do as well. [Here is where imagination is self-taught in earnest. editor]

Then "close-wind" the "primary" (multi-turn) coil of the coupling transformer evenly around the toroid form, with 20 turns of no. 20 (or some size close to that) "magnet-wire". Then wind the "secondary" coil with (7) seven turns of no.18 "bell" or "hookup" wire. (Wind this coil directly over the primary winding turns; NOT on the "other side" of the core, as shown in the diagram.) Now connect both the coupling transformer, and the variable capacitor, each by its leads, across its' own insulator, on each side of the loop, as shown in the diagram. Keep these leads as short as you can and solder each connection carefully. [You may require a larger soldering pencil than used with ICs. Check for proper soldering techniques. And determine if the antenna will work for you. Editor]

Get as large a knob or dial for the variable capacitor asyou can find -- to reduce "hand capacity" effects when tuning. (Old time Hams often have large dials in their "junk boxes" which they may part-with if spoken-to respectfully.) Or, if you can manage it, arrange a brass coupling with a short extension-shaft here. This will further reduce possible "hand-capacity effects" when tuning your loop. For the "tuning lamp" (see diagram), "barrow" a bulb-and socket from a Christmas tree light string; saving about two-inch connecting leads with the socket. Then solder each lead to two points about 2-1/2 inches apart, onto the loop wire; scraping off the insulation for each connection first, of course. The tuning lamp should be connected to the loop about 4 inches above the "transformer-side" insulator. You'll need the tuning lamp, it is IMPORTANT! It tells you, by its brightest glow, when the loop is correctly tuned. And it is "loop current", (not VSWR), which does the radiating for you!



Finally, connect about five or six feet (never more than ten feet) of RG-58u coaxial cable [short lengths with pl-259/spades at Radio Shack] to the loop primary (the "many turn" winding.) The other end of this cable connects to your transceiver. (Install a suitable cable-connector here, as necessary. With loop construction now finished, you are ready to install it in your shack. The loop should be up close enough to your operating position, so that you can tune it accurately to resonance (maximum glow of tuning lamp) easily on the particular band in use. The plane of the loop should be VERTICAL. (Despite what you might have heard, such a loop is practically non-directional, although there will be two very narrow "null lobes" squarely off of each side. You will probably not notice the effect of these much -- as they are so "sharp".)

If possible, one edge of your loop should point toward your favorite working direction. (It does not pay to provide rotation to the loop.) Any unusual directive effects will probably be due to interaction between the loops' field with house wiring, or large metal objects nearby --- try to keep the loop as far from these as possible. [Perhaps attach to a painting/picture frame?]

Now, with the ROCKLOOP in place in your shack, you may tune it as follows: Set your transceiver to the band (either 15,20,or 30m). Tune it to the center of the band. Press the key and adjust the rigs out put to about (5) five watts. Then tune the loop capacitor until the tuning lamp lights-up as bright as possible. (This is important -- tune it carefully -- right on the nose allowing for that possible "hand-capacity" effect! Your DX success may depend upon doing this properly!) Finally, increase the output power to no more than 25 watts! Otherwise you'll "arc the capacitor" or damage something else!

Given reasonable ionospheric conditions, and thoughtful operation, you can work a big part of this entire planet with a ROCKLOOP! It's a challenge, sure, but good radio sportsmen love to "work the world" with less! Write me (snail mail pse) and tell me how your ROCKLOOP does, of any problems, or about worthwhile changes you suggest.

[From Common Ham Vol. 17 No 1]

72/73 de W9SCH

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Gashi, Flying Pig!

By Chuck, AA8VS

Let me start out by saying this is not about radio or hamming. As a Senior Project Engineer with GM Powertrain I get a chance to travel to really neat places. I work with CNC equipment used in production machining lines. We are now dealing with Enshu who is a machine tool builder and the plant is in Hamakita City, Japan. The following are some pictures that I took while working there for three weeks.

I was in Hamamatsu City, Japan while you might not have heard of it you may be familiar with many of Hamamatsu's products. Names such as YAMAHA, KAWAI, SUZUKI, HONDA. I stayed in the Okura Act City hotel in Hamamatsu City. I was lucky to be on the 40th floor and the view out the window looking east toward the mountains was tremendous.

You do not realize how built up and congested Japanese cities are until you have an opportunity look down from above.

The Act City hotel in Hamamatsu is about 15 Km from Hamakita. So the mode of travel that made the most sense dollar wise was by train. We ended up walking about a mile from the hotel to the train station. Trains in Japanese cities compete for space just like the buildings, people, cars, etc. So in this case the train station is actually on the third floor and that is where the tracks are.

Trust me those steps seemed to get higher everyday. As the train moves out of town it does get back to the street level.

The walk to the train station took us through some courtyards, down steps below ground level. We happened to pass a neat waterfall that was below ground level but as you pass it, it was worth stopping to look at.

After you came back to the street level you were looking at the train station entryway.

While walking through the courtyard area I turned around to snap a picture of the Act City hotel. No matter where you went in the city, the hotel was easy to spot. It was the only 45 story building in the area. There is quite a bit of walking space underground. Again they are trying to conserve space wherever they can.

Now the train would pull in to the station and you waited for everyone to get off, then you got on.

As far as the train ride went we were lucky. The stop we got off at worked out to be the very last stop going east. The train fare for the trip was 460 yen each way. On the trip back to Hamamatsu City it was also the very last stop also, so there you are transportation problem solved.

The plant was in the Eastern outskirts of Hamakita and when you looked east you were looking at the mountains.

It was really a nice view, but it was hot and humid when we were there. The temperature was in the high 80s and really humid. It really got close if you know what I mean in the plant. Part of the reason they told us was the rainy season was getting there and it always the most humid then.

Now before anyone asks about ordering food in a country where you do not speak or read the language. They seemed to have come up with a novel solution.

There are plastic recreations of everything served in the restaurant on display in shelves at the front entrance of the restaurant. They do not have an objection if you and the waitress go out and you merely point at what seems to look good.

Another thing I thought I would throw in, you have heard that McDonalds is everywhere. Well he is located in Hamamatsu City! I just had to take a picture of the inside and it does not look too different except I cannot read the menus. I found pointing did not work very well, but they really tried to work with you.

Finally the trip from Hamamatsu to and from Nogoya where the airport was gave me a chance to ride the bullet train.

That is quite an experience, the acceleration and deceleration is very smooth. The speeds are great but the seats are very much like an airline. They have a lady selling snacks that came through the train on the long leg of the trip.

Well that about wraps up my trip and I enjoyed sharing it with you folks. Hope fully you did not mind the getting away from radio for a bit. I would also like to share some of the local color in the form of a couple of URLs http://www.amigosbar.com/ and there is also the Hamamatsu City home page: http://www.hamamatsu.tokai-ic.or.jp/hamamatsu/hamamatsu-e.html

So there you have it, hope you enjoyed it!
73 oo
Chuck AA8VS Ω

QRP Happenings in July

July 1, Canada Day Contest:
Radio Amateurs of Canada (RAC). 0000Z to 2359Z.
More info at:
http://www.rac.ca/CANDAY.htm

July 4, Michigan QRP Club's July 4th CW Sprint:
2300Z (Wed.) 07/04/01 to 0300Z(Thurs.) (1900 to 2300EDT Wed.)
More info at:
http://www.qsl.net/k8dd/miqrp/rules01.htm

July 7, Original QRP Contest:
Jul 7-1500z to Jul 8-1500z.
ORIGINAL QRP rigs only, CW Only.
More info at:
http://www.sk3bg.se/contest/origqrpc.htm

July 14, FISTS CW Summer Sprint:
FISTS International CW Club, 1700Z until 2100Z. CW Only.
More info at:
www.fists.org

July 14, CQ WW VHF Contest:
CQ Magazine, from 1800Z July 14 until 2100Z July 15. 6 and 2 meters.
More info at:
http://www.cq-amateur-radio.com/vhfcontest.html

July 15, QRP ARCI Summer Homebrew Sprint:
Sponsored by QRP ARC International 2000-2400Z. CW Only.
More info at:
http://www.personal.palouse.net/rfoltz/arci/arcitst.htm

July 15, AGCW DL QRP Summer Contest:
Saturday 15.00 - Sunday 15.00z. CW Only.
More info at:
http://home.online.no/~janalme/rules/agcwdl.txt

July 21, Georgia QSO Party:
SECC and SEDXC. Two periods: 1800Z July 21 to 0359Z July 22 and 1400Z July 22 to 2359Z July 22.
More info at:
http://www.secc.contesting.com/

Jul 29, Flight of the Bumblebees:
Most outrageous venture for QRP Portable, 1700z to 2100z CW Only.
More info at:
http://www.natworld.com/ars/pages/bumblebees/bb_rules.html

About the Flying Pigs QRP Club

OUR MISSION:
1: Have Fun.
2: No rules.
3: Have a group of Friendly Hams who enjoy Amateur Radio, and sharing their skills with their fellow Hams.

CLUB EMAIL POLICY:
These are not rules, just common sense.
Club email is not moderated, as we are not a stuffy group. You can send off topic messages about most subjects, but please keep it clean and in good taste. We do like good-natured ribbing and joking with each other, but we will not tolerate flaming other members or spaming the group.
We will remove offenders who abuse our open policy.

CLUB WEB PAGE:
The club web page is our forum for sharing projects, and information about us. You are encouraged to submit your ideas and projects to be added to the web page.

PROBLEM REPORTING:
If you are having problems with email, the web page, or a fellow club member, please report this to either:
Diz, W8DIZ at w8diz@cinci.rr.com
Rick, WB6JBM at ripowell@mpna.com
Dan, N8IE at shephed@aol.com

We welcome all to join the Flying Pigs QRP Club, and we hope you have fun! Ω

Remember those who gave their lives for US!

Have a safe and happy 4th of July fellow Piggies!