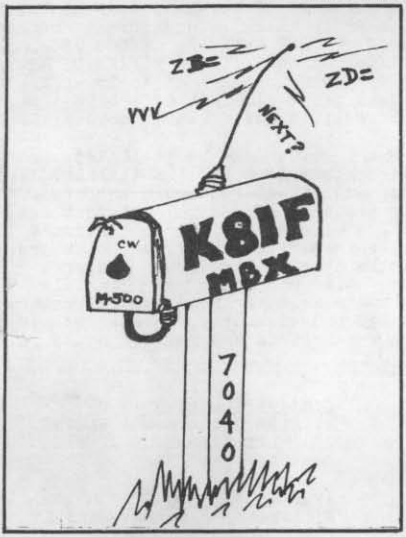
QRP QUARTERLY

Journal of the QRP Amateur Radio Club International, January 1983, Vol. 21, No. 1

TECHNICAL ACHIEVEMENT AWARD WINNER - THOM DAVIS, K8IF

K8IF CW MAILBOX (MBX)



CW Mailbox
(A Review)
by Thom Davis, K8IF

Purpose: To provide an automatic relay and message storage facility for CW operators.

Uses:
- *News items
- *Message storage from one user to another
- *Announcements of "want to get rid of" or "needed" equipment
- *Determination of band conditions
- *Relay when point to point conditions are poor

Frequency: 7043.00 Mhz (this may read out 7043.75 due to the typical 750 Hz offset on many transceivers).

Time: Most of the time

Access Code: Send K8IFZW without any space between letters.

User Commands:

* CMD (CoMmanDs) Lists User commands
* xxZ Changes the speed of the system to xx WPM. Note: the only acceptable values are 20, 30, and 40 WPM.
* NUZ Lists the news bulletin.
* ZL# List the entire directory of the Mailbox. Suggsetion... don't do this unless as a last resort. It can take a long time.
* ZG#call# Get a list of all of the messages queued for "call". The system will come back with the identification of K8IF Mailbox and then a list of message numbers, receiving and sending stations, and finally the K8IF MAILBOX id. If there are no messages it will simply id twice.
* ZRxx# Read message number xx from the mailbox.
* ZDxx# Delete message number xx from the mailbox. Note: if you are deleting more than one message during a session delete them in descending order. The messages are resequenced as messages are deleted. This is IMPORTANT ifyou are not to delete the wrong message.
* ZB#to/from# Send a message to station "to" from station "from". Then wait for the system to prompt you for the actual text of the message. Begin the text with a double "##" and end it with five "N"s.
* MBX OFF Shut the mailbox off.

Notes: Each transmission should begin with a few "V"s. This will give the computer a chance to sync in on your signal and code speed.

Remember the "#" on CW is the BT symbol. Be sure to use it wherever noted.

(For the purpose of this column, the "#" represents a double dash, or BT. The original script called for the double dash, but the mill here does not have one so the pound sign was used, "#". Please note this in the text... Ed.)

(Please See Page 19)

QRP Quarterly is the official journal of the QRP Amateur Radio Club, International, Inc and ispublished four times a year: January, April, July, and October. The QRP ARCI is a non-profit organization dedicated to increasing world-wide enjoyment of QRP operation and experimentation (QRP, as defined by the club, is 5 watts output CW, 10 watts output PEP). Members agree to voluntarily limit their transmitter power to 50 watts output CW, 100 watts PEP, except for public service work, where higher power may be necessary. Current club membership is 5195, QRP Quarterly circulation is 744.

Initial membership fee of $6.00 ($7.00 for DX applicants) covers lifetime membership plus first four issues of the QRP Quarterly. Membership information is available from the secretary/treasurer (see roster below). Subscription renewals are $5.00 ($6.00 for DX Subscribers) for four issues. Expiration notice appears in red (rubber stamp) on the mailingcover of final issue. Expiration date also appears on mailing label, following QRP number: i.e. 4174-4/81 means member 4174's subscription expires with October issue, 1981 (or fourth quarter, 1981). Renewals must be received by secretary/treasurer by the 15th day of the month prior to month of publication for continuous service. Otherwise, renewal begins with the next issue. Send renewal notices, changes in call, or address changes to the secretary/treasurer (see roster below). PLEASE MAKE ALL CHECKS OR MONEY ORDERS PAYABLE TO: QRP Amateur Radio Club International, Inc. PLEASE DO NOT SEND CASH. New members will receive first issue following receipt of their application provided it is received at least 15 days prior to month of publication. Otherwise, their subscription begins with the next issue. Please include QRP # and Call on checks and M.O.s.

Letters to the editor are welcome. Not every letter can be published, and the editor reserves the right to edit letters to conform to space limitations. Those desiring a responsefrom the editor, officers, and Directors should enclose a SASE with their letter. Construction projects or articles of general interest are always welcome. Manuscripts should be typed, double spaced, and all circuit diagrams should be clear and include all parts values. The editor and club are not responsible for testing projects that appear in this publication. Pictures should be sharp, distinct, and Black & White. Size should be approximately 3" by 3", or a size that can be trimmed to one column size. Any requests for returned materials MUST be accompanied by return postage and envelope. Please include name, call, address, and phone number on all manuscripts and mailed to the editor.

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Renewal ( ) for _____ yr(s). Change of address ( ) Change of call ( ).

Amount enclosed $_____ QRP ARCI Number _____ Call Sign _____

Name _____ New Call (If applicable)

Address _____ _____

City _____ State/Province _____ Zip _____

Country (If DX subscription) _____

Letters from the Readers...

I just wanted to pass on my experiences on 1296 after the solar flare in June. I was able to work out-of-town for the first time with my varactor diode tripler transmitter and worked WA5TBE in Sandia, Tx., WB5LUA in McKinney, Tx., and W5HN in Dallas, Tx. My power output to the feedline at this time was only 900 milliwatts.

Curious as to what was actually reaching the homebrew 10 element Quagi on the roof through the RG-223 coax, I slipped the antenna end of the coax into my shack and found the power at the antenna was only 370 milliwatts - WOW!! Measurements were made with a Hewlett Packard laboratory quality 435A Power Meter. These QSOs were all cw, of course and you can imagine what over 4 db of feedline loss did to my receiver noise level. I am using a microwave modules 1296 converter with no preamp. 1296 energy from the antenna goes directly to the mixer in the 23 cm converter without the benefit of RF amplification. This converter is then fed to my Argonaut 509 QRP rig as a 10 meter IF. The antenna is the 10 element Quagi described by N6NB in the August 1981 issue of QST.

W5HN was 439, WA5TBE was 5X5 on SSB, and WB5LUA was 569 with this very modest set-up. You can imagine my thrill to be able to work this far with a diode transmitter on microwaves. Before these QSOs, I had only worked a local on 23 Cm., W4ODW, who is 12.6 miles away. All this would not have been possible without the first-class stations at the other end of the path.

Calculating the Great Circle distance to WB5LUA, it seems we are 619.74 miles apart and with an output power of 370 milliwatts, this represents 1.67 kilomiles per watt. The distance spanned at this frequency and power level is an exciting experience for an avid QRPer like myself.

I hope this experience will encourage those interested in micro-wave communications with simple gear and antennas to give it a try. I failed to mention that the 432 Mhz. "Exciter" is an ICOM IC-402 putting 3 watts into the tripler transmitter. Of course I use a tuned filter on the output to insure that only the 1296 Mhz energy is radiated.

Four stacked Quagis with a new Heliax feed will be up soon and a preamp is in the works for this modest 1296 station.

73 from sunny Fla,
Terry Young, K4KJP

Here is some reader news for the QRP Quarterly. I have been off the air about 2 years but am back with an HW-8 and 230 foot long-wire from the apartment. I really enjoyed the fall QSO Party. I only made 24 contacts, but only had about 6 hours to operate it.

There are two new QRP rigs on the market that seemed to have slipped up on most of us unnoticed. They are the IC-730 and IC-740. ICOM does not advertise them as QRP rigs, but under the top cover of each rig is a miniature slide switch. The circuit board is marked "100" and "50". By placing the switch in the "100" position as the radio comes from the factory, the power output is 100 maximum and 10 watts minimum. Power is controlled by the "RF Power" control on the front panel, both on CW and on SSB when the Speech processor is turned on. In the "50" position the maximum output is 50 watts and the minimum is about 1 watt. Further reduction of the maximum output could probably be obtained by adjustment of the ALC Control inside the rig.

Once the switch is set, simply replace the top cover and the job is done. One can run the rig QRPp or have the equivalent of a 50 watt amplifier by turning the knob. The really neat thing about these rigs is that both have all the new bands and dual VFOs. Also, the receivers are quite a bit better than what a lot of us are used to.

Yaesu markets its whole line of transceivers in Japan as 10 watt rigs with an "S" in the model number. i.e. FT-707S, FT-101ZSD, etc. These can be bought in Japan and brought back to the U.S. by paying a 10% import duty.

(Continued on Page 19)

A PEAK INSIDE

Keep an eye, and an ear, out for the spring and fall QSO Parties. Dates and further information to appear in the next issue.

WB8VGE at the controls of W8NP. Equipment shown is:
Bottom -

Kenwood TS-130 w/Power Sup.
Homemade Memory Keyer (Via WB8VGE)
Ten-Tec Argosy with Tuner-Power Supply

Top -

Yaesu Two Meter
Heath Clock
Tv Monitor For RTTY-CW
RTTY-CW Decoder
RTTY Interface for Printer (Not shown)
10 Meter 29.6 FM

The President Speaks
by Ed Popp, K5BOT
QRP ARCI President

It is a little late, but I hope that everyone had a joyous holiday and I hope that all have a great and prosperous new year.

The October QSO Party was a lot of fun and I enjoyed meeting many of you. My only regret is that I wasn't able to operate as much as I would have liked. Next year, I plan to do much better, I hope!

The G-QRP-C and QRP ARCI Activity week-end was fair. Conditions just weren't very good as compared to the previous week-end. But as of late, 10 and 15 meters has been great into Europe. If you need any Europian QRP contacts, now is the time to go get 'em.

If you don't know by now, 30 meters (10.1 - 10.15 Mhz) is open and jumping. But I know of only a few QRPers on the band. Where is everyone else?

You say your rig doesn't cover 30 meters? I hope that most of you are NOT planning to trade-in the old rig for a new one with 30 meters. Personally, I can't see spending a couple of hundred or more bucks and the ol' rig just get on a new band. For about a tenth of the amount, you can use that ol' rig and have fun in the process.

Why not build a transverter for your present rig? About a watt of drive is all that is needed. Or, how about a transceiver for the band? The possibilities are almost endless for getting on the new band without buying a new rig.

There are plenty of circuits for transverters and transceivers for 40 and 20 meters that with simple modifications in the tuned circuits and a change in crystals, you are on 30 meters. Sure beats two hundred or more dollars especially with today's economy.

When you come up with that working transverter or transceiver, how about sharing it with your fellow QRPers? Send it to the editor for publication in the Quarterly and also become eligible for the Tecnnical Achievement Award. But don't stop with transverters or transceivers. Ther's antennas, modifications or traps for antennas, beams??? And a whole list of items that can be used or made for 30 meters. Let's heat up the soldering irons, gang.

At this point in time, QRP ARCI does not have a calling frequency staked out on 30 meters. Director Chris Page, G4BUE, states that G-QRP-C is currently using 10.106 Mhz as a calling frequency as it is clear of QRM in Western Europe. It's a place to start. CU on 30 meters. 73.

Shack of the Quarter
Michael Bryce, WB8VGE/W8NP

Michael Bryce is our operator of the quarter. He is shown at the controls of Massillon Amateur Radio Club's console, W8NP.

"The Massillon Amateur Radio Club has been around now for about 40 years. It has been only the last few years that we have been getting back on the air. Most of the older guys are no longer with us and the younger ones are riding saddle now. There is about 100 members and about half are active in the club. The younger ones like myself are getting the club interested in QRP operation. Myself and Terry, N8ATZ were the ones to get the club back in the saddle with operating the club solar powered on the two big contests (QRP CW and PHONE).

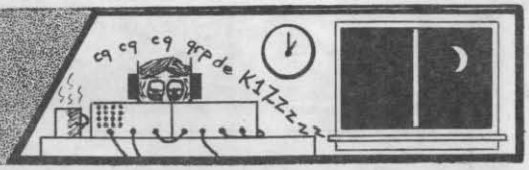
"While not shown the club has RTTY and computer in the shack. There is much work done in the area with solar/wind power and that work is also in the club. Myself and Terry are just about donewith the club's 220 machine. It will later be runningon wind power/solar when time and money allows."

Mike has advised us that his YF is expecting their first harmonic soom... target date 17 January. Good health, Mike from QRP ARCI.

(Thanx to Skip for the pic, WB8OWM)

****UPGRADED? TELL THE SEC/TREASURER***

QRP CONTESTS



The Tasmanian "Devil" Award

This award is created to interest Australian and overseas amateurs in contacting reasonably rare VK7s. Tasmania, the island state of Australia, has many unique features, the "Devil" award is named after one of these.

To Qualify:

You may qualify for the award in any one of the sections or subsections.

Sections:

1/MF-HF
(a) Open-by the use of any combination of bands up to 30 Mhz and modes available to applicant.
(b) One band-of those available.
(c) One mode-of those available.
(d) All Novice-contacts with Novice calls.

2/VHF
(a) Open-by the use of any combination of bands above 30 Mhz and modes available to applicant
(b) One band-of those available.
(c) Satellite-contacts via Amateur Satellites. Cross band to HF allowed if permitted under license terms.
(d) Repeater-via in-band repeaters.

Claims:

HF. Applicants must establish two way contact with a number of VK7 Amateurs depending on the applicant's location.

Australia including Tas.- 50 contacts
Oceania, Antarctica - 30 contacts
Asia, North America - 20 contacts
Europe, South America - 10 contacts
Africa - 7 contacts

VHF. Applicants to contact 20 VK7 amateurs with at least one station in each of the three W.I.A. branch areas.

Verification:

Claim logs, with applicant's name, call, section, and to show station contacted, date, time, band and mode. The claim to be signed by applicant and countersigned by two other amateurs. Spot checks will be made with contacted stations in VK7 for confirmation. QSLs NOT REQUIRED

Commencement:

Contacts made since first day of January 1978 can be used in claims.

Applications:

A fee of 10 IRCs overseas, or 5 IRCs within Australia or equivalent should accompany claim to cover cost of award and postage and be sent to:

Awards Manager
C/o VK7 QSL Bureau
P.O. Box 371D
Hobart, Tas. 7001.

Those who entered the VK vs The World CW QRP Contest are advised to have their contest entry into the club via:

Contest Manager...VK CW QRPp Club
PO Box 109... Mt. Druitt, NSW 2770
Australia

Entries must be in not later than the end of January 1983.

Be watching in later issues for other QRP contests.

DX DIARY....

G-QRP-CLUB
1983 Activity Weekends (C.W.)
by Chris J. Page, G4BUE

As in previous years, the G-QRP-CLUB is promoting QRP Activity Week-Ends throughout 1983. All radio amateurs throughout the world are invited to participate as the object is to promote QRP activity world-wide.

Spring QRP CW Activity Weekend -

19th/20th March 1983

1983 QRP Winter Sports (CW) -

26 December 1983/
1 January 1984

The times (GMT) and frequencies for both of the above events are as follows:

0900 - 1000	14060	1500 - 1730	21060/28060
1000 - 1100	21060/28060	1730 - 2000	14060
1100 - 1200	7030	2000 - 2100	7030/10106
1200 - 1300	3560		
1300 - 1400	10106	2100 - 2200	3560
1400 - 1500	3560	2200 - 2300	14060

Late Spring QRP SSB Activity Weekend -

7/8 May 1983

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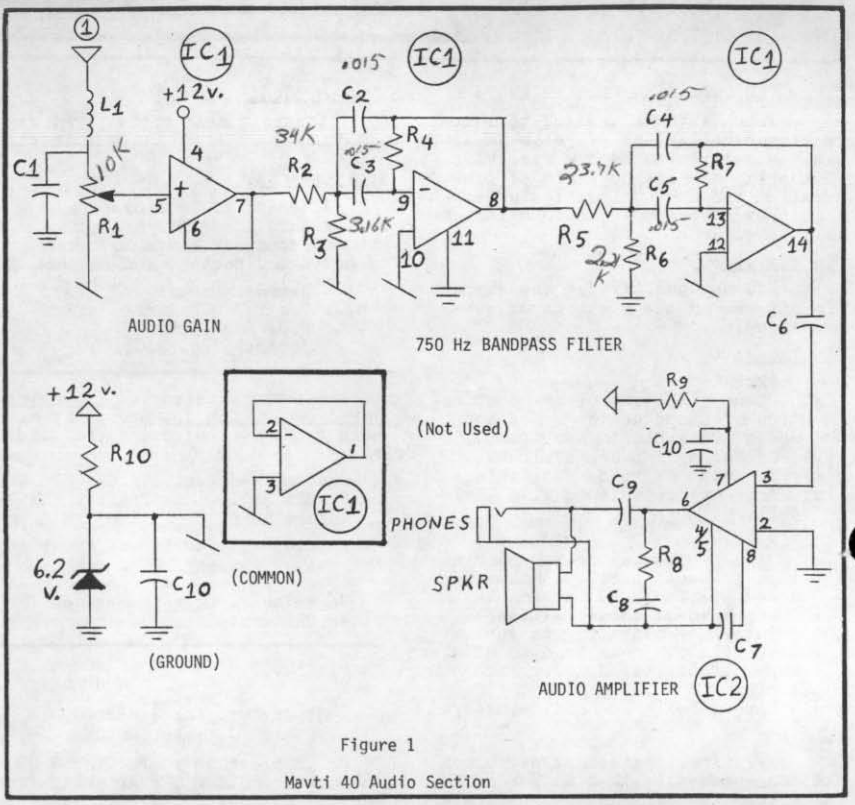


Figure 1

Mavti 40 Audio Section

MAVTI 40 SECOND ORDER MFA BANDPASS FILTER

by Paul Kranz, W1CFI
Rd2 Box 370
Harvard, Ma. 01451

I thought that your readers might like to see two additions I have made to the Mavti-40 Transceiver which appeared in June 1975 QST.

In the spring of 1980, the Hewlett Packard, Andover Division, radio club built six Mavti-40 Transceivers as described in the June 1975 issue of QST. The transceiver has a 5 watt output on 40 meters and uses a direct conversion receiver with a passive tuned 750 Hz filter in its output. The performance of the lettle rig is outstanding considering its simplicity and size. In fact, the receiver seems almost as sensitive as my Drake R4A. However, the switching from transmit to receive is done manually and the receiver output is quite broadband in spite of the tuned filter in its output. To improve the transceivers performance a 750 Hz bandpass filter, audio power amplifier and a transmit/receive switch were added.

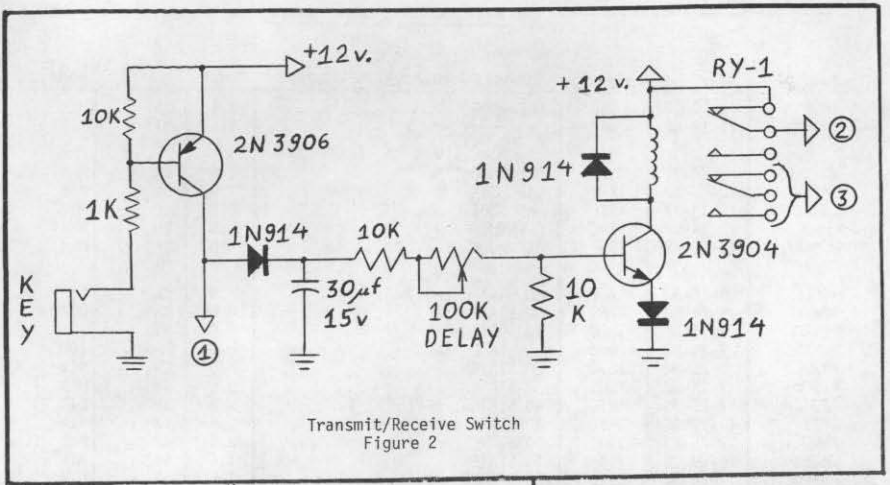
The filter (Figure 1) is a second order maximally flat amplitude bandpass type with a center frequency of 750 Hz and a 3 db bandwidth of 350 Hz (Figure 3). The filter uses all 1% metal film resistors and a 10% mylar capacitors. No substitutions should be made for these components since the filter's performance will be adversely affected.

The automatic transmit/receive switch (Figure 2) was added for operating convenience. The 100K DELAY pot should be set for a comfortable delay between transmit and receive.

The next modification will probably be a circuit to shift the transmit and receive frequencies by 750 Hz.

**********C Q Q R P**********

We have a Quartz Crystal Data Sheet from Hayward Labs. TV color burst xtals, 5 & 10 Mhz Xtals, BFO xtals, NPO caps, and design assistance are available. Contact them via 7700 SW Danielle Ave, Beaverton, Oregon 97005, or SASE & 20¢ for copy of data sheet from editor.



Transmit/Receive Switch
Figure 2

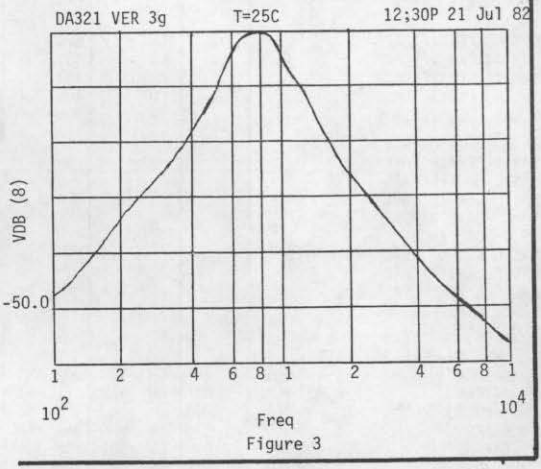


Figure 3

A Note from Harry, K6JSS

I would like to express my warmest thanks to those who honored me with your appointment as a permanent member of the Board of Directors. Such an expression proves to me that after 21 years, our club still has time to consider each member as a contributor.

(Harry will be featured in the next issue of QRP Quarterly)

****CLIMBING TOWERS? USE THAT BELT!****

The Editor's Soapbox
by Terry M. Gregg, KA5EXI
QRP Quarterly Editor

Here I am entering into the second year of being editor of the QRP Quarterly. This job has been a challenge, but what comes out of the wash is the pride in the finished product put into the mail.

This issue is the birth of a new year for the TAA (Technical Achievement Award). Last year's winner is our first example of what you can do. Next year it could be you, but only if you try.

All of this work is supported by both the "regulars" and the one-timers alike. To all of you who have sent in, I thank you. For those who are perhaps thinking of doing so, DO IT! This is your magazine, so support it. Letters to the Editor, letters from the readers to the readers, technical articles, upcoming DXpeditions, humor, observations, Shack of the month, etc. Let's expand this magazine.

Do you regularly go to a local club? Do you take the QRP Quarterly with you? If not, why not? Strut your stuff. Show others what QRP is all about and that the CW drive, carrier level, etc. does not have to be full clockwise. Tell them to try the other direction. Help create inter-

(Continued on Page 20)

CALL	DATE	BASIC	ENDORS. - MILES/WATT - NOTES	POWER	MODE	BAND
			- DXCC -			
KK9Q	11-14-82	55C	ONE MODE	2.5	SSB	MIX
K4AHK	11-13-82	56C		5.0	MIX	MIX
			- W.A.C. -			
WA1YIO	9-26-82	426C	ONE MODE	2.0	CW	MIX
SM1CNS	10-17-82	427C	ONE MODE	1.0	CW	MIX
G4EBO	11-13-82	428C	ONE MODE	2.0	CW	MIX
KM9Q	11-14-82	429C	ONE MODE	2.5	CW	MIX
WB3HNK	11-21-82	430C	ONE MODE	3.0	SSB	MIX
			- W.A.S. -			
N4FLC	9-26-82	172C	40 STATE SEAL	2.0	CW	MIX
NØBYC	9-26-82	178C	40 STATE SEAL	10 PEP	SSB	MIX
NØBYC	9-26-82	182C	40 STATE SEAL	5.0	MIX	20m
NØBYC	9-26-82	184C	40 STATE SEAL	5.0	MIX	10m
WB8UUJ	9-26-82	189C	20 STATES	5.0	CW	MIX
N1BOM	9-26-82	190C	40 STATES	5.0	CW	MIX
KA9JKK	9-26-82	191C	40 STATES, NOVICE	5.0	CW	MIX
AI2T	10-17-82	192C	20 STATES, ONE MODE	2.5	CW	MIX
KM9Q	10-29-82	193C	50 STATES	2.5	CW	MIX
WB6UNH	10-29-82	194C	40 STATES	1.0	SSB	MIX
PY2FNE	11-14-82	195C	20 STATES	2.5	CW	MIX
WB3HLH	11-21-82	196C	50 STATES	2.0	MIX	MIX
N5EM	11-30-82	197C	20 STATES, 1st 30 METER !	2.0	CW	30m
			- NET -			
WB9WOM	10-17-82	12	GLN-80 CERTIFICATE		CW	80m
WA6FLN	10-17-82	13	SWN-40 CERTIFICATE		CW	40m
KD6OQ	10-17-82	14	SWN-40 CERTIFICATE		CW	40m
W6SKQ	10-29-82	15	SWN-40 CERTIFICATE		CW	40m
K5VOL	11-30-82	16	GLN-80 CERTIFICATE		CW	80m
			- QRP-25 -			
K4ADI	10-27-82	945	BASIC CERTIFICATE			
VE3KTZ	10-29-82	946	BASIC CERTIFICATE			
WB5FKC	10-31-82	947	BASIC CERTIFICATE			
WB9WOM	10-31-82	938	"200" SEAL #100			
WB2IPX	11-14-82	943	"50" SEAL #506			
KM9Q	11-14-82	948	BASIC & "50" SEAL #507			
WA2BTG	11-14-82	949	BASIC CERTIFICATE			
W6JHQ	11-14-82	950	BASIC & "50" SEAL #508			
W5QJM	11-20-82	951	BASIC CERTIFICATE			
K3TKS	11-30-82	918	"200" SEAL #101			
			- 1000-MILE-PER-WATT -			
WB5FCO	9- 9-82	760	TO UA1OSA 3,558 M/W	1.5	CW 598	20m 185
WB5FCO	9- 9-82	761	TO JH1APK 6,907 M/W	1.0	CW 599	15m 261
SM6DEC	9-26-82	762	FROM K8LJQ 20,595 M/W	.200		
N4FSZ	9-26-82	763	TO KA7KCQ 1,642 M/W	1.4	CW 600	15m 262
N4FSZ	9-26-82	764	TO EA4BJC 1,999 M/W	2.0	CW 601	20m 186
N7DGZ	9-26-82	765	TO K1JD/KH6 1,928 M/W	1.4	CW 602	20m 187
N7DHA	10-17-82	766	TO K4HZK 1,692 M/W	1.4	CW 603	20m 188
N7DHA	10-17-82	767	TO KH6OZ 2,544 M/W	1.06	CW 604	15m 263
WD9IFF	10-17-82	768	TO JH1BAY 12,698 M/W	.500	CW 605	10m 133
KE6VY	10-17-82	769	TO W3RMD 1,163 M/W	2.0	CW 606	15m 264
SM1CNS	10-17-82	770	TO ZK1CQ 15,071 M/W	.650	CW 607	15m 265
WB2IPX	10-29-82	771	TO CT4BD 1,144 M/W	3.0	SSB 116	75m 30
VE3KTZ	10-29-82	772	TO ZL2MM 4,330 M/W	2.0	CW 608	15m 266
K4KJP	10-29-82	773	TO WB5LUA 1,678 M/W	.370	CW 609	23cm 5
G4OSE	10-29-82	774	TO WBØYJQ 1,508 M/W	2.7	CW 610	15m 267
WB9WGM	10-29-82	775	TO ZS1XR 3,369 M/W	2.5	CW 611	15m 268
N7DGZ	10-29-82	776	TO AX2PBK 8,324 M/W	.920	CW 612	15m 269
WB9WOM	10-31-82	777	TO KA1W (2-WAY QRP) 1,618 M/W	.500	CW 613	20m 189
KA9NZI	10-31-82	778	TO WBØUCQ (NOVICE) 2,462 M/W	.370	CW 614	15m 270
JE2MFE	11-13-82	779	TO K7WA 9,834 M/W	.500	CW 615	40m 130
W7OKE	11-13-82	780	TO ZL1JM 3,508 M/W	2.0	SSB 117	15m 271
KE6VY	11-13-82	781	TO VK2DZZ 3,766 M/W	2.0	CW 616	20m 190
K5IS	11-13-82	782	TO JA7IL 2,987,500 M/W (DISTANCE CHAMP FOR THIS QTR.)	.002	CW 617	15m 272

(Continued on Next Page)

1000-MILE-PER-WATT (CONT'D)

CALL	DATE	BASIC	ENDORS. - MILES/WATT - NOTES	POWER	MODE	BAND
KA7HRE	11-13-82	783	TO VK3XB (NOVICE) 8,166 M/W	1.0	CW 618	15m 273
G4EBO	11-13-82	784	TO ZL4CO 4,688 M/W	2.0	CW 619	20m 191
N7DGZ	11-21-82	785	TO W4IOL 1,142 M/W	2.2	CW 620	40m 131
KM9Q	11-21-82	786	TO F6HKD 4,134 M/W	1.0	CW 621	15m 274
KH6UN	11-30-82	787	FROM KA7KLH(TECH/NOV)1,529 M/W	2.0	CW 622	15m 275
WB3GNJ	11-30-82	788	TO ON6PO 6,622 M/W	.500	CW 623	15m 276

AD2Y WITH ADE WEISS' DXCC QRPp TROPHY

Club Awards Update
by Bill Harding - K4AHK
QRP ARCI Awards Manager

-FIRST 30 METER AWARD ISSUED-

Ed Manuel, N5EM, has been awarded the first QRP ARCI award for the recently opened 10 Mhz band. With one day to spare before the editor's deadline for this issue of the Quarterly, Ed sent in his application for a 30 Meter WAS-QRP certificate. He qualified with the basic 20 states and said in his letter that he was almost ready for his 30 state seal. Who is going to be the first to get 30 Meter certificates for the other awards? The race is on!

-ARRL DXCC-QRP-

In the last issue of the QUARTERLY, mention was made about a proposal being considered by the ARRL DX Advisory Committee to create an ARRL nonendorsable QRP DXCC Award. A Survey of the QRP ARCI officers and directors is in progress by your awards manager and a report will be made at a later date.

In the last issue, AD2Y was recognized for receiving for receiving the DXCC-QRP Award and Ade Weiss' DXCC QRPp Trophy. A picture of Fram with his trophy is printed in this issue. He is a student in electrical engineering at Clarkson College of Technology in Potsdam, N.Y.

-75 METER K-MILE/WATT-

Several 1000-Mile-Per-Watt awards deserve special recognition this quarter. Les Shattuck, WB2IPX, received 75 Meter endorsement #30 for his SSB QSO with CT4BD. Therehave only been two of these issued since 1977. Terry Young, K4KJP, is in the news again with 23 Cm endorsement #5 for his solar flare QSO with WB5LUA. Jerome Doerrie, K5IS, is our distance champ this time with a 2 milliwatt QSO to JA7IL netting a whopping 2,987-500 miles/watt!

Elsewhere in awards, the QRP-25 Award activity picked up dramatically following the October QSO Party. Danny Gingell, K3TKS and Ken Robertson, WB9WOM, both received "200" seals for their certificates.

Several QRP-NET certificates were issued this quarter with your Nets Manager, Red Reynolds, K5VOL, taking #16.

For those of you who are trying for 2-way QRP WAS, a membership application has been received from technician class KH6UN in Eva Beach,

(Continued On Page 20)

15 Meter Mobile Antenna

by Louis J. Jacobs Jr., KN9V
5627 So. Homan
Chicago, Illinois 60629
&
Gerald G. Czaja, KM9Q
3949 W. 57th Place
Chicago, Illinois 60629

Time spent driving to and from work is time away from the shack, which led me to the thought of running mobile. Being a ham, and a frugal one at that, the thought of buying a commercial antenna just didn't sit right with me.

My major interests lie in QRPing and I have been anxious to try my new NCG 15 Meter QRP rig while on the road. The only obstacle was the antenna. Where does one get a cheap efficient, easily built antenna? Well, a trip to the junk box, basement and the local hardware store resulted in this 15 Meter QRP mobile antenna.

Before getting into the construction, I would like to say that it works well with a low SWR of 1.3:1 over 15 Meter band using 10 watts of input power. The antenna hasn't been tried with more power because as mentioned before it was designed with QRP in mind

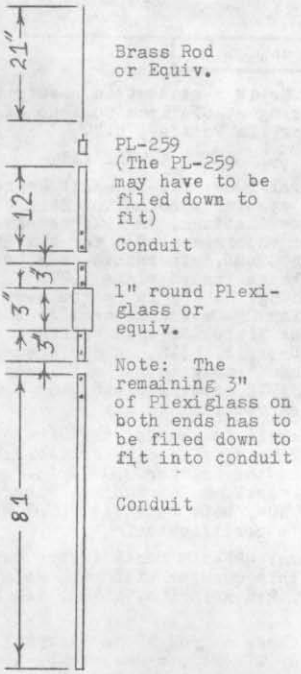


FIGURE 1

The antenna was constructed from 1/2 inch thin wall conduit from the hardware store. The center loading coil is a piece of 3 ¼ inch diameter B&W stock from the junk box or the inductor can be hand wound using approximately 18 gauge wire. The top section is a piece of 19 ½" whip from an old 11 meter antenna. The base mounting insulator was fabricated from an old piece of ¼" thick plexiglass.

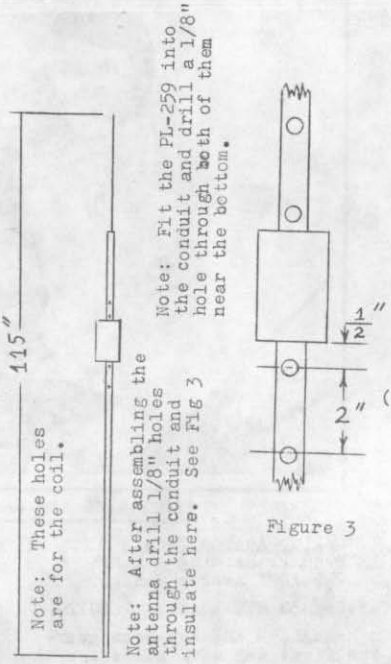


Figure 3

FIGURE 2

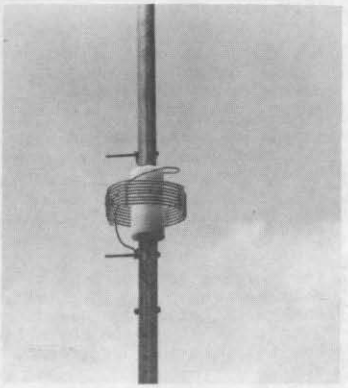
The antenna was field tested and the results are as follows: Using 10 watts with the antenna mounted to the rear bumper of my pick-up, the stations worked were: Fort Worth, Texas; Picorivera, Calif.; Richmond, Va.; Hendersonville, NC; and Milville, NJ. The signal reports on single sideband ranged from 5-1 to 5-7 and on CW from 519 to 579. I was well pleased with the antenna's performance and the signal reports considering the poor conditions we have been having lately.

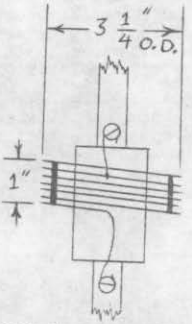
After consulting several handbooks and being thoroughly confused by conflicting statements, I decided to utilize a few facts and apply the old scientific principle of "Trial and Error". That is how I came up with this cookbook, 15 Meter Mobil QRP, home-brew, cheap, efficient, effective, easy and fun to make antenna.

(Continued Next Page)

Parts List:

1 - 10' X ½" thin wall conduit
5 - 1/8 X 3/4" machine nuts and bolts
1 - 1" roundstock plexiglass 9" long or any other insulating material
1 - 3¼" B&W air inductor 1" high
1 - antenna whip
1 - SO-238 Chassis connector
1 - Coax cable (length as needed)
1 - Plexiglass ½"x3"x12" or any suitable size
2 - conduit pipe straps for ½" conduit
2 - Large nuts, bolts and lockwashers for mounting insulator to bumper.





3" of 18 Gauge wire. Use this to find lowest SWR on coil.

NOTE: The coil I used was a B&W 3¼ OD 1" high, about 8 turns

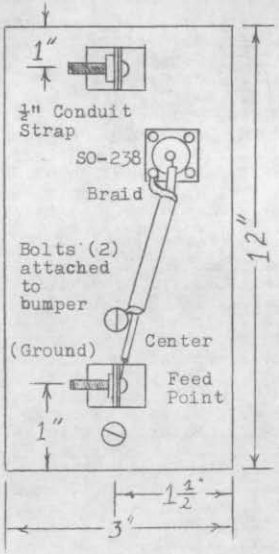


Figure 4

From The Secretary's Blotter
by Irwin R. Lappi, WD4LOO
QRP ARCI Secretary/Treasurer

I would like to remind members once again that I cannot respond to your correspondence unless I receive an SASE or appropriate postage.

Also please note that since I do not have the services of a computer available to me, it is going to be late Feb or Mar, '83 before the membership list can be updated and available for mailing. So please do not ask for it until Feb or Mar, '83.

A few members are still sending in the wrong renewal fee. This information can usually be found near the front of the "Quarterly" so please check it out and pass the word to your friends and contacts.

Also I do not know how well the mini-contests for our monthly informals are going but I am sure that some fine member out there is going to win a four year free subscription to the "Quarterly" or his choice of 1000 club QSL cards.

Another year is complete and it is with sincere hope that I wish each of you a very productive, profitable, and challenging year to come and hope that each of you had a very happy and safe holiday season just past. That's it for thismonth - hope to CU on the air - GOOD LUCK QRPing. 73 - Ed

**********C Q Q R P**********

Make the following new members welcome when you work them on nets or in club contests.

WA2VJL, Fred Wasielewski, TX
WBØKYJ, Robert A Stoinski, MN
KA6COU, Clarence F. Elworthy, CA
N2BRU, John A Schenone, NJ
W7OKE, Dell O McCuaig, WA
WD6DMY, Brian J Greer, CA
KA5BOU, Craig S. Young, LA
N6GFX, Murray G Casady, CA
KA5JBB, Robert D O'Brien, TX
N6GFO, Matt Dennis, CA
N7BHI, E G 'Pat' Winsberg, WA
K1THP, David Karpiej, CT
KA8NRO, Anthony A Luscre, OH
KØDSL, John P Boejer, TX
KB4GF, Van R Brollini, FL
YU2JK, Martin Svaco, Yugoslavia
WA7RGZ, Karl Haley, AZ
KI2L, Larry Spinak, NJ
KH6CP, Zachary H J Lau, HI
KA7DNE, Roy E Tuomi, OR
KA6UTU, Robert A Houghtby, CA
NN4I, Marquis G Witt, VA
KC7VQ, Jay L Sturdivant, WA
WD5GSV, Oscar Kuenstler, NM
KA1IRB, Charles E Hance, ME
WA2BTG, William J Sutter, NY
KA7NDH, Thomas B Henchy, UT
N5EOP, Orien H Block, TX
WD5GLO, Louis A Nix, OK
W3UOS, Miller Young, PA
K4CWQ, Winston F Jones, GA
AI2T, Barry L Ives, NY
N6DZP, William P Parker, CA
WB3KHB, James H Martin, PA
KA9BDB, Barry L Oberling, IL
KA4KVL, Joseph C Scorsone, NC
KU7I, David J Benson, AZ
N9DHQ, Gary L Webb, WI
W6MGV, William L Keating, CA
KC3OF, Robert P Beck, MD
WB5LKZ, James B Geer, TX
WD6FIX, Frank C Valentine, CA
AC5K, John W Spence, TX
WB3JEZ, Bruce E Palmer, ME
The Vibroplex Co, Inc., ME
KB8NR, Floyd A Hollenbeck, MI
EA2SN, Jon M Iza, Spain
KA1SR, Robert J Koziomkowski, RI
W4ILE, Regis K Kramer, FL
KA9NZI, Gary L Phillips, IL
N7IS, George A Bowman, WA
VE7ARR, W. John Coulthard, Canada
KAØJWC, Scott Blixt, MN
KA9HQW, Robert W Pulliam
KA4VDP, G R Campbell, FL
N6HBF, Charles H Bobby, CA
VE3HQV, L A Mackenzie, Canada
KØCVN, Peter A Flaton, MO
WB5ZGH, John H Edgerly, TX
G4OSE, Paul Bookbinder, England
VE2GHI, Jean Jibouleau, Canada
WBØBEK, Jerry L Bartachek, IA
KF1D, Michael A Bunker, RI
KA3IVS, Marvin V Pease, PA
WA6YSO, David L Dorrance, CA
K2AD, Frank Grech, NH
KD1K, Richard Wagner, CT
KB6VY, Eric C Wight, CA
G4INM, Thomas W. Frankland, Eng
KC3OV, Donald W Smith, PA
KY5J, [illegible] Lee Nelson, IA
N7DHA, Mary Lou Brown, WA
W6BWT/7, Roy H Gregson, WA
N7DYS, Mark W Johnson, ID
WA2GLL, Joseph A Maniccia, NY
WA2GLL, Joseph A. Maniccia, NY
KA6EHD, Raymond E. Tougas, CO
WA3UJM, George J. Dierking, PA
KS7R, John C. Geach, MT
KB6TQ, Gary F. Williams, CA
WB1CAK, Mitchell E. Cole, ME
NZDLR, Donald G. Dobbs, MN
KA7KLH, William M. Colony, MT
G4FAI, Anthony Smith, ENG
YU3UQR, Krizanec Konrad-Rado, Yugosl
KK9Q, Michael J. Wendland, IL
KA5OBZ, Julian R. Lowe, NC
WBØION, Emil J. Laborelle, MN
K5LB, Leonard R. Barad, TX
WA4NAD, David R. Devlin, NC
WB6ZYK, Sam Rappold, CA
K6FI, Byron W. Looney, CA
N4HLU, Daniel R. Smelser, GA
KB1CP, Frank Bernaby, MA
KA4TAU, Joseph S. Garzik, NC
AD5M, Morris H. Middleton, AR
WB2OUQ, David A. Werner, NY
KA9MZG, Robert A. Siirila, WI
KH6UE, Given Nakamine, HI
WØKP, Stan Sjol, UT
WB6ZHS, Charles M. George, CA
NL7Z, Joseph C. Hannigan, CO
WD8CYP, Robert A. Bolda, MI
N5EAR, Michael W. Laskey, TX
KQ7T, John L. Sullivan, AZ
KK6C, Patrick E. Page, CA

(Continued Page 20)

Net Report

by Red Reynolds, K5VOL
Nets Manager

We have lost our net manager of the CCN net, which covered the area between GSN and SWN. Poor response did not help it! Unless we find someone who can take over the reins of CCN, it will have to be dropped.

New 25 QNI awards winners include 11 new certificates and only one sticker. K3TKS now has four 25-QNI awards - great job, Dan! The race is on between K8IF and K3TKS for the first 5th 25-QNI. The list for the last two quarters is:

W5QJM	GSN-40	Cert	(May)
KB5CS	GSn-40	Cert	(June)
WB2IVX	NEN-40	Cert	(Aug)
K3TKS	GLN-40	Sticker	
K5VOL	GLN-80	Cert	
K9PNG	GLN-80	Cert	
WA6FLN	SWN-40	Cert	
KD6OQ	SWN-40	Cert	
WB6PUM	SWN-40	Cert	
W6SKQ	SWN-40	Cert	
VE3KTZ	GLN-80		(Sept)
W1FMR	NEN-40		(Oct)

Congratulations to all these stations. This brings us to a total of 42 qualifiers for 25-QNI.

The following are the current nets, all listed by day and corresponding UTC (Standard times):

Time	Day	Freq	Net	NCS
0100	Mon	14060	TCN	WA9WZV/4
0100	Wed	7030	SEN	WD4LOO/ WA9WZV/4
0200	Thur	7040[1] 3560[2]	GLN	K5VOL
0200	Thur	7040[1] 3560[2]	GSN	K5BOT
0200	Thur	7040[3]	CCN	KC7IG
0400	Thur	3710[2]	SWNN	KC6JII
1200	Sat	7040[1]	NEN	WB2IVX
1300	Sat	7040[2]	NEN	WB2IVX
1500	Sat	3560[3]	GLN	N8CDP
1600	Sat	7040	SWN	W6RCP
1600	Sat	7110[1]	SWNN	KG6JII

[1]Net Frequency during Daylight Time.

[2]Net frequency during Standard Time.

[3]Tentative - Check NCS

All nets are informal roundtables and are open to check-ins, regardless of power and/or affiliation.

It has been requested that all NCS remind all QNIs to QNZ (Zero Beat) the NCS. This has been lax in the past, and can cause problems in two ways: 1) Failure of NCS to hear the QNI due to out-of-passband due to a narrow filter. 2) Failure of NCS to hear QNI due to QRM in a wide passband. Make it easy for the NCS, guys!

Got some worn out, cut, or otherwise useless coax? Regardless of the type, the shield can be salvaged.

Strip off the outer covering and cut into two foot strips. Slowly push the shield off the inner insulation. It may be difficult, but by grasping the shield in both hands and spaced about 6" apart, patience will let you persevere. The shield will "blossom" as your hands close in on each other. Then grasping the inner insulation, grasp the shield in the other hand and slowly slide the shield down to the other end. The longer you cut the section of coax, the longer it will be to pull the shield off. The shield can be stretched to close in the gaps.

You now have an excellent grounding strap for your shack. It can be used for various purposes. The editor uses it to ground pieces of gear to each other, and to ground the equipment to earth ground. Longer pieces can be stripped off, or shorter pieces can be spliced together.

Shield is extremely flexible and we use it in portable operations. Twist it...Stretch it...Abuse it. It works!

********REMEMBER TO QNZ ON NETS *****

Pen Pal Wanted...

Dear Friend,

As you can see I am from Yugoslavia. Your address I got from a radio amateur here. I know that you radio amateurs are ever ready to help. I do hope you will help me too.

I am so much interested in U.S.A. I would like to know more about the way of life ofyour people, your history and culture. I also would like to learn English better, especially American way of talking (speaking).

So, I would like your people to write to me, to send to me newspapers and books.

I am a man, 43 years old. I also was radio amateur years ago. When my radio set was broken I couldn't afford to buy a new one and so it wasthe end.

Could you find somebody who would be willing to write to me? Among your friends or elsewhere? Or maybe you could give my address to some magazine (radio amateur or other kind). Thank you in advance for your kindness.

73,
Dusan Mihajlovio
Micurinova, 7
2120J Srem. Karlovci
Yugoslavia, Europa

**********ARE YOU DUE TO RENEW?**********

Build A Noise-Fighting Loop for 160 Meters

by C. F. Rockey, W9SCH
Box 171
Albany, Wisc. 53502

Is a high noise level a problem for you in 160 Meter band reception? It certainly was for me until I built this simple but effective receiving loop antenna.

For instance, a neighboring TV receiver strongly radiates a 15750 Khz "Flyback" signal, with its happy harmonic family. One of these pests plunks itself squarely in the middle of the 160 Meter CW band, utterly spoiling my fun there (The set is owned by a sweet little old widow, with whom I can scarcely quarrel). Another electronic "skunk oil distillery" elsewhere in town spreads its raucois buzz over many kilohertz on many an evening. But now that I have my loop, I can effectively "null these out" and truly enjoy "top-band" operation.

There's nothing new about such a loop, descriptions of similiar things have appeared in QST and other publications, but not recently; we gladly acknowledge our debt to its originator. But we believe that a re-run in the Quarterlyis in order.

To build this thing, first acquire five feet of one-half inch copper tubing from your local plumber or auto supply store (this is a bit more than strictly necessary, but will give leeway for soldering, etc.). Then bend this tubing into approximately an 18" circle, leaving about a three inch gap at one point. The exact diameter is not critical.

Then find a nice old tin can, a coffee can (of the older sort, with a fitting lid) is fine. We used an empty one-pound pipe tobacco can but even a clean, new tobacco can will do...

Wrap a number of turns of electrical tape around one end of the tubing at the gap. Then, with a hot soldering iron (or torch), "tin" the other end of the tubing.

Carefully poke two holes diametrically opposite to each other in your can (My WHAT???..Ed), one just a whicker larger than ½", the other just large enough to pass the taped end of the tubing (one end of the tubing shield absolutely must be insulated from the can!). Then carefully solder the tinned end of the tubing to the can. Upon the integrity of this soldered joint the strength of the final assembly depends. The tubing circle's plane must be perpendicular to the top of the can, so that you may set it atop your receiver or table, keeping the loop's plane vertical.

Next, drill a hole in the center of the can's top and mount your tuning capacitor there. It MUST be insulated from the can! Use your favorite technique to accomplish this. We used a 250 pfd. mica variable, which was available at a "Radio Shack", but any good variable capacitor of over 200 pfd max capacity that fits into the can will do.

Now, to windthe loop winding, bet some well-insulated wire; anything from No. 18 to No. 26 B & S Gauge will do (P.S. We used #20 copper "bell wire"). Stretch this wire out straight, then carefully thread six turns around through the tubing (We do not recommend enamelled wire, as it may be scuffed during winding and short-circuit to the tubing). It might take a bit of practice, but it isn't difficult. Then thread one more turn through, to form the coupling loop. Connect the two ends of the six-turn coil to the variable capacitor approximately. The one-turn coil is connected to the receiver through a suitable length of coax cable or plastic lamp cord. Ground the coax shield or one side of the lamp cord.

If you have a bottom cover (and we recommend one) you might cement a piece of felt over it to prevent scratching the surface upon which it sits.

To set-up the loop for operation, connect to the input of your 160 meter receiver. Turn-up the "sensitivity" (or R.F. Gain) control to get a noticeable hiss. then rotate the tuning capacitor of the loop; at one fairly "sharp" spot the hiss-level should noticeably increase. Here the loop is in-tune, and should pick-up any reasonably-strong signals on the band at this time.

Although it does not have quite the "effective pick-up area" of a dipole or long-wire antenna, it is adequate, and the greatly-improved signal-to-noise ratio easily makes-up the difference.

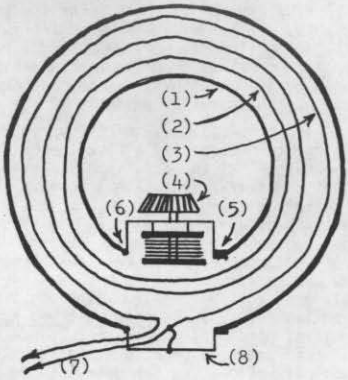
To "null-out" a local noise source, rotate the loop until its plane is broadside (either side) of the source. The noise will, in most cases, disappear as if by magic. Try it...

The textbooks tell us that we receive maximum signal voltage when the plane of the loop is edgewise toward the transmitter. But this is only true for reletively close, vertically-polarized signals. Sky-wave signals seem to come in equally well how ever the loop is pointed. But the null-point on local noise-sources is very sharp and definite, so you can "null-out" the noise and usually not reduce the desired signal strength from a distant transmitter. In this respect, the loop is a truly-effective noise reducer.

When you have your loop working to your satisfaction give it a coat of paint to your taste (I used "Antique Brass which seems to mollify the XYL even though it doesn't look like it came from Marshall Field's).

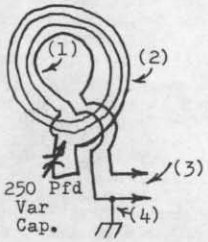
(Continued Next Page)

Mechanical Arrangement of Loop
(Not drawn to Scale)



(1) 18" Diameter ¼" Copper Tubing
(2) 6 Turns for Tuned Loop
(3) One turn for coupling to Rcvr
(4) Capacitor shaft insulated from Can
(5) Tubing insulated from can (Important!!)
(6) Tubing soldered Firmly to can here
(7) Coax (or lamp cord) to receiver
(8) Tin can (at least 3½" diameter)

Wiring Diagram



(1) One turn coupling loop to receiver (interweaved with tuned loop)
(2) Tuned loop, 6 turns
(3) To receiver
(4) Ground onto can

How is it possible that a shielded loop like this one, can pick up a signal? Old-Timers know why, of course, but young fellers are often puzzled. The answer is that one end of the loop is insulated, so it does not "Short-out" the magnetic component of the wave. This induces the signal voltage into the loop while the shielding does remove the electric field pickup. If the shield were grounded at both ends , both components would be unable to act upon the coil and no received signal would be found.

Build yourself a Noise-Fighting Loop and enjoy 160 Meters this season.

73, C. F. Rockey, W9SCH

******DON'T FORGET THE INFORMALS****

Great Circle Distance and
Miles/Watt Calculations for
QRP ARCI Inc
"1000-Mile-Per-Watt" Award
by Bill Harding, K4AHK

What is your name and call?
?John McNeil WA2KSM

This program calculates Great Circle distances in statute miles and kilometers between two points on the earth and shows miles/watt of output power.

Northern hem Latitudes are positive.
Southern hem Latitudes are negative.
Eastern hem Longitudes are positive.
Western hem Longitudes are negative.
Use degrees and decimal parts - not minutes and seconds.

What is your QTH?
?Long Island NY

What is the latitude of your QTH?
?40.8

What is the longitude of your QTH?
?-73.2

What is your power output in watts?
?2.0

What is the distance station's call?
?W6RCP

What is the location of distant point?
?Santa Cruz CA

Enter latitude of distant point
?37.7

Enter longitude of distant point
?-122.5

The distance from Long Island NY to Santa Cruz Ca is 2612 miles. That distance is 4203 kilometers.

This QSO represents successful communication equivalent to 3106 miles per watt of output power.

Congratulations!!!

**********Q R P A R C I **********

QRP Frequencies:

Look for QRPers on the following frequencies:

CW: 1810, 3560,7040, 14060, 21060 and 28060 Khz

Phone: 1810, 3985, 7285, 14385, 21385, and 28885 Khz.

Novice: 3710, 7110, 21110 and 28110 Khz.

Examining Our Attitudes Toward QRP
by C. F. Rockey, W9SCH

"Comparisons are odious" is a phrase often heard among thoughtful people. But it is all too often disregarded among QRPers, particularly younger ones. One reads of the marvelous achievements of someone in the gang, for instance, and compares this achievement with his own mediocre performance. Often the result is discouragementor perhaps the abandonmentof QRP-effort altogether. This should not happen. We are here making an odious comparison.

Or, again, after pitting one's three watts against bitter Sunday afternoon QRM, one wonders ometimes whether he should quit and leave it all to Maw Bell or Western Union. Phooey! Try again when conditions are better.

All of us give ourselves over to despair occasionally; this is the human condition. But our better judgement soon tells us that such downcast feelings are fruitless and nonproductive. Furthermore, a bit of thought reveals that such discouragement is often due to invidious comparisons and unrealistic personal standards. Let us relinquish these.

At present, amateur radio is beset by an excessively competitive spirit, we believe. A large part of the blame for this should rest with the amateur radio magazines, including the larger ham fraternities. Awards and contests of all kinds have been emphasized so strongly that, if an amateur does not place highly therein, it is a presumption against him.

But you do not need to be intimidated by these things. If you simply do not allow yourself to be swept along on the tide of excess and foolish competition, you will insulate yourself from much self-induced inferiority. Are you discouraged because you cannot bat at least a 33.3 percentage in a big-league ball park? Do you feel like a 90 pound weakling because you could not stay in the ring with Mohammed Ali? Of course not! Such egotistical machismo is ludicrous to any thoughtful person. We must accept our physical limitations reasonably.

What is the moral to the story? Simply that you cannot be defeated if you do not compete. This is obvious enough, but is often forgotten. It is a key to tranquility.

Provided it is indulged in a purely sporting manner, against gentlemanly opponents and reasonable odds. A bit of competition can be the spice of life, but when competition is no longer a sport, and becomes a way of life, it is time to call a halt. This is particularly true of a hobby-activity like amateur radio.

When we read that one of QRP's "Supermen" has worked 100 countries with one watt of RF power into a wet noodle, it disturbe us not a whit. By now we have learned that neither our available operating schedule nor our patience is up to such a thing. A big part of life is in learning what fairly to expect of ourselves in any given situation; this goes for amateur radio also.

For instance, we have long since learned that we are personally unequal to such an annual fracas as the "Sweepstakes" or, Heaven spare us, the DX contests. For us, in such events, all too many of the contestants are no longer gentlemanly nor are the odds realistic. In such cases we ground our antennas and console ourselves with philosophy and are better off psychologically, we feel.

The true objective of QRP activity, to us, is not to necessarily strive toward Top-Bananahood but to enjoy some moderate achievement and self-realization through a spirit of "Multum in Parvo", Much in Little. QRP activity is unique in that, like bow-hunting or pole-worm-and-hook fishing, it provides the most satisfaction with the least brute force. We are sportsmen in QRP, not beasts. As with all good engineering and technology, the objective in QRP is to make what you have work as well as possible. We are not "Giant Killers"; if both your equipment and operating skills work as well as you can make them do at the moment, then you are a QRP Success and need no bushel of QSLs nor silly certificate to prove it.

****QRP-AROUND THE CORNER&AROUND THE WORLD*****

More On Publicity Efforts
by James A. Holmes, W6RCP
136 Reed Way
Santa Cruz, CA 95060

Dave, WA6YSO andJimhave been out mixing with their local area hams telling them about the fun and excitement of QRPing and the prestige of being a QRP ARCI member. They were center stage during a QRP forum at the ARRL Pacific Division Convention held in Santa Cruz, California October 8, 9, and 10.

Following this they were invited to attend a meeting of the West Valley ARC in Los Gatos, November 3, where they were the featured speakers.

On both occasions Jim told of his experiences in ham radio, with emphasis on QRP. He discussed the various aspects of QRP and QRP ARCI. There was special emphasis on "home-brew" QRP aptly handled by Dave as he demonstrated his little but mighty rig which measures 2" H X 3" D X 5" W. It features VFO, QSK, and RIT. The rig uses the receiver and VFO from W7EL's QRP transceiver, Aug. '80 QST and the transmitter from KA7EXM's rig, Aug. '81, QST.

*** ***

Six QRPers from QRP SWN-40 had eyeball QSOs at the ARRL Pacific Division Convention. They were N6HY, KG6JII, W6RCP, K6RJM, KD6OQ, and WA6YSO. It was the first time any two of them had met except through their many QNI and QSOs on the bands. All agreed, "We will have to do this again".

*******QRP: AROUND THE WORLD DAILY*****

Vibroplex Bugged Revisited

Thanks to all that sent in their suggestions and comments on the proposed QRP transceiver that Vibroplex is considering. I was surprised by many of the comments and in some areas, there were some very good ideas. So, not only have I compiled a brief list but also sent all letters to Vibroplex, as I think that they should see all the comments.

Here are a few of the items that many wanted to see; the receiver to be superhet with RIT, adjustable output power from 0 to 5 watts, cw was the main mode with full QSK, and operate from 12 vdc. Some of the options that many wanted were, audio filtering, built-in cw keyer and power/swr meter. Also, some wanted a rig that was rugged enough for mobile or backpacking.

So there you have it in a nutshell. Now we will have to wait and see. K5BOT

**********Q R P A R C I**********

Ham Seeks Mobile QRPers' Help

Skip Gee, N4FSZ, is looking for help from QRPers who operate mobile.

He is compiling a manual on mobile operating and wants to devote a chapter to doing it with low power. He wants some first-person accounts of the whys and hows of QRPing from the car or trunk or what-have-you.

"Hams running QRP mobile know how to operate," he says. "They must have a good equipment set-up and super operating habits to survive band conditions. I run my HW-8 mobile as time permits, but like too many things, there is never enough time."

Skip says he gladly will accept all contributions, and those selected for inclusion in his manual will be acknowledged in print. His chief interest is equipment and operating practices, followed by noise suppression, equipment modifications, homebrew projects, etc. His aim is a step-by-step manual to take the operator who has never tried mobile and turn him/her into one who regularly does it and without having to buy a half dozen publications.

"I also need a copy of the old ARRL Mobile Manual," Skip says. "I can't find anyone willing to part with one. I'll pay for one in good shape."

Send all material to:

E.R. "Skip" Gee, N4FSZ
P.O. Box 589
Bassett, Virginia 24055

Send along an S.A.S.E. if you want questions answered. W5QJM

WQF Report

The new Secretary of the WQF is Jack Swiney, VK6JS. He succeeds Gus Taylor, G8PG/GW8PG, who has completed his term as Secretary. Jack's term of office will be two years, '83-'84. Jack is also President of the VKCW QRPp Club.

The SSB level question has been finally settled. WQF members voted that the maximum level be 20 watts pep. This in no way changes the QRP ARCI power level for SSB which is 10 watts pep.

A suggestion has been made that 1983 be a year of QRP technical development. This can be accomplished by home construction of equipment for QRP, antenna development and experimentation, and studies in propogation of QRP signals on the HF bands. This information is to be shared by all WQF members.

The sharing of information is through the various QRP club newsleters. QRP ARCI exchanges copies of the "Quarterly" with other members of WQF. All clubs have the priviledge of copying articles for publication in their own newsletter giving credit to the appropriate newsletter and author.

Speaking of newsletters, here are a few more that may be of interest. "QRPp BOLETIN INFORMATIVO" is published by the QRP group on the Canary Islands. It is written in Spanish and contains both technical and general articles. Those interested can write to Santa Cruz De La Palma, P.O. Box 162, Islas Canarias.

If you can read Japanese, the spoken form of writing, there is the "FANCY CRAZY ZIPPY." It is a small monthly magazine with both technical and general articles. There is also a section entitled "QRP NEWS." Subscription is 2300 yen (a little over $10.00) a year. Write to: FCZ Lab. Inc., 5288 Kurihara, Zama City, Kanagawa, 228 Japan.

VK CW QRPp Club also has a news bulletin that is published quarterly. DX amateurs can subscribe for $6.40 (Australian) or 16 (sixteen) IRC's per year. The "News Bulletin" is issued February, May, August, and November. Sorta fills in the gaps of our own "Quarterly". Send your subscription to VK CW QRPp Club, 59 Collova Way, Wattleup 6166, Western Australia.

As many of you know, the Vice President of QRP ARCI is the WQF representative. Let's all welcome Gary Beam, WA9WZV/4, and wish him much success with the international mails. Welcome aboard Gary.

********** 1 Km/W Award **********

QSL Cards - QRPARCI

$22.50 for 1,000. Include call, name, address and QRP number. Send to:

Certified Communications
4138 S. Ferris
Fremont, MI 49412

The Dinner Bell Syndrome

by Mark W. Johnson, N7DYS
Box 251
Fairfield, ID 83327

Having been a member of the scientific community at one time (I took a biology course in college) I have always been interested in peculiar phenomena. It is with great pride that I reveal a bizarre phenomenon that is showing up on the amateur bands. I call it The Dinner Bell Syndrome.

This particular syndrome is really not new. Anyone who is familiar with the work of Pavlov and his drooling dogs will probably be able to identify this syndrome without much difficulty. As with Pavlov's dogs, certain stimuli create a "drooling" response in many amateur radio operators. This response is directly related to admitted QRP operation.

In order to study this phenomenon I set some conditions that would be stringently followed during the experiment. First, output power would be limited to only 2 watts at the most. Second, only CW operation would be used in the initial experiment because of license restrictions and the attitude of the FCC in regard to Technicians using SSB on the HF bands. Third, no admission of QRP operation would be made until the signal report was received from the other operator. If this report was over 5-6-9 I would advise the receiving operator of the low power level.

After only a brief period of operation I discovered an unusual pattern developing. When I was given a signal report of 5-6-9 or more I would immediately respond with "TNX OM QRP HR ONLY 2 WTS OUT." In virtually every instance this admission was followed with, "SRI OM BUT XYL SEZ DINNER IS RDY."

What conclusions can be drawn from this experiment? First, the grocers of this nation will soon see a dramatic increase in the amount of money spent in their stores. This will be good for the grocers but bad for the harried housewife who is already struggling with an impossible household budget.

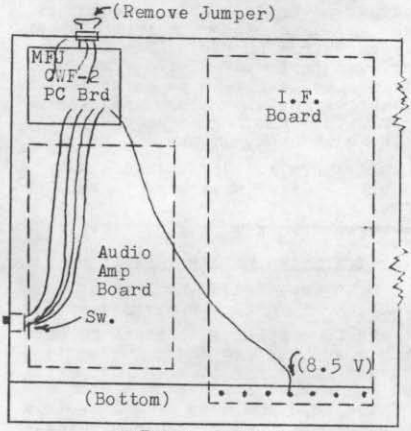
Second, more and more ham operators will begin eating meals with the rest of the family. Thanks to QRP operation more families in this country and around the world will see that one individual who has been absent from the table for so long.

While this study is not totally conclusive, it can be stated with a high degree of certainty that QRP operation is directly related to the triggering of a hunger response in many amateur radio operators. Further experimentation on SSB will be needed before a final conclusion can be drawn about this mode, but it is almost certain to create a similar response.

MFJ CWF-2 Filter PC Board Kit and The Argonaut

by Cliff Soper, WA2PJW
Box 303 Rd #1
Lowman, NY 14861

The CW filter fits nicely into the Argonaut and takes its power from the rig's IF board. So as not to deface the front of the rig I added switch(es) to right hand end panel which is plastic and easily worked. If I decide to sell or trade the rig I only have to remove switches and recover with matching veneer.



Front of Rig

Witn rig bottom up, add switch to side (I used a hot knife to cut the slot for switch handle and hot nail for screw holes-2)and lay PC board to left side over the accessory jack. The ground lead to lug under PC. The output lead to pin 5 on jack and input lead to pin 4 on accessory jack. Power lead is run to pin 4 on the IF board where 8.5 volts is available. I used no switch in this lead as filter only draws 9 ma. The leads for 80, 110, and 180 bandwidth leads were soldered to switch contacts. Check it out and insulate both sides and tape to front and back of board onto sides of rig, laying it over the components.

(July, '82 QRP Quarterly deals with a calibrator for the Argonaut...Ed.)

From The VK QRPp Club (Aug '82):

Happy birthday to the club and its members. January will make the club two years old. Many happy returns.

QRP ARCI member WA1JVY, Mark Pereira, was dubbed VK QRPp's first DX member. Attaboy, Mark!!

VK QRPp operating frequencies are: 3530, 7025, 14050, 21130, 28125 Khz. Why not give them a listen ...when not working one of our club sked?

CW Mailbox (Cont'd)

The following is an example of how the K8IF mailbox works:

Send:

"VVV DE K9PHP"- (ids for the computer log and the FCC)

"VVVK8IFZW" - (activates the system)

"VVVCMD" - (Lists the instructions if you need them)

"VVV30Z" - (sets the mailbox transmit speed to 30 WPM)

"VVVZG#K9PHP#" - (asks for any messages for K9PHP)

"VVVZR1#" - (asks for message number 1)

"VVVZR12#" - (asks for message number 12)

"VVVNUZ" - (asks for any News)

"VVVZD12#" - (deletes message number 12. Remember, REVERSE ORDER!!!)

"VVVZD1#" - (deletes message number 1)

"VVVZB#K8IF/K9PHP#" - (get ready to send a message to K8IF)

"VVV## HI THOM # WE HOPE TO HAVE SEVERAL MORE MAILBOX USERS SOON # 73 # DAVE NNNNN (send the message text)

"VVVMBX OFF" - (shuts off the mailbox)

"VVV DE K9PHP" - (id's for the computer log and the FCC)

The system is quite simple to use. It helps to "load" a few things into your buffer (if you have one) prior to starting the mailbox. Remember to add a few "V"s in front of each command to start it tracking.

TRY IT, YOU'LL LIKE IT (Misteaks are welcome).

Please remember to always shut the mailbox down when you finish.

QRP ARCI: WORKING THE WORLD DAILY*

DX Diary (Cont'd)

The times (GMT) and frequencies are as follows:

0900 - 1000	14285	1500 - 1730	21285/ 28885
1000 - 1100	21285/ 28885	1730 - 2000	14285
1100 - 1200	7090	2000 - 2100	7090
1200 - 1300	3690	2100 - 2200	3690
1300 - 1400	14285	2200 - 2300	14285
1400 - 1500	3690		

Late Summer QRP CW Activity Weekend Sponsored By the World QRP Federation:

10/11 September 1983

The main purpose of this weekend is to promote intercontinental QRP QSOs, and member Clubs of WQF are invited to suggest their own time/frequencies in accordance with propogation condition conditions. For Europe the following are suggested:

0700-0800	Europe - Oceana
0800-0900	Europe - Japan
1600-1800	Europe - N. America
1900-2000	Europe - S. America/ Africa

(All on the highest HF band which is open.)

Weekly Club Activity Periods -

In addition to the above events, the G-QRP-CLUB promote weekly Activity Periods between 1100 - 1200 and 1400 - 1530 GMT on the International QRP frequencies (3560, 7030, 10106, 14060, 21060, 28060) every Sunday and from 2000 Local Time onwards (UK Time) on Wednesday evenings for U.K. and West Europe members. All radio amateurs interested in QRP are invited to join in.

Letters...(Cont'd)

Maybe this information will help some of the QRP guys out there who are looking for modern rigs with a lot of "bells and whistles" as well as good performance. I hope to see you on the air. Happy QRP.

73, Mike Kilgore, KG5F
1111 Abrams #120
Richardson, TX 75081

Had an idea! Just got a QSL card which listed the rig as HW-8 with 1.28 watts output. That fact, plus the distance from Washington state to my QTH and a little arithmetic resulted in figuring 1398 miles per watt. How do the QRP gang measure low power? Maybe a Quarterly issue or column could illustrate all the various methods used.

I've read about transmitter outputs of less than 1 watt - a certain number of milliwatts - how measured? This leads to another concern of mine. How can a transmatch be adjusted for low SWR with only a fraction of or at best 1 - 1.5 watts out like an HW-8? From what I hear, 2 or 3 watts is the least power which will allow the toroid type SWR meter to be "Set" on FWD to full scale even with a 50 microamp meter.

P.S. Had a ball in the QSO Party a week ago this past week - with a borrowed HW-8.

73, Luke Dodds, W5HKA

***Well, Luke, that sounds like a question I'll leave open for our readers to go for. You got my reply by now, but your questions do arouse curiosity among probably not a few operators, some of which may be new not only to QRP, but to amateur radio as well.

How 'bout it, gang? Someone want to take on the job and come up with something for next issue?

(Continued Next Page)

Club Awards (Cont'd)

HI. He can be found on the 15 Meter Novice Band.

And, finally, for you antenna buffs, SM1CNS writes from the island of Gotland in the Baltic Sea: "I'm using long-wires in different directions. The longest is 1000 feet long and 180 feet above sea level - just 1500 feet from the sea." Now that's a real sky hook!

Remember that a copy of the Awards Rules is available free for a S.A.S.E. My address is inside the front cover of the QUARTERLY.

Until next quarter - 73 and HAPPY QRPing!

**********WHO'S NEXT ON 30?**********

Letters from the Readers (Cont'd)

Dear OM:

I noted in the last issue of QRP Quarterly a reference to Argosy Review by WA2JOC, January '82. This was one issue before my subscription started. I am interested in the Argosy and would like to obtain a copy of the Jan. '82 issue, if possible. Can you help me?

M.A. Watts, VE6ER
13443-113 St.
Edmunton, Alta
T5E 5BR.

Ed: I decided to put your letter and reply in the Quarterly because there may be others who would like copies. Each copy costs $2.50 postpaid. State the copy needed and quantity desired. There are limited issues available, so be sure to contact the editor before sending request, with a SASE, to the editor. Overseas, please remit 20¢ additional to cover the postage difference.

NEED TECH HELP? USE THE QUARTERLY

New Members (Cont'd)

N6 WG, Robert N. Tellefsen, Ca
VE7DCI, Robert S. Whitele, Canada
KA6WGF, Phil B. DuRall, Ca
KA3BMO, James A. Miller, Sr., Pa
WA3UAX, Sam Maslaney, Sr., Pa
WØLR, Vernon V. Holmes, Ia
N3DBX, Thomas M. McLenahan, Pa
N6DW, Dale W. Welch, Ca
VE3JFH, Edward W. Shields, Canada
KC7IR, Clifford C. Ostermeier, Or
WB8IOA, Maxon Svoboda, MI
WB8CVP, Jerome P. Hartweg, Oh
K1LF, Peter D. Wechter, Ct
N8CHW, David R. Percio, Oh
W6WQY, Robert F. Herring, Ca
WD8MRR, William L. Horner, Oh
WB6IDT, J. H. Steinert, Ca
VE3APG, Don W. McFarland, Canada
KA1DPW, David Goldblatt, Ca
K4HGF, Holden E. Sanders, Tn

TIME TO RENEW? CHECK YOUR LABEL

The staff of the QRP Quarterly wishes to pass along our heartiest of cheers to the QRP ARCI for a New Year. Good health and good luck in all of your pursuits.

Editorial (Cont'd)

est by relating a personal experience. Perhaps, if nothing else will sway them, try the ol' ploy of little, if no, TVI. QRP means little or none of it.

Before we go further, the club wishes to congratulate Thom Davis, K8IF, for his MBX articles. We had a "very fluent" showing of votes for the TAA. With 650 plus members active, we had a whole 31 votes received by the secretary/treasurer as of the 30 November deadline. Now that's what I call support!!!! That's about a 5% turn-out. We even provided the absentee ballots. We once again have shown a silent majority. The decision was made and won by a whole 2 (two) votes. Way to go, gang!!! Keep up the support.

We're still having people send in their renewals for the QRP Quarterly to me. This only delays the updating, so if you're contemplating this, be sure to send it to the Secretary/Treasurer, not the Editor.

As best as it appears from my limited sources of information, ham radio is going to move one step back. With the tentative approval of no-code licensing by the FCC for amateur radio, what will we be moving to...more technical CB? True, the computer buffs will be grateful, but what of the opinions of the O. T.s? Those who worked hard to get where they are today will be seeing those whose capabilities to pass a technical test equal to them in class.

A piece of mind...if this is to come about, what will happen to our outlook of amateur radio andour pride of our skills we've developed. The perfect CW you hear the next QSO, will it be with a fist or an IC?

BCNUL & Have a positive and prosperous New Year. 75 (73 & 2W.)

********QRP - SPREAD THE WORD**********

Notes on Heathkit Iambic Keyer:

When in PRAC mode and you hit the P/C (Pause/Continue) Key, your series will stop as per the manual. During the Pause side of the key, you may TUNE and still retain the PRAC and P/C functions. To stop this TUNE mode, simply hit either of the two paddles and the TUNE will cease, continuing with a string of either dots or dashes, depending on the paddle touched.

Pressing the P/C Key will resume the PRAC operation. This can aid in accidentally stopping the string of letters.

The TUNE mode can be terminated in the NORM mode by touching either paddle in the same manner as above. This could save looking for the STOP Key in subdued lighting. KA5EXI.

********DID P.R. WORK? TELL US!********