January, 1992

### **BEGINNINGS**

This is the first Newsletter issued by QRP -NE the QRP Amateur Radio Club of New England.

QRP-NE was formed in December of 1991 in the hopes that NE QRP enthusiasts would respond favorably to a club which would promote QRP Amateur Radio locally, and provide QRP'ers an opportunity to meet and share information.

W1FMR had prepared a survey to assess interest in establishing a formal club, and invited attendees to let him know if each would be willing to serve in some capacity. Those that were interested in serving the organization were encouraged to provide that information on the survey sheet.

This newsletter and the **potential** for an exciting organization are the result of that meeting. The success of both the organization and the newsletter depends on you — the active QRP enthusiasts of New England!

# QRP - NE, THE EXCITEMENT IS BUILDING!

Jim Fitton, W1FMR

The first meeting of the "QRP Club of New England" was held on Saturday, December 8, 1991 in Salem, N.H. Attending were: NG1G; KN1H; KI2L; WA1MAC; W1XH; KH6CP/1; WA1JXR;NX1K; KB1RT; NN1G; KA1VYX; N1CUU; KR1S; WA1MBK; and W1HH.

This first meeting featured many clever home brew projects in various stages of construction. Many of the projects have recently appeared on the pages of the QRP Quarterly, CQ & QST! With the participation of such excellent authors, designers, and builders - QRP - NE should be a great club!

### AND BUILDING...

Those who brought projects to show were:

KH6CP/1 - A completely portable microwave station and miniature (QST) HF transceivers.

NN1G - Finely designed and crafted transceivers recently featured in the QRP/Quarterly.

KN1H - A newly designed and extremely interesting 40 meter transceiver.

WA1MAC - A small indoor magnetic loop antenna for HF communications and other projects as well as PC board engraving techniques.

KB1RT - An array of clever home brew designs and construction techniques.

Thanks to all who brought HB projects large and small. Everyone who attended came away with an enthusiastic outlook gained from sharing and learning!

### **VOLUNTEERS**

A big thank you to those who volunteered prior to; during, and after the meeting to help get QRP - NE "up, up and away!". These include:

Paul, W1CFI -- TREASURER
Jack, NG1G -- MEMBERSHIP
John, KN1H -- TECHNICAL EDITOR
Greg, WA1JXR -- NETS
Carl, N1CUU -- NEWSLETTER
Jim, W1FMR -- OVERALL
COORDINATOR

All assignments are to be considered interim until we get to a point where it makes sense to re-assess the strengths and weaknesses of various teams.

January, 1992

### QRP "TEAM" CONCEPT

It is very important that each team has ONE spokesman to take overall responsibility for a project and to regularly communicate any progress or problems to the club via the overall coordinator.

The following have expressed their interest in serving on various teams:
KA1VYX & KR1S want to be on the Newsletter Team.

W1CFI, NN1G & KB1RT want to be on the Homebrew Project Team.W1CFI, WA1MAC, & NN1G want to be on the Technical Editing team.

Paul, WA1MAC has CAD schematic generating capabilities. He runs a model control business and can buy components in quantity through his business. Paul has volunteered to be part of the QRP-NE"Parts" team. Paul also volunteered his home in Hampden, CT for a future meeting. The easiest way for teams to communicate seems to be setting up regular radio meeting schedules. Many QRP-NE team leaders are already meeting on Monday evenings at 9:00 p.m. on 3755 Khz. SSB to discuss club happenings.

If you want to be part of the success of QRP-NE, be specific about what it is you would like to do. You can either fit into an existing team, or perhaps form a new team to take on new and challenging tasks! This club is in its infancy and welcomes all creative, enthusiastic and energetic involvement.

#### WHO TO CONTACT?

SEE THE MINI-DIRECTORY ON PAGE 6!

### NEXT MEETING FEBRUARY 23, 1992 ARRL HQ, NEWINGTON, CT \*\*\*10 AM \*\*\*

Jim, KR1S, has arranged for the second QRP-NE meeting to be held on February 23, 1992 at ARRL Headquarters, Newington, CT at 10 AM. All are advised to eat breakfast before arriving! Check out the map included in your newsletter-

# KR1S passed along the following info-

Following the meeting we will be operating W1AW/QRP. Twelve - volt power supplies and keyers will be available for those who wish to bring homebrew rigs! If your reig does not use UHF connectors (SO-239), bring a suitable adapter. Remember, to operate W1AW ytou must have your original license or a photocopy.

To save time, we thought we would order pizzas for lunch. There are several restaurants in the ara, including a Friendly's within walking distance, if pizza isn't to your liking.

We would like to know how many to expect. You can call me at work at 203-666-1541, ext 279, or let WA1MBK or me know on NEN Saturday mornings. We are looking forward to a big turnout!

72, Jim, KR1S

On the agenda for Newington -10 am-- Introduction, HB Show & Tell.
Noon -- Pizza!
Afternoon -- Tour of ARRL . Operate
WIAW/QRP. Tell all to listen for
WIAW/QRP from 1700-2100 U.T.C.

January, 1992

#### SURVEY RESULTS

At the December 8th meeting in Salem, a survey was distributed to the QRPers in attendance. This survey was also sent to QRPers who would not be able to attend the meeting. A total of 20 surveys were distributed. 11 were returned. The results follow:

#### QUANTITY TOPIC

<b>L</b>		
11	Want a QRP-NE club.	
11	Want a mailed newsletter.	
11	Want combined swap sheet and newsletter.	
11	Want a club homebrew project.	
5	Want the club charter to focus on homebrew building.	
8	Meet at various locations.	
9	Wanted to have membership numbers.	
1	Use ARCI numbers.	
7	Willing to work to get the club started.	
8	Wanted to be a club officer.	
8	Want to meet quarterly.	
3	Want to meet every 6 months.	
QUANTITY	INTERESTS	
11	Homebrew, technical interests.	
10	Technical.	
8	Experimenting.	
7	Swap.	
6	Socials.	
5	Writing, Contesting, Nets.	
3	Bulk parts, PC-Modem capability.	
2	Homebrew field day,	

Boxboro booth, Packet.

#### **TECH NOTES**

From the QRP-NE Newsletter Technical Editor: John T. Collins, KN1H, RR2, Box 427, Cornish, NH 03745 (603)542-2057H (802)674-6200 W

The results of the membership poll are in, and they confirm what we all learned at our first meeting: this club is full of homebrewers! As an ardent homebrewer myself, I know how good it feels to share what you're doing with other homebrewers, and to see what the others are up to. I also know from experience that writing an article about your latest creation can take longer, and is considerably less rewarding, than building the project in the first place. When an editor redraws your schematic, adding a few errors, and modifies your text to make it sound etter, you end up with a major headache just because you wanted to show someone else what's going on in your cellar.

This newsletter is going to be different. Send me the schematic of your project (or hint, kink, etc.), black ink on white paper, and no more than a paragraph of text and it will be printed that way. I will not presume to know more abut your project than you do, and try to 'improve' it. We will assume that readers of this newsletter are experienced enough as homebrewers to not require a lot of hand holding, and a brief description of what the circuit does and what makes it neat should suffice. Thus everyone has more time to homebrew and the newsletter has more space for articles.

Back to the membership poll: it appears, not surprisingly, that the membership is overwhelmingly in favor of a club project. Any one with an idea of what form that project should take should jot it down on one of those 19 cent postcards and send it to me at the above address. I should be able to report in the next newsletter what we want to build as a project, then we can get it underway as soon as possible.

72, John

January, 1992

### Operating QRP In Contests

by Jim Kearman, KR1S

Eve operated contests with QRP and QRO. I've also been on both sides of the pileups, having operated from C6AFQ a couple of times. Many QRP contesters are unfortunately using techniques that burt their chances for a good score. Maybe they feel inferior, due to running low power. One of our favorite methods of selling QRP to non-believers is to explain how reducing power from 100 to 5 warts only reduces your signal strength by about three S units. Keep that in mind when you're contesting!

#### Should You Send "/QRP"?

Many stations we work in contests are trying to keep their "rate" up. Rate is the number of contacts/hour. It's possible to have a rate greater than 150 during good conditions, and rates over 200/hour aren't unusual! Sending "QRP" instead of your call, or appending "QRP" to your call may make you stand out in a pileup. But, if the other station can pick out "QRP," be or she can pick out your call, too! If all the other station gets is "QRP," you have to make an extra transmission to conclude the contact. There goes the other station's rate. Big-time contesters don't like making extra transmissions, so just send your call. When I operate contests I'm always glad to hear a QRPer in the pileup. But, most contesters I know couldn't care less what you're running. If you want to impress people with your QRP prowess, get a good score and submit it to the contest spousor. We can all read about it in the writeup, after the contests!

#### Don't Send Your Exchange Twice.

Another similar mistake is repeating your exchange. You think you must because you're weaker than the pack. Contesters are very good operators as a rule, and they can bear well. If the other station needs a repeat, you'll hear about it. Don't repeat the exchange unless asked to.

#### No Tricky Signal Reports.

QRPers are an honest bunch, so they give honest signal reports. (This morning I got a "519" from GONCE on 10 meters. Curse the S meter! According to my RST table (in the ARRL Log Book), S1 means "Faint signals, barely perceptible." What Owen really meant was, "Your signal isn't moving my S meter.") Every contester worth his salt uses the excellent contest logging program developed by K1EA, called CT. Unfortunately, you can't use CT in QRP ARCI contests, but it's usable in just about every other contest. (I'll have CT available to demonstrate at the February meeting.)

CT assumes every signal report is 59(9), and so do serious contesters. Like it or not, the days of honest signal reports in major contests are gone. In a contest, I don't really care what my report is either; if you can copy my exchange I'm happy! The shortened report "5NN," where "N" abbreviation for "9," is the way to go. In fact, some of the hard-core European stations use

"ENN"! No wasted air time there.

QST and CQ publicize all major contests and most minor ones. The notice tells what the exchange is. You should send the exchange and nothing more. If the exchange is a signal report and CQ zone number, and you're in New England, I want "5NN 5." I don't want to hear your state, name, power, age, rig, antenna or weather! If you feel compelled to tell me this information, write it on a QSL and mail it to me. (If Im outside the country for the contest, don't forget the SASE. US/VE cards without SASEs go into the wood stove.)

Asking a DX station for QSL information during a contest is risky. Contesting outside the US does strange things to your metabolism. Many of us are fond of sampling the local liquid product when we go offshore. I sometimes want to say "I shoot every tenth station who asks for QSL information. I just worked the rlinth one..." QSL information is available on PacketCluster, in the DX newsletters, and (belatedly) in the major magazines.

I'm not a big fan of SSB contests but I operate them when sufficiently motivated. My most-recent motivation led me to C6AFQ for the CQ World Wide (WW) phone contest last November. We made a point of not responding to stations who sent their last two letters." Like sending "/QRP," this technique adds at least one transmission to the QSO and is entirely unnecessary. If I can bear the "fast two" I can hear the first two, three or four, so please spare me. The last-two business started with so-called DX nets, where people say "please copy..." and other ridiculous things. When a station says, "please copy 59 oh-five," I want to say, "please QSY" (that isn't true, but this is a family newsletter). Good communicators say what must be said; no more, no less. Be polite to your spouse, be brief to me. If you want to rag chew, stop by 7040 on Saturday mornings or look me up at a meeting.

#### If You Can't Work Me Now, Work Me Later.

The first day of a big contest is pretry heeric. The big guns are blazing away, trying to work each other before the sunspots get revoked or something. The first day is rough for QRPers. Why dig for an S9 QRP signal when there are so many 30- or 40-ever signals to work? (You think they'd get the hint and turn off the Alphas, but they don't.) On the second day however, the same big guns are bored to tears and begging for QSOs. Now they'll gladly dig for even the weakest 50-mW station. If your time is limited, spend Saharday with the family and do your contesting on Sunday.

#### QLF1

Some QRPers really like a handicap. Not only are they weak, but their signals sound like born-again rotary spark gaps. Even worse are signals that drift or choip. I like to hear a lousy signal once in a while--it makes mostalgic for my early days. Bad signals sound exotic, and you can usually assume the rig is either home brew or ancient. On the other hand, when I'm "running"

January, 1992

stations (calling CQ to get a good rate going), I don't want to lose the frequency I'm on. Finding a clear frequency during a contest is tough. Keeping someone from stealing it is tougher. Spending 10 seconds trying to decipher a weak, whooping buzz saw is a good way to lose that frequency, which makes me feel uncharitable toward the station I was trying to copy.

Is your fist as good as W1AW's?

Yes, WIAW sends computer-generated code and so can you. If you just can't send readable code from a keyer (bugs and straight keys belong in museums) use a computer. CT sends code from 22 to 50 WPM, and never makes a mistake (unless you type something incorrectly). At the very least, use a memory keyer. Especially when the exchange is long, like the ones in QRP ARCI contests or CW Sweepstakes, making a mistake is deadly. I gave up on and dumped QSOs with fumble-fingered ops in last year's CW Sweepstakes, rather than risk losing my frequency. Get it right the first time.

There are numerous memory keyers available, including at least two that send sequential serial numbers. One is made by MFJ, the other by AEA. The AEA unit can be retrofitted with CMOS chips, reducing its current consumption to a few milliamps, just right for the solar-powered station. I keep an AEA keyer on hand for emergencies, but I do all my major contesting with a notebook computer running CT. CT is cheap, about \$40, but you need an IBM-compatible with a hard disk or 720k (min) floppy drive to run the latest versions (7.22 as I write this).

If pride or parsimony means you must use a keyer, make cue card of the contest exchange. Then, when you finally get through you won't fumble around sending it.

How's Your Code Speed?

Listening on the bands and watching the PacketChuster spots, I often think the code-free license has been around for a long time. CW contesting requires you to copy the other station's exchange at speeds from 30 to 50 WPM. As I mentioned earlier, CT can only go as low as 22 WPM. If it went faster than 50 WPM, people would use the higher speeds.

There are so many ways to improve your ability to copy faster I'll probably miss a few, but here's a sampling: W1AW, MFJ and AEA keyers with "training modes" (AEA's simulates the CQ World Wide contest), the NA contest logging program by K8CC (similar to CT, but covers some other contests and has a CQ WW simulator, too), numerous computer programs, the now-discontinued Dr DX from AEA for Commodore computers and-getting on the air (what a concept!). Code tapes are okay, but they usually stop at 22 WPM, where CT starts, and they're easy to memorize. By the way, if you decide to go modern and use computer logging, take a touch-typing course. I learned to type from a self-study course put out by Gregg, the shorthand people (not WA1XR). It may still be available from office-supply or book stores.

Get On Frequency

I could rant and rave about this topic for eternity, or at least three pages. Transceiver manufacturers insist on putting 700-Hz offsets and 700-Hz sidetone oscillators in their rigs. Most people prefer to copy at about 500 Hz of even lower. That means they're always at least 200 Hz off frequency. Other people don't seem to have any concept of pitch; you know them, they sing loudest in church. Stations tend to get cozy during CW contests, often operating within 100 or 200 Hz of each other. If you aren't on the right frequency, you're going to make three people unhappy: the station that hears you, the station you're actually calling and you. You can probably figure out how to learn to zero beat another station, so I won't repeat the process here (Hint: It helps to have a second receiver).

The Europeans are notorious for ealling below your frequency, even if you specify you're listening "up." If you call a European in a contest and don't get a response, try calling a little lower in frequency. I learned this tactic try calling a little lower in frequency. I learned this tactic try calling a little lower in frequency. I learned this tactic try calling a little lower in frequency and lots of Europeans while looking for a clear frequency on which to call CQ. After a few futile CQs I tuned down a couple of kHz and found a big pileup of Europeans. I tuned around to see who they were calling, and realized I was the target! No matter what I did or said, they insisted on calling me below my frequency. The last time I went down there, I hung around the very bottom of whatever band I was on, trying to hure a few of them to their doom, but they just called on top of me instead! Give me a "rum" of North Americans any day, even if they're weak, drifting QRPers with Lake Erie swings.

It's often said that operating QRP makes you a better operator. The truth is, good operators get through with QRP, while poor operators fail at even the loudest stations. Concise and accurate is better than loud and sloppy. New England has a proud tradition of excellent contest operators and stations. Let's make New England QRPers the standard by which all operators are judged!

About The Author.

Jim Kearman, KRIS, has been a ham since 1962. Jim is an Assistant Technical Editor at ARRL. While Jim likes to operate QRP, he admits to sometimes running QRO during contests. Heck, so does G4BUE!

### WANT TO TAKE PART?

LET US KNOW ON YOUR QRP-NE APPLICATION!

January, 1992

# PLEASE WRITE FOR 'YOUR' NEWSLETTER

Our goal is to make it easy for you to submit your ideas. Deadline for the next newsletter will be March 31. Send your material, hand written or typed. Floppy diskettes, MS-DOS text files accepted gladly, any size any density. Be sure and send your phone number so that I may contact you. If you have a FAX # please let me have that too. My address is: Carl Heidenblad, N1CUU, 40 Martins Ferry Rd., Hooksett, NH 03106. My work phone number is 603-432-7154. My home phone is 603-647-9864.

Technical articles should be sent to John Collins, KN1H, QRP-NE Technical Editor. John has established guidelines for Technical material in his Technical Notes Column, page 3. Please contact John with questions or concerns about articles of a technical nature.

#### DIRECTORY

Contact the following for information:

#### MEMBERSHIP-

Jack Frake, NG1G, POB 1153, Barnard, VT 05031. 802-234-9792

#### TREASURER-

Paul Kranz, W1CFI, 26 Mettacomett Path, Harvard, MA 01451. 508-687-1501 x 2604. Fax 508-687-7265.

#### TECHNICAL ARTICLES -

John Collins, KN1H, RR2, Box 427, Cornish, NH, 03745. 603-542-2057.

#### **NEWSLETTER** --

Carl Heidenblad, N1CUU, 40 Martins Ferry Rd. Hooksett, NH 03106. 603-647-9864.

#### OTHER CLUB MATTERS, ADMINISTRATION, ETC.

Jim Fitton, W1FMR, POB 2226, Salem, NH 03079. 603-898-6188H 508-960-2577 W

#### FROM DAVE, NNIG

I am an avid homebrewer and occasionally motivated qrp contester. Other ham interests include public service work and packet. When not meaningfully occupied in the shack, or juggling a busy family life, I admit to employment with United Technologies as a display systems engineer. I am available to assist you with free (and worth every penny) advice and help with your homebrew efforts, so feel free to ask. See you on the nets, 72

Dave, NN1G 80 E. Robbins Ave. Newington, CT 06111 (203) 667-3536

(Note from the editor, Dave has volunteered to serve on the QRP-NE homebrew team.)

#### FOR SALE

GRA - 1 or GRA - H (& 17 DBM) double balanced mixers \$1.00 each, 1.00 shipping. NN1G, 80 E. Robbins Ave., Newington, CT 06111.

Micro 30 Superhet Receiver Kit (Small Parts Center). 4 Bands, 80, 40, 30, 20, AGC and S meter. Half finished. Too many projects ahead! Price \$50.00. NG1G, POB 1153, Barnard, VT 05031 (802)234-9792

NEXT ISSUE ...

TECHNICAL ARTICLES HAVE BEEN OFFERED BY WAYNE BURDICK, N6KR (also the ballad of Q.R. Oscar and Q.R. Pete).

HOMEBREW IDEAS -

AND WITH YOUR HELP, LOTS OF GOOD STUFF.

THANKS TO ALL WHO CONTRIBUTED TO THIS ISSUE!

# QRP - NEW ENGLAND THE N. E. QRP AMATEUR RADIO CLUB

### APPLICATION FOR MEMBERSHIP

Last Name:	First Name:		
Call Sign:			
Street Address/P.O. Box:			
		Zip Code:	
License Class:	Age:		
Year First Licensed:	Former Calls:		
Please indicate whether you are also a member of these QRP organizations:			
QRP - ARCI* YesNo			
What QRP awards have you wor accomplished?	or achievements have	e vou	
Would for the to tieth write for	the QRP-NE Newslett Ragchewing, DX, C	YesNoMaybe ter? YesNoMaybe contests Troffic Avonds Hambary	

ANNUAL DUES ARE \$5.00 PER YEAR. PLEASE MAKE YOUR CHECK OR MONEY ORDER PAYABLE TO: "QRP Club of New England." PLEASE PUT YOUR CALL NUMBER ON YOUR CHECK! MAIL TO: JACK FRAKE, NG1G, MEMBERSHIP COORDINATOR, P.O.B. 1153, Barnard, VT 05031.

72 & QRP DX!