2727 Harris Road
Ypsilanti, MI 48198
January 14, 1991

Dear MRRC member,

Hopefully, the first half of the 1990-91 contest season was a successful one for you. As we look toward the second half, we have the CQ 160 contest, NA Sprints, and the ARRL DX Contests. The purpose of this letter, is to encourage your participation in the ARRL DX Contests.

The ARRL DX Contest is the granddaddy of all DX contests, dating back to the early thirties when each mode was two weeks long! Now, trimmed to (only) 48 hours, they offer even small stations excellent opportunities to work DX, since the contest format (W/VE works only DX, and vica versa) causes foreign stations to focus on US.

The Mad River Radio Club attempts to participate in all club competitions, but we usually focus on ARRL contests where the three-tiered structure (Local, Medium and Unlimited) allows us to be competitive. In 1986, MRRC won the Medium Club category for the ARRL Sweepstakes, which shows what we are capable of when our members put their minds to it. In contrast, our 1990 ARRL DX Contest club score was only 6.8 meg (of which 5.2 meg came from one station), putting us a meager sixth in the Medium Club category.

We, as a club, are asking that you plan to participate in the upcoming ARRL DX Contests - CW: February 16-17, 1991 and SSB: March 2-3, 1991. Several of our club "big guns" will be going all out, but we need the support of our mid and little guns to pile up the points. Most of the time, it seems that our members who are interested in DX contesting already plan to participate, while the rest of us may make a few QSOs but not send in a log. This year, we would like to see is EVERYONE in the club make an effort to put in some time and contribute points to the MRRC club score. To encourage member participation, MRRC is going to do several things.

First, the upcoming MRRC 'FLASH' newsletter will focus on the DX contest, with tips and techniques for operating, and how to maxmimize your effectiveness for those of us with limited time. This newsletter should be out in early February, so there is still time for members to contribute an article or tidbit for the upcoming issue.

Second, MRRC will have two additional meetings in the upcoming weeks to focus interest on the contests, and to encourage members to meet the club meeting requirements for eligibility. The first meeting will be at 7 PM, Friday, February 1, 1991 at the K8CC QTH in Ypsilanti, MI. This is the weekend of the CW Sprint, which is why the meeting is on the Friday evening. You'll find a map to K8CC on the second sheet of this letter - come and visit with the MRRC gang for refreshments and munchies, and check out the K8CC contest station.

The second meeting will be at 2 PM, Saturday, February 9, 1991 in Columbus, OH. We will meet at WU2B's townhouse complex, a map to which is also provided on the second sheet of this letter. We plan to organize a caravan and set out to survey some of the Columbus "big guns". Our first stop will be K7EG, whose 3L KLM 80 ought to be a sight. Then, we will continue on to the under-construction QTH of long-time MRRC member Doc Sheller, KN8Z, where there will be lots to see, I'm sure. After KN8Z, we will return to the clubhouse at WU2B's townhouse, where WU2B and NZ8O plan to make us dinner (really guys, it can't he THAT bad...).

Finally, if you don't have a station to operate from for the ARRL DX Contests, MRRC will try to find you a chair to fill. There will be several club multi-ops participating on either CW or SSB, and operators are sure to be needed. If you don't have a station, or perhaps would like to help out at a larger station, call K8CC and we will see what we can do. Similarly, station owners, if you are looking for operators, get in touch will me and I'll try to connect you with available people. Please keep in mind, we will try to find appropriate match-ups between operator experience and station capability.

As of press time, K8CC is aware of the following plans for ARRL DX:

CW				SSB	
W8UA	(s/o)	KW8N	(NZ4K s/o)	W8UA	(s/o)
K8MR	(s/u)	K7EG	(KU8E s/o)	K8MR	(s/u)
K8CC	(s/o)	W8FN	(m/s)	K8CC	(m/m)
K8AQM	(m/m)	N8CXX	(m/s)	K8AQM	(WD8IJP s/o)

That's not a bad preliminary list - my apologies if your call is omitted here, but then, it's your own fault for not checking in to 3825 KHz on Mondays @ 8:30 Eastern.

With that many multis, there ought to be good packet spotting activity on the appropriate weekends. Little guns, you might want to consider entering the "single-operator assisted" class (which means you can use packet spotting) which is a good way to pile up lots of points. We can keep our fingers crossed that the Michigan link into the Ohio packet backbone will be QRV by that weekend.

That's about it from here. Be on the lookout for the ARRL-DX edition of the 'Flash', and perhaps plan to make one of the two upcoming meetings. In any case, plan on operating in the ARRL DX Contests - the sunspots should be good enough to provide good propagation, so that even a small station can pile up lots of points. In doing so, you will help the club, improve your operating skills, and have a lot of fun.

73,

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2727 Harris Rd.
Ypsilanti, MI 48198
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CONTEST LOGGING PROGRAMS
By Dave Pruett, K8CC

You might not know it, but there is a revolution going on in the contesting world. As in everything else, the personal computer has made its way onto the operating desk, simplifing the contester's life by automating the logging process and reducing paperwork.

Computers have been used in logging for years, but it was not until Ken Wolff, K1EA wrote his DX contest program CT that the automation enhanced, and not hindered the contesting process. CT supports the CQ WW, ARRL DX, CQ WPX, DARC WAE and VHF QSO Party contests. Subsequently, K8CC went further and wrote a program called NA which mimicks the operation of CT, but supports the NA Sprint, NA QSO Party, IARU HF Championship, ARRL Sweepstakes, ARRL 160m and 10m, and CQ 160m contests.

It has been my experience that most contesters resist using the computer for logging. Indeed, I was a vehement opponent for many years because it added several (large) boxes to an already crowded operating desk filled with radios and sheets of paper. The CT and NA programs justify the computer's spot on the desk by not only accomplishing logging/duping in real time, but also:

- Scores the log in real time as contacts are made, showing QSO and multipliers by band
- Sends CW like a memory keyer, but can automatically extract data (such as the other guy's call) from the logsheet.
- Provides real-time display of QSO rates

All of these tasks are performed in a way that is intuitive, and most people find that the computer does not slow down their rate. It DOES, however, require a different set of motor actions, as translating the audio data coming in your headphones onto the computer is different than writing it on a sheet of paper.

On the following page are example of the main logging screens from both programs. You will immediately note the similarities between them which is intentional. Learning one program will give you the skills to use the other. These screens are divided into several functional areas.

The lower left quadrant is the logging area. Log data is entered from the keyboard, with the program doing as much of the work as possible. In the CQWW, CT fills in the zone automatically, while NA does this in the IARU HF. In ARRL DX, if you have previously worked a station, CT automatically puts his power in the exchange field from the previous QSO. NA acts similarly for the Sprints and NAQP, filling in the name and state from previous QSOs. The time is taken from the computer clock, while the current band is toggled up or down with function keys. The "*" and "#" symbols on the right end of the log lines denote new multipliers.

In the lower right corner is the score summary, showing QSOs, mults and dupes by band. This display is continuously updated in real time so the operator instantly knows where he stands. NA has a display labeled "Minutes per Multiplier", which uses your current totals and rate to determine how long you can spend chasing a multiplier. CT has a similar display showing the ratio of QSOs to multipliers.

```
            1111111111222222222233333333334
    12345678901234567890123456789012345678 90
160 *******   ***                        *
 80**********  ****    **    *       *  *
 40 **********   ****  **      *  *  *****  ****  *
 20        ****  ****** *            *
 15    *       *   ***    *   **       .
 10    *                        *     *
```

Tues Oct 17 13:03:35 1989

```
611  15  0032  JT1KAA         59  23    ____*_
612  10  0034  ZD7AF          59  36    _____#
613  10  0036  K1EA           59  05    _____#
614  20  0038  UZ4FWD/UI8U    59  17    ___*__
615  15  0100  UP1BYL         59  15    _____
616  15  0102  XX9SW          59  24    _____#_
617  15                       59        _____
```

*** CT Version 5.05 by K1EA ***

SUMMARY

	Q	Z	C	D
160	55	12	29	1
80	212	20	55	2
40	130	28	62	1
20	102	12	34	0
15	106	8	34	3
10	3	3	3	1
ALL	608	83	217	8

Score: 515,700
QSOs per Mult: 2.0

Example 1
Sample Screen from CT Logging Program

CHECK PARTIAL (Bold calls are needed this band)
KB0G
KB1VL
KB2AOE
KB4GID
KB6MGK
KB7AWM
KJ4KB

RATES
Last 10 QSOs: 75
Past 10 QSOs: 63
Last 100 QSOs: 55

STATUS
CW Speed: 30 WPM
Sidetone: ON
AutoDupe: OFF

NA QSO PARTY LOGSHEET   GMT 11:09:50

nr	bnd	time	call	name	QTH	mults
546	160	0554	K1CC	RICH	CT	......
547	160	0554	K9SM	SCOTT	IL	......
548	160	0555	K6LL	DAVE	AZ	*.....
549	160	0556	K4XS	BILL	FL	......
550	80	0557	KJ0H	JOHN	IA	.*....
551	80	0558	NI0E	THOR	CO	......
552	80	0600	NF6H	DOUG	CA	......
553	80	0601	KM5G	CHUCK	AR	......
554	80	0602	K3LR	TIM	PA	......
555	80		KB_			......

BREAKDOWN

	Q	M	D
160	51	24	0
80	119	43	0
40	178	46	0
20	127	41	0
15	43	23	0
10	36	20	0
ALL	554	197	0

SCORE: 109,138
Mins per Mult: 12.6

NA Version 4.23 by K8CC

Example 2
Sample Screen from NA Logging Program

The upper right corner of the display shows rate information. CT shows your rate for the past ten QSOs, and your rate for the past 100 QSOs, plus overall rate and time ON/OFF. NA shows your rate the past ten QSOs, the previous ten QSOs, and the past 100 QSOs. These displays are updated every time a QSO is made, and are real useful for determining the effectiveness of your operating strategy.

The upper left corner of the screen on both programs is used for multiple functions. In Example 1, CT is showing a display of all CQWW zones presently worked by band. In example 2, NA is showing a "Check Partial Call" display, which is also available in CT. Down in the logging screen, the operator has typed "KB" and pressed a function key. The "Check Partial" display shows all callsigns worked which contain the letters "KB". Other functions in this window include Callsign Check (by band), Multiplier Check (by band), and several others displays.

Both CT and NA have other full-screen windows which are temporarily displayed to perform certain functions. A function key will bring up a display of all multipliers, showing those needed and those worked. A help key will bring up a display of all commands for reference.

Right below the Rate Window is a status display (not shown in example 1, but is similar for CT). This shows the current sending speed of the internal CW interface for both CT and NA. NA also has displays for the keyer sidetone and the AutoDupe function (described below).

The CW interface adds immeasurably to the ease of using either CT or NA on CW. There are five memories built into the program, similar to a memory keyer which can be used to send contest information. The CW interface can also take information directly from the screen. If I type a callsign on the screen and press a function key, the interface will send that callsign and my exchange automatically. Another key calls CQ, another calls QRZ, etc. All messages are programmable by ther operator. The CW interface sends its data out the serial or parallel ports of the computer, using some simple electronics tom connect to the radio's key jack. The electronic interface is identical for CT and NA.

There are some functions which CT provides and NA does not, and vica versa. CT can use the multi-function window as a terminal for interfacing to your TNC for packet radio. Function keys can extract PacketCluster data directly to the logging window, and even control certain types of transceivers with RS232 interfaces. NA has the capability to use the computer's function keys to control an outboard voicekeyer. NA has a function called AutoDupe, where if the QSO is a dupe, pressing the function key to send the exchange sends a "QSO B4" message instead.

As good as both CT and NA are to use, the big relief comes after the contest. With a few simple commands, either program will print out a fully scored log ready for entry, with dupesheets, multiplier sheets, and a summary sheet. CT also can generate a rate sheet, plus breakdowns of QSOs by continent and other interesting stuff. Watch my lips - NO MORE PAPERWORK! YAHOO!!

If you already have an IBM PC-compatable computer, there no excuse nct
to try this stuff. The hardware requirements are not excessive - a
standard 640K PC with at least one disk drive and any type of monitor
will work just fine. Serial and or parallel interfaces are required if
you want to send CW, interface packet, control your radio, etc.

There may come a day in the not too distant future when using the
computer will be mandatory for a serious entry. The ARRL has proposed
an official file specification which will allow them to directly import
a log entry into their computer for scoring. It's hard not to see it
from their point of view - a typical 2000 QSO ARRL DX log can be
checked by the computer in about sixty seconds, the same log checked by
hand takes six hours! There are some people who have proposed that it
be mandatory for logs to be submitted on computer disk. It doubtful
that it will be applied to that extent, but already the ARRL is
proposing that computer logs be allowed smaller penalties for busted
calls and errors, as an incentive for people to submit logs on disk.

The best part about CT and NA is that they are available cheap. CT is
available from the Yankee Clipper Contest Club for $25. NA is
available from LTA Industries, Inc. right here in MRRC country for
$20. The purchase price includes a printed manual in both cases, and
makes you a registered user who will be kept abreast of program
improvements and updates. Neither program is copy protected.

YANKEE CLIPPER CONTEST CLUB   LTA INDUSTRIES, INC.
c/o Bill McGowan, KC1EO   P. O. Box 92
33 Truell Rd.   Canfield, OH 44406
Hollis, NH 03049

MICHIGAN NOTES

ANTENNAS - N8CXX lost three rotators plus a ten meter beam in the big
winter winds. Talk about overkill - K8AQM now has his 120' Rohn 45G
tower up, supporting a 2M Ringo Ranger! Actually, Ted has 5L 10m and
15m beams to go up, but the Michigan wx has not cooperated. KN8S had
the back half of his A4 tribander spin vertical during the big January
winds - K8CC braved the 40+ MPH gusts the restore the beam and install
new 145 MHz antennas.

QTHs - N8BTU has bought a new QTH in Livonia not far from WA8RRR. W8UA
is in the midst of finishing off his basement ham shack. Ditto for
K8CC - with the help of KN8S and KE8OC, the former cinder block decor
has given way to paneled walls, carpet and a dropped ceiling.

COMPUTERS - KE8OC has a new 386SX computer which he is very pleased
with - his prior XT computer now belongs to K8JM. K8CC now has THREE
PC clones upon the acquisition of a second-hand AT clone for logging.
This goes with a 80386 for modeling and general use. The mongrel XT
clone is slated for a PacketCluster node, with plans to link to the
K8NLD SEMDXA cluster on 450 MHz.

ARRL DX - W8UA plans to do single-band 15m on CW. Likewise K8JM will
do 10m on CW from N8CXX, while 'CXX himself will do the honors on 10m
SSB. K8CC will be s/o all-band on CW, with plans for multi-multi on
SSB.

THE 1990 ANTENNA FORUM

FRIDAY APRIL 27,1990
FROM 1300 EST TO 1645 EST
ROOM 5

MODERATOR : TIM DUFFY K3LR

"EFFECTIVE HF ANTENNAS, A PRACTICAL APPROACH"
                    DOUG GRANT K1DG
"THE WIND IN THE YAGIS"
                    DAVE LEESON W6QHS
"MODIFICATIONS AND IMPROVEMENTS TO THE KT34XA"
                    ERIC SCACE K3NA
"STACKING TWO TH7DXX TRIBANDERS"
                    FRED HOPENGARTEN K1VR
                    KEN WOLFF K1EA
"DESIGN AND CONSTUCTION OF 80 METER ANTENNAS WITH GAIN"
                    LEW GORDON K4VX
"THE STATUS OF CURRENT ANTENNA MODELING COMPUTER PROGRAMS"
                    DR. JIM BREAKALL WA3FET
"YAGI ANTENNA DESIGN"
                    ROGER VERMONT ON6WU
                    VERMET

CONTEST FORUM 1990
SATURDAY APRIL 28, 1990
FROM 1315 EST TO 1700 EST
ROOM #1

MODERATOR : TIM DUFFY K3LR

"CONTEST EXPEDITION TO ZW5B"
                    JIM NEIGER N6TJ
"THE CT CONTEST LOGGING SOFTWARE"
                    KEN WOLFF K1EA
"THE KS9K SUPERSTATION"
                    PAUL HELLENBURG KS9K
"THE NA CONTEST LOGGING SOFTWARE"
                    DAVE PRUETT K8CC
"CONTESTING FROM COSTA RICA"
                    LUIS TINCO JR. TI2L
"CONTESTS AND THE PACKETCLUSTER SOFTWARE"
                    DICK NEWELL AK1A
"AN OVERVIEW OF THE MATURE W3LPL"
                    FRANK DONOVAN W3LPL
"CQ MAGAZINE AWARDS PRESENTATION"
                    STEVE BOLIA N8BJQ
                    JOHN DORR K1AR
"OPERATING THE NOVICE ROUNDUP"
                    RONI STERN KA1NRR
"THE PHONE CONTEST SCRAMBLE"
                    RANDY THOMPSON K5ZD/3