

# MAD RIVER RADIO CLUB

February, 1991

Editor: Ted, K8AQM

THIS ISSUE

Well gang, this is it. This is the last issue of <u>THE FLASH</u> that I will be the editor for. As I sit here doing this issue I realize that ARRL CW DX is only one week away. It figures, you'd think that the last issue I do would at least be out in plenty of time...why spoil a consistent record! Anyway, it has been a lot of fun and I have really enjoyed the chance to stay abreast of the latest happenings in Mad River country. I have seen a lot of things change in the time I have been the editor...not all good but I wouldn't leave Mad River for any other club. This contesting stuff is my hobby, not a way of life, just a hobby and it sure has been better for me since I have been a member of Mad River. I guess when it quits being fun then I'll leave but not just to be with a select group of guys. Mad River has a great bunch of contesters and I intend to spread the word thoroughly while in Japan.

KE80C, Tim, will be your new editor and I can hardly wait to be on the receiving end of the new FLASH. Tim is planning on big improvements to the newsletter and no doubt it needs improving. One thing Tim will still need, your support in articles and notes regarding contesting and station development. I have been really lucky to have had a lot of support from the membership for scores, articles on stations and just generally good things for the rest of us to know about. Tim needs your input, after all, "no input, no output." I'll be running the dial on the bands in the major contest from over in Japan and I'll let you know who has the big signals. My first priority will be to search out the Mad River types and Tim will receive the articles from Japan on contesting. Help Tim out as much as you can...keep those articles coming.

N8CXX has given the word on new club shirts and Jackets. Be sure to read the message from John. John says that deliver can be before Dayton if we order soon. Also in this issue you'll find the story of VE2ZP's contest expedition to Zone 2, boy, would I like to go there again. Dave has been Zone 2 several times before and it looks like this may be his last for awhile. K8MR has the latest scores and a few words about operating with packet for the forthcoming ARRL DX. Along with the word from "THE FISH", Dave has given some of you some good advise for the optimum score you can produce for the club.

Well, enjoy <u>THE FLASH</u>, keep Tim well supplied in articles, get set to make score and take coup on NCCC and...GO MAD RIVER!

FROM THE 'BIG FISH' By Dave Pruett, K8CC

Every couple of months or so, I have to sit down and write this column, and often I'm not sure what to say. Sometimes, I preach, but often I simply observe what is going on within Mad River. As club president, I try to attend all of the MRRC meetings. Being single has its advantages for freedom of travel, and perhaps not many members get to see MRRC the way I do. In this month's column, I'll follow President Bush's example and offer my view of the "state of the club".

From what I have seen in the past MRRC year (i.e. Dayton 1990), there is good reason to be proud of the past, and optimistic about the future of Mad River. The crowd at the K8MR Christmas Party were enthusiastic in their support for the club, particularly once NCC quests politely excused themselves. This support was evidenced Bennett, NZ80, stepped when Dick organize the forward to upcoming Columbus meeting, the first we have had in that area since I joined the club in 1982. It appears that we can look forward to renewed MRRC activity from the Columbus area in 1991.

Two days ago, we had 18 people show up for the MRRC meeting here at K8CC, on a Friday night no less! In attendance were the majority of the Michigan MRRC membership, but also quite a few people who are relatively new to the club. Once again, enthusiasm and support for Mad River was very strong, and I believe that the club will continue to grow throughout Michigan in 1991.

As I have said before, Mad River is a club of traditions, and they only get better with time. The MRRC Dayton Hospitality Suite, the K8MR Christmas Party, and the N8ET Findlay gathering are meaningful high points of the MRRC year, all of which add to the enjoyment of being part of this club. The Dayton suite is in the capable hands of WD9INF, and with the support of the membership, it should be a rousing success again this year. The Finday meeting and Christmas Party are both on the calendar for 1991.

Despite the time which has passed, it would be impossible to review 1990 without mentioning the NCC. There are still many open wounds to heal within MRRC, none of which were helped by the NCC guys scheduling their meeting on the K8MR party weekend, or by the news of the K3TUP/NCC ballroom/suite for Dayton. I am not going to use this opportunity to get into NCC-bashing, because ironically, I believe that the defection of the NCC people (18 out of 22 NCC members are ex-MRRC) has in reality, helped our club.

The leaders of the NCC seem to be driving it toward a "country club" type of organization. There are minimum for attendance and log requirements submittal to be a member, and there has been some talk of limiting the number of its members. I, for one, am glad to see this kind of attitude exorcised from MRRC. Since the NCC guys left, there has come a new awareness that, hey guys, this is only a hobby. People and go, individual activity rises and falls, but its the person-to-person friendships that last. Also, I think we are more cognizant of the contributions of our little and medium guns. Activity is what counts, not the magnatude of the score.

One aspect of MRRC that we can be proud of is the fact that most of our accomplishments are the result of membership TEAMWORK. Many of NCC's tangible results hinge on one person. That person produces their newsletter, and finances their suite and several of the meetings. I am not trying to bash this person, for I applaud his generosity. However, MRRC gets most of the same things done by volunteers shoestring budget. This speaks highly for the membership of our club, in that we can join forces to get the job done, rather than just throw \$\$\$ at it.

Yes, I am very optimistic for the future of MRRC. We are not the same club as we were in 1989, but perhaps we are even better. With our new people, and renewed activity from some long timers, 1991 should be a great year!

#### 'BIG FISH' (continued)

MRRC GOALS FOR 1991

As president, I have a personal list of 1991 goals for our club. None are cast in cement, so think them over and be prepared to make your ideas known at the Dayton meeting.

#### ESTABLISH A FIRM MEETING SCHEDULE

One thing I have observed from the NCC are the benefits of a regular meeting schedule. Our club goal is to have a minimum of six meetings per year. The Dayton, Findlay, and K8MR Christmas meetings established dates. I would like to see two meetings per year in Michigan, and the third one in the Columbus area. These meetings should be roughly every other month. For example:

- 1. February Michigan
- 2. April Dayton
- 3. June Columbus
- 4. September Findlay
- 5. October Michigan
- 6. December Cleveland @ K8MR's

These dates are not evenly spaced, but arranged to fit around the "fixed" meeting dates. Columbus and Michigan can be swapped as needed. Also, the dates in February and October must avoid the important contest weekends.

This list is just a proposal. Think it over and come to Dayton with your ideas. We would like to set the schedule at the Dayton meeting.

#### MOVING THE CLUB CIRCLE

Several people have asked, "where is the center of the MRRC Club circle". Traditionally, the club was centered on Marion, OH, and extended into MI, KY, PA, and IN. However, with people leaving for the NCC, the face of Mad River face has changed considerably in a geographic sense.

Tom, WI8W, plotted the QTHs of all the MRRC members on a map, and concluded that our geographic center is somewhere on the south side of Detroit! This is amazing for what has traditionally been a Ohio-based club.

Not having a chance to review a map, here is an initial proposal. I feel that the club center should remain in Ohio. However, to reflect the increasing number of Michigan members, I would propose that the center of the club circle be moved northwest. We should try to cover most of Ohio down through Cincinnati, and yet encompass more potential members in Michigan. The club center could be some easily identifiable city, such as Toledo.

Again, consider this proposal and bring your ideas to Dayton.

#### IMPROVED CLUB COMPETITION

For 1991, I would like to see MRRC again become a force in the club competitions. ARRL DX and Sweepstakes should continue to be our main focus due to the three-tiered structure. but we should try to do well in the CQ club competitions too. Scores result from activity. which is the natural by-product when people enjoy what they are doing. Everything that we do in Mad River should focus upon helping our members enjoy contesting, at which time the scores will come naturally.

#### NEAR-TERM GOALS

EVERYBODY needs to get on for the ARRL DX contests. Almost every day I hear about another sizable MRRC effort taking shape. I sense club momentum is mounting - if you are not planning a serious effort, be sure to get on and score a few points for the club.

Dayton is just around the corner. Be thinking NOW about volunteering to help at the MRRC Hospitality Suite. Final plans will be in the next 'FLASH'. Also, be thinking about the election of officers for 1991/92. The "election railroad" is fueled concensus. If you would like to serve, have someone you would like to make it known to K8CC prior nominate. to the Hamvention.

1991 should be a blast! CU in ARRL DX.

73, Dave, K8CC

## OPERATING WITH PACKET DE K8MR

If your contest goal is to work as much good DX and make as many points for the club as possible, Single Operator Assisted (SOA) is clearly the class to enter. Just watching a Packet cluster for a contest weekend shows the immense quantity of DX out there; it's just up to you to work it!

Much of the strategy in SOA is the same as normal single operator. Perhaps the most common error, if maximum score is your aim, is spending too much time chasing multipliers and not enough time piling up QSOs with relatively mundane Europeans. A multiplier is typically worth only about 4 or 5 QSOs in ARRL, and less in CQWW. Often time is better spent calling the loud YU's on 20 than trying to break a monster pile up to Africa on 10. Of course if you can run a frequency, do so. Even a relatively slow rate CQing (40-50/hr) builds up the QSO volume needed for a big score.

Such slow rate CQing time provides a good time for SOA technique #1 - the second VFO search and pounce for multipliers. While keeping up the CQs on the main VFO, preferably higher in the band where competition for the frequency is a bit less intense, use the second VFO to find and work the packet multiplier spots. computer interfaced radios this should be simple; with less fancy stuff such as my TS 830S/VFO-120, it may take several tries to find the spot and several more to get in sync with him. Never take more than 2 or 3 seconds on the second VFO without returning to the main VFO for another CQ. If you get an answer to your CQ work the guy and then make several more CQs before switching VFOs again. Remember, you don't want to let on that you aren't really using the frequency. If you keep getting answers to your CQ's, your rate is too good to be chasing multipliers. This two VFO technique allows you to keep running the casual Europeans at a time (typically after 1500Z on 10 meters, for example) when you otherwise would need to be S&P ing those active multipliers that aren't going to be calling W's, such as T77, 4U1, etc.

During much of the contest there are more casual guys tuning than there are serious contesters. This makes practical technique #2, the "Still Need" announcement. During one CQWW I put out an announcement that I still needed about 8 somewhat common and/or known active countries such as EI, UA2, HBO, etc. In the next hour or so the guys came up with 4 or 5 of these that I was able to work (some by technique #1!). This technique is more appropriate for the second day.

It is important to keep in mind both the nature of the spot and the nature of who put out the spot. The stuff that gets the serious DXers excited may not be worth the time in the pile up - W6QL/ZA is worth no more than the first LX. If you see a spot for an 80 meter UI8 from the local big gun with the 3 el yagi, don't jump if your antenna is a dipole at 50 feet. Keep in mind who's on the other end. The first 160 meter spot of a big multi like PJ1B is no cause for excitement, but the spot for P4OGD may be his only appearance on the band and may require appropriate action. Likewise in putting out spots be aware of what's been put out and what has not. The 20th spot of a big multi in CT3 is likely to be of less help than a seemingly ordinary one like KH6 on 20 meters or VK/ZL on any band.

SOA adds to the fun of contesting by keeping in touch with your fellow contesters, sharing news and frustrations, adding additional competition to see who finds the best spots, and by sheer volume of stuff to be worked. Most of the very big guns are still doing pure single op, leaving less competition for second tier stations like me. If possible give it a try in the upcoming ARRL DX contest to give the maximum possible boost for Mad River!

## MAXIMIZING SCORE IN A DX CONTEST (Adapted from an old YCCC Contest Handbook)

Not all of us can put in a full effort in a DX contest. Some of us have moderate stations, others have family and job pressures. However, there are many strategies we can employ to have fun and maximize our scores. Before you read on, consider how much time you have available and read that section first. Then, you may want to read beyond to see how much more pain is involved with more operating.

#### NO OPERATION PLANNED

This is probably the most popular category, however, it does little to contribute to the club score. Have you ever hosted a guest operator? It can sometimes be more fun than operating yourself!

#### LESS THAN FIVE HOURS

Try to run Europe for an hour or two each morning. This works well if you have family commitments because the best running time is before everyone gets up! You may want to compete a buddy doing the same thing - it's amazing how a six-pack of beer can help the club WIN! Also, don't forget about multipliers. An hour on 40/80 combined with several on the high bands could yield 300 QSOs and 100 multipliers.

#### FIVE TO FIFTEEN HOURS

Run Europe on the high bands as much as you have time for. Combine this with a couple of hours on 40/80 meters. For the SSB contest, you'll want to split you time between 40/80 meters, while on CW you may want to concentrate more on 40 meters for rate. A ten hour effort could field 500 QSOs and 150 multipliers.

#### FIFTEEN TO THIRTY HOURS

Guess what, you're falling into the trap of a serious operation. Try to take most of your off-time during normal sleeping hours (the 48-hour crowd may be doing the same). Otherwise, you are able to follow a pattern much like that of a full time effort. It may be wise to avoid time-consuming pileups, but certainly spend a lot of time looking for multipliers in the afternoons. This type of operation is where most of our club score could come from - we need you guys! A good 20+ hour effort could yield 800+ QSOS and 200+ multipliers.

#### MORE THAN THIRTY HOURS

This is the class of operation where you should have your marbles checked! Anyone in MRRC territory with a beam and KW can make 1000+ QSOs in this type of operation. Ask one of the club "big-guns" to give you his band and hourly breakdowns to study for strategy. You might surprise yourself with the score you can make from even a moderate station. Go for it!

#### GENERAL COMMENTS de K8CC

Think like an East-Coaster and don't miss any opportunities to run Europe. JAs are fun to run, but there seem to be fewer to work. 40M is usually good for W8 to Europe after their sunrise - use your DX EDGE! Try 160M on the hour starting at 03Z, but don't stay more than five minutes without at least hearing or working something. For big stations, QSO volume is the key, but for moderate efforts, attention to multipliers can pay off handsomely. Try to think like a "big gun" - don't be low band DXing when you can run QSOs on the high bands.

BREAKDOWN SHEET QSO/mults

1990 ARRL 558

call: NA8V mode: SSB

class: Single-Operator

class: Single-Operator								
HOUR	160	80	40	20	15	10	HR TOT	CUM TOT
0				12/12	3/3	26/8	41/23	41/23
1		1/1	20/15	14/6		16/1	51/23	92/46
2	1/1			47/20	5/4	1/1	54/26	146/72
3		5/5	6/3	7/4	19/7		37/19	183/91
4			8/3	29/8	6/2		43/13	226/104
5	5/5	14/12		17/2	2/0		38/19	264/123
6		4/2	15/11	18/3			37/16	301/139
7		6/5	7/2	26/4			39/11	340/150
8	2/1	7/3	8/2	17/1			34/7	374/157
9	2/2	2/1	6/5	43/3			53/11	427/168
10		1/1	1/0	77/5			79/6	506/174
11				4/1	54/19		58/20	564/194
12					114/12		114/12	678/206
13					16/0	71/24	87/24	765/230
14						97/11	97/11	862/241
15					6/2	72/12	78/14	940/255
16					17/2	73/5	90/7	1030/262
17					20/0	36/3	56/3	1086/265
18						83/4	83/4	1169/269
19					13/2	33/11	46/13	1215/282
20				3/1	48/6		51/7	1266/289
21				4/1	11/2	22/7	37/10	1303/299
22				23/1	18/2		41/3	1344/302
23 .				1/0		67/2	68/2	1412/304
0			5/2	5/2	8/4	13/0	31/8	1443/312
1			9/3			66/4	75/7	1518/319
2			3/1	9/2	9/3	30/0	51/6	1569/325
3			3/2	21/5	9/2	4/0	37/9	1606/334
4				14/1	51/2		65/3	1671/337
5.		6/3	16/2		5/0		27/5	1698/342
6				57/1	2/1		59/2	1757/344
7	1/1	3/1	3/0	25/3			32/5	1789/349
8		1/0	4/0	31/1			36/1	1825/350
9								1825/350
10			1/1	3/0			4/1	1829/351
11		2/1	3/2	9/2	10/0		24/5	1853/356
12					53/5		53/5	1906/361
13					3/0	92/3	95/3	2001/364
14						<del>96</del> /1	96/1	2097/365
15				2/0		71/2	73/2	2170/367
16				4/2	3/0	42/4	49/6	2219/373
17					2/2	73/2	75/4	2294/377
18				1/0	26/2	29/0	56/2	2350/379
19					5/1	41/2	46/3	2396/382
20				3/0	30/2	15/1	48/3	2444/385
21					53/0		53/0	2497/385
22				14/1	46	22/3	36/4	2533/389
23	10.0		74	8/4	10/4	7/1	25/9	2558/398
DAY1		40/30	71/41	342/72	352/63	597/89		1412/304
DAY2	1/1	12/5	47/13	206/24	279/28	601/23		1146/94
TOT	11/10	52/35	118/54	548/96	631/91	<b>1198</b> /112		2558/398

BREAKDOWN SHEET QSO/mults

1990 ARRL CW

call: NASV mode: CV

class: Single-Operator

HOUR	160	80	40	20	15	10	HR TOT	CUM TOT
0			17/10	11/10	10/6		38/26	38/26
1		21/14	19/7				40/21	78/47
2		7/1	14/5	17/6			38/12	116/59
3	3/3	13/4					16/7	132/66
4	1/1	8/5	11/4	10/6			30/16	162/82
5	2/2	4/2	16/6	5/4			27/14	189/96
6		2/1	61/4				63/5	252/101
7	3/3	4/2	56/5"				63/10	315/111
8	1/1	3/3	21/2	23/3			48/9	363/120
9		2/2	12/4	17/1			31/7	394/127
10		3/1	12/4	3/2			18/7	412/134
11	1/1	2/2	3/1	11/4			17/8	429/142
12			6/6	4/2	4/3 4/3		14/11	443/153 508/163
13 14				61/7 14/1	15/10	12/10	65/10 41/21	549/184
15				52/4	22/6	12/10	74/10	623/194
16				32/4	56/6	18/11	74/17	697/211
17					41/4	3/2	44/6	741/217
18				18/1	18/1	7/6	43/8	784/225
19				10/1	43/3	5/4	48/7	832/232
20				52/3	43,3	3/1	55/4	887/236
21				7/0	19/8	3/3	29/11	916/247
22				10/1	7/2	3/1	20/4	936/251
23			24/0	5/1	.,-	6/1	35/2	971/253
0		22/3	,-	4/4	2/2	•,	28/9	999/262
1		4/1	7/0	8/3	2/0		21/4	1020/266
2		3/1	18/4	2/0			23/5	1043/271
3		5/3	9/1	2/0			16/4	1059/275
4	2/2		13/0	7/2			22/4	1081/279
5			10/1	6/2			16/3	1097/282
6		7/1	1/0	3/0	9/1		20/2	1117/284
7		4/0	7/0				11/0	1128/284
8								1128/284
9								1128/284
10								1128/284
11		1/1	4/3	1/1	4/1		10/6	1138/290
12					51/5	2/0	53/5	1191/295
13					43/3	12/4	55/7	1246/302
14					39/2	18/4	57/6	1303/308
15					53/1	.20/2	73/3	1376/311
16						89/10		1465/321
17					18/2	30/4	48/6	1513/327
18				1/1	14/1	15/3	30/5	1543/332
19				22/2	6/0		28/2	1571/334
20					6/2		6/2	1577/336
21				10/1	13/1	1/0	24/2	1601/338
22			6/2	8/4	7/1	1/1	22/8	1623/346
23		1/1	2/0	3/1	6/1	12/0	24/3	1647/349
	11/11	69/37	272/58	320/56	239/52	60/39		971/253
DAY2	2/2	47/11	77/11	77/21	273/23	200/28		676/96
TOT	13/13	116/48	349/69	397/ <i>7</i> 7	512/75	260/67		1647/349

#### Great White North DX A? Expedition to Zone 2

For the second year in a row, I made the long, difficult trip from my home is south-western Quebec to the remote Zone 2 QTH of Ment Chown VEZLJ forthe CQ WW DX SSB Contest.

Although Kent and I live in the same province, there are over 1700 air kilometres between us (1100 miles). Setting from here to there is quite an ordeal. Kent lives in a small fishing village called Harrington Harbour, on an island hugging Quebec's lower north shore. The village has a population of 324, and most of the locals are employed in the fishery in the Gulf of St. Lawrence. The nearest road is over 300 km away, and the only way in or out is by boat, (skidoo after freeze-up) or by air. Take a close look at the map and you'll see Harrington is further, east than any part of VF1.

To get there, I drove 14 hours from my home to Sept-Iles (just inside Zone 2), then took a plane to Chevery, the nearest mailand village, and then a boat (jokingly called a taxi) to Harrington. Total travel time: two days.

Kent is moderately well set up, with a TA-33 up 45 feet, and whatever wires he can keep up in Harrington's hostile, winly climate. Thanks to the NCDXF, Kent has a Hammond HL-1200 amplifier to supplement his IC-735.

For my operations up there, I chose to bring my own FT-901PM from home. In 1989, I didn't discover until after the contest that Kent's fedlines for his 42, 87 and 160 metre antennas were severely contaminated and lossy. In 1990, I arrived at Kent's place a few days early, to replace his LF antennas, and run some of KPAQM's famous hardline up to strategic spots on the island to ensure a good signal on the low bands.

Working through high winds and the occasional rain or snow squall, I was able to get dipoles for 80 and 160 up on a short mast on top of a hill overlooking salt water. On antother mast (actually an inoperative KK400 GAP vertical) I got a 40 metre delta loop halfway up the hill favouring Europe.

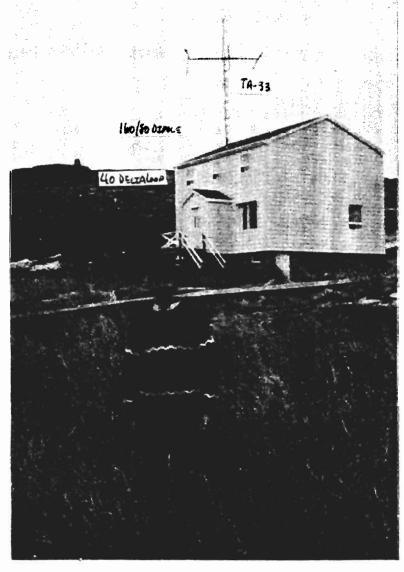
What the man said about "best-laid plans" certainly applies to operating from a northern location. While the rest of the world was raving about how much better conditions were in 1990 than in 1990, there was a marginal magnetic disturbance that made my score 25% lower this year than last. As anyone who has been north can tell you, you are really at the mercy of the geomagnetic field at higher lattitudes.

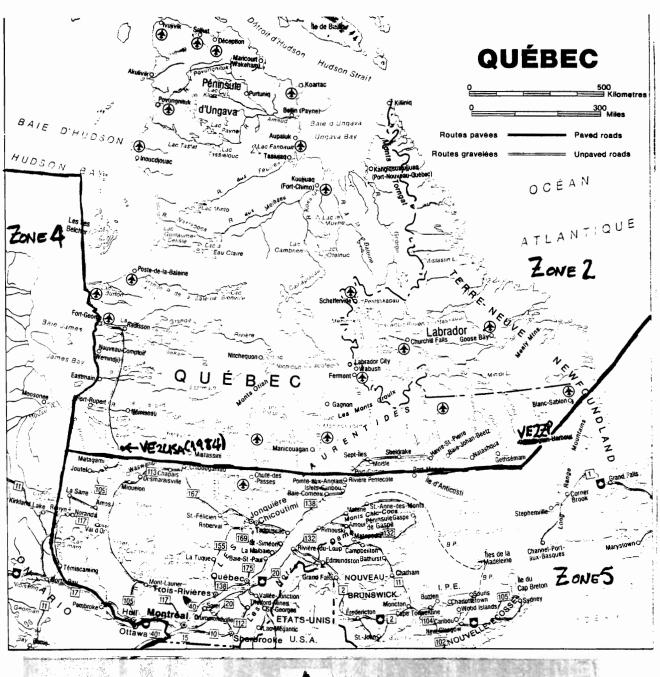
For all that, my line score this year loks like: 3818 QSOS 102 zones 306 countries for 3.79 M, single op all bands. At times the rates were incedible. According to K1EA's CT, my "last 17 QSOs rate" hit 430 at times, and my best hour had 271 QSOs. I sure can't do that from garden variety Zone 5.

A final note: There is some confusion about the southern boundary of Zone 2. The written WAZ rules refer to that part of Quebec north of 50%, while the MAZ map shows the southern boundary at 52%. CC's WAZ committee decided some time ago to accept all operations from Quebec North of 50% as being in Zone 2, so correct your maps, folks.

After almost six years in Zone 2, Kent has male almost 29,000 QSOs. He has just received word of a new posting: Seoul, South Korea. Zone 2 should be significantly rarer after July 1991, but hopefully HL will be more available. Yent was a great host, and gave me the chance to see and enjoy a beautiful and stark part of my own province. I won't be returning to Harrington for any contests, unless... Yell, there is this large empty building near the point... A zone 2 Multi-multi?... Ted. how much hardine have you got?

Dave Toodwin, VEZZP/XMZP







#### SCORES! SCORES!

#### ARRL TEN METER CONTEST

K8CC	2163 / 143	619,000	SSB W8WD opr.
WD8LLD	1150 / 117	539,604	CW
W8FN	579 / 104	242,112	CW
W8UPH	583 / 150	270,900	Mixed
K8DD	363 / 88	128,000	п
WD9INF	324 / 109	81,314	11
N8CQA	201 / 63	41,958	" QRP
K8MR	167 / 74	39,812	п
KW8N	2636 / 282	2,080,000	Multi + NZ4K, KU8E, KC3N, N8MSF
N8CXX	2170 / 270	1,753,000	" + K8JM, KE8OC, NE8T, WA8VMS

### NORTH AMERICAN QSO PARTY

	<u>CW</u>	SSB	
KW8N	491 / 195	KW8N 621 / 218	NZ4K opr
W8FN	362 / 166	K8MR 224 / 104	
K8MR	353 / 155	W8UA 136 / 82	
AU8W	181 / 97	KE8OC 124 / 72	
N8CQA	160 / 89		

### CQ WW 160 METER CW

WD8LLD	548 / 82 148 K		
W8UA	310 / 49		
K8MR	274 / 50		
WD8AUB	160 / 37		
AC8W	140 / 43		
N8CQA	155 / 39		
K8CC	104 / 46		
K8DD	111 / 32		
KE8OC	55 / 22		
N8CXX	504 / 66 88K Mu	lti + K8JM, K8FC, AA8AV, V	UT8W

#### CLUB SHIRTS AND JACKETS

From NBCXX, John, comes word on jackets and shirts. Delivery can be made at Dayton. Send your order and your cash to NBCXX ASAP.

- For shirts we need a minimum order of 23. The cost of the shirts will be \$10.00.
- 2. Those nice silk jackets are \$34.00.

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All questions regarding size...Small, Medium, Large, X-Large and bigger should be directed to John. Check the roster for John's phone number.

#### DAYTON!

The next issue of <u>THE FLASH</u> will detail the plans for the suite at Dayton and the meeting times (this I miss more than anything else..ed). Life without Dayton and the <u>GREAT Mad River suite</u> is hardly worth calling life. WD9INF will fill you in on all the details.

#### 160 METER SSB CHALLENGE

Boy, what can you say about WD9INF? Poor Ken must be a bit ill. After getting waxed in the ARRL 160 test. Ken has gone and challeged K8CC to a heads-up battle on 160. I haven't heard if the challenge has been accepted but this should be good. Although cw is not INF's strong suite, ssb certainly is and I think that I'm going to join in this one and pass out the QSO to those truly deserving. Dave asked to see if there was anyone out there that wanted to engage in a bit of friendly competition...here it comes Dave. Any other takers out there...N8CXX maybe ?