FLASH

MAD RIVER RADIO CLUB

October/November 1993

MRRC CALENDAR

OCTOBER 24
- USECA Hamfest/MRRC Meeting

OCTOBER 30-31
- CQ WW DX Contest - SSB

NOVEMBER 6-7
- ARRL November Sweepstakes - CW

NOVEMBER 20-21
- ARRL November Sweepstakes - SSB

NOVEMEBR 27-28
- CQ WW DX Contest - CW

DECEMBER 3-5
ARRL 160M Contest

DECEMBER 11-12
ARRL 10M Contest

NEXT MRRC MEETING

The next meeting of the Mad River Radio Club will be at the USECA Swap-and-Shop in Warren, MI, on Sunday October 23, 1993. A map to the swap is included in this newsletter. The meeting will be held in the upstairs "break" area at 11 AM. **Buck, N8CQA** and **Hank, K8DD** will be at the MI-QRP booth from 8:00 - 10:50 for more information.

The FLASH is the official newsletter of the **Mad River Radio Club**, and is published six times per year in even-numbered months. Submissions of material for the FLASH are welcome, and may be sent to the editor at the address on the last page.

The Mad River Radio Club an ARRL-affiliated contest club centered on Findlay, OH and serving the surrounding states. Membership in MRRC is open to anyone. Dues are $7 per year.

From the 'Big Fish'

By Steve Miller, WD8IXE

Greetings fellow CHAMPIONS! A hearty congratulations to everyone for winning the Medium Club category for the 1993 ARRL International DX Contests! Certainly another testimony to the fine tradition of Mad River Radio Club contesting. Extra congratulations to **N8ATR, WD9INF, AA8U, K8GL, K8CC,** and **KW8N** for making "the boxes". With a strong SS effort from everyone we can claim another ARRL club victory/gavel and show the contest world what MRRC is all about. Dave, K8CC, has compiled a special SS issue to help us achieve a sweep in the ARRL club competitions this year.

Although the club didn't fare as well in the CQWW contests, there were still a few bright spots. MRRC was well represented by the #2 world SSB 15m single band showing by **Bob, KW8N** from NP2E (from zone 8 no less) and the #2 USA CW 20m single band from the KW8N station by **Pat, NZ4K**- Great job Bob and Pat!

Wonders never cease, at least that was the case at Findlay this year. Although I was unable to make the annual pre-hamfest gathering at the N8ET QTH for the first time in several years, I was amazed to learn that **Doc, KN8Z,** and Tina (Mrs. N8ET) had an enjoyable chat. For those of us who witnessed the now infamous "KN8Z Tequila show" two years ago, this reconciliation was considered most improbable if not impossible. Personally, I rank it up there with the falling of the Berlin wall, The break-up of the Soviet Union, and the new found Israeli/PLO relations. Thanks again to Bill and Tina for their continued MRRC hospitality.

Speaking of Findlay, not only did we manage to sign 5 new MRRCers, the club flea market table netted over $100 for the club coffers. **Dick, NZ8O** brought more non-skid pads which keep keyer paddles from sliding across the table. I've used one for a few years now - they work great! Drop Dick a note if you are interested. **Hank, K8DD** was taking MRRC callsign badge orders to pass on to **Buck, N8CQA** who is now in charge of the process. Hopefully there will be no further problems in getting this next order processed and distributed.

By the time this issue of the Flash hits the streets, the contest season will be upon us. Judging from the talk at the meetings and MRRC net, I'm sure we'll all be primed for some serious operating. Even though the sunspots are fading, there are plenty of MRRC members looking forward to fighting it out on the lower bands with SA (Stomp A**) confidence. Don't forget the meeting at the USECA hamfest on October 24th. It's going to be a good year for MRRC - I can feel it.

73, **Steve, WD8IXE**

P.S. I'd like a matching SS gavel to go with the DX gavel - remember WE ARE THE CHAMPIONS!!!

FROM THE EDITOR
By Dave Pruett, K8CC

INCREDIBLE, AMAZING, and totally unexpected. These are the feelings I experienced when the October QST came out and the whole world saw that the **MAD RIVER RADIO CLUB** had won the Medium Club Category in the ARRL DX Contest Affiliated Club Competition. In the grand scheme of things, our accomplishment perhaps doesn't rank up there with world peace, an end to starvation, or a date with Cindy Crawford. Nonetheless, only one club wins the gavel each year, and this year **MAD RIVER DID IT!** Take a bow, fellow MRRCers, for accomplishing something we have never done before!

A tarnishment on my euphoria occured when I closely examined the editorial contents of the contest writeup. The writeup noted that the second-place entry from the North Coast Contesters averaged more points per entry than MRRC. The contest editors have never (at least in the past ten years that I checked) made this distinction when comparing the winning scores. Furthermore, the same relationship exists in the Unlimited Category, where the winning Frankford Radio Club averaged fewer points per entry over the second place Yankee Clipper Contest Club. Was this noted in the writeup? Nooooooooo...

So why was the MRRC vs. NCC comparison included in the QST writeup? Were the comments politically motivated? The NCC had won the past two years - was someone in their club so distraught over losing the "three-peat" that they prevailed on the ARRL Contest Desk for some editorial commentary to tarnish our achievement? The NCC guys that I know personally are honorable fellows, so I have a hard time believing this to be an official position of their club. Nonetheless, I was upset enough about this whole matter to write a letter to KR1R at the ARRL demanding an explanation. The full letter is included in this newsletter so you can judge for yourself. It will be interesting to hear what the ARRL has to say.

CQWW is rapidly approaching, and with it the start of the 1993-94 contest season. MRRC is preparing for a massive onslaught in SS. I heard **Ted, K8AQM** comment the other day that he has never seen such an interest in SS within our club. Many stations are preparing to give it a serious go - quite a few never having done it before. To give us something to shoot for as a club, here are the scores submitted by MRRC in SS for the past ten years:

year	score	entries	finish
1992	3,810,523	37	5th Medium
1991	3,647,368	41	4th Medium
1990	3,157,086	35	3rd Medium
1989	2,144,068	25	7th Medium
1988	2,693,480	26	7th Medium
1987	2,864,622	28	4th Medium
1986	**3,622,504**	**36**	**#1 Medium!!**
1985	1,792,234	21	8th Medium
1984	5,465,897	82	2nd Unlimited
1983	4,326,166	47	2nd Medium

In 1983, we lost to the North Texas Contest Club by only a few thousand points in one of the closest finishes in history. MRRC last won the SS Medium Club gavel in 1986 when **Joe Warden, WU2B** (ex-W8LNO) was president. It would be really great for our club to do it again.

We **CAN** do it again folks...**GOOOOOOOOO MAD RIVER!!!!**

73, **Dave, K8CC**

CQ WW DX REMINDER

The CQ WW DX contest rules for the club competition has the requirement that groups submitting scores for the club competition must submit a list of claimed scores by members to be eligible. What this means is that in addition to putting **MAD RIVER RADIO CLUB** on the summary sheet, you must send the score to MRRC Score Collector **Jim Stahl, K8MR** so that he can send in the list to CQ Magazine. Jim's address is shown in the club officer's list on the back page of this newsletter.

The CQ Magazine deadline for log submissions is 30 days after the contest. Please try to get your score to Jim by the same time.

MRRC FINDLAY TABLE RESULTS
By Ed Glassman, N8HTT

Thanks to all the members who donated and/or purchased equipment at the MRRC Table at the Findlay Hamfest where we were able to raise $127 for the club treasury. The last hour "boat-anchor" special conducted by **Doc Sheller, KN8Z** not only raised some bucks but, more importantly, cleared the table.

Perhaps we should try this at Dayton. Any thoughts on this?

73 **Ed, N8HTT**

THE MAD RIVER CLUB CHAMPIONSHIP
By Jim Stahl, K8MR

Fall marks the beginning of the contest season, and also the start ofa new year for the **Mad River Club Championship**. This is a ranking of members' performance in the major contests of the year, based on scores normalized to the winning USA score in each contest.

The contests considered and maximum points awarded for each are as follows:

CQ WW and ARRL DX:	2000 points/mode
ARRL SS:	1000 points/mode
CQ WPX and CQ 160M:	750 points/mode
ARRL 10M, ARRL 160:	750 points
NCJ Sprints and NAQPs:	200 points/mode

Points go to the operator rather than the station, and in the case of multi-ops, points are divided between the operators with an extra share for the station owner.

The award season starts with the CQWW SSB contest in October and runs through the September Phone Sprint the following year, Results for 1992-93 will be out in the summer of 1994 - the CQ 160 results are the major holdup, although preliminary results can come sooner.

The reigning champ for the past two years has been **Dave Pruett, K8CC**. However, in spite of his excellent station and operating skill, it was not a runaway. One or two good entries from the next several finishers could have put them into first place.

Full details were in the June 1990 **FLASH**, or can be obtained from **K8MR**.

IN YOUR EAR - TWO RADIO STATION SWITCHING

By Randy Farmer, W8FN

Once you get yourself accustomed to doing it, listening to two radios at once has many advantages in the contest environment. The most obvious applications for this are the Sprints and ARRL Sweepstakes. Over the years, I have tried various ways to set up a dual receive system, and the one described here is the one I finally settled on. It is somewhat complex, but it does allow you to use one or two extra transceivers or receivers to full advantage. This setup has been invaluable for squeezing out those few extra 20 and 15 meter QSOs on Sunday afternoon in SS while sitting on a 40 meter frequency and calling CQ. It has also turned out to be extremely useful for split frequency DX work.

When I first moved to a location where I was able to construct a halfway serious contest station in 1987, I installed two complete stations for multi-single operation. It didn't take long for me to start looking for ways to take advantage of the two-band capability for single op contesting. It was relatively easy to set up a relay switching arrangement so that the key line and microphone could be switched between stations, but managing the proper switching of receiver audio took a little trial and error experimentation. After a while, I had managed to set up a crude switching arrangement that could put the audio from the secondary station in one ear of my headphones and the primary audio in the other. This worked well enough, but I found myself wishing I had more flexibility, like the ability to put both receivers on the same antenna for split frequency DX work. And there was the small matter of a perfectly good modified R-4C gathering dust; perhaps I could use that as an auxiliary receiver. So I sat down with a pad of paper and a few beers and began to plan ways to put the available hardware to optimum use.

The final arrangement had the following features:

1. The ability to use an auxiliary receiver integrated into the primary station. This auxiliary receiver can be used in place of the receiver in the primary station transceiver or can share the primary receiver antenna for use in split frequency monitoring on a single band. An additional "crossband" mode is available in which the aux receiver is connected to the antenna from the secondary station. This is useful for single op work, as it gives the ability to scan a second band without the necessity of leaning over to tune the secondary station transceiver VFO.

2. The ability to monitor the audio from both the primary station and the secondary station simultaneously. This is useful for picking up extra QSOs on other bands while calling CQ during slow periods in SS.

3. The ability to "slave" the secondary station receiver to the primary station antenna. This is useful for slow periods in a multi-single operation where the operators at the two radios can scan the same band for multipliers simultaneously. It also comes in handy for those situations on 80 or 160 meters when a second set of ears is needed to pull a call out of the noise or QRM.

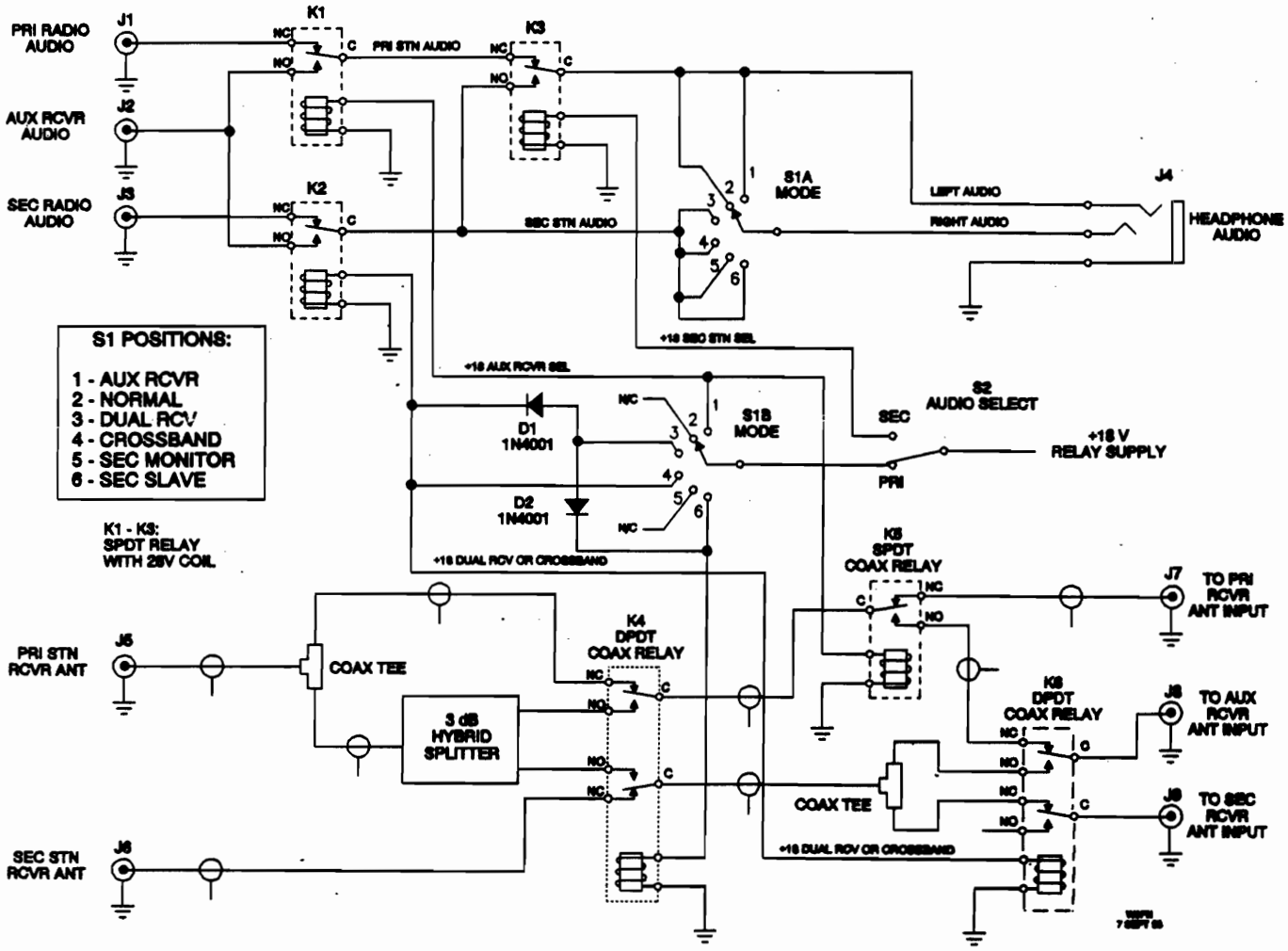
Circuit Description — The circuit for the receiver switching system is shown in the accompanying schematic diagram. There are three relays that switch audio signals and three that switch receiver antenna signals. Mode switch S1, a Radio Shack 2-pole 6-position rotary switch, switches right side headphone audio (since my station is set up with the primary station on the left side of the console, the left ear is the primary station side and the right ear is the secondary/auxilliary station side) and 18V relay control signals. There are six modes: Aux Rcvr, where the auxiliary receiver is connected to the primary station antenna and its audio is fed to both left and right headphones; Normal, where the primary station receiver is connected to the primary station antenna and its audio is fed to both left and right headphones; Dual Rcv, where the primary receiver and the auxiliary receiver share the primary antenna by means of a hybrid power splitter and primary audio is fed to the left headphone and aux audio is fed to the right side headphone; Crossband, identical to Dual Rcv except that the aux receiver is connected to the secondary station antenna; Sec Monitor, which simply samples the secondary station audio and puts it in the right headphone; and Sec Slave, where the primary and secondary receivers share the primary antenna signal by means of the hybrid splitter and secondary audio is fed to the right headphone. Audio Select switch S2 is actually the master station select switch. It feeds the audio from the secondary station into both headphones and disables all switching. The +18 SEC STN SEL control signal that this switch generates is used to switch keying and microphone lines from the primary station to the secondary station. This switch is thrown when the secondary station is used to make a QSO on a different band.

Audio Switching: K1-K3 is used to select between audio from the primary receiver or the auxiliary receiver. K2 selects audio from either the secondary station receiver or the auxiliary receiver. K3 selects the audio that is fed to the left ear of the headphones. This is normally the audio from the primary station receiver but becomes auxiliary receiver audio when K1 is activated or secondary receiver audio when K3 is turned on. Mode switch S1, selects right audio and switches the 18V relay control signals. Left audio is not controlled by the mode switch.

Antenna Switching: K4-K6 are coaxial relays that switch the receiver antenna signals. K4, a single pole double throw relay, is used to switch the 3 dB hybrid splitter in and out of the circuit. When K4 is activated, in the Dual Receive or Secondary Slave mode, the two outputs from the relay are identical copies of the signal from the primary station antenna. The hybrid splitter was procured at a flea market. If you can't locate one, they are easy to build using a few turns of wire and a ferrite toroidal core. We're not talking aerospace level performance requirements for this circuit, so a hybrid you build yourself is plenty good enough, even at 10 meters. K5 is a SPDT coax relay whose job is to steer the primary antenna signal (or half of it in the Dual Receive or Secondary Slave modes). This signal is normally connected to the primary receiver antenna input, but when K5 is closed, in the Aux Rcvr mode, it is instead sent to K6 for further selection. K6 switches the output signals to the auxiliary receiver and secondary receiver antenna inputs. The auxiliary receiver antenna is normally not connected; in Aux Rcvr mode K5 is closed, however, and the aux receiver is connected to the primary antenna signal by way of the normally-closed contacts of K4 and K6. In Dual Receive mode K4 and K6 are activated and the aux receiver antenna input is connected to the split primary antenna signal. In Crossband mode, only K6 is activated and the auxiliary receiver antenna is connected to the secondary station antenna. The second half of K6 switches the antenna to the secondary receiver. The secondary receiver antenna is normally connected to the secondary station antenna. In the dual receive or crossband mode, where the aux receiver is being used, the secondary receiver is disconnected.

The coax relays I use for switching the receiver antennas are twin miniature coax relays with BNC connectors that I was lucky enough to find at a flea market some time ago. These relays have 24 Volt coils and are quite compact. If you wish to duplicate this system or use it as a starting point for your own design, don't despair if you

don't happen to have coax relays on hand. I have also had good luck using standard miniature relays in small miniboxes with RCA connectors to switch receiver antennas. The trick is to keep the leads to the relays very short. Most miniature relays have RF characteristics that are plenty good enough for use as antenna switches at HF. The audio switching relays are garden-variety surplus miniature types. The relay supply I use is 18 Volts because that happens to be what you get when you bridge rectify and filter the output from a standard 12.6 V filament transformer. I have never encountered a 24 Volt relay that wouldn't switch just fine with 18 Volts applied to its coil. I have had a simple supply made from a Radio Shack 1.2 Amp filament transformer running a total of 30+ relays in my station switching for over ten years, and it has yet to fail. Stay away from the little teeny transformers, though; they're junk.



Secondary/Auxiliary Receiver Audio and Antenna Switching

SWEEPSTAKES RECORDS FOR MICHIGAN AND OHIO

By Dave Pruett, K8CC

Contesting is many things to many people. Some folks want to win, while others just want to make QSOs. Everyone wants to do "well" (whatever that means) and perhaps accomplish something from their operating experience. Winning is nice, but not everyone is situated to win. EVERYONE however, can set a goal for themselves and set out to beat it. The secret is establishing a challenging, yet attainable goal.

A national ranking in Sweepstakes is extremely difficult for a W8. To put this in perspective, the last time a W8 made the top ten in CW SS was when **Dave, K1ZND** did it from the Michigan State University Club station, **W8SH** over 20 years ago! It's been just about as long for the phone ops too - **Kevin, WA8ZDT** was the last to make it in 1973.

Recognizing that a national ranking was extremely difficult, I began to tablulate and track a overall "W8 Top Ten". On the following page, you will find tables of the ten best scores ever done from Michigan and Ohio in the four SS categories on both CW and SSB since the late sixties. The scores are in standard "SS-results" format - each line shows year, callsign (guest op is in parenthesis), points, QSOs and mults.

These "ten best" scores provide an interesting insight into what it takes to be a "big gun" from W8. In some cases, certain people and stations have been a force to be reckoned with in SS for years. Some scores have stood as records for almost two decades. In many cases, a regional rivalry in a certain year stimulates a number of big scores.

Let's look at these scores. In the high power category, our own **Steve, WD8IXE** operating from **KW8N** is waging a running battle with the NCC's WR3G for Buckeye CW supremacy - the top five OH CW QRO scores have been made by these two fellows. In MI, **Dave, K8CC** has six of the ten best scores, with K8LX, WA8YVR and WA8ZDT sharing the other four spots. On SSB, the NCC's K8AZ hold the OH crown with MRRC's **Dick, NZ8O** in second. (Notice that the other eight OH QRO SSB scores are all over a decade old.) In MI, a spirited battle has developed between MRRCers **Stan, K8MJZ** (3 ten-best) and **Tim, WD8IJP** operating at **K8CC** (2 ten-best) followed by **Bruce, AA8U**. As in OH, three decade-old scores by WA8ZDT operating from K8LX still make the ten-best list, along with a recent 'ZDT score.

In the 150W category, the NCC's K8CX holds the CW record for OH but KV8Q (3 ten-best), K8BL (2 ten-best), and N8AA (2 ten-best) are all repeaters with recent scores. In MI, W8CQN's 1974 score has stood seemingly forever as the record, but KW8G and MRRC's **Ken, AA8AV** are in close pursuit. Ken also holds the record and three ten-best MI scores for 150W SSB, ahead of WD8MGQ's three scores from back in the mid-eighties. In OH, K8BL is the 150W SSB champ and also has three ten-best scores to his credit, leading K8EE with two.

The QRP in SS was created in 1987, so all the scores are relatively recent. In OH, WA8RJF holds the CW QRPp record and three ten-best scores ahead of W8IDM who also has three. MI has an interesting CW battle brewing between WK8V, WB8AAX, and MRRC's own **Buck, N8CQA**, each with three test-best QRPp scores. On SSB (can you imagine anything more grueling than phone SS with 5W - whew!), the OH record is held by W8ILC, but WA8RJF (three ten-best), AA4YZ (two ten-best) and NQ8Y (three ten-best) have also made the grade. In MI, 5W SSB must not be very popular because there have only been six entries in six years, although MRRC's **Buck, N8CQA** and **Hank, K8DD** have made efforts.

At one time, there was no "official" multi-operator category in SS. Since that time, MRRC's own **KW8N/WB8JBM** has dominated the category from OH. On CW, six of the ten-best scores belong to teams led by Bob. Not to go un-noticed is the 1991 **W8EDU** ten-best score, a MRRC effort led by **Gary, AF8A**. On SSB, **KW8N/WB8JBM** has again been dominant, with six more ten-best scores. However, a MRRC team has kept **WD9INF** right on their heels with three ten-best scores. In the MI multi-op category, MRRC's **K8AQM** holds the record on CW and two ten-best scores, followed by K8LX. On SSB, 1987 was the year as MRRC stations **K8CC, N8CXX** and **K8MJZ** all battled for the crown. Silent key WD8CRY used to dominate this category, and still has three ten-best scores as evidence.

It is also interesting to compare the scores between Ohio and Michigan. The high power listings are very even on both modes, with OH averaging slightly more on CW and MI ahead on SSB. In the 150W category, CW is quite even between the states but MI is running ahead on SSB with four 1000+ QSO scores to none from OH. The situation is reversed on QRPp as OH has a significant edge in both modes. In multi-operator CW, the top MI and OH scores are a virtual tie, but OH has been much better on average (compare the tenth-place scores between the states). On SSB, it is no contest (pardon the pun!) due to the efforts of Mssrs. Hayes and Rogner. Despite the the 1987 shootout, the #9 score from OH would be a record in MI.

How can these results be used to set your own personal goals for the upcoming Sweepstakes? Looking at the tables, it should be obvious that making a ten-best score puts you in some pretty fine company, but it doesn't come easy in most categories. If you want to make the grade in either class "A" or "B", you need an above-average station, SS experience and a full-time commitment to the contest. Likewise for the multi-operator categories - although the tenth place scores from both states are perhaps more attainable than for single-ops, you will still need a good station, multiple rigs and well-coordinated teamwork to make the grade. QRPp is altogther different - it's relatively new, and presents a big challenge. This is evident in comparing the ten-best scores from a given state and mode - in most cases there is a wide gap between #1 and #10, which indicates an "opportunity to achieve".

If you plan to operate SS full time, the "ten-best" tables may be used to set a personal goal if you have a "good" station. (K8CC definition of "good": tribander/dipoles at 40' or more, competitive-grade radio/amp.) However, results in Sweepstakes depend a great deal on experience and knowing the "tricks of the game". If you have never operated SS seriously, I would deduct 20% before using the ten-best tables as a goal.

Although making a big score from W8 is difficult, making a moderate score is not. The last 30% is the hard part - if you have no SS experience and no beam, you still can make probably 70% of a ten-best score. In either "A" or "B" power, this is still 100K points - a worthy goal and a **BIG** contribution to the MRRC score.

Its very difficult to interpolate these results if you're not going to operate SS full time. Typically, 70% of the QSOs come the first day on CW, while on SSB the ratio may be 60%/40% so it depends somewhat on when you plan to operate. While it might appear that being the new guy on the band the second day might generate some big rates, it seldom works out that way unless you're only going to operate a couple of hours.

Kick butt people - and **GO MAD RIVER!!!**

Join the MAD RIVER RADIO CLUB net every Monday evening at 8:30 PM Eastern on 3825 Khz ± QRM.

SWEEPSTAKES RECORDS FOR MICHIGAN
through 1992

CW Single Operator - High Power

91	K8CC	182,490-1185-77
90	K8CC	171,300-1142-75
83	WA8YVR	159,100-1075-74
88	K8CC	156,436-1057-74
78	K8LX	153,150-1021-75
83	K8CC	152,144-1028-74
86	K8CC	151,848-1026-74
77	K8LX (WA8ZDT)	151,694-1039-73
81	K8CC	150,480-1045-72
92	WA8ZDT	149,226- 969-77

CW Single Operator - Low Power

74	W8CQN	137,492- 929-74
91	KW8G	134,288- 872-77
92	KW8G	132,440- 860-77
92	AA8AV	132,132- 858-77
76	W8CQN	131,254- 899-73
92	WG8M	121,650- 811-75
91	AA8AV	116,732- 758-77
75	W8CQN	116,060- 829-70
91	KJ8A	113,700- 758-75
77	K8IF	113,734- 779-73

CW Single Operator - QRP

92	WK8V	51,830- 355-73
91	WK8V	47,334- 343-69
88	WB8AAX	42,600- 300-71
91	W8VCF	41,538- 301-69
91	N8CQA	39,480- 282-70
92	WB8AAX	38,364- 278-69
89	WK8V	32,508- 258-63
91	WB8AAX	32,368- 238-68
89	N8CQA	32,256- 252-64
87	N8CQA	30,736- 226-68

CW Multi-Operator

87	K8AQM	162,504-1098-74
92	K8LX	157,542-1023-77
91	K8LX	147,440- 970-76
92	KV8H	129,514- 841-77
77	W8UM	125,720- 890-70
86	K8AQM	120,960- 840-72
91	WB8OHO	112,274- 769-73
80	W8UM	110,016- 764-72
79	W8UM	105,376- 712-74
84	K8JRK	102,200- 700-73

SSB Single Operator - High Power

91	K8MJZ	239,008-1552-77
92	K8MJZ	236,852-1538-77
92	K8CC (WD8IJP)	231,000-1500-77
90	K8MJZ	228,912-1506-76
92	AA8U	226,534-1471-77
78	K8LX (WA8ZDT)	223,200-1488-75
81	K8LX (WA8ZDT)	222,592-1504-74
90	K8CC (WD8IJP)	220,800-1472-75
79	K8LX (WA8ZDT)	212,528-1436-74
92	WA8ZDT	205,744-1336-77

SSB Single Operator - Low Power

92	AA8AV	186,494-1211-77
90	N8CXX	154,924-1006-77
83	WD8MGQ	154,364-1043-74
91	AA8AV	153,230- 995-77
85	WD8MGQ	151,548-1038-73
88	WD8MGQ	148,808- 979-76
92	N8NVT	126,588- 822-77
84	WD8MGQ	125,060- 845-74
90	AA8AV	120,736- 784-77
89	NE8O (KA8JBK)	119,928- 789-76

SSB Single Operator - QRP

89	KB8DLH	43,216- 296-73
89	W8VWY	28,676- 214-67
91	KODD	27,950- 215-65
92	N8CQA	26,980- 190-71
87	K8DD	11,960- 130-46
88	W8VWY	9,328- 106-44

SSB Multi-Operator

87	K8CC	214,500-1430-75
87	N8CXX	205,050-1367-75
87	K8MJZ	204,150-1361-75
83	WD8CRY	192,992-1304-74
91	K8LX	182,550-1217-75
81	K8SS	182,208-1248-73
86	W8SH	179,672-1214-74
82	WD8CRY	179,376-1212-74
85	W8SH	176,860-1195-74
80	WD8CRY	173,308-1171-74

SWEEPSTAKES RECORDS FOR OHIO
through 1992

CW Single Operator - High Power

92	KW8N (WD8IXE)	180,334-1171-77
92	WR3G	179,256-1164-77
91	WR3G	173,866-1129-77
91	KW8N (WD8IXE)	172,172-1118-77
90	KW8N (WD8IXE)	169,800-1132-75
90	NG8D (K3UA)	165,376-1088-76
92	WOCG	162,944-1072-76
78	K8NZ	161,320-1090-74
78	K8MR	158,508-1071-74
81	K8NZ	157,916-1067-74

CW Single Operator - Low Power

92	K8CX	153,846- 999-77
89	K8BL	136,192- 896-76
91	N8AA	132,132- 858-77
88	K8BL	130,720- 860-76
92	KV8Q	129,206- 839-77
92	N8AA	127,680- 840-76
87	K8ND	117,822- 807-73
79	K8EKG	116,800- 800-73
91	KV8Q	115,500- 770-75
90	KV8Q	114,750- 765-75

CW Single Operator - QRP

92	WA8RJF	82,950- 553-75
90	K8BL	75,000- 500-75
90	WA8RJF	60,480- 420-72
89	K8ATQ	58,756- 397-74
89	W8IDM	54,312- 372-73
88	W8IDM	53,136- 369-72
89	WA8RJF	50,700- 338-75
87	W8IDM	45,560- 335-68
90	AA4YZ	25,840- 190-68
92	W8VK	23,250- 155-75

CW Multi-Operator

83	WB8JBM	161,616-1092-74
82	WB8JBM	154,944-1076-72
81	WB8JBM	154,322-1057-73
84	WB8JBM	150,088-1028-73
91	NG8D	147,224- 956-77
74	WB8JBM	147,022-1007-73
91	W8EDU	142,912- 928-77
79	K8ND	142,080- 960-74
81	K8ND	141,044- 953-74
78	WB8JBM	138,380- 935-74

SSB Single Operator - High Power

91	K8AZ (K8NZ)	238,700-1550-77
92	NZ8O	225,148-1462-77
78	W8KIC (WB8MZZ)	219,450-1463-75
81	K8ND (WB8MZZ)	217,412-1469-74
76	WA8PLZ (WB8AYC)	213,014-1459-73
77	W8KIC (WB8MZZ)	208,800-1392-75
78	K8AZ	207,150-1380-75
78	K8MR	205,350-1369-75
81	K8MN	204,832-1384-74
79	WB8MZZ	202,464-1368-74

SSB Single Operator - Low Power

92	K8BL	148,610- 965-77
89	K8BL	142,142- 923-77
81	K8EE	118,114- 809-73
82	K8EE	113,150- 775-73
86	KQ8M	108,624- 744-73
87	K8BL	104,390- 715-73
80	WA6EZV/8	104,340- 705-74
92	N8AA	101,640- 660-77
91	KA8D	100,408- 652-77
83	KC8JH	100,010- 685-73

SSB Single Operator - QRP

92	W8ILC	64,064- 416-77
92	WA8RJF	61,500- 410-75
90	AA4YZ	50,850- 339-75
89	NQ8Y	47,850- 319-75
88	N8EIH	42,918- 311-69
88	NQ8Y	36,938- 253-73
92	AA4YZ	26,412- 186-71
91	NQ8Y	28,336- 184-77
89	WA8RJF	28,080- 195-72
87	NQ8Y	27,302- 187-73

SSB Multi-Operator

92	KW8N	304,766-1979-77
91	KW8N	294,140-1910-77
89	KW8N	260,106-1689-77
85	WB8JBM	255,744-1728-74
87	WD9INF	245,100-1634-75
91	WD9INF	244,112-1606-76
83	WB8JBM	229,252-1549-74
86	WB8JBM	228,068-1541-74
92	K8CX	226,688-1472-77
89	WD9INF	207,480-1365-76

SS STATISTICS

By Gary Mikitin, AF8A

What tools are out there to help you strive for the winning SS effort (while adding to the MRRC point totals)? I'd like to suggest post-contest statistics...but not only those provided by the contesting software packages. These programs can give us QSO and mult totals, hourly rate breakdowns, score by bands, etc. There may be other statistics lurking out there to help you plan the next assault on the record books. **Jim, WB8WTS** regularly puts his Machintosh to work on past W8EDU CW SS logs. He comes up with interesting graphs that are often the basis for hours of heated discussion on trips to and from the local hamfests.

Jim takes mundane statistics, like QSOs/hour, dupes/hour and bandchanges/hour, and makes them come alive by manipulating and graphing the data. For instance, we examined our 1988 through 1990 logs, looking at our QSOs/hour and bandchanges/hour during the first six hours of the contest (when SS is often won or lost) and the last six hours (when QSOs are toughest to come by) trying to figure out how to get more points during those critical times. Jim invented a truly novel statistic: the Ease Factor, or EF. Jim derived the EF by dividing the hourly rate by the number of band changes in the hour, for each hour of the contest. What good is this seemingly oddball quantity? After much careful study, we decided that the EF graphs told us we needed to get more QSOs out of the second rig. Hence, in 1991 we operated with a keyer switch between the two rigs and added an amplifer to the second radio. The analysis paid off that year when we posted our best effort ever: 928/77/143K - much better than the 743/72/107K score in 1987, when we did our first multi-op SS effort.

So, what's the moral? We have come to realize that winning contest efforts take planning, and part of that planning should inculude a review of past performance. Sure, if you gather the best ops, build the best station and the propagation gods smile upon you, winning seems easy. But, for the vast majority of us we have to work at winning before, during, ar.d after the contest. Crunching numbers can be a fun, informative, and productive way to pass the hours between contests.

MRRC SCORES

Collected by Jim Stahl, K8MR

CW SPRINT

KW8N	279-42
K8MR	273-42
WOCG (WD8AUB)	260-43
WX3M	127-33
NF8R	96-37

SSB SPRINT

KW8N	???-??
KF8QE	231-46
K8CC (WD8IJP)	212-41
KF8TY	181-41
WD9INF	52-22
K8MR	42-20
WX3M	14- 8

SEPTEMBER VHF QSO PARTY

K8MR	89-40	AB
WD8AUB	29-19	B

SS STRATEGY TIPS

By Dave Pruett, K8CC

Here are some strategies that I have found useful in SS. Some of the ideas are more beneficial on CW than SSB, and some primarily apply to all-out efforts, but all should help your score.

OFF TIMES - The contest starts at 2100Z, and unless you have an equipment failure, plan to operate the first 12 hours straight. For a serious effort, any time lost here cannot be made up. As it gets late (08-09Z), watch your rate closely. Be continually asking yourself "Am I doing better now than my worst times tomorrow?" If so, stick with it until the rate drops like a rock.

Whatever time you went to sleep, try to get back on by 1200Z. It seems that a lot of people get on and make a few QSOs when they first get up, then move on to their Sunday activities. The rest of Sunday morning usually provides reasonable rates. Try not to take another off time until noon.

Hopefully, by this point you have used up only 2 - 4 hours of off time. Throughout Sunday afternoon use the rest of the time in 30 minute periods when you hit a rate lull. Usually the last two hours are not too bad rate-wise, so plan to have your off time used up by 0100Z or so.

BAND SELECTION

The key to band selection in SS is to always consider skip zone and the potential audience. There are many more active SSers east of the Mississippi than out west, hence a W8 should primarily focus on opportunities for short skip. What kind of conditions are we looking for? Conditions with high arrival angles covering moderate distances (≈ 200 - 500 miles) put the W8 right in the center of the action. When do those conditions occur? 7 MHz in daytime and 3.5 MHz at night. Best of all, simple dipoles are tremendous antennas for these conditions, so even a "medium gun" station can be competitive. The low bands are our "bread-and-butter" in SS.

It's still necessary to work the guys out west, and its the easiest on the higher bands (14, 21, & 28 MHz). The problem is that the skip zone is working against you. Often, the shortest skip you hear is west of the Mississippi, and sometimes it's west of the Rockies. There are just not enough SSers in W5/6/7/0 to keep up a good rate for very long. Sometimes a western strategy works, but WATCH THE RATE - it only SEEMS like you're working a lot of W6s.

BANDSWITCHING/SECOND RADIO

There is nothing you can do to improve your SS score more than to run two radios (particularly on CW). With two radios, you can be bandswitching one radio while operating the other, hence no time is wasted. However, the REAL benefit comes when trying to determine whether to CQ your brains out, or to tune for QSOs. With two radios and an appropriate switching system, you can do both at the same time! You don't have a second radio? Borrow one from a non-SSer friend for the weekend. If both radios are equal in capability and you have a separate 7 MHz antenna, put one rig on 40 and bandswitch the other across the bands

ATTITUDE, ATTITUDE, ATTITUDE

The best advice I ever saw for "little" and "medium" gun stations is this: **ACT LIKE A BIG GUN WHENEVER POSSIBLE**. Some battles you cannot win, but there are quite a few that you can...

Good luck and **GO MAD RIVER!**

Join the MAD RIVER RADIO CLUB net every Monday evening at 8:30 PM Eastern on 3825 Khz ± QRM.

TREASURER'S REPORT
By Tim O'Sullivan, KE8OC

The current fiscal status of the Mad River Radio Club as of October 1993 is as follows:

Balance reported 8/93	$148.01
INCOME:	
Dues collected at Findlay '93 meeting:	$158.00
Additional dues collected:	$21.00
Income from MRRC table at Findlay	$127.00
	Total: $454.01
EXPENSES:	
Printing checks:	$5.95
Checking account maintenence ($3/month)	$6.00
	Total: $11.95
Balance 8/93	$442.06

A megathanks to all the members who paid up their dues and supported the MRRC table at Findlay. The treasury is back to a healthy state with all of our current bills paid.

de Tim, KE8OC

MRRC BADGES

Buck, N8CQA reports that the MRRC badge situation will soon be under control, and that he expects to have the problems sorted out by the USECA meeting. Also, efforts are being made to have another batch of MRRC T-shirts and jackets made. If interested, contact Buck or Hank, K8DL.

MEMBER PROFILE:
BRIAN PETKU, W8WD

This month's member profile spotlights **Brian Petku, W8WD** from Clarkston, MI. Originally licensed in the seventies as WN8KKA and WB8KKA while in Birmingham, MI, he received W8WD in 1977. He has been a member of MRRC on and off for the past several years.

The W8WD antenna farm is under construction, but currently there are two 130' Rohn 45G towers in the air. Tower #1 will soon have a KLM KT34XA tribander at 130' and also support antennas for the W8WD PacketCluster node. Tower #2 has a Mosley TW-33 WARC tribander for 30/17/12 meters at 140', and will soon have a Cushcraft 40-2CD at 130'. The two towers support a variety of wires for the low bands. Inside, W8WD has a Kenwood TS-440S transceiver and a Drake L4B amplifier. All of the antenna switching is controlled by a surplus industrial programmable controller with the plans to eventually automate the antenna control. Station logging is done on a 386SX-16 computer.

Brian's operating interests are mainly SSB, and he has been a frequent guest-op at K8CC in the DX and 10M contests. W8WD is also a PacketCluster node running on a 386DX-33 computer, with a user port on 2M and linked to other nodes in the Great Lakes PacketCluster system on 70CM. The main computer (used for antenna modeling and other stuff) is a 486DX/2-50 upstairs, and all three computers in the Petku household are linked together over a Novell Network! Obviously, Brian has a strong interest in the technical side of amateur radio.

W8WD is employed as the Automotive Products Manager for NEC Electronics stationed in Detroit. The job entails much travel interacting with customers at all of the "big three", plus trips to NEC offices in W6 and JA. He is married to wife Kim and has a daughter [illegible].

MAD RIVER RADIO CLUB
Dave Pruett, K8CC
2727 Harris Road
Ypsilanti, MI 48198

Jim Stahl
K8MR
30499 Jackson Road
Chagrin Falls, OH 44022

MAD RIVER RADIO CLUB OFFICERS

President:	Treasurer:	Scorekeeper:	Editor:
Steve Miller, WD8IXE	Tim O'Sullivan, KE8OC	Jim Stahl, K8MR	Dave Pruett, K8CC
220 Freyn Dr.	39991 Finley Drive	30499 Jackson Road	2727 Harris Road
Centerville, OH 45458	Canton, MI 48188	Chagrin Falls, OH 44022	Ypsilanti, MI 48198
(513) 433-8090	(313) 397-9732	(216) 831-6954	(313) 481-0755