THE LED

Published by the
Livingston Amateur Radio Klub
Howell, Michigan

NOVEMBER 2003

http://www.qsl.net/milark

Livingston Amateur Radio Klub
PO Box 283
Howell, Michigan 48844

Dated Material

NEXT KLUB MEETING
NOVEMBER 13th 7:30 P.M
EMERGENCY OPERATIONS CENTER
300 SOUTH HIGHLANDER WAY

NET 146.680 SUNDAY 9 P.M.

CLUB CALL IS: KB8ZTV

BOARD MEMBERS

President	Art	KC8WAZ
Vice-President	Melissa	KC8UTF
Secretary	Mary	KC8SER
Treasury	Clairus	KC8QQN
Program Director	Bob	K8VQC
Tech Coordinator	Chuck	W8CLK
Board Member	Paul	KC8UKF

COMMITTEE CHAIRPERSON'S

146.680 Repeater	Jack	KA8BOG
LED Editor	Jim	WB8AZP
VE Coordinator	Greg	AA5GO

PREZ SAYS

Wow, what an exciting summer it has been! This month too, has seemingly whizzed by as our KLUB starts to prepare for the fall season. WE all have a lot to be thankful for and I'm sure we will all be wishing for those summer picnics again, now that summer is behind us.

Now that autumn leaves are falling, planning for the winter season and repair and inspection of our antennas and feed lines, prior to the white stuff starting to fall and accumulate, is an important consideration.

Though the "Dogs in the Park" events are over 'till next summer, many have suggested "KLUB Dinners" as a good idea for EYEBALL QSO'S….A-LA-HAMBONE style, soooo put your thinking caps on and lets create a list of places to try our BON A PATETE Ham Bone Style!

My friends, I am happy to say, your Board of Directors is now complete and working diligently on the KLUB's business. Nearly all "old pending business" has been, or is in the process of being resolved. Also, the Board is working on future planning for activities and events.

Both of our Program Directors, Bob K8VQC and his able and enthusiastic co-director Jim WB8AZP are busy thinking about foxes and bunnies and other fun stuff !!

(I thought we were a radio club not a blooming huntin' club!)

Committee volunteerism is KEY to our success on the events or activities we choose to promote. And our present staffing is doing a GREAT job!!!!! Can you imagine what our KLUB will be like if we can continue to improve at the rate we have been improving over the last few months? I'm excited about the KLUB'S future, for it is looking brighter each and every month!

I decided to relocate the BOARD of Directors to north side of the room, to improve the membership's ability to hear those who are speaking. Also, the BOARD is trying to obtain a portable speaker system to further improve on this problem. (With both Bob-K8VQC and Jim-WB8AZP as Program Directors "EXTERORDINAIR" we will want no hearing problems during these important presentations.)

A heart felt thanks is extended to Chuck Keep-W8CLK for accepting his appointment to the Board of Directors, as the "KLUBS" Technical Director. I am confident Chuck will serve well in his new capacity. On behalf of the Board; Chuck, A HEARTY WELCOME ABOARD !!

Our next BOARD meeting will be the first Monday of the month, 11/06/2003 (7:30 pm) as this is a change to go back to the previous meetings schedule, which we needed to change so this group of board members could all coordinate their schedules to a uniform date and time convenient for all concerned.

Now, with the recent changes on the Board, this revised date was necessary. We, on the Board, hope the Membership will keep in mind that our meetings are open to the membership and Interested Guests and we hope you will attend whenever your schedule will permit! I'm sure you will really be glad you stopped by!

Be Well……. 73 !

Art……

. EDITORS COMMENTS

To steal from an old line "Ask not what your club can do for you, but ask what you can do for your club".

Summer is long behind us, and winter is not far away. Hopefully, you'll all find time to contribute an article or note to the LED to share with your fellow "KLUB" members, right?

Notes from that last swap you attended would also be great as well. Concerned about jotting down your ideas? Your friendly neighborhood editor can help!

Remember, more of your "stuff" means less of mine for you to have to read through.

Why not make the November meeting "bring a non-LARK ham night"? Rumor has it there will be some very interesting "50/50 plus" prizes this month!

Bob, K8VQC, & I traveled to Ann Arbor to attend the Introduction to Disaster Communications Class, which was taught by Jim Wades WB8SIW.

See you all at the November meeting, right?

Jim WB8AZP

TREASURER REPORT
GENERAL OPERATING FUND

FOR PERIOD OCT. 1, 2003 TO OCT. 31, 2003

OPENING CASH (CHECKING ONLY) $ 261.93
INCOME
SEPT. 50/50 33.00
DONATION OF 50/50 WINNINGS 33.00

TOTAL DEPOSIT 66.00

EXPENDITURES

JIM WB8AZP, PRINTING SEPT LED 46.20

ENDING BALANCE OCT. $ 281.73

OPENING CASH (CD $1,000.) $1,221.59
OPENING CASH (CD $500.) 588.29

6 MONTHS INTERESTS ON CD 2.21

TOTAL OPERATING CASH. $2,093.82

EMERGENCY COMMUNICATIONS FUND TREASURER REPORT.

PERIOD OCT. 1, 2003 TO OCT. 31, 2003

OPENING CASH (CHECKING ONLY) $1545.23

BALANCE OCT. 31, 2003 $ 1545.23

Respectfully submitted,
Clairus KC8QQN
Treasurer

SECRETARY'S REPORT

GENERAL MEETING

Art, KC8WAZ opened our October 9th, 2003 meeting by leading those in attendance to the Pledge of Allegiance.

A motion was made by Dave, KE8Z to accept the secretary's report as published, and was seconded by Chuck W8CLK. This motion passed unanimously.

Gregg, AA5GO made a motion to also accept the treasurer's report as published. The motion was seconded by Bruce, N8WWX and also passed unanimously.

Bob, K8VQC gave a talk on Fox Hunting, with assistance from Bob, K8BPA. The program discussed many of the basics of fox hunting, and will hopefully be helpful to the membership during our own Klub foxhunt, coming soon.

Bruce, N8WWX discussed the upcoming ARES/RACES meetings scheduled for December 1st and December 8th to discuss how better to utilize the radio room and equipment at the Emergency Operations Center (EOC).

Bruce also discussed the upcoming District SET on November 8th, as well as a Red Cross building tour.

The November program will be on High Speed Multi-Media networking, presented by John, K8OCL and Neil, K8IT.

Jim, WB8AZP announced that he intends to have the LED "in the mail" by the first of each month. Jim cited that a slightly longer lead time was needed to accommodate those members receiving their newsletters by "snail mail". Jim also encouraged those wishing to submit articles as well as those submitting reports to submit "early & often".

It was announced that the L.A.R.K. Christmas dinner will be held on Sunday, December 21st, 4:30 PM at Chippers in Gregory. Please call Rita, WA8IAQ @ 734-878-9484 and let her know how many are planning to attend.

The 50/50 raffle took in $66.00, and the lucky winner was Mary, KC8SER. Mary chose to generously donate her winnings to the Klub. Additionally, many more prizes were given out to the lucky members in attendance.

Mac, N8RBA made a motion to adjourn, seconded by Dave, KE8Z.

SECRETARY'S REPORT

BOARD MEETING

The October 6th, 2003 meeting was called to order by Art KC8WAZ at 7:50PM.

Paul, KC8UKF made a motion to accept the Secretary's report, seconded by Clairus, KC8QQN.

Chuck, W8CLK made a motion to accept the treasurer's report, seconded by Bob, K8VQC.

Both motions passed.

A discussion was held relative to getting data and dues submitted in a timely fashion to the repeater council. Clairus, KC8QQN has taken care of this, and established procedures to hopefully keep us current in the future.

Clairus, KC8QQN has volunteered to draft a few charts to illustrate to the KLUB members where their dues monies are spent, as well as what our budget for 2004 might look like.

Other items that were discussed included:

- Money Makers for the KLUB
- Updating the KLUB Website
- Mailing & Emailing of the LED
- LED mailing to past members
- Update of the KLUB Roster
- Meeting programs & projects

The Christmas dinner for the KLUB is planned for Sunday, December 21st, 4:30 PM, at Chippers in Gregory. Spouses & children are welcome. Door Prizes will be given out as well.

Next board meeting is Monday, November 3rd at the EOC library.

Respectfully Submitted,

Mary KC8SER

L.A.R.K. SOCIAL NOTES

We've been having a lot of fun at our pre-meeting dinners. Hope you can join us Thursday, November 13, 2003, 5:30 to 6:45 PM at BE MY GUEST CAFÉ, 2709 East Grand River, Howell.

Try to let Bob, K8BPA know that you plan to attend the pre-meeting dinner. He should be listening to the repeater on November 13. The restaurant will set up tables especially for us, so it would be nice to have a tentative count. We can always squeeze you in if it's a last minute decision. The more the merrier.

We go to the E.O.C. for the 7 PM eyeball QSO, with the L.A.R.K. meeting starting at 7:30 PM. See you there!

33 and 73 Laurene WA8IAQ

VE Team News:

There will be a test session on Nov 11th at 7pm at the EOC center. Pre-registration is not mandatory but it is appreciated. The cost of testing is now 12 dollars in case it has been a while since you have tested. Bring copies of your license and of any CSCE that you may hold.
I talked with Bruce N8WWX and have set up testing sessions for the 2nd Tuesday of the odd months with the exception of the month of July, for next year. Well, hope you all are studying and ready to test in November.

73 'till then.

Greg McDiarmid AA5GO

Greg is relaxing at a meeting (far right)

OK, let's get started!

Rain Gutter Antenna

41 Countries in 5 Hours with 100 Watts into a Rain Gutter!
by Jack Ciaccia, WMØG

I decided to try the ARRL International CW DX Contest from my new, super stealthy HF radio setup... let me explain.

My HF rig is an ICOM 745 and a Dentron transmatch running 100w but my antenna system is a little unusual though. After I moved to my new QTH in Lafayette, CO, I tried to put up my trusty old Butternut HF6VX Vertical. I am located in a covenant controlled neighborhood and thought the vertical would suffice as it is ground mounted and is not taller than my house. But, the local neighborhood HOA "watchdog" showed up at my front door about one week after I put it up and reminded me about the HOA rules of NO OUTSIDE ANTENNAS! It turns out, she lives in the house directly in back of me and can see the antenna from her dining room window—my typical luck! Well, not to put the nice radial system I had recently "planted" to waste, I started to think about some alternative, stealthy antenna designs.

I noticed the rain gutters and downspouts of my house. They were aluminum and brand new so they probably made contact continuously. The downspout section is about 25 feet high and it connects to a horizontal gutter run which is 35 feet long. Hmmm... 60 feet of conductive material in an inverted 'L' Marconi type design and ready made! I'd heard of Hams loading up their rain gutters before but never thought that I would he relegated to this option myself. I ran a 50 foot piece of RG-8X out from the "shack" to the bottom of the drain spout. I drilled a hole in the drain pipe and attached a sheet metal screw. To this screw I attached the center conductor of the RG-8X coax. The shield side of the coax was then soldered to the ground radial leads. The ground radial system consists of 10 random lengths of 4 conductor antenna rotor cable buried in the lawn and the ends of three of these radials are also screwed into my basement's metal window wells too.

I tested the stealth antenna with my MFJ antenna analyzer to see if there were any inherent resonant points on this system. There were a few spots where the "Rain Gutter Antenna" was under 2:1 SWR.

Coincidentally, these occurred at the top of the 75 meter band and again in the middle of the 15 meter band... "Life is good". Time to attach it to the

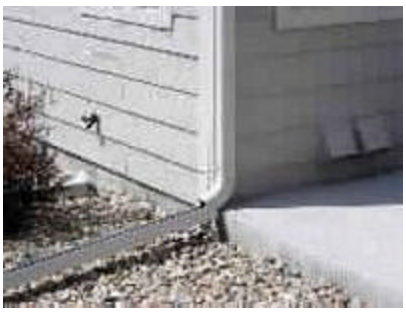
transmatch and HF rig and “fire it up”. It loaded up nicely on 75 meters so I thought I would try to check into one of my favorite WAS nets, the GERATOL Net on 3.768 MHz. Net control was in Indiana and had no problem hearing me. As the net went on, Yardley Beers, WØJF, a local, also checked in and now I had a reference station for reported signal strengths. The signal reports Yardley was getting from the same stations we worked were very similar to mine, although once in a while he would be an S unit above me. Not too bad, considering he was using a well designed trap vertical for 75 meters.

So now I had some confidence in my antenna system and decided to try the DX contest. This would he a difficult test due to the pile ups on the DX stations. Fortunately though, the contest DX stations have some excellent antennas and operators. I worked all bands 80M to 10M. As I said in the title, I worked 41 different countries in 5 hours of operating time on all bands. I was selective in who I called too. I worked 78 total “band countries” and made 97 contacts. Most of these stations answered on my first call. I also made sure to “zero beat” right on top of their frequency before I called.

I spent about half of my 5 hours on 40M and worked 28 different countries there in the evening. In one hour on 20M I worked 20 more countries; one hour on I5M yielded 14; 15 minutes on 10M another 9 countries; and about 15 minutes on 75M with 7 more. Of course, I had duplicated some of the same countries on these different bands, but the total different countries worked was 41. 12 of these countries were in Central America and the Caribbean, 6 in South America, 14 in Central and Eastern Europe, 3 in the South Pacific, 2 in Asia, 1 in Africa, 1 in Antarctica, plus Alaska and Hawaii.

No doubt, the “wile and guile” I’ve learned over my many years of DXing played a small part on my getting through, but the “Rain Gutter Antenna”, I thought, played pretty well too. If I had known this antenna was going to perform so well, I would have planned to work the entire contest and attempt to achieve a DXCC country count! I’ve written this article in hopes of inspiring other Hams living under similar conditions to look around at the possibilities of not-so-typical antenna designs and give HF and DXing a try. There are many ways of devising a stealthy antenna and many books have been written on the subject. The satisfaction of making a QSO under not-so-ideal conditions is a lot more gratifying than working DX with a KW and a multi-element array at 150+ feet. Ask anyone who works QRP! Plus, working under adverse conditions hones up your operating skills and then, when you do have a better antenna farm, you will probably be a better operator as well.

The feed to the rain gutter is barely visible in these photos as well as the braided connection to the radials.



The rain gutter antenna has a vertical component approximately 25' high and extends horizontally across the roof line for 35'.

A couple of years ago I had written an article on the use of my rain gutter on my home as my HF antenna. This is the antenna I have been relegated to use for my HF operating due to the oppressive rules of the local Home Owners Association regarding external antennas. Although, I did remind them that it was now illegal to ban small satellite dishes and yagis for TV reception per the FCC, so they amended that clause in the HOA covenants but still continue their ban on any outside ham antennas. I'll not complain, as I knew what the HOA rules were when I got this house and have accepted them as a challenge to my ingenuity

In my original article I told about the inspiration I had to then use the aluminum rain gutters on part of the east side of my new house as my antenna. They measure 25 feet vertically and then run 35 feet horizontally for a total of 60 feet overall length and resemble a ready-made inverted "L" or Marconi antenna configuration. In that article I also explained how I had planted a radial system beneath the lawn that consists of ten random length radials and how I`ve also tied into this radial system the three aluminum window wells that are on that side of the house. According to accepted theory, the more metal and wire you use in your radial system, the better. You should consider connecting to your radial system any nearby chain link fencing, metal lawn sprinkler piping, fire department stand pipes, underground storage tanks, metal drain culverts, railroad tracks, etc.

One of the drawbacks I've noticed on my original rain gutter antenna was that it was somewhat tricky to load on some of the bands using a conventional antenna transmatch. It was impossible to find any decent matching combination on 160 meters at all. Loading on the 80, 40, 30, 20, and 15 meters bands did not present much of a problem. Tuning on 10 meters was a bit tricky at times, as well as finding a decent match on 12 meters and 17 meters.

I looked at several possible solutions including one developed by my good ham friend, Friday lunch buddy, stealth antenna compatriot, long time DXer, celebrated author and renowned Physicist - Yardley Beers, WØJF who did all the complex mathematical calculations on my rain gutter antenna and offered me a coil design that could be added to the feedpoint in order for it to load on 160 meters. No doubt that it would work!

Ultimately though, I had decided on using a different approach. I had read a lot about the SGC-230 Smartuner antenna coupler in ham magazines and on the Internet. It seemed like a plausible solution to this problem if it would work as advertised. The automatic antenna coupler is designed for use with end-fed unbalanced antennas such as whips and long wires. It can be configured to be used with dipoles and inverted vees as well. This automatically tunable antenna coupler is an ideal solution for this type of installation due to the fact that the rain gutter looks like a non-resonant end-fed unbalanced antenna.

What is the difference between an antenna coupler and an antenna tuner? According to the SGC manual, "Antenna "couplers" are placed at the antenna and match conditions of the antenna to the feed line in a very precise manner. Antenna "tuners", on the other hand, are generally located at the transmitter output at the radio end of the coaxial feed line. Furthermore, antenna tuners placed at the transmitter allow substantial losses in feed lines to be corrected in order to "fool" a transmitter into working correctly. The losses are dissipated through heat or to ground. A coupler installed at the antenna eliminates these losses by providing a proper match of the antenna to the feed line. The SGC-230 Smartuner is a true antenna coupler".

After purchasing the unit from my local Denver HRO store I couldn't wait to get it installed. Upon physical inspection of the unit, I was impressed by the ruggedness of the construction of the SGC-230. This hermetically sealed antenna coupler was obviously meant to be installed outdoors and was even suitable for installation on shipboard. Included in the equally formidable packaging box was an impressive and informative 81-page installation and operating manual that explained the coupler's inner workings and it even suggested various antenna applications for the SGC-230 with illustrations. SGC builds other models of these type of antenna coupling devices but the SGC-230 Smartuner is the only model that is rated at 200W input. I probably wouldn't ever run that much power, but it is comforting to know that you are not running on the hairy edge of the limits of its power capabilities. Hopefully, that additional margin will translate into many extra years of trouble free operation.

The installation was a snap. SGC gives you an additional quick installation guide (for those of us that don't like to read the whole manual) that was easy to follow. First, I mounted the antenna coupler as close as possible to the feedpoint of the rain gutter per the specification in the installation guide. This is because any portion of the feed wire that is connected to the SGC-230 becomes part of the overall length of the antenna too. So I mounted my unit on the inside wall of the foundation of my basement just above the wooden base plate and below the flooring. This location was just opposite the downspout of the rain gutter, which is my antenna feed point on the outside. A distance of about 8 inches away. I drilled two holes just larger than the O.D. of the intended feed-thru wires through the 2 x 12 above the concrete foundation and on through the outer siding. Then I took apart a piece of RG-8X coax and separated the inner conductor from the braided shield. The inner conductor would serve nicely as the feed wire from the coupler to the downspout. You are cautioned in the instructions not to use coax to hookup these auto couplers on the antenna feed side. The now-separated braided shielding served as the hookup to the outside radial wires and was then connected to the ground lug provided on the SGC-230. Now all that was left was to connect the 50-ohm coax from my rig to the input coax cable harness provided with the SGC-230. There is a set of control wires and voltage wires included in this coaxial cable harness. The 12V hot wire and ground went to my 12V power supply. There are control signal leads that are also provided that are used for an indication of the coupler`s tuning. An LED "antenna tuned" indicator was connected between + 12V and the control signal wire. When the antenna coupler has found a match, the coupler drives the signal to ground on the control wire, which causes the LED to light. It provides a good visual indicator close to my operating position because I can`t hear the quiet auto coupler relays engaging from my operating position. The total time for installation, from getting the unit out of the box to starting the initial testing, was under 45 minutes.

To me, the "proof of the pudding" would be how well it performed in on the air tests. First I tried to load up the antenna on all the bands from 10 through 80 meters. No problem whatsoever. Most bands indicated a 1:1 SWR and initial tuning time was from 3 - 4 seconds for finding a match. The Smartuner automatically evaluates and switches 64 input and 32 output capacitance combinations plus 256 inductance combinations in a "pi" network - over a half-million matching combinations. Once it does find a match, the SGC-230 has 500 memories in which it stores the LC combination in its non-volatile computer memory so that the next time you tune up on that same frequency it is tuned almost instantaneously (less than 10 ms). Now for the band I hadn't been able to get a match on before - 160 meters. I went down to the CW portion, where I usually operate, and it found a match within 4 seconds. Life is good again! I also have not noticed any "hunting" by the SGC antenna coupler once it is tuned to a frequency.

I decided I would wait until the evening to perform some on the air experiments with some people I knew on 75 meters SSB. I checked into the GERATOL Net on 3.768 MHz, which is a WAS net for the extra class ham. I have been active on this WAS net for over 13 years and knew most of the folks checking in. These

unwitting participants in my tests were giving me S-7 to S-9+ reports from New England to California and from British Columbia to Florida. I had not let on to anyone before the net that I had done anything to my antenna system and thought I`d gather a few willing souls after the net to give me some further signal reports.

I was getting reports of S-6 in New England later on as the band seemed to be changing a little but I was still getting S-9+ reports from the southern states and was still S-7 into British Columbia and Washington State and S-9 into California. Most of these good folks know that I am using a rain gutter for an antenna but some of them think I am kidding them about it and using something more formidable for an antenna and maybe even a linear! So after telling everyone on the frequency about my latest antenna configuration and new addition, I got a comment from a station in Arkansas and he said, "If I could put in a signal like that out from my rain gutter, I'd get rid of my dipole and my linear too!" He said that my signal had been over S-9 all night at his QTH. The band conditions were decent this particular evening but the reports were consistently above previously logged reports I've had with those very same stations in the past under similar band conditions without the coupler. To date, the signal reports remain fairly constant, plus or minus band conditions.

Later that same week, I noticed on the KØMP Telnet DX Cluster that the long awaited K5K Kingman Reef Dxpedition was up and running. This would be an ATNO (all time new one) for me if I could get through the pileups. I knew that CW would be my best chance early on and I`d try for the SSB contacts later on during the DXpedition when the "big guns" had gotten their fill and the "feeding frenzy" was over. I caught K5K easily on 30 meters - no problem, as everyone on that band is fairly equal due to the power limitation. Later, I worked them on 15, 17 and 40 meters CW. I even got them on 40 meters SSB too! Finally, one evening I saw a spot for K5K on 160 meters. I hadn't actually operated down here before with the rain gutter due to the problems I have previously noted. I heard him and set up split about 1.5 KHz up and slipped in my callsign fully preparing to be there for a while as his presence had attracted a fairly good pileup. He came back to me on my very first call! I was so shocked that I didn't answer right away. I just kept staring at my radio - like having "buck fever" when you're out deer hunting. He sent my callsign again. I hurriedly snapped out of my trance and jumped onto my keyer and gave him the usual 5NN 5NN CO TU ES 73 DE WMØG. He acknowledged my reply and continued on to work the rest of the pileup. Not too bad! My very first 160 meters contact on the rain gutter was a rare DX station in a pileup. I was even more impressed now with my new antenna coupler. It had 'played` as advertised and had already justified it`s pricey self in my mind. I like to imagine that the other guys in that pileup thought that they had initially lost out to some "big gun" topband DXer with his quarter wave length high 160 meters 4-square vertical array and Alpha 87A amplifier -- HI!

Since that time, I have casually worked over 120 countries (using all bands), and have enough QSO`s again for WAS, if I needed it, on 75 meters SSB. I even participated in the ARRL SSB Contest and managed to work 45 different countries in 98 contacts, mostly on 20, 15and 10 meters, on all continents in a little under three hours of actual operating time while being particular on who I called while searching and pouncing. While this is certainly not an impressive "run rate" it is still is not a bad testimonial to the capabilities of the antenna and coupler combination even if one takes into account that the contest guys on the receiving end were using much more impressive antennas in order to hear me. They were still coming back to me on my first or second call except for a few of the rarer ones with lots of QRM on their frequency.

Another idea has popped into my mind since I've been using this antenna. I have a duplicate rain gutter section on the west side of my house and, if I bought another SGC antenna coupler, I could phase the rain gutter antennas together with equal amounts of coax to the couplers plus by inserting a 135 degree phasing line cut for each band, I could then switch them as an

end-fired array and have resultant directional gain to the east or to the west. Then I could switch and "tee" them together using just the equal lengths of coax without the phasing line and have simultaneous north/south directional capability as well. The house is almost 70 feet in width so it would be over a quarter wavelength on 80 meters between the rain gutter elements. Hmmmm… Hey, don't laugh -- it sure beats trying to figure out how to rotate the house!

I know now that when I install my next mobile HF radio installation, it too will have a SGC antenna coupler just ahead of the whip. Reports I've read on the resultant combination of the SGC series automatic antenna couplers used with plain steel whips have been very good from 160 meters on up. I also have read independent reviews that it works incredibly well with the equally pricey, but efficient, matching SGC-303 9 foot mobile antenna. No, I don't work for SGC, but I am a satisfied customer, and I don't mind spreading the word about their quality products.

As in my previous article, with regards to my experiences using a rain gutter for an antenna, I write this in fervent hope that some covenant restricted or apartment dwelling ham, somewhere, will be inspired to replicate some form of stealthy antenna system as I, and many others, have done too. I would hope he or she would also then share their enjoyment of being on the HF bands with a respectable signal, despite the covenanted restrictions and physical obstacles around them.

This article is certainly not technical in its content, nor was it meant to be so. It is, however, testimony that one need not have ideal antenna conditions in order to operate effectively on the HF bands. Many books have been written on the subject of stealth amateur radio and all of them offer some very sound advice regarding the subject of stealth antennas. I suggest that if you have a desire to run a stealthy ham station that you consult these books first. Also, go to the SGC web page and download one of their on line manuals for their antenna auto couplers where you will find even more ideas and solutions.

See you in the pileups!

The Rain Gutter Antenna is absolutely Stealthy!

THE EOC AMATEUR RADIO COMMUNICATION ROOM FIVE-YEAR PLAN

STRATEGY MEETING

Monday, December 1st & Monday December 8th at 7PM
EOC Conference Room

Five years ago a small group of the amateur's got together in a proactive response to the plans being made for the new 9-1-1 Central Dispatch and Emergency Management Department. This group wanted amateur radio communication room to be an integral part of the emergency communication response to any emergency or disaster. The current configuration is the result of their hard work. Their well thought out proposal gave the planners and engineers a clear picture what was needed and expected to compliment the current equipment at hand. The results were amateur radio antennas

located at the very top of the 150' tower. Until the microwave was put in place the amateur radio's 80', 100' and 150' antennas were the only antennas above 60'. The amateur radio communications room is larger with superior electrical capacity and grounding specifications than many of the RACES rooms throughout the state.

Homeland Security and disaster response capability concerns have caused the state, district and local ARES/RACES/SKYWARN leaders to re-evaluate their response plans and training. Currently Livingston County Public Service Corp has been revamping response plans to conform to State Police Emergency Management, RACES, and local Emergency Operations Plans.

The age of the previous amateur radio communication room plan and today's demand for a state of readiness demand a fresh look. A new five-year plan would let local officials and amateur radio personnel know in what direction the amateur radio communication room needs to go in-order to support ARES/RACES/SKYWARN activities.

When planning for any dispatch center personnel and technology must be integrated. It must be user friendly and it must be able to get the job done in a fast, efficient, effective way. Is the communication room?

1. Receptive to experienced and inexperienced operators.
2. What configurations best benefit the needs of amateur radio personnel in the field as well as Central Dispatch and management team in the Emergency Operation Center?
3. ARES/RACES has obtained three county donated Pentium 400 computers loaded with Windows-98 software, what and how should these computers be used.

FIVE-YEAR PLAN DISCUSSION

On Monday, December 1st & Monday December 8th at 7PM at the EOC conference room, we will have a brainstorming session on how to improve the amateur radio communication room for the future. The focus of all ideas will be to identify equipment, computer, software, and training needs of the amateur radio communication room. To get the most out of these sessions we ask you to come prepared with a list of well thought out items. Please also consider that there is a cost for everything, and that the EOC has very special safety and antenna restrictions in place. For instance, it is not possible for amateurs to climb the Central Dispatch tower to mount antennas, so costs to do antenna work needs to be considered. Another example is that the County must own all software used at the amateur radio communications room.

When creating your list, please consider the items you use the most in your ham shack, that's missing or "feels" wrong at the communication room. What feature would cause you to want to spend more time at the communication room? Please consider that the communication room must be able to function in all sorts of situations at a moment's notice. What might of worked in last weeks skywarn net, might not be efficient in the next scenario. However the room has limitations on how fast it can change its characteristics, so the design of the room to be flexible is a must.

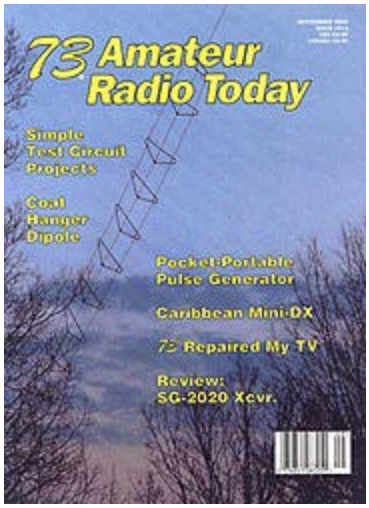
The first evening will be devoted to a short history of the radio room, followed by going around the room in circular fashion having each person name one possible upgrade for the room. This will continue until we run out of ideas. After we have gotten a good list of items, we will then start evaluating each idea, by first identifying criteria and a scale to rate each of the possible ideas. Next we will all rate each possibility by the decided criteria. At the second meeting we will evaluate the top ideas and discuss how to move forward with them.

So give it some thought, and join us on Monday to help define the future.

Bruce Pollock N8WWX, Neil K8IT, Rick KC8HEZ, Dave KE8Z, ETAL

Labyrinth from the air @ WB8AZP's house

73 Magazine Says "73 and QRT"



***The end of an era*: The September 2003 issue of 73 will be the last.**

NEWINGTON, CT, Oct 10, 2003--After completing 43 years of publication, *73 Amateur Radio Today* magazine is calling it quits. Plans to publish a joint October/November issue fell through this week, and the September 2003 issue was the magazine's last. According to self proclaimed "El Supremo and Founder" Wayne S. Green II, W2NSD, it was a simple matter of economics.

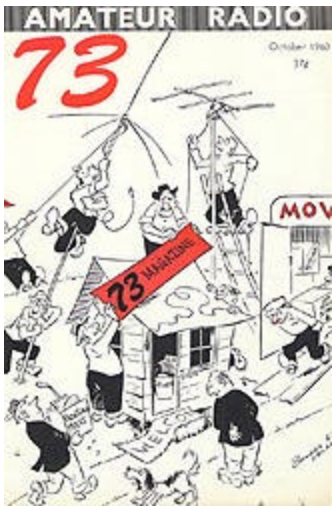
"After failing a last minute effort to collect on some larger accounts receivable we decided yesterday to throw in the towel--that the September issue will have to be the last," Green told ARRL October 9. "SK after 43 years of publishing."

The decision to pull the plug apparently did not come easily. After telling the League and others a few days earlier that *73* would cease publication because of insufficient advertising revenue, Green rebounded with plans to put out an October/November issue if *73* could collect the delinquent accounts. "With the hobby slowly dying, these are difficult times," he said. "But then, we've been through difficult times before."

Green's October 9 statement appears to be the final word on the matter, however. It also seems to leave remaining staff members and contributing editors--freelancers--out in the cold. One columnist reports not having been paid for several months of contributions.

Bob, K8VQC demonstrating Morse code using his hands!

LARK BUNNY



Volume 1, No 1: **The first issue of *73* appeared in October 1960. The magazine then was published out of what Green called "a small, dingy apartment" in Brooklyn, New York. The magazine moved its operation to New Hampshire a couple of years later.**

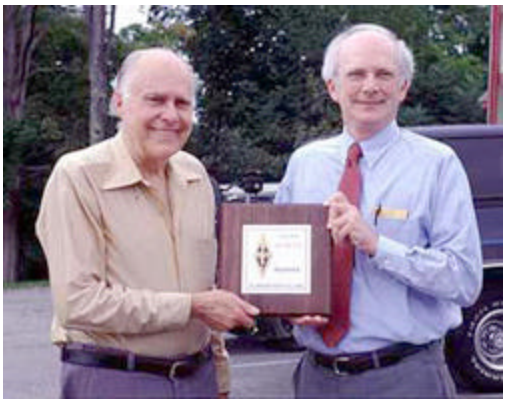
The first issue of *73* was published in October 1960 from what Green--a former editor of *CQ*--once described as "a small, dingy apartment" on E 15th Street in Brooklyn, New York. Late-night radio personality Jean Shepherd, K2ORS (SK), was listed as a contributing editor. Copies cost 37 cents apiece, and subscriptions were $3 a year. By the time of its demise, the larger-format *73 Amateur Radio Today*--which contained approximately the same number of pages as the first issue (64)--sold for $3.95 per issue on the newsstand, and an annual subscription was $24.97.

The magazine--which became virtually inseparable from Wayne Green himself--was a pioneer promoter of SSB, FM, solid-state, easy construction projects and the marriage of personal computing and Amateur Radio. His interest in microcomputing led Green in 1975 to found *Byte*, a magazine devoted to the then-nascent and largely do-it-yourself computer hobby. He sold the magazine three years later, and it continued publication until 1998.

Since the summer of 1962, *73* has been based in Peterborough, New Hampshire. After searching for bigger digs than what Brooklyn had to offer, Green determined that New Hampshire offered the best of all possible worlds, including cooler temperatures, cheap land, low taxes and access to the big city (Boston). For a time, the magazine flourished. At the peak of its popularity in the 1970s and 1980s, individual issues of *73* totaled more than 300 pages of ads, articles and commentary. Heading each issue was Green's inimitable "Never Say Die"--some would say never-ending--editorial, in which he rarely missed an opportunity to tweak the ARRL and his magazine competitors for their perceived shortcomings.

From day one, Green was the virtual heart and soul of *73*, but for a short time--from the spring of 1985 until almost a year later--he was absent from the magazine, which, at that point, he no longer owned. CW Communications had acquired *73* along with Green's computer publications a few years earlier. He returned in full control of the publication in its March 1986 issue, again vowing to turn the competition on its ear.

QST Editor Steve Ford, WB8IMY, says *73* published his first article as a freelance writer in the mid-1970s. "I was saddened to hear that *73* has ceased publishing," Ford said. "I was an avid *73* reader in 1971 when I was first licensed. Wayne's excitement about the growing amateur FM repeater phenomenon at the time was infectious."



While *73*'s Wayne Green, W2NSD, often has often been critical of ARRL in his editorials over the years, he remains a League member. In 1999, ARRL CEO David Sumner, K1ZZ, visited New Hampshire to present Green with his 60-year ARRL membership plaque.

Green's *73* editorials and regular round of hamfest and convention personal appearances--he was a Hamvention forum staple for years--originally concentrated on Amateur Radio and his ideas to improve, advance and grow it. In

more recent years, however, they've veered into conspiracy theories, cures for cancer, AIDS and other ailments and Green's proliferation of book titles on those topics. Green has been an occasional guest on the *Coast to Coast AM* overnight radio talk program once hosted by Art Bell, W6OBB.

In 1996, Wayne Green Inc filed for Chapter 7 bankruptcy, but the filing did not affect *73*. New Hampshire newspaper accounts at the time indicated that Green's wife, Sherry Smythe-Green, had purchased *73* two years earlier, and it's believed the magazine remained in her hands. The affected Green subsidiaries were Almost Free CDs, Uncle Wayne's Books, Creative Music, N.H. Language Systems and Green With Envy.

In 2001, *CQ* named Green to its inaugural Amateur Radio Hall of Fame, citing his roles as founding editor and publisher of *73*, former *CQ* editor/columnist and publisher of *Byte.*

Green said he would continue his essays on his Web site "for those subscribers who mainly bought the magazine for them." He told ARRL that no definite arrangements have been made yet about how to handle outstanding *73* subscriptions. He said he does plan at some point to make available on a Web site "articles of lasting interest."

CQ Publisher Dick Ross, K2MGA, called *73* and Green "significant contributors to the history of our hobby" for more than four decades. "There's no joy to be taken from the passing of *73* magazine," Ross said. "The loss of any publication serving Amateur Radio leaves all of us a bit poorer."

Through the pages of *73*, amateurs were able to access "a curious mixture of new ideas, not the least of which was the technology and fun of FM repeaters, which Wayne pushed relentlessly until the rest of the ham publishing community finally woke up," Ross said. "Thank you, Wayne, for 43 entertaining, informative, sometimes infuriating, and always interesting years of *73*. We'll genuinely miss it."

DX NEWS

ROTUMA ISLAND, 3D2. Vlad, 3D2VB/R has been QRV on 15 meters around 2300 to 0300z. QSL via UA4WHX.

SRI LANKA, 4S. Franz, DL9GFB and Joachim, DL9MS are QRV as 4S7FBG and 4S7JWG, respectively, until November 4. Activity is on 160 to 6 METERS meters using CW, SSB, RTTY and PSK31. They will use the callsign 4S7WAG in the Worked All Germany contest. QSL 4S7FBG and 4S7WAG via DL9GFB and 4S7JWG via DL9MS

UNITED ARAB EMIRATES, A6. Alex, A61AR has been QRV using RTTY on 15 meters around 1330z. QSL via UA6MF.

HAMVENTION SIGNS CONTRACT FOR 2004 SHOW AT HARA ARENA

Hamvention <http://www.hamvention.org> will be at Hara Arena near Dayton, Ohio, at least for another year. General Chairman Gary Des Combes, N8EMO, announced the one-show contract this week. The last Hamvention contract with Hara Arena was for five years. Des Combes also expressed confidence that behind-the-scenes management changes he's instituted since taking over July 1 will translate into success for "the world's largest Amateur Radio gathering and trade show."

"Overall, I think things are going very well," Des Combes said of progress toward pulling together Hamvention's 53rd show, which will take place May 14-16. "I'm confident we're going to be successful." The always popular annual gathering attracted slightly more than 22,100 visitors in 2003.

That figure was down by more than 10 percent from the 2002 crowd, and it marked the third year in a row of declining Hamvention attendance.

Des Combes is banking that the management team and "best business practices" approach he's put into place for next spring's show will turn things around. One significant change is a shift away from jobbing out Hamvention's production to paid professionals and returning to the strong reliance on volunteers that was a hallmark of past Hamventions.

"Some of the volunteers, quite frankly, felt they were not welcome," said Des Combes, who believes that moving away from an all-volunteer Hamvention was a mistake and created some unease within the organization. Under his regime, some volunteer staffers from the past now have returned to the fold, Des Combes said. Most of the volunteers for the 2004 show are from the sponsoring Dayton Amateur Radio Association (DARA) http://www.ceitron.com/dara/.

The new order at Hamvention means that Garry Matthews, KB8GOL, is out as the show's paid production manager (See "How Hamvention Happens"

<http://www.arrl.org/news/stories/2003/03/06/4/0004053.pdf>, by Rick Lindquist, N1RL, QST, Apr 2000). Matthews had served as the backstage impresario for more than three decades of Hamventions. Des Combes said he intends to spread out Matthews' former duties among several volunteers, saving money in the process. He's also establishing--and in some cases re-establishing--a set of committees responsible for various aspects of Hamvention. The Hamvention assistant chairman is Jim Nies, WX8F.

"We have to just work smarter and tougher," he said, adding that the management change will be invisible to those attending. "I don't think John Q. Ham will see anything much different."

While the show is still in the planning stages, Des Combes said one possible change would be to have the award winners' recognition ceremony during Hamvention itself. The recognition event has replaced the traditional Saturday evening banquet, done away with this year because of slack attendance.

A project management professional, Des Combes says he anticipates the all-volunteer approach will make it possible for Hamvention to more economically mount a show that's of the same quality or better than those of past years.

"I can tell you I am leading sweeping changes in how we operate Hamvention," he said. All of them, he says, will better serve the vendors, DARA and the amateurs who attend Hamvention. "I think it's going to be good for everybody."

Ticket prices for the 2004 Hamvention will remain at the prices established prior to Des Combes' taking over the reins. Advance tickets for all three days are $20 ($23 park-n-ride bus transportation). Tickets at the gate will cost $25. All less than 12 years of age are admitted free. Des Combes says arrangements are under way to enable on-line ticket purchases.

There's more information on the Hamvention Web site http://www.hamvention.org.

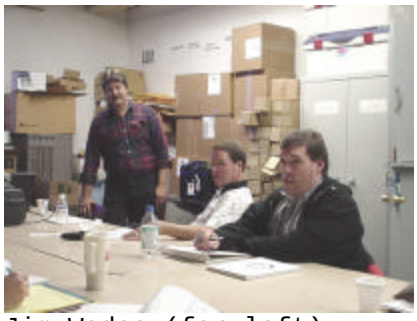
Want To Be The New SEC?

```
Bulletin from Michigan Section Manager
WA8EFK

With sincere regrets I wish to announce the
resignation of Jim Wades WB8SIW from the
post of Section Emergency Coordinator and
RACES Radio Officer for Michigan. This will
become effective November 30.  Jim has
served in this role for approximately one
year, and has accomplished much during such
a relatively short period.  As radio
amateurs are called upon by our served
agencies for more critical duties,
Jim has worked to develop specific training
programs with the aim of maintaining
exemplary performance standards for ARES /
RACES personnel, and worked closely with
his team of DECs and ECs to revise and
```

update the Michigan ARES / RACES Plan. Having several other amateur radio efforts underway, Jim has chosen to devote more time to his family. We certainly wish Jim well with his future plans.

Michigan amateurs wishing to apply for the SEC/RO position may express their interest by contacting N8EXV@arrl.org.



Jim Wades (far left)

A REAL BAD DAY!

TYPICAL SCENE ON MICHIGAN HIGHWAYS