

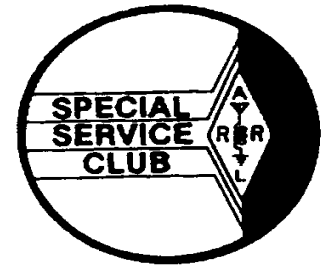


THE HAMCALL

The Official Newsletter of The Kentucky Colonels

Amateur Radio Club, Inc. Call: KY4BG
Bowling Green, Kentucky

Web page: [tp://www.angelfire.com/ky/kcarcl/](http://www.angelfire.com/ky/kcarcl/)



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PRESIDENT'S CORNER



President Mike McClure
KW4MAC

Hello Everyone,
Field Day 2008 was a fun event for our club. Chris (W4BGN) did a GREAT job of organizing, and getting everything in place for the big day. On Saturday June 28 we gathered on Reservoir Hill to begin setting up equipment and antennas. A Windom antenna was strung between two trees and fed with coax. Thanks Bill (KI4B) for tuning it up nicely prior to FD. Marshall (KC4WFN) brought the tower, and the 20-15-10 meter tri-band beam. That was fun putting together...twice! But Marshall color-coded the beam elements when we took it down, so maybe next year the assembly will be with fewer expletives! Thanks Marshall for getting that beam up and operational. Hank (W4HTB) and Mark (KJ4DGZ) brought their own rig to use, and Bill operated the club's new transceiver, the ICOM 706MIIg. Most of the equipment was operational by 2pm, and many contacts

were made on CW and voice over the duration of the event. At 6:00pm we stopped long enough to picnic with friends and spouses. The food was great and a special thanks to John Renfrow (KI4KFD) and Rafferty's for providing the tea, and those tasty ribs. Chris, Mark, James, and Mark's daughter spent the night at the site, and reported making many contacts (on the radio) after midnight. Sunday morning several of us gathered again to take down the antennas and pack away the gear. If you missed the event...you missed the fun! So, put a note on your calendar today to remind you of next year's Field Day.

I have received an email from Janarae Conway letting us know that that they have reserved us a table at the 2nd annual Disaster Preparedness Summit scheduled for Saturday September 13. This summit is sponsored by the BRADD Citizens Corps Council and will be held from 9:00am to 1:00pm at the Phil Moore Park in Alvaton, KY. This will be a great opportunity to showcase Amateur Radio's commitment to helping in times of emergencies.

I would like to have another meeting of the Board of Directors in August. I'll get input from board members at our July meeting and set a date that is ac-

ceptable to the majority. Please feel free to let me, or any board member know of any issues or concerns you would like us to address at the next board meeting.

In June our club participated in the Bowling Green Bike Club's "Tour de Cave" event. I received a letter from the Bike Club thanking us for our help with the event, and they enclosed a check for \$50 to show their appreciation. I've asked Hank to include the letter in the HamCall, so be sure and read the nice comments that were made about our club.

Finally, I'd like to introduce new officers that were elected at the June meeting.

John Reasoner (WA4QMQ) moved up to the President-Elect position that was vacated due Don Bush's resignation. John will assume the duties of President-Elect and Program Chair for the remainder of 2008. Please let John know if you have a program you'd like to present.

Ed Gann (N4HID) was elected Vice President.

Thanks John and Ed for your commitment and expertise to the club.

See you at our July meeting.

73

Mike KW4MAC

Letter from Bowling Green Bike Club

“Thanks so much to you and all your ham radio operators for helping out once again for the Mammoth Cave Bike Tour. You are a real presence, and especially valuable in an area where cell phones are flaky or worse! Here is a small token of our appreciation – but our thanks are HUGE! Chris Platt, Treasurer (Bowling Green Bike Club).”

The Bike Club sent us a check for \$50 which will go into our general fund. This is a good example of how Amateur Radio serves the community. Please consider volunteering at next year's Tour de Cave event.
Mike (KW4MAC).

Sec/Treasure Report

No Submission

KCARC FIELD DAY 2008

The following are a few of the pictures I took at Field Day I have sent all my pictures to Dean to post on the Club's Web Page

www.angelfire.com/ky/kcarc

I know that others took pictures also, so send them via email to Dean K4NQV to be posted.



Getting Started Marshall, Tim and Doc Brooks



Field Day Chairman Chris and Marshall.



Boy! These are good ribs



I told you it was Joe's fault

Thanks to Bill KI4B for restoration of the Club's tri-band beam Bill provided the following. See Bill at Friday's meeting for before and after pictures

Restoration of a Cushcraft ATB-34 Triband Beam

INTRODUCTION

The ATB-34 Cushcraft Tribander is considered an excellent classic antenna. The traps have smaller coils than the competition and contribute very little linear loading on 20 meters, leaving this rugged antenna nearly as large as a full size 20M beam. The successor, A4S Beam went to all-stainless hardware and fixed capacitors rather than lengths of RG-8. The former was a good improvement, while the latter is more suspect as a labor + material cost reduction than a quality upgrade. The KCARC antenna now has mostly stainless

hardware, while the capacitors were retained coax originals.
ALUMINUM SURFACES
Some 40 years or so of exposure have weathered the aluminum surfaces and the years of diverse service left a few deep gouges and tool gripping marks. The restoration began with complete disassembly, followed by several days of hand sanding with 120 grit papers, then hand sanding with finer 220 grit papers, finally ending with a good rubbing with steel wool. This also removed some black and blue and orange and red paint that evidently color-coded at one time the pieces for assembly in the field, exposing a much shinier surface. Going deeper after some of the gouges would have thinned the tubing excessively, still the beam looks new (until you look real closely.)

HARDWARE REPLACEMENT
Stainless steel U-bolts cost 4 to 5 times as much as plated mild steel ones. The former would be nice, but the latter lasted 40 years. So new "standard" U-bolts were obtained from Trustworthy and Ace Hardware and Lowes except for a couple of sizes which required a little hand bending to work. The exceptions were the large mast-to-boom U-bolts which I could not obtain from any of the above sources. Those four units were heavily wire brushed and painted with *Rust-oleum* aluminum paint which contains zinc to inhibit rust formation. I believe they will last for 40 more years.

The new hose clamps are entirely stainless, including the worm gears. They have screwdriver or wrench adjustment capability, and a 5/8" nut driver works as well on all but the boom clamps which require a bit more torque than someone over 39 can exert with just a nut driver.

FEEDING THE DRIVEN ELEMENT

The direct coax feed was received with one self-tapping screw and another standard threaded screw

fully through the tubing. I wondered how the antenna ever worked last field day. Lady luck was with us! The holes were wallowed out with stripped threads, and the manufacture's intent for the connection screws to press against the wall of the tubing for contact was obviously impossible due to holes being all the way through the tubing inside the insulating sleeve. Initially the thought was to re-tap the sleeve and rotate some fresh aluminum tubing within the sleeve and under each hole, as per the manufacture's method. Rotating the tubing would probably have destroyed the metal. I suspect that the tubing was originally hydraulically pressed into the sleeve and could have even been knurled as well. The original holes were simply filled with RTV- Silicon to be water tight, and the no-hole connection points were relocated just beyond the sleeve edges on the driven element itself. Underwriters and NEC approved solder lugs were soldered to two 6" lengths of RG-8 center conductor for connections from balun-to-driven element. Short lengths of shrink tubing were used at each lug to add strength and support at the soldered connections. These commercial lugs have tin based plating surfaces to ensure quality connections to both aluminum and copper [or brass] surfaces, without dissimilar metals galvanic corrosion.

AN EFFECTIVE BALUN

The factory ATB-34, by the way, originally included a balun feed. Our bright red donated balun originally was designed for in-line insertion with SO-239 connectors on both ends. A connector was removed from one end, and the RG-8 type leads were direct soldered to the heads of new brass bolts. Once heavily soldered, the studs were fed from the inside through drilled holes in the balun enclosure, using hemostats down through the SO-239 hole. A short prayer and many tries eventually worked!

The SO-239 was fitted with a Cap-plug and reinstalled unconnected, but perfect for re-sealing that end of the balun from moisture. Finally two stainless hose clamps were used to attach the balun to the boom. These connections, in fact ALL beam electrical connections, including each nested tubing connection in the elements were lightly coated with a chemical anti-oxidizing paste to ensure solid, long-lasting conductivity. The balun, by the way, has RG-8 or equivalent coax folded three times and passed through three ferrite tubes, between the SO-239 and the brass studs. I am sure it must be effective against any RF attempting to flow on the outside of the coax.

TUNE UP AND TRY OUT

The assembled ATB-34 was elevated to the height of a pair of saw horses. The elements were all adjusted to factory specified lengths with Marilyn on one end of the tape and me on the other. SWR data was collected using an MFJ-269 and turned out pretty good for "right out of the box". The driven element largest diameter tubing, which affected all three bands, was progressively reduced by about 6" to improve 20 meter and 10 meter SWR readings. Next I elevated the beam to basket ball goal height (around 10 feet for you non-athletes) and the MFJ readings showed I needed to undo all my previous length adjustments. So I have once again learned for the umpteenth time that you cannot tune a beam near the ground. You would think Marilyn would have at least remembered this time-tested fact! So the beam is back to original manufacturer length specifications, but a caveat is that the new driven element feed method may require an inch or two length change. As is, SWR is less than 2:1 on 20 and 15 meters at the band edges, and would noticeably improve when elevated to the minimum suggested height of 33 feet. Many thanks, to Hank Cantrell, W4HTB, Club leaders and espe-

cially to Marshall Love, KC4WFN, for his years of care-n-feeding of this beam, for trusting me with this project. It was a labor of "love" for me too, and an honor and a privilege to do a second ATB-34.

Bill, KI4B

7/13/08

The following article is by John Meyers NB4K A must read!

VOLUNTEERING

Excerpts taken from the ARRL 1988 Communications Manual

A volunteer; A person who performs or offers to perform a service of his or her own free will, A person who renders aid, performs a service, or assumes an obligation voluntarily. Do you fit this description?

As the Great Lakes Division Legislation Action Coordinator (DLAC), I have asked the State Legislative Action Coordinators (LAC) when making first contact with prospective Legislative Action Assistants (LAA) to make sure before they accepted the position that they were asked to take, to read the description before they make a decision. In accepting the volunteer position they will be expected to do the work, knowing that circumstances do arise and that make it impossible to carry through. But all in all we all are expected to do the job we accept.

The LAC has asked you to take this position because they feel you can and will do the work involved. They have asked you to take this position because they need it done and feel you were the best person to do it. Volunteers are the lifeblood of the ARRL. They are difficult to find, more difficult to keep, and at times, we all can be difficult to work with. Volunteers come in a wide variety of shapes, colors, sizes, backgrounds, skills, experience, and levels of motivation. They have their own reasons for participating and their own specific needs which must be met if they are to continue to volunteer. Their needs, abilities, and accomplishments determine the ultimate success or failure.

We must remember that volunteers are human beings with human needs, goals, attitudes, abilities, strengths and

weaknesses. Since volunteers are the basic resource that we will be working with, it will be to our advantage to get to know each other as well as possible. Generally, volunteers will do precisely what they are asked to do - no more - no less. As each individual has his own likes and dislikes, it maybe necessary to demonstrate the full value of some assignments which are important though unpopular. Volunteers must believe in what you are asking them to do is really needed. Volunteers don't like to be underutilized, and tend to disappear when kept cooling their heels for a significant length of time. They will work for long hours under the worst conditions as long as they can see the need for it. Most will do anything you ask as long as they're treated properly. If you mistreat or abuse them, they may not volunteer their help again.

It would be physically impossible to discuss in this article every possible reason why people join a volunteer group. Generally speaking, they volunteer and join to satisfy a personal need. The majority of your volunteers though joined out of a need they have to serve the public or hobby in a way they best know how: as communicators. These are the volunteers you should direct your efforts toward. You've got to find out what their needs are before you can attempt to satisfy these. In short, the best way to find out why your members volunteered is to ask them!

As volunteers they have a right to expect courteous, considerate, fair and impartial treatment from the leadership. Courtesy is always in order; rudeness will cost us dearly. In addition to learning and compensating for their weaknesses and being tolerant of their faults, you must also consider their feelings. Don't forget that you are taking precious time from their families. They also have the right to expect you to make a reasonable effort to learn and apply the skills and techniques of communications management. You will be expected to make mistakes -- admit them openly, and learn from them as you grow into your new role. You will also be expected to keep them informed as to what is happening and why. Unfortunately, some members will expect much more of you than they have a right to expect, and often more than you can do. They

may expect you to change situations over which you have no control, force other volunteers to change their habits, provide them with privileged treatment or status, fire a useful assistant because they happen to dislike him, or other equally inappropriate actions. In short, they will tend to forget that you deserve the same treatment from them that they expect from you. Each member has different job demands and family requirements, as well as other outside interests.

John D. Meyers, NB4K
Great Lakes Division
Division Legislative Action Chairman

Thanks John

As most of you know by now, this past week end was quiet eventful. The Kentucky Space Grant Consortium picked Bowling Green to launch their first near Space balloon. I was invited to participate along with Bill Brown WB8ELK who is an expert at high altitude balloon launches.

Several of our club members attended the event July 14 at the Warren County Airport.

We are fortunate to have the Director of the program here at WKU that is, Dr. Karen Hackney.

We all remember the great programs that her late husband Richard N1ASA has given for our club.

Karen will be our guest speaker at our July Meeting July 18th.

She will have pictures of the event and I will bring the ATV package that was flown successfully.

I would strongly recommend that you invite others and the young people you know to attend. This is the kind of "good stuff" that kids like and become interested in Amateur Radio.

I really enjoyed seeing the students from around KY universities working together toward designing and launching their own satellite next year.

Many of you listened and talked through the Simplex repeater on 144.34mhz. I heard checkings from Ohio, Ill, Ga.

Here are some pictures taken during the launch ...



Bill inflating the balloon



Some of the coffee crowd , Bill, grandson, John and Leon



Up Up and Away....Liftoff



View from 80,000 ft live pic sent to our receiver via 1258mhz fm atv.



Chris inspects EM Comm. van

If anyone has more pictures and video files I would like to have a copy of them.

Reminder

The month is half over and how are you doing with the contest..... ???
Better get busy .

Coming Events and Hamfest

July 19th Swapfest Central Ky ARC
Campbellsville KY
Talk-in 146.64mhz rpt

Aug 10th Lexington HF (Lawrence-
burg) BlugrassARS.org

Aug 16th & 17th Huntsville HF
Huntsville AL.

Aug. 15th KCARC club meeting

Sept 13th Disaster Preparedness
Summit at Phil Moore Park

Sept. 19th KCARC Annual
Picnic/swapnite.

NEXT KCARC CLUB MEET- ING: July 18th 7 pm

**BG Police Dept. Community
Room**

**Program- Dr. Karen Hackney
Dir. Of Ky Space Grant Con-
sortium**

Traders Net -

**Each Monday 1900 cst
147.330 rpt. Tone 107.2**

KCARC Net -

**Each Tuesday 1900 cst
147.330**

4th ARES NET MEETS 7 NIGHTS A WEEK

**AT 9 PM LOCAL TIME. Fre-
quency: 147.165**

**MHz. W4WSM Repeater.
Secondary**

**Frequency: 147.330 MHz.
PL Tone 107.2**

KA4CFW Repeater

**ITEMS OR WANT ADS FOR
HAMCALL - DEADLINE IS
THE 10TH OF EACH MONTH.
SEND To: HANK CANTRELL –
W4HTB
905 WRENWOOD DRIVE
BOWLING GREEN, KY
42103**

OR EMAIL: w4htb@insightbb.com

For Sale:

2M/70CM Vertical Model UV-200
\$55 new
Shure 444D mike
KI4DPW Asbury Fugate
270-777-3534

Beam – 6 Meter 2meter and
440mhz. 3Ele on 6 horz.
5 ele on both 2m and 70cm
vert pol. \$150
N4QWZ Todd
toddp12@comcast.net

KY4BG Repeater News-

Tom Williams WB4SCV retuned
the duplexers and increased the
output power level to 30 watts out
of duplexers. This caused a PS
failure thus an external power sup-
ply was installed and repeater
working fine.

Hopefully we will soon be able to
add Echolink as an input.

KY4BG 147.060 tone 156.7

2008 KCARC OFFICERS

President: Mike McClure

KW4MAC

Vice President: Ed Gann

N4HID

Sec-Treas: Dr. Claire Rinehart
KF4IWX

Pres-Elect: John Reasoner
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