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Harrisburg Radio Amateur's Club Newsletter

HRAC meets the second Wednesday of each month at 7:00 pm at HACC, Shumaker Public Safety Center, Gate 5 on Industrial Road in Harrisburg (Elmer Time starts at 6:30PM)

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From The Desk of The President.....

Well, it looks like winter is finally over (for now) and the hamfest season has begun. I attended the York Hamfest a few weeks ago and despite the cool, windy weather, there seemed to be a very good turn-out, in spite of the fact that it was their first year at a new location. I hope that their event will continue to grow and prosper.

And speaking of hamfests, our own Firecracker Hamfest is just 65 days away. There is every indication that this will be another outstanding event, both for our club and for the ham community in general. We have some interesting speakers lined up as well as ARRL representatives from both the Eastern PA Section and the Atlantic division. If you have any comments, cudos, gripes, complaints or questions that you would like to present to the ARRL, don't be bashful about sitting down with one of those gentlemen and making it known. And if you want to get down into the trenches, we can always use more help in preparing and implementing the event. Feel free to drop me an email if you're interested.

As the warmer weather approaches, we will have opportunities to get out of the shack for a while and operate in the field. That might be a remote meadow in the middle of a state forest, a summer cabin, the park down the street or simply your own back yard. If you're looking for a change of pace, there's nothing like a change of location to sharpen up your game. Whether it's operating from your back porch or searching for a hidden transmitter in the woods, try moving out of your comfort zone and expanding your horizons a bit.

The club has just taken delivery of a six-foot by twelve-foot enclosed trailer that we will be outfitting as a mobile communication center. This should eliminate a lot of the set-up tasks involved in field day and give us a good tool to promote amateur radio at special events as well as field day. Of course, this will require a good bit of work to put it all together. There will be more information posted in the near future about work days.

.73,

Tim KB3OZA



April Meeting Minutes

The April 8, 2015 meeting of the Harrisburg Radio Amateurs Club was called to order at 1905 HRS by the president, Tim (KB3OZA).

Secretary Report - The minutes of the February meeting were published in the newsletter. Chuck (N3WL) made a motion to accept the minutes seconded by Dave (N3DSA). Motion PASSED

Treasurers Report - Joe (KQ3F) presented the treasurer's report. Rick (K2RBT) made a motion, seconded by Richard (KB3YRC), to accept the report. Motion PASSED

Equipment Trustee – No Report

Repeater – Steve (KA3PDQ) gave the go-ahead to put up the UHF repeater.

VE Committee – The next test session will be April 18th

Membership Committee – No Report

Newsletter – A style guide for submitting articles to the newsletter is being developed

Web page – No Report

EMCOMM –The TMI dill will be April 14th

DXCC –Next mailing will be at the end of April.

Entertainment – Tonight's entertainment was on sound equalizers. Next month will be on MMSTV.

Elmer Time –No Report.

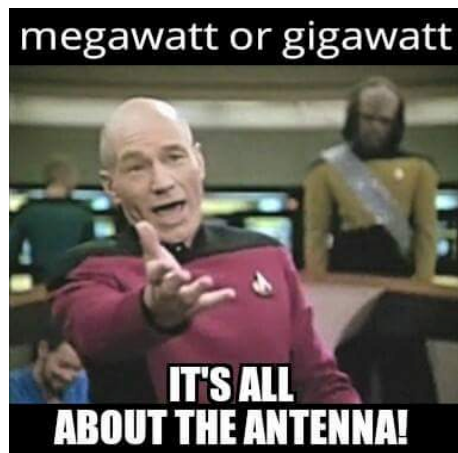
Old Business – The club is still looking for a trailer to create a mobile operating station.

New Business – Nick (AA3T) is open to suggestions regarding Field Day.

Good of the Club – Tim (KB3OZA) reported there will be a Bike ride and the horse ride at Wisner State Forest, for information, email Paul Coleman, WQ3P.

Adjournment – There being no further business to conduct, Rick (K2RBT) made a motion, seconded by Glen (K3SWZ), to adjourn. Motion PASSED

Meeting adjourned at 1940 HRS.



Weekly HRAC Net

The weekly information net is held every Wednesday at 8:00 PM on the 146.760 repeater, except for the second Wednesday of the month, which is club meeting night.

Please send any articles for the newsletter to hrac.newsletter@Yahoo.com

The next VE Testing session will be on Saturday June 20, 2015 in the HACC Shumaker building at Gate 5 on Industrial road, Harrisburg, PA. Pre-Registration is required. Please arrive by 8:30am

Contact: Steven Gobat [717-938-6943](tel:717-938-6943) Email: KA3PDQ@arrl.net.

Well it was a small session with only (2) exams administered. Both were Techs and we had a 50% pass rate.

I mailed the package to Arizona on Saturday via priority mail. Well it must take less time to get to Arizona than it does to Maryland. The package has been received and the license already granted!

Thanks all who helped out on a beautiful Saturday.

- KV3Q Gary
- KE3YC Bill
- N3FWE Steve
- KB3OZA Tim
- KA3PDQ Steven

A Very Special THANK YOU to Pete, KB3WIH for promoting the club to the applicants.

Steven, KA3PDQ

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I welcome subjects for the Elmer Time sessions from anyone, including our seasoned radio amateurs. Subjects should be something to expand on questions in the license exam that may need a clearer understanding. Either email the ideas to me at Terry@DJTerry.com, or text at 717-979-9515.

Tnx 73

Terry WB3BKN

Two Great Amateur Radio Events in October

Don Kunst, W3LNE



The New Birth of Freedom Council will hold their Wizard Safari October 2, 3, 4 at 1073 Accomac Road, Hellam, PA, York County. This event is only held every 4 years and is the oldest and largest Scouting event run by the New Birth of freedom Council.

<http://newbirthoffreedom.org/>

You may remember at the Gettysburg 150 I had set up a Ham Radio station near the medical tent for Scouts and Scouters as well as our Amateurs to talk around the world. I have received permission to plan to do this again at the Wizard Safari, but I need Amateurs to help staff it. The goal will be to use the K2BSA/3 call sign as a special event station and let the world hear about the great time we are having at the Safari and to introduce Scouts to Amateur Radio, the Merit Badge and have some fun. I especially hope that our Scouts and Scouters who are

Amateur Radio Operators will support this event. In keeping with the event I hope to have Telegraph demonstration.

If you or your club are interested in helping, please contact me by email.



The 6th Annual JOTA, Jamboree On The Air, is October 16, 17, 18 in Upper Dauphin County. This weekend of camping gets bigger every year, , with some exciting new activities this year. We still will have the Radio Merit Badge and tons of fun. If you haven't attended this event in the past years, it is the one to put on your calendar for the fall. <http://www.k2bsa.net/jota/>

Please let me know if you are interested in attending or staffing this great weekend. This is open to all Troops and Venture Crews in the Council.

I can be reached via email at: w3lne@arrl.net or by phone at: 717 712-9116

R(adio S)hack

*For those of us who still are members of the Radio Shack battery for life club; OR Who still own Radio Shack Tubes that are " Guaranteed for Life".

I have the following info for you:

A friend of mine has a daughter in NYC who worked on the Radio Shack bankruptcy. It's all over ! For fun, I asked him to ask her about our radio tubes Guaranteed for Life. Her reply was "What is a tube?" I shall give her a R.S. tube to put on her desk.

We are all S.O.L.

But My SX-100 still runs and glows.

73 Dave W4JVN



FCC Proposes to Permit Amateur Access to 2200 and 630 Meters

Amateur Radio is poised to gain access to two new bands! The FCC has allocated a new LF band, 135.7 to 137.8 kHz, to the Amateur Service on a secondary basis. Allocation of the 2.1 kHz segment, known as 2200 meters, was in accordance with the Final Acts of the 2007 World Radio-communication Conference (WRC-07). The Commission also has proposed a new secondary 630 meter MF allocation at 472 to 479 kHz to Amateur Radio, implementing decisions made at WRC-12. No Amateur Radio operation will be permitted in either band until the FCC determines, on the basis of comments, the specific Part 97 rules it must frame to permit operation in the new bands. Amateur Radio would share both allocations with unlicensed Part 15 power line carrier (PLC) systems operated by utilities to control the power grid, as well as with other users.

In addition, the FCC has raised the secondary Amateur Service allocation at 1900 to 2000 kHz to primary, while providing for continued use by currently unlicensed commercial fishing vessels of radio buoys on the "open sea."

The allocation changes, associated proposed rules, and suggested topics for comment are contained in a 257-page FCC Report and Order, Order, and Notice of Proposed Rule-making addressing three dockets - ET-12-338, ET-15-99, and IB-06-123 - which affect various radio services in addition to the Amateur Service. The FCC released the document on April 27.

With respect to the new LF sliver band at 135.7-137.8 kHz, the FCC concluded that Amateur Radio and PLC systems can coexist there. "Since the Commission last considered this issue, amateurs have successfully operated in the band under experimental licenses without reported PLC interference," the FCC said. "We are also encouraged by the fact that numerous fixed radio navigation beacons, which operate at much higher powers, share spectrum with PLC systems without reported interference."

In 2003 the FCC turned down an ARRL proposal to create a 135.7-137.8 kHz Amateur Radio allocation, after utilities raised fears of a clash between Amateur Radio and PLC systems operating below the AM broadcast band. This time, the FCC said, "It is clear that we will have to establish appropriate requirements for amateur use of the band, if we are to ensure compatibility with PLC systems." WRC-07 set a maximum effective isotropic radiated power (EIRP) limit of 1 W, which is what the FCC is proposing.

The FCC said it "explicitly" rejects the suggestion that it choose one use of the spectrum over the other. "Our objective is to allocate spectrum on a secondary basis to amateur stations in a manner...compatible with existing PLC systems," the FCC said. "However, we also expect to permit amateur operators to make use of the allocation in a manner that is less burdensome and more productive than they are currently afforded under the experimental authorization process."

The Commission said that if it concludes, after considering the record, that Amateur Radio and PLC systems cannot coexist, it would "defer the adoption of service rules, and amateur users will have to continue to use the experimental licensing process to operate in the band."

With respect to the proposed 630 meter allocation, the FCC has proposed limiting amateur stations in the US to a maximum 5 W EIRP. In the US, 435-495 kHz is allocated to the Maritime Mobile Service on a primary basis for federal and non-federal use, and to the aeronautical radio navigation service on a secondary basis for federal use.

The ARRL submitted a Petition for Rule Making in 2012 asking the FCC to allocate 472-479 kHz to the Amateur Service on a secondary basis and to amend the Part 97 rules to provide for its use. Several countries, including Canada, already have access to the band. The ARRL has pointed out that during its extensive course of experimentation in the spectrum around 500 kHz, no interference reports have been received.

The FCC said that the "cornerstone" of the technical rules it's proposing for both bands is "physical separation between amateur stations and the transmission lines" carrying PLC signals. "Such a separation, in conjunction with limits on the amateur stations' transmitted EIRP and antenna heights, will enable PLC systems and amateur stations to coexist in these bands," the FCC asserted. "In addition, we propose to limit amateur stations to operations at fixed locations only, to ensure that this separation distance can be maintained reliably."

The FCC said it wants to hear from both PLC system users and radio amateurs regarding technical requirements it would have to put into place to permit both users to operate comfortably and without compromising the PLC systems. The Commission suggested that other requirements might include limits on antenna heights, transmitter power limits, and operating privilege limits based on license class or mode. The ARRL will file comments in the proceeding.

The FCC will accept comments for 60 days following publication of the Report and Order, Order, and Notice of Proposed Rule-making in the Federal Register. Reply comments would be due 30 days after the comment deadline.

Long Delayed Echoes

Looking back through the rich history of the Harrisburg Radio Amateur's Club

Compiled by Mark Robinson WB3JIS

Early spring 1996 saw flooding in our area as the snow melted, resulting in Red Cross evacuation centers being opened and manned by local ham operators including yours truly. I ran across this article in the March 1996 issue of the club newsletter that I happened to pen.

Selecting one of my own articles also indicates I'm getting low on material and I want to avoid "jumping the shark" (see http://en.wikipedia.org/wiki/Jumping_the_shark if you are too young or too old to get the reference!). This will be my last Long Delayed Echoes installment. In addition to material becoming thin, a recent job change entailing more travel, marrying off a daughter, involvement in a church plant, and a number of other personal pressures are forcing me to cut back on my areas of involvement and unfortunately this monthly newsletter contribution is one casualty. I've enjoyed rifling through my briefcase of personal club materials and your contributions since the first article in April 2012 and hope you've enjoyed reading these 38 installments.

Lastly, if you share my interest in our club's deep history I encourage you to pick up your keyboard and continue this column. I am sure Editor Terry would appreciate the material in this excellent newsletter he is producing.

73 de Mark WB3JIS

WHAT I OBSERVED AND LEARNED DURING OUR FLOOD RESPONSE

MARK ROBINSON, WB3JIS

- My "emergency" car battery does little good if I don't know its charge state.
 - I need a quick check list of what it takes to put a 2 meter station on the air.
 - While many HRAC members may not make all the meetings and activities, they come through when you need them - when it really counts!
 - A good repeater should not be taken for granted.
 - Good operating practices are quickly learned/remembered when one or two good operators get on frequency.
 - While most of my services might have been replaced by cellular telephones, the battery in the shelter manager's phone went dead before the first shift was over, and a replacement was miles away.
 - Red Cross personnel appreciated the weather updates I copied from 162.55. It was something proactive that helped them.
 - The evacuees and the staff both appreciated seeing a new face. A smile and a pleasant word meant much under the circumstances.
-

Personalized Items Make the BEST Gifts!

(And who says you can't give yourself a gift...)

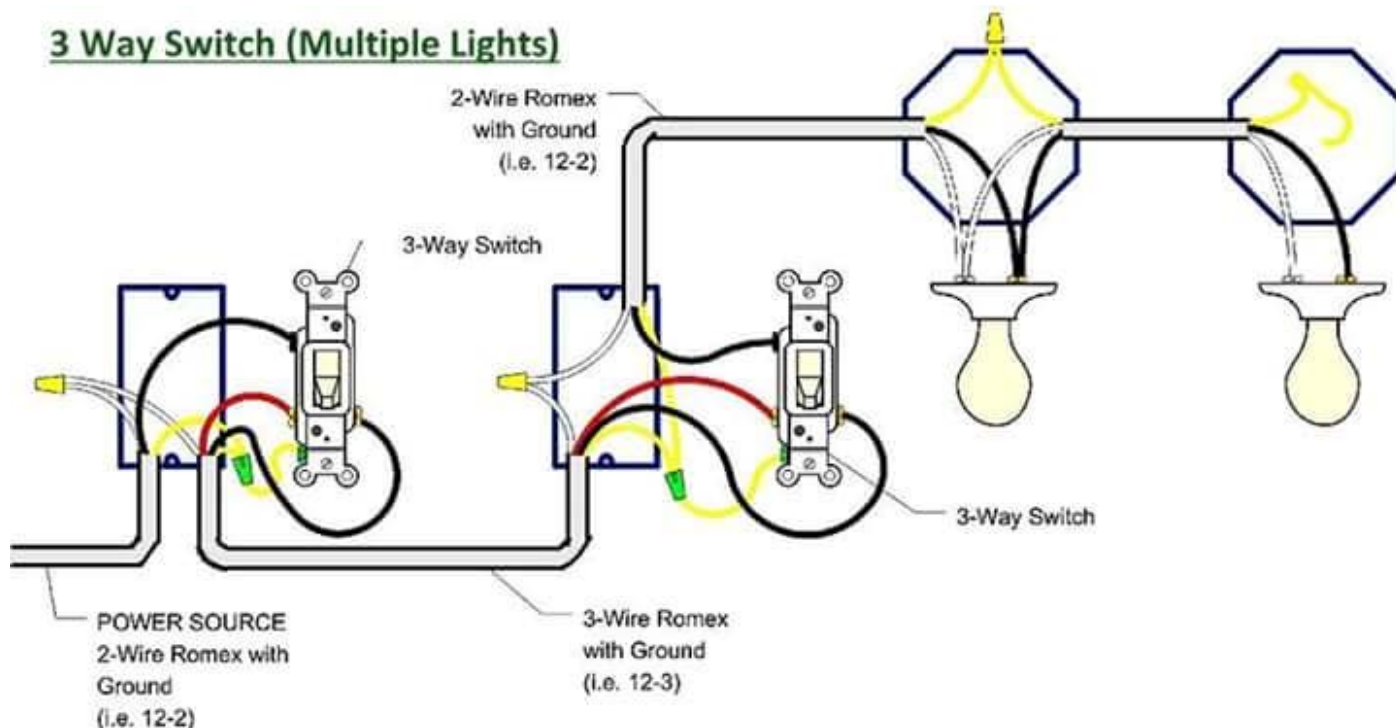
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3 Way Switch (Multiple Lights)



HOW TO READ A



RESISTOR

Hold the resistor with the lonely stripe (usually shiny) to the right.

Now read the stripes from left to right:

The first two stripes stand for digits of a number, and the third stripe stands for the power of ten by which to multiply that number. The lonely stripe represents the margin of

For example:



Stripe one: red = 2 Stripe two: brown = 1
 Number to multiply = 21
 Stripe three (multiplier): orange = x1000
 Resistor value = 21 x 1000 = **21 K Ω**

	Digit Value	Multiplier Value	Quality Value
None			$\pm 20\%$
Silver		.01	$\pm 10\%$
Gold		.1	$\pm 5\%$
Black	0	0	
Brown	1	10	$\pm 1\%$
Red	2	100	$\pm 2\%$
Orange	3	1000	
Yellow	4	10000	
Green	5	100000	
Blue	6	1000000	
Purple	7	10000000	
Grey	8		
White	9		

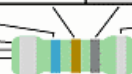
INDUCTOR COLOR GUIDE

Result Is In μH

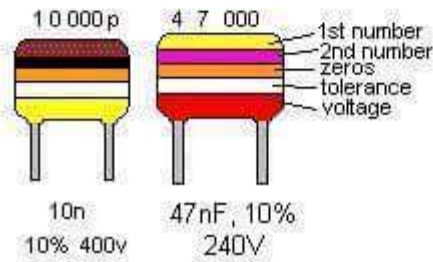
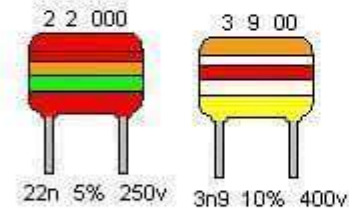
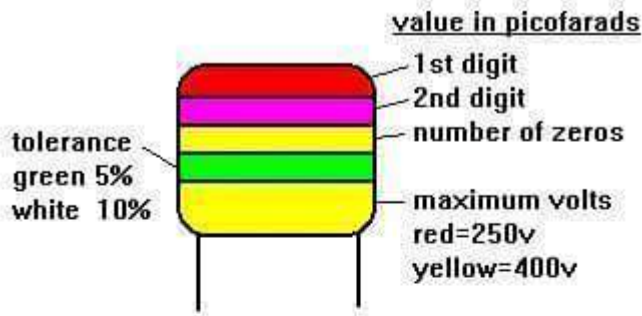
4-BAND-CODE $270\mu\text{H} \pm 5\%$

COLOR	1st BAND	2nd BAND	MULTIPLIER	TOLERANCE
BLACK	0	0	1	$\pm 20\%$
BROWN	1	1	10	Military $\pm 1\%$
RED	2	2	100	Military $\pm 2\%$
ORANGE	3	3	1,000	Military $\pm 3\%$
YELLOW	4	4	10,000	Military $\pm 4\%$
GREEN	5	5		
BLUE	6	6		
VIOLET	7	7		
GREY	8	8		
WHITE	9	9		
NONE				Military $\pm 20\%$
GOLD			0.1 / Mil. Dec. Pt	Both $\pm 5\%$
SILVER			0.01	Both $\pm 10\%$

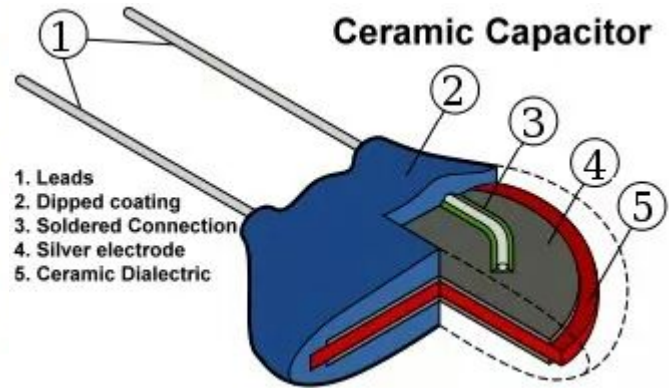
Military Identifier



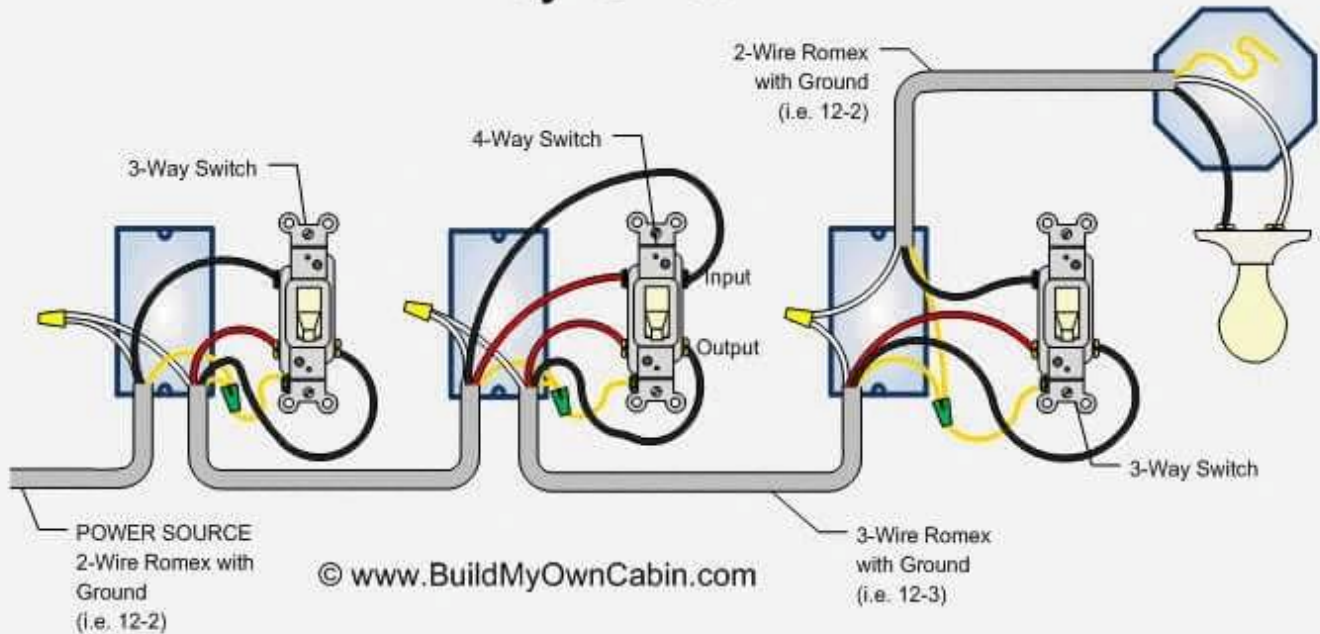
$6.8\mu\text{H} \pm 10\%$
MILITARY CODE



Black	0
Brown	1
Red	2
Orange	3
Yellow	4
Green	5
Blue	6
Violet	7
Grey	8
White	9



4-Way Switch



Monthly Ham Radio Lunch

The last Thursday of each month there is a Ham Radio Lunch at the "Old Country Buffet" at noon (unless it is a major holiday).

This restaurant is located on Route 22 in Colonial Park in the vicinity of Value City Furniture, K-Mart and Home Depot.

It's a great way to meet new people!

From the Editor's Desk

I have been having problems with the gas lines on my Chrysler Town and Country. For an unknown reason the lines around the fuel filter would begin to shoot streams of gas. This past week I found out why. The reason is grey with a bushy tail. After repairing it again, I covered the lines with poly loom. Hopefully the problem is solved. Thanks for the articles that all have sent.

I welcome and encourage submissions to be published. I am just asking for you all to understand and follow a few guidelines. As an editor, my job is to compile stories as submitted to me, and to check for misspelled words, and grammar problems. Your job is to submit a ready to print article. If you have pictures, please add them to your email and they will be placed into the article. If your story is only fragmented sentences, or just copy points, it will be returned to you to correct. This is not because I am a bad guy, but because it takes valuable time to decipher the meaning intended. Please write any articles from the viewpoint of a reader who knows absolutely nothing about the subject. This includes including the meanings of acronyms.

Please do not wait until a day before publication date to submit things. If that is done, it will not be included. Most, if not all regular information is known by the middle of any month, and should be submitted immediately. If you are writing an article about an event, write it while the event is fresh in your mind, and submit it. Don't wait until the end of the month. Send articles to HRAC.newsletter@Yahoo.com.

Tnx 73

Editor: Terry WB3BKN

Proofer: Jim WF3J



HRAC MEMBERSHIP APPLICATION

MAIL TO:
Tim Lehman (KB3OZA)
PO Box 453
Hummelstown, PA 17036
717-982-8550

Make checks payable to HRAC—Membership is \$15.00 (\$7.50 if over 65) per year.
Family Membership is \$25 (Hams must reside in the same household)
Dues end December 31st.

NAME _____ CALL _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

PHONE _____ E-MAIL _____

ARRL Member: Y _____ N _____ * YEAR FIRST LICENSED _____

SIGNATURE _____

I agree to abide by the guidelines of the membership and The Harrisburg Radio Amateur's Club, Inc.



He said his name is RJ W3HP, but at times he sounds like me.