



Celebrating Our 25th Anniversary!

Volume XXVI, no 10

<http://www.w8lky.org>

October 2012

Serving the Tri-County area since 1986

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Elections Are Coming Up

Don't forget that club elections are coming up this month. Most folks spend time running from office, rather than for it. Will you be the one to turn the tide?

You can choose to fill a seat at the club meetings, letting others do the work, or you can take an active role in YOUR club. It's your choice.

The running joke from years past was officers weren't elected, but railroaded. **That attitude was unacceptable then, and is unacceptable now!**

Think of this as an opportunity to give back to the local community. As per our Bylaws, we will be voting, and/or reaffirming the positions of Vice-President, Secretary, & Treasurer, as well as one Trustee.

We will NOT be reaffirming the position of President. See pg 2 for more information.

If you are interested in throwing your hat into the ring, you can either inform one of the current Trustees, or wait till the night of the club meeting. Nominations will be taken from the floor.

Duties of officers is spelled out in the bylaws, which were sent to all paid-up members last month. An excerpt is reprinted on page 8 of this issue.

Board Meeting Change

After the August board meeting, it was decided to return to Don Pancho's Tex-Mex Café for the time being.

Reason being, the meals at the Alliance Family Restaurant were not up to their usual high standards.

It turned out to be a lucky thing that we chose to move for the September board meeting. According to the Alliance Review, the Alliance Family Restaurant closed around labor day.

So, the October board meeting will be at Don Panchos, at 6 PM. All are welcome to attend.

Our Next Meeting

will be on Wednesday, October 10th, 2012.

No speaker this month, due to club elections

At 6 PM on meeting night, please join us for dinner at

Don Panchos Tex-Mex Cafe

2105 W. State St,
Alliance

Officers

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Homeworth, OH 44634

Editor

John Myers, KD8MQ
(See above)

Rambling

By John, KD8MQ

Welcome to the October issue of the Zero Beat.

This month, I actually did a bit of the newsletter in advance. It seems strange to open the Zero Beat publisher file, and have some of the work finished already.

Every month, I promise myself that I'll get the newsletter together in advance, so I don't have to work quite so frantically at the last minute.

Then, each month turns out the same. I guess it's human nature.

Elections

OK, here's the mandatory part of the October newsletter where I admonish you to get off your butt, and consider giving something back to your club. There are all kinds of excuses to sit on the sidelines, and let someone else serve as an officer, or trustee. For instance:

"I don't have the time"

Do you really not have the time? I'll compare schedules with you if you'd like. Serving as a club officer doesn't take as much time as you think.

"I've already done my time"

OK, this one's not bad, but your experience is exactly what's needed right now. We are entering our 2nd 25 years as a club (or 2nd 75 years, depending on which timeline you go by; more on this soon). We are attracting the attention of Hams around

(Continued on page 5)

Meetings

The Alliance Amateur Radio Club meets on the Second Wednesday of each month. Check the meeting announcement on page 1, for the location. Talk-in is on 145.37 ®. Meetings begin at 7:30 PM. Visitors are always welcome.

Nets

Thursday is our "net night," with the following nets held:

Ten meters

CW @ 8PM on 28.100 MHz
SSB @ 8:30PM on 28.400 MHz

2 meters

9 PM on 145.37 MHz

The Homeland security Net meets on the last Tuesday of the month, at 8:00 PM, on 147.51 simplex

Internet

Web: www.w8lky.org

E-mail: W8lky@w8lky.org

We are also on Facebook!

Newsletter Information

The Zero Beat is a publication of the
Alliance Amateur Radio Club
P.O. Box 3344
Alliance, OH 44601

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You can submit material to the Zero Beat via e-mail to kd8mq1@gmail.com

September Minutes

September 12, 2012

The regular meeting of the Alliance Amateur Radio Club was held on September 12, 2012 at 7:30 PM in the first floor conference room of the Alliance Community Hospital with club President John Myers (KD8MQ) presiding. The pledge of allegiance was recited followed by introductions. There were 17 members present along with Miriam Sanor and guests Dennis Conklin (AI8P), Gary Grimes (KB8GAB) and Gary Russell (KD8QFH).

President John first introduced Dennis Conklin, who presented a program about QSL cards and tips for successful QSLing.

Returning to the club business meeting, President John announced birthdays for the month which included:

- Dave (KD8RFY)
- John (W0OZZ)
- Allen (WI8T)
- Barry (AB8YE)
- Tom (KD8JRK)
- Mary (KD8RFZ)
- Smitty (KC8TJQ)

Secretary Don (AB8KV) gave the Secretary's report, noting that the August meeting minutes were in the newsletter. He added that he had sent a thank-you card to Dave (N8NLZ) on behalf of the

club for his donation of the rotator and control box. With nothing further, the report was approved on a motion by Howard (K8DXR) and seconded by Tom (KD8JRK).

Treasurer Mary Ann (KB8IVS) then gave the Treasurer's report. The report was approved on a motion by Smitty (KC8TJQ) and seconded by Dave (KD8RFY).

Committee reports:

Regarding ARES and nets, Don (K8OMO) reminded the club about the Homeland Security net the last Tuesday of each month on 147.510 simplex, inviting participants.

Club activities and events:

John reported on the Castle Run held on Labor Day, noting that there were nine volunteers assisting with the communications. He added that for next year, he hoped to add another person at the finish line.

Regarding Field Day, John noted that he still had the first place operator's pin to be given out to Duane (W8DHZ).

He then reported on the Special Event station held on August 18, with approximately 50 QSO's completed.

For the Ohio QSO party held August 25, John stated that the club logged 16 CW contacts and 179 phone contacts, with 7 operators working the event. The club's score was just over 16,000.

John addressed the issue of the club picnic, noting that the date of September 29 had previously been selected. He had called the park board and reserved the rustic shelter for that date from noon to 5 PM. The cost is \$30; a motion to pay for the shelter was made by Frank (WA8WHP), seconded by Tom and approved on a voice vote.

Old business:

President John brought up the issue of the proposed amendment to the club by-laws regarding formation of a repeater committee and the committee's responsibilities. The amendment as presented at last month's meeting had been sent to each club member, to be discussed and voted on at this meeting. John then read aloud the amendment and opened the floor for discussion. Don (K8OMO) and others proposed some changes of wording in two sections of the amendment. After further discussion, a motion to

(Continued on page 4)

September Minutes—cont.

(Continued from page 3)

accept the amendment as altered was made by Joe (KC8TAC) and seconded by Tom. The motion was then passed by voice vote with no objections. John then charged the trustees, in cooperation with Don (K8OMO), with obtaining information on insurance costs for the repeaters and other club-owned equipment, to be reported on at the October meeting.

New business:

John addressed the issue of the club's needing to update the club website, adding features and making it a more dynamic forum. He turned the topic over to Ben (KD8KMQ) who showed a video presentation of a pro-

posed upgraded home page with more up to date features. There followed some discussion about the format, potential cost increases for hosting the website and changes that might be made including transferring the hosting. Ben volunteered to check further into the various details including cost figures, and will report on his findings at the next meeting.

John addressed a question raised by Doug (KB8DNQ) about possibly reinstating the club mailing list with consideration to be given to do that.

Announcements:

In response to a question, Don (K8OMO) stated that he would re-

verify the date for the club Christmas party with Pancho's.

The Berea hamfest will be held on September 30 at the Cuyahoga county fairgrounds.

Frank reminded the club about upcoming annual elections for officers, encouraging members to consider running for an office.

Don (AB8KV) noted that ham-of-the-year ballots could be turned in to him any time now.

After the break, with no other official business for the club, the meeting was adjourned at 9:15 PM on a motion by Howard, seconded by Tom.

Minutes respectfully submitted by Don (AB8KV), Secretary.

PA QSO Party Is Coming Up

Well, contest season is approaching. The 2012 PA QSO Party is scheduled for October 13th & 14th.

The PA party is one of, if not the best of the state QSO Parties. The contest period runs from Noon, on October 13th, to 6 PM on October 14th, with an 8 hour break between 1AM & 9 AM on Sunday morning.

The rules are simple, and can be found online at www.nittany-arc.net/PAQSO.html.

For those who may be planning rover, mobile, or portable operations, and want to concentrate on those counties which have been rare, in the past, that information can be found at www.kd8mq.info/pqp/.

Also, there is a Pa QSO Party Reflector where many operators post their party plans. Bud, AA3B compiles the plans and posts them to the reflector every week. Instructions are on the PA QSO Party homepage. As I said before, this is one of

the best of the state QSO Parties. If you are pursuing your Worked all Counties, it's a great way to polish off an entire state in one weekend.

This year, myself, and Ben, KD8KMQ are descending upon John, N8PLA's Jefferson County cabin. 40 & 80 SSB will be our main bands. But, some CW & PSK is also planned.

Hope to hear you on!

Rambling - cont.

(Continued from page 2)

the state, and gaining new members, and new Hams because of it. We need leaders who will keep the momentum going.

"But, I don't know the first thing about being a club officer"

Look around at everyone you know who has been a club officer. Do you really think any of us attended a training class? You know, like **"club officer 101"**? Nope, it's largely **On The Job Training**.

Job descriptions are listed in the bylaws. Also, a lot of guidance can be had by bouncing stuff off of your fellow officers, and the membership.

"But it would interfere with the time I spend with my family. "

You got me there. As with any "extra-curricular" activity, you must balance your time a bit; never spending too much time away from the things that really matter. If Amateur Radio is at the top of your priority list, I feel for you.

As guidance, check out "The Amateurs Code", by Paul Segal, which is running in this issue. It is just as relevant today as it was when it was written in 1928.

Pay your dues

Here's one more reminder; You must be a paid-

up member to vote, or to run for office. If your dues aren't paid, Mary Ann will be more than happy to take your money in advance of the annual meeting.

A word of thanks

As the October meeting approaches, I'd like to thank all of you for your support over the last 6 years.

I've had the honor of serving three years as VP, under some of the finest Hams this club has known, including two of the four Hams who I consider my elmers.

Next came last three years as club president. I've tried my best to make this club into one that I would want to join.

I've tried to schedule programs, and events that I felt would be enjoyed by the greatest number of members; I hope I've succeeded.

But, midway through my 2nd term, I found that the fire was not burning as bright as it used to be. I accepted nomination for this last term, with some hesitation, and I have to admit to coasting through a large part of this year. So, it's time to step back, and recharge my batteries.

My apologies to Don, AB8KV, and Mary Ann, KB8IVS. I realize that trying

to keep up with me at a meeting can sometimes be like to trying to nail Jello to a wall.

But, overall, I've had fun, and I hope you have had as well.

I plan to continue editing the Zero Beat, unless the new administration wants to replace me. But, I do not plan to accept any nominations this year. I will be back, but definitely not this year.

Club picnic

Well, the turnout was less than I'd hoped for, but hopefully, everyone had a good time. The weather even cooperated.

Club programs

The club program schedule is in decent shape for the incoming president. We have activities, and programs planned through December for sure, and January, if things pan out the way I hope they will.

Work Party

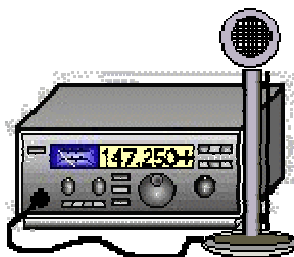
Sometime this month, I hope to put together a work party to check out the equipment that we purchased from the estate of Jim, K8LTG. I'll be sending out e-mails once we get a date nailed down.

That's all I have for this month. I hope to see you at the next club meeting. 73, de John, KD8MQ.

Homebrew Night IV!

All right, you've been waiting for it; you've been up late soldering, drilling, and fabricating, and now it's finally here!

The Alliance Amateur Radio Clubs November meeting is the venue for our 4th annual Homebrew night.



Here's how it works:

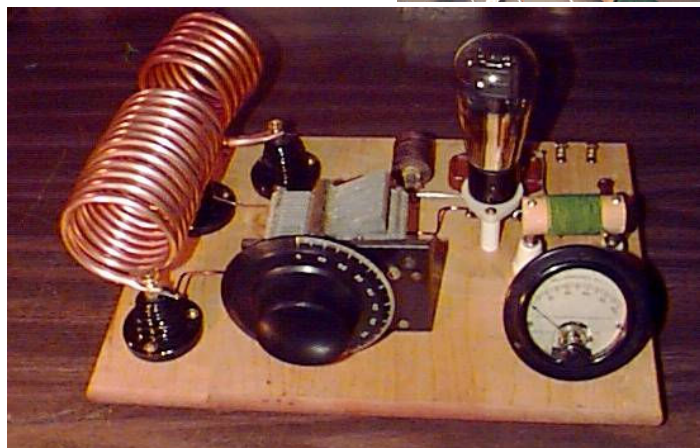
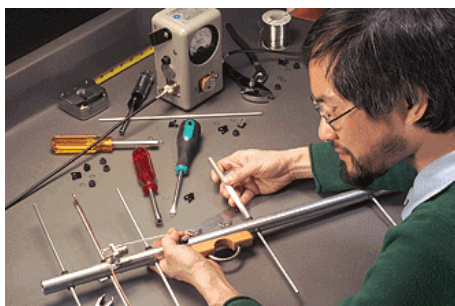
- Bring something you've built, or restored to the November meeting.
- All entrants will get five minutes or so to describe their pride & joy, and field questions from the audience.

- Afterwards, you vote for your favorite entry.

The winner gets a fabulous prize, direct from the Massillon Hamfest.

Sorry, we ask that your entry be at least remotely related to Amateur Radio. Previous entries are not eligible, unless substantially changed.

So, get those projects finished up. November 14th is coming up fast!



Wayback Machine - cont.

(Continued from page 18)

Break at a highway rest stop in order to raise funds.

- This was the last newsletter for Jerry, N8SH. He was resigning to focus on other projects.

October, 2002 (editor, KE8VE)

- This was to be Larry, KE8VE's first issue as regular editor of the Zero Beat.

- Plans were being made for our annual meeting.

- The menu was posted for the AARC Christmas banquet, to be held December 14, 2002, at Mikes Roadhouse Charly Restaurant.

License classes had started up again at the hospital.

October, 2007 (editor, KD8MQ)

- It was election time, and your editor was admonishing everyone to "put the choo - choo to rest". No rail-roading of officers!

- This was only a 6 page newsletter. To think, I used to complain about all the work it took to put out the Zero Beat. I wonder what I'd have done if I was putting out 10-20 page newsletters?

- The club picnic was coming up. We had reserved the log cabin at Silver Park.

The Amateurs Code

1 - The amateur is considerate

He never knowingly uses the air in such a way as to lessen the pleasure of others

2 - The amateur is loyal

He offers his loyalty, encouragement and support to his fellow radio amateurs, his local club and his national association, through which amateur radio is represented

3 - The amateur is progressive

He keeps his station abreast of science. It is well-built and efficient. His operating practice is above reproach

4 - The amateur is friendly

Slow and patient sending when requested, friendly advice and counsel to the beginner, kindly assistance, cooperation and consideration for the interests of others; these are the marks of the amateur spirit

5 - The amateur is balanced

Radio is his hobby. He never allows it to interfere with any of the duties he owes to his home, his job, his school or his community

6 - The amateur is patriotic

His knowledge and his station are always ready for service of his country and his community

Paul Segal, W9EEA (1928)

Who was Paul M. Segal, W9EEA?

The Amateur's Code on the preceding page was written in 1928 by Paul Segal, W9EEA.

Mr. Segal was a young attorney from Denver, when he was elected as Director of the ARRL Rocky Mountain Division.

The 1920's appear to have been a perilous time in which to be a Ham. Mr. Segal was pressed into service to fight oppressive local ordinances which would have proved hazardous to our hobby.

He quickly became invaluable to the league as general counsel; a position he retained until his retirement in 1962.

Of course, there is much more to the story than that. For more information, I recommend reading "**Paul M. Segal—A Tribute**", on pg 40, of the January, 1962

issue of QST. It is available on the league's website, as a perk of membership.

Also, in my readings, I found a piece entitled "**Re: The Amateurs Code**", Written by Rufus P. Turner, (no call listed). Mr. Turner cautioned us all to remember to be balanced; keeping in mind that Ham Radio is a hobby.

To quote the letter, **'The balanced amateur does not lead the one-sided life that the public ties up with ham radio. He still finds time to make his interests liberal and broad, though he devotes the greater portion of his energy, when he is at leisure, to his hobby'**.

The letter has as much relevance today, as when it was written in 1932. It can be found in the QST archives, on pg44 of the June, 1931 issue of QST.

Excerpt from Bylaws

(ed. Note - Here's an excerpt from the bylaws regarding the duties of officers)

A. The **President** shall preside at all meetings of this club and conduct them according to Robert's Rules of Order. The President shall be responsible to ensure positions are filled and to conduct the business of the club. Examples of these positions are: Newsletter Editor, Equipment Chairman, Program Chairman, etc.

B. The **Vice President** shall assume all duties of the president in his/her absence. He/She shall also organize club activities and programs not otherwise designated to a committee, or other member.

C. The **Secretary** shall record minutes of all meetings, keep a roll of members and receive applications for membership.

D. The **Treasurer** shall receive and receipt all monies paid to the club, keep an accurate account of all monies received and expended, pay no bills without a majority vote at a regular meeting by the club, and shall make a brief financial report at each regular meeting.

C. The **trustees** shall have the control and management of the property of the club, subject only to the action of the membership, audit the books of the corporation, conduct the annual meeting, and further duties as may be required of them by the members.

Changes to W8LKY.org

As reported last month, some changes are afoot for W8LKY.org. At the September meeting, Ben, KD8KMQ presented a draft of a direction we could go with the site. The draft can be seen at:

<http://w8lky.dp9x.com/>

The big advantage to this site is that it will be set up to allow changes to be

made on the fly. No more emailing the webmaster for changes. A small group will have access to the site, and be able to make changes to it. No more HTML coding!

More information about the site, and the hosting costs will be available at the next meeting.

Club Repeater Interference Found, & Fixed!

For those who were listening to the club repeater (145.37) around the end of September, you no doubt aware that there were some interference issues.

According to Don, K8OMO, the repeater Trustee, there was a strong signal on the input at 144.77. It moved around a bit, but ultimately wound up locking the repeater up.

The immediate course of action was to bump up the squelch setting until the signal could be tracked down, and corrected. This had some detrimental effects on some users. One regular reported having to increase his power to 75 watts just to get into the machine from home.

Both Don, K8OMO, & I (KD8MQ) went into fox hunt mode to track the signal to an area on Ashwood Dr, about a kilometer from the repeater. The Doppler identified the strongest signal coming from a couple of utility pedestals in that area. Since all utilities are underground in that area, it was assumed that the signal was being produced, and radiated by the cable lines. That turned out to not be the case. Since it was 10 PM, it was agreed to suspend the hunt for the night.

The following week, Don contacted the cable company, and made contact with their headend manager, Greg, who fortunately is a

Ham.

Don had spoken to his brother, Lou, K8LW, who had offered that the issue was likely a bad power supply inverter. Lou had some experience in this kind of situation thanks to his previous work with garage door openers, at the Genie Co.

Before the technical team could come out, Don, and XYL Sherry returned to Ashwood Dr, for some further investigation.

Walking the area with an HT tuned to the interfering signal, they were led to an RV parked next to a nearby home. After making contact with the homeowner, and explaining the situation, the RV's inverter was cycled off, and viola, the signal disappeared! The inverter was part of a load center; a \$10,000 system on the RV. Since the RV was plugged into house power, that gave the signal a path into the electrical grid.

Later in the day when the load center was turned back on, the interference returned. A quick call to the homeowner was all it took to convince the homeowner to shut the system down for good, until repairs could be made. At last report, the RV had been taken in for service.

All is again copasetic with the repeater.

FCC Seeks to Change Amateur Radio Licensing Rules, Allow Additional Emission Types

ARRL Bulletin ARLB023

On October 2, the FCC released a Notice of Proposed Rulemaking (NPRM) in WT Docket No. 12-121 that seeks to change the Amateur Radio licensing rules, especially as they concern former licensees.

Acting upon an April 2011 Petition for Rulemaking filed by the Anchorage VEC to give permanent credit to radio amateurs for examination elements they have successfully passed, the FCC proposes to revise Section 97.505 to require that Volunteer Examiners (VEs) give examination credit to an applicant who can demonstrate that he or she formerly held a particular class of license. In addition, the Commission seeks to shorten the grace period during which an expired amateur license may be renewed and to reduce the number of VEs needed to administer an amateur license examination.

In response to a Peti-

(Continued on page 10)

AARC Picnic



Foreground- Don, AB8KV, and Judy (XYL)
Background - Paul, K2ASA & XYL, Rick, KC8SUI
Ted, KB8PRK, Don, K8OMO & Sherry (XYL)

The annual Alliance ARC picnic was held on Saturday, September 29th.

We had great weather this year, and everyone had a good time.



Paul, K2ASA, (l), & John, KD8MQ(r)



Miriam (l), Tom, KD8JRK (r rear), and Alfreda, Tom's mother

FCC Seeks to Change Amateur Radio Licensing Rules, Allow Additional Emission Types

(Continued from page 9)

tion for Rulemaking filed by the ARRL in March 2011, the FCC looks to amend the Amateur Service rules to allow amateur stations to transmit additional emission types in order to permit Time Division Multiple Access (TDMA) in the Amateur Service. But in doing so, it denied the League's request for a blanket waiver pending the resolution of the rule-making proceeding.

Comments on these proposed rules changes will be accepted until 60 days after the NPRM is published in the Federal Register (this can take up to six weeks after release of the NPRM). Reply comments will be accepted until 90 days after publication in the Federal Register.

Complete information can be found at, <http://www.arrl.org/news/fcc-seeks-to-change-amateur-radio-licensing-rules-allow-additional-emission-types>.

Z e r o B e a t

From time to time, people send me pictures of their projects. It's an interesting addition to the Zero Beat, not to mention great motivation for the rest of us.

This batch of pictures comes from Steve, KB8RFE. Thanks Steve!



Zero Beat

Here's more pictures from Steve, KB8RFE. This guy just never stops! Excellent work Steve!



AARC Swap n Shop!

WANTED: 2 meter/ 440 Beam Antenna

contact WA8SHP [330 821 8794](tel:3308218794). wa8shp@aol.com or the W8LKY Repeater

**Just think, your swap & shop items could be here!
You could make money, and clean out the shack! Your XYL/OM/Significant other will
be shocked, amazed, overcome!**

All it takes is a simple e-mail to get the ball rolling. Just let me know

A) what you have, or what you need

B) How much you want for it

C) How to reach you.

That's all there is to it!

Swap & Shop rules: We'll keep the rules simple.

1. All ads will run for two months, unless you contact me to cancel, or extend it.
2. You are allowed to post anything as long as it is Ham Radio, or Computer related.
3. Please, no CB equipment.

To place an ad: contact John, KD8MQ (e-mail: kd8mq@arrl.net)

Cell Phone Fundraiser



I suppose that everyone considers the club cell phone fundraiser dead. I can't say I blame you, since it's not been mentioned for some time.

But, we just received our latest recycling check. The total is \$48! That's practically the cost of renting the Field Day site.

So, let's keep on our friends & family to donate their old cell phones to the club. You can bring them to any club event.

Let's keep this going!



Final Fox Hunts of 2012

Date	Start Time	Hunt/Talk-in Freq	Sponsor	Start Line
October 3 rd	6:30 PM	147.525	Cuyahoga Falls ARC	2850 Church St, Stow, Ohio
October 24th	6:30 PM	147.525	Alliance ARC	1906 S. Union Ave, Alliance
October 17 th	6:30 PM	147.525	Cuyahoga Falls ARC	2850 Church St, Stow, Ohio

For changes, or additions, e-mail kd8mq@arrl.net

Fox Hunt News

The weather for the September AARC fox hunt was not bad, but not great either. The rain which had plagued us all day had finally slowed to a drizzle by hunt time.

The hunt began at 6:29, with 4 vehicles looking for the fox. Ben was hidden in the parking lot at the medical clinic on W. Sawburg.

The order of finish was:

- Don, K8OMO - 6:39
- John, KD8MQ - 6:41
- Jim, N8PXW - 6:42

We had one hunter that met us at Sheetz, for the debriefing.

It's noteworthy that OMO finally managed to exorcise the demons from his Doppler. Good job, Don!

Nothing special to report from the Cuyahoga Falls hunts. "Team Alliance" has continued to finish in the back of the pack, but we keep trying. It must be the good food, & camaraderie.



Now's the time to cast your vote for the 2012 Ham of the Year.

Get your ballot to Don, AB8KV ASAP! His contact info is on page two. (dkingan@neo.rr.com)

My vote for Ham of the Year is: _____

Comments (optional) _____

Scope Out the Ham Fest

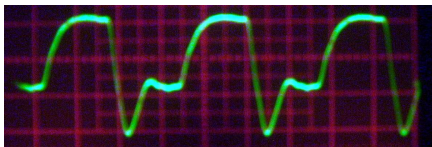
Scope Out the Ham Fest

Are you interested in trying to find a scope (oscilloscope) for troubleshooting some stuff around the radio room? Before you buy, take a look at the displays below.

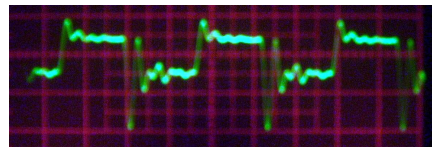


The following waveforms show the output of an oscillator running around 6.092 MHz. The same signal is applied to an oscilloscope using different probes and cables.

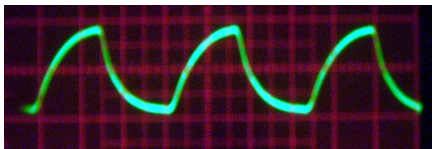
Which waveform is correct?



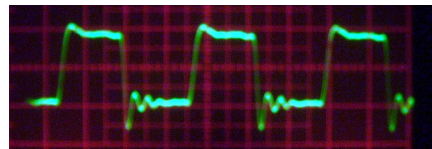
(A)



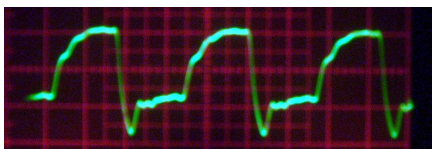
(B)



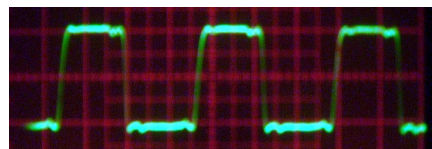
(C)



(D)



(E)



(F)

This shows the complexity in trying to do repair or calibration. In each case, the oscilloscope was displaying the correct waveform that was presented to the input terminals. The difficulty is in knowing which type of probe is necessary for this case. Each case requires a different setup.

(Experienced Guessing Helps).

Picture (A) and (B) used a low cost probe with (A) direct measurement and (B) with the probe in the 10X position (divided by 10).

Picture (C) and (D) used a higher quality probe with (C) direct measurement and (D) with the probe in the 10X position (divided by 10).

Picture (E) and (F) used a 50 ohm coax with (E) direct measurement and (F) with the coax terminated using a 50 ohm resistor at the input to the oscilloscope.

The picture (F) is the most correct signal since the signal should be a square wave.

Additionally, when using a frequency counter, only the coax & terminating resistor setup displayed the proper frequency. The other setups gave false readings due to the ringing on the waveforms, which gave multiple frequency components, so the counter display would not stabilize.



Instrumentation requires study and understanding before determining the correct model to purchase and use. Equally important with all instrumentation is the correct setup and, at least, basic understanding of the circuit in use.



Oscilloscopes come with a variety of specifications: A good model can measure from DC to the limit of your budget (bandwidth in MHz). The higher the bandwidth, the higher the cost. There are also digital models but beware, they are not the same. For example: If the specifications on a digital scope states 10 MHz, then at 10 MHz there will be only one dot on the screen. At 1 MHz there will be only 10 dots on the screen, etc. There is more data at low frequencies. Digital scopes are sampled, that is (snapshots per second). Some scopes may appear to have more dots but they fill in data from multiple samples, however, it takes skill to determine if the data shown is accurate. A good feature of digital scopes is that they can store a waveform and some have printing capability or interface to a computer.

The Analog scope will give a reasonable display up to the limit of its bandwidth but at the top end, signals like square waves, will be rounded and look more like sine waves.

NOTE: A digital camera can take a picture of the analog scope screen as shown in the pictures above. A light shield is necessary. Use the camera macro mode and disable the flash. Experiment with the trace intensity since digital cameras do not need much light. Keeping the trace intensity low will help with the sharpness of the picture.



Oscilloscopes can be interesting and helpful for repair, calibration, and design, but suggest doing research before purchasing.

73, DE MIKE WA8MKH

October 2012

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday																																																																																																								
	<i>1</i>	<p style="text-align: center;"><i>2</i></p> <p>7:00 PM Stark Cty ARES Net (147.12) 9:00 PM Northern Columbiana Cty Training Net (147.255)</p>	<p style="text-align: center;"><i>3</i></p> <p style="text-align: center;">Cuyahoga Falls FoxHunt</p>	<p style="text-align: center;"><i>4</i></p> <p>7:00 PM PCARS Net (146.895) 8:01 PM AARC CW (28.100 MHz) 8:30 PM AARC SSB(28.400 MHz) 9:00 PM AARC VHF (145.37(-)) Terry, N8ATZ BD</p>	<i>5</i>	<i>6</i>																																																																																																								
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<i>28</i>	<p style="text-align: center;"><i>29</i></p> <p style="text-align: center;">Frank, WA8WHP BD</p>	<p style="text-align: center;"><i>30</i></p> <p>7:00 PM Stark Cty ARES Net (147.12) 8:00 PM Homeland Security Net (147.51) 9:00 PM Northern Columbiana Cty Training Net (147.255)</p> <p style="text-align: center;">Steve, KB8RFE BD</p> <p style="text-align: center;">Ted, K8TWA BD</p>	<p style="text-align: center;"><i>31</i></p> <p style="text-align: center;">Cuyahoga Falls FoxHunt</p> <p style="text-align: center;">John, KD8MQ BD</p>	<table border="1" style="margin: auto; border-collapse: collapse;"> <thead> <tr> <th colspan="7" style="text-align: center;">Sep 2012</th> </tr> <tr> <th style="text-align: center;">S</th> <th style="text-align: center;">M</th> <th style="text-align: center;">T</th> <th style="text-align: center;">W</th> <th style="text-align: center;">T</th> <th style="text-align: center;">F</th> <th style="text-align: center;">S</th> </tr> </thead> <tbody> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td style="text-align: center;">1</td></tr> <tr><td style="text-align: center;">2</td><td style="text-align: center;">3</td><td style="text-align: center;">4</td><td style="text-align: center;">5</td><td style="text-align: center;">6</td><td style="text-align: center;">7</td><td style="text-align: center;">8</td></tr> <tr><td style="text-align: center;">9</td><td style="text-align: center;">10</td><td style="text-align: center;">11</td><td style="text-align: center;">12</td><td style="text-align: center;">13</td><td style="text-align: center;">14</td><td style="text-align: center;">15</td></tr> <tr><td style="text-align: center;">16</td><td style="text-align: center;">17</td><td style="text-align: center;">18</td><td style="text-align: center;">19</td><td style="text-align: center;">20</td><td style="text-align: center;">21</td><td style="text-align: center;">22</td></tr> <tr><td style="text-align: center;">23</td><td style="text-align: center;">24</td><td style="text-align: center;">25</td><td style="text-align: center;">26</td><td style="text-align: center;">27</td><td style="text-align: center;">28</td><td style="text-align: center;">29</td></tr> <tr><td style="text-align: center;">30</td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </tbody> </table> <table border="1" style="margin: auto; border-collapse: collapse;"> <thead> <tr> <th colspan="7" style="text-align: center;">Nov 2012</th> </tr> <tr> <th style="text-align: center;">S</th> <th style="text-align: center;">M</th> <th style="text-align: center;">T</th> <th style="text-align: center;">W</th> <th style="text-align: center;">T</th> <th style="text-align: center;">F</th> <th style="text-align: center;">S</th> </tr> </thead> <tbody> <tr><td></td><td></td><td></td><td></td><td></td><td style="text-align: center;">1</td><td style="text-align: center;">2</td></tr> <tr><td style="text-align: center;">3</td><td style="text-align: center;">4</td><td style="text-align: center;">5</td><td style="text-align: center;">6</td><td style="text-align: center;">7</td><td style="text-align: center;">8</td><td style="text-align: center;">9</td></tr> <tr><td style="text-align: center;">10</td><td style="text-align: center;">11</td><td style="text-align: center;">12</td><td style="text-align: center;">13</td><td style="text-align: center;">14</td><td style="text-align: center;">15</td><td style="text-align: center;">16</td></tr> <tr><td style="text-align: center;">17</td><td style="text-align: center;">18</td><td style="text-align: center;">19</td><td style="text-align: center;">20</td><td style="text-align: center;">21</td><td style="text-align: center;">22</td><td style="text-align: center;">23</td></tr> <tr><td style="text-align: center;">24</td><td style="text-align: center;">25</td><td style="text-align: center;">26</td><td style="text-align: center;">27</td><td style="text-align: center;">28</td><td style="text-align: center;">29</td><td style="text-align: center;">30</td></tr> </tbody> </table>		Sep 2012							S	M	T	W	T	F	S							1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30							Nov 2012							S	M	T	W	T	F	S						1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
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Alliance Amateur Radio Club
P.O. Box 3344
Alliance, OH 44601

The AARC Wayback Machine

Here again are some of the highlights from the last 20 years of the Zero Beat. you can read them at <http://www.w8lky.org/newsltrs/>.

October, 1987 (Editor, N8IAK)

- a steam-powered train celebrating the 200th anniversary of the constitution rolled through Alliance with Amateur Radio on board.

- Our program at the club meeting was Jamboree On The Air, presented by Patti, KE8KH.

- Our latest fox hunt was won by the team of John, N8GIE, Eric, N8HHV, Alan, N8EZO, and Kevin, N8IVI. They found the fox hiding in the scout cabin at Silver Park. The foxes were John, KD8MQ, and Pam, N8IAK.

- Our Ham of the month was Bob Hobbs, W8ACP.

- HTs were being raffled off to raise money for the repeater fund. The most recent winner was Ray, N8HRZ. Tickets were already being sold for the next HT raffle.

October, 1992 (Editor, N8LVO)

- Elections were coming up at the October meeting. Outgoing officers were:

- N8IAK (Pres.)
- KE8VE (V-Pres.)
- KE8KH (Treasurer)
- N8LVO (Secretary)
- Jim, KB8GHZ was the outgoing trustee.

- There was a recap of our Mall show. Displays were set up by the Salem Area AR Association, the Canton, ARC, the Alliance Youth RC, & MARS. Mark Koontz was to speak on Severe weather & Amateur Radio, but cancelled at the last minute. Don, K8OMO stepped in and saved the day!

The best of show award went to Jim, KB8GHZ.

- N8LVO was looking for an operating partner for the PA QSO Party. Dan stated that "If you don't want to work hard, operate long, and in general be an all around great Ham Radio operator, don't bother calling me".

October, 1997 (editor, N8SH)

- The 1997 Mall show was history. The Salem club brought their trailer. Jack W8WEN did his fine job of PR, attracting lots of interest in the club license classes.

- We were talking about doing a Safety

(Continued on page 6)