THE eQRM

JANUARY 2018

P&LE RAILROAD OHIO RIVER BRIDGE

The Pittsburgh and Lake Erie Railroad (P&LE) Ohio River Bridge (ahead) was constructed between 1908 and 1910. The famous German engineer, Albert Lucius, designed the bridge and McClintic-Marshall Construction Company built it at a cost of \$2 million. The bridge was the third built by the P&LE crossing the Ohio River between Beaver and Monaca, the first being built in 1878.

The P&LE Railroad Ohio River Bridge was documented by the Historic American Engineering Record in 2001. It has been described as the "most outstanding structure on the P&LE main line" and is significant for its relatively long and heavy cantilever truss and concrete pier caissons.

Les .

The BVARA in Beaver County Pennsylvania

Beaver Valley Amateur Radio Association

W3SGJ

Repeater 145.310 PL 131.8

Un the cover:

Here is a January photo of the freezing Ohio River and train bridge. It is cold here in Pennsylvania for just 90 more days. Spring will be here soon. Are you making plans for something in your Ham radio hobby? Start dreaming up something big for this year and do it!

Photo courtesy of David Covalt

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Check into our nets

Wednesday 2 MeterWednesday 10 Meter8:30PM on 145.310 MHz PL 131.89:00PM on 28.470 MHz

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Who We Are

2017 BVARA OFFICERS

President: Jack Spencer, KZ3Z Vice President: Mark Kavic, KB3LED

2nd Vice Pres.: Rob Miller, N3OJL

Treasurer: Pam Spencer, W3PMS

Secretary: Norm Trunick, K3NJT

Director: Bob Winkle, N3AZZ

Director: Bob Croft, KB3RHN

Trustee: Rich Soltesz, K3SOM

MONTHLY MEETINGS

E-Board meetings are now held the Saturday before the monthly club meeting.

VE testing begins at 5:00 PM.

Regular meetings are at 6:30 PM

All meetings are held at the Beaver County Emergency Services Center 351 14th Street Ambridge, PA 15003 on the second Thursday of every month (unless otherwise stated).

2017 MEETING DATES

Jan 11 2018 Feb 08 Mar 08 Apr 12 May 10 Jun 14 Jul 12 Aug 18 Corn Roast Sept 13 Oct 11







This Month

BVARA Club Feature Presentation

Speaker: Rich Soltesz K3SOM

Topic: FW Loop and OCF Antenna Models *Including:*

Continuing with our BVARA Presentation Series this year, our topic this month deals with two controversial wire antennas. The first one is the full-wavelength horizontal loop antenna. We'll examine how it performs on various bands at reasonable heights above ground. But not every-one has room for a 270-foot wire with four supports at the corners. So, we'll look at what happens when it becomes a rectangle or a trapezoid that will fit in your yard. Very interesting!

Our second antenna is the controversial Off-Center Fed (OCF) Dipole. People either love them or hate them, depending on their experience with them or the experiences of their buddies. There seems to be no middle ground with this antenna. Originally built and tested by William Everitt in 1923, it became known originally as the Windom Antenna when Loren Windom described it and published it in *QST Magazine* in September 1929. Perhaps some of the controversy surrounds differing results because of variations in wire lengths, importance of a balun, use of ladder line, and several other configuration changes.

We'll examine each of these antennas and variants with two modeling tools: EZNEC 6+ and AutoEZ that have been designed to work with Microsoft *Excel*. With these tools we can easily examine the effect of making various physical changes to our antenna from the comfort of inside our home or radio shack.

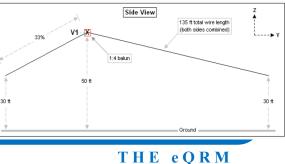
But wait, there's more! Matching these antennas to your favorite feedline for maximum power transfer of those precious watts from your transceiver can be tricky because of the impedances that you will encounter. Feedline losses can be excessive if we choose to ignore the issue. Then there is the potential problem of RF in the radio shack . . . Whether you are a beginner or a veteran ham, bring your ideas and success stories to the meeting because this is one exciting

presentation that you won't want to miss.

ATU

Rich's Background:

Extra Class Ham, Licensed since 1962, VE, B.S. Electrical Engineering



50'

45

ine

window

mut

150

More this Month

Weekly

The Freedom Square Diner in Monaca has a great wait staff. Come let them take your order.

The eQRM urges all Beaver County licensed amateurs to participate in the County's RACES and ARES programs.

Any Beaver County Amateur that is interested in participating in the RAC-ES/ARES programs can do so by checking into the Beaver County Public Service Net which meets every Monday evening at 8:30 PM local time on the N3TN 146.850 MHz repeater (131.8 PL) Thursday Morning Breakfast (or you can have lunch)



The BVARA meets every Thursday at the Freedom Square Diner in Center Township, just to the right of the Cinemark Center Township Marketplace at 09:30 AM. All radio amateurs and those interested in amateur radio are encouraged to come join us at our Thursday morning break-

fast.

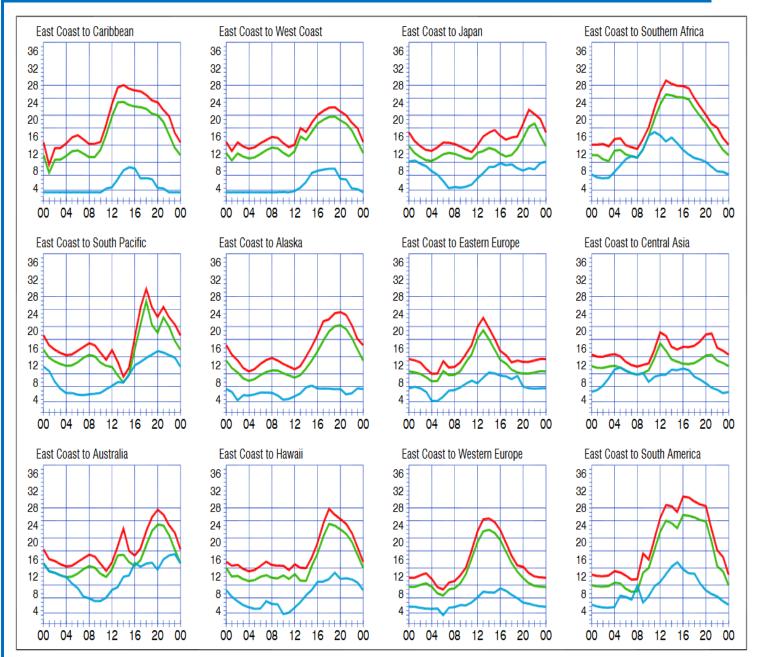




RACES / ARES The eQRM Urges All County Hams to Participate.



Propagation



When are the bands open? These charts, generated using CAPman, show probabilities for average HF propagation in the month of **January** for the paths indicated. The horizontal axes show Coordinated Universal Time (UTC), and the vertical axes frequency in MHz. On 10% of the days of this period, the highest frequencies propagated will be at least as high as the upper red curves (HPF, highest possible frequency) and on 50% of the days they will be at least as high as the green curves (MUF, classical maximum usable frequency). The blue curves show the lowest usable frequency (LUF) for a 1500-W CW transmitter. For SSB or a lower transmitter power, the LUF will be somewhat higher than the blue curves indicate. See Oct 1994 *QST*, pp 27-30, and Feb 1995 *QST*, pp 34-36, for more details. The predictions assume an observed 2800-MHz solar flux value of 73. This is a Very **Low** level of solar activity. See the detailed propagation tables on *The ARRL Antenna Book CD-ROM*.

PROPAGATION

The East Coast propagation chart listed here is for January 2018. If you would like more information in general, please visit <u>http://www.arrl.org/propagation</u>

Get your License or Upgrade

If you are interested in getting your first FCC license or upgrading your current amateur radio license, the Beaver Valley Amateur Radio Association holds VE Test sessions (Volunteer Examinations) the second Thursday of each month at the Nine One One center in

Ambridge Pennsylvania prior to our BVARA Club meeting. If there is no meeting there is no test session. Please come take your test with us!

> For more information, contact : Rich Soltesz, K3SOM (724) 847-0610 k3som@arrl.net



VE TEST SESSIONS

Beaver County Emergency Services Center 351 14th Street Ambridge, PA 15003. Tests begin promptly at 5 pm on the same day as BVARA Club Meetings (the second Thursday of the month). All classes of amateur radio license tests are administered.

ALL candidates MUST bring ALL of the following:

- 1. 2 forms of I.D. one MUST be a photo I.D.
- 2. A pencil AND a pen with blue or black ink.
- 3. The original AND a photocopy of any valid ham license.
- 4. The original AND a photocopy of any C.S.C.E.
- 5. The test fee of \$15 cash, check, or money order.

New License and Upgrades

BVARA VE Testing

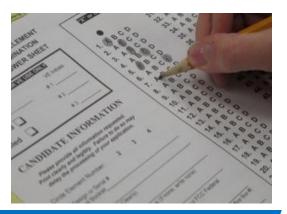


Testing this month :

You're invited, come test with us.

Testing resumes in 2018!

January the eleventh at five pm with our regular monthly meeting to follow at six thirty pm.



By becoming a BVARA member you help secure the future of Amateur Radio in Beaver County. Additionally, the BVARA receives a portion of each ARRL

membership you purchase!

	Join the BVARA and A	ARRL	
Sign up for:		Price	
BVARA full membership		20.00	
BVARA student members	hip	15.00	
BVARA associate membe	rship	10.00	
BVARA Child under 21 at	t home membership	5.00	
One year ARRL membersh	ip	49.00	
A Club Donation			
ARRL Member? Yes No		Total Enclose	d
Your License Class (If you have of Technician General Advanced Extra Class	Name Address Email Phone Your Call sign	S 1	

Make check or money order payable to:

The Beaver Valley Amateur Radio Association, P.O. Box 424

South Heights, Pa 15081

Hamfests & General Announcements



- Admission, \$3.00 per person.
- First table free. Additional tables \$3.00 each!
- Food and drinks available
- DXCC/WAS/VUCC QSL Card checking on site
- Amateur radio testing at 9:00 am
- Please, be courteous to your fellow hams by using reasonable table space. If you can use ½ table, please do so. (based on demand)



No reserved table space Unloading can be done at the main doors, and then move vehicle to the parking area

> General Admission: 8:00 AM Web Site: www.w3uu.org

For further information or questions contact: Tim Lehman 717-982-8550 kb3oza@arrl.net

Contest Corral

January 2018

Check for updates and a downloadable PDF version online at **www.arrl.org/contests**. Refer to the contest websites for full rules, scoring information, operating periods or time limits, and log submission information.

	Start -	Fink	sh					
Dat	e-Time			Bands	Contest Name	Mode	Exchange	Sponsor's Website
1	0000	1	0100	3.5	AGB New Year Snowball Contest	CW Ph Dig	RST, serial, mbr (if any)	www.qsl.net/eu1eu/agb_nysb.htm
1	0900	1	1100	3.5-7	SARTG New Year RTTY Contest	Dig	RST, serial, name, "Happy new year" in native language	sartg.com/contest/nyrules.htm
1	0900	7	2000	A	IQRP Quarterly Marathon	CW Ph Dig	RS(T)	www.arimontebelluna.it
1	0900	1	1200	3.5-14	AGCW Happy New Year Contest	CW	RST, serial, mbr (if any)	www.agcw.org/index.php/en
1	1400	1	1800	144, 432	AGCW VHF/UHF Contest	CW	RST, serial, power class, 6-char grid	www.agcw.org/index.php/en
1	1500	1	1800	3.5-28	QRP ARCI New Years Day Sprint	CW	RST, SPC, mbr or power	www.qrparci.org/contests
2	0200	2	0400	3.5-28	ARS Sportan Sprint	CW	RST, SPC, power	arsqrp.blogspot.com
3	2000	3	2100	3.5	UKEICC 80-Meter Contest	Ph	4-char grid square	www.ukeioc.com
3	2300	7	2300	1.8-7	AWA Linc Cundall Memorial CW Contest	CW	RST, eqpt year, power	www.antiquewireless.org
4	1800	4	2200	28	NRAU 10-Meter Activity Contest	CW Ph Dig	RS(T), 6-char grid square	www.nrau.net
6	0000	6	2359	3.5-28	PODXS 070 Club PSKFest	Dig	RST, SPC	www.podxs070.com
6	1200	7	1200	3.5-28	WW PMC Contest	CW Ph	RS(T), PMC abbreviation or CQ zone	www.s59dod.si
6	1900	6	2359	3.5-28, 144 repeaters	Kids Day	Ph	Name, age, QTH, favorite color	www.arrl.org/kids-day
6	1900	7	2359	3.5-28	ARRL RTTY Roundup	Dig	RST, SP or serial	www.arrl.org/rtty-roundup
6	2000	7	0700	1.8	EUCW 160-Meter Contest	CW	RST, name, mbr or "NM"	www.eucw.org/eu160.html
13	0000	13	2359	3.5-28	YB DX Contest	Ph	RS, serial	ybdxcontest.com
13	0500	13	0900	3.5-28	Old New Year Contest	CW Ph	RST, sum of operator age and years on the air	www.radio.ru
13	1200	14	1200	3.5-28	UBA PSK63 Prefix Contest	Dig	RSQ, UBA section or serial	uba.be/en/ht/contest-rules
13	1200	14	2359	1.8-28-50	SKCC Weekend Sprintathon	CW	RST, SPC, name, mbr or "none"	www.skocgroup.com
13		14	0559	1.8-28	North American QSO Party, CW	CW	Name, state/DC/province/country	www.ncjweb.com
14	0630	14	0830	3.5-7	NRAU-Baltic Contest, SSB	Ph	RS, serial, 2-letter region	www.nrou.net
14		14	1069	28	DARC 10-Meter Contest	CW Ph	RS(T), serial, DOK (if any)	www.darc.de
14	0900	14	1100	3.5-7	NRALI-Baltic Contest, CW	CW	RST, serial, 2-letter region	www.neou.net
18	0130	18	0330	3.5-14	NAQCC CW Sprint	CW	RST, SPC, mbr or power	naqco.info/sprint
19	1900	19	2200	3.5-7	LZ Open Contest	CW	3-digit serial, 3-digit serial received from previous QSO	www.lzopen.com
20	1200	21	1159	1.8-28	Hungarian DX Contest	CW Ph	HA: RS(T), 2-letter county or mbr. Non-HA: RS(T) + serial	www.ha-dx.com/HADX
20	1900	21	0559	1.8-28	North American QSO Party, SSB	Ph	Name, state/DC/province/country	www.nojweb.com
20		21	2300	1.8	WAB 1.8 MHz Phone	Ph	RS, serial, WAB square or country	wab.intermip.net
20	1900	_	0359	50 and up	ARRL January VHF Contest	CW Ph Dig	4-char grid square	www.arrl.org/january-vhf
20		21	0559	1.8-7	Feld Hell Sprint	Dig	RST, mbr, SPC, grid	sites.google.com/site/feldhelklub
21	1300		0800	1.8-144	Classic Exchange, CW	CW	Name, RST, SPC, rowhantr model	www.classicexchange.org
22	_	22	0400	1.8-28	Run for the Bacon QRP Contest	CW	RST, SPC, mbr or power	qrpcontest.com/pigrun
24	0000		0200	1.8-28	SKCC Sprint	CW	RST, SPC, name, mbr or power	www.skcogroup.com
24		24	0330	1.8	NAQCC CW Sprint	CW	RST, SPC, mbr or power	naqoo.info/sprint
26			2200	1.8	CQ 160-Meter Contest, CW	CW	RST, SP or CQ zone	www.cq160.com/rules.htm
27		27	2359	1.8-432	Montana QSO Party	CW Ph Dig	RS(T), county or SPC	fvarc.org
27	0600		1800	3.5-28	REF Contest, CW	CW	RST, French Department or serial	concours.r-e-f.org
27	1200	_	1200	3.5-28	BARTG RITY Sprint	Dig	Serial	www.bartg.org.uk
27	1300		1300	3.5-28	UBA DX Contest, SSB	Ph	RST, serial, province (if ON)	uba.be/en/ht/contest-rules
27		28	1900	AI	Winter Field Day	CW Ph Dig	Category, ARFIL section (or "DX")	www.winterfieldday.com/rules
31	2000	31	2100	3.5	UKEICC 80-Meter Contest	CW	4-char grid square	www.ukeicc.com

All dates refer to UTC and may be different from calendar dates in North America. No contest activity occurs on the 60-, 30-, 17-, and 12-meter bands. Mbr – Membership number. Serial – Sequential number of the contact. SPC – State, Province, DXCC Entity. XE – Medican state. Listings in blue indicate contests sponsored by ARRL or NCJ. The latest time to make a valid contest QSO is the minute listed in the "Finish Time" column. Data for Contest Corral is maintained on the WA7BNIM Contest Calendar at www.homucopla.com/contestcal and is extracted for publication in QST 2 months prior to the month of the contest. ARRL gratefully acknowledges the support of Bruce Hom, WA7BNIM, In providing this service.

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Bits and Pieces

This month for my "Interview with a Ham" series I spoke to Doug Lawrence, K3GTX. I met Doug at one of our BVARA Club meetings. I got to know him a little more one Field Day. After this interview I feel I know him better. I look forward to future conversations to get to know him even better. I consider him a good friend. As we talked I could easily see Doug's "Gentlemanly Ham Spirit". I admire that in our amateur radio hobbyists. Doug shared more of his Ham radio hobby with me along with some great conversation. As we continued it went like this...





I played around a little with radio. My father had a radio on which I listened to shortwave; it was a Zenith I think. I really didn't mess much with radio. In my teens my father, uncle, cousins and I would use CB to stay in contact on our trips to the cabin in the mountains by Smethport Pennsylvania. Radio wasn't a big deal to me then.

When I was in my forty's my Dad got into Amateur Radio and would talk about it. Any time he talked about it I didn't have a clue what he was meaning. I began to ask questions just so I could have an intelligent conversation with Dad. Soon I got a book to study for my Tech license. My interest really took off after that. Radio is a big deal to me now. I really enjoy it.

It's one of my mainstays.

My first radio was a hand held Yaesu VX7P. I now have a Yaesu FTDX3000. I recently built a To-Go kit with a Yaesu FT857.

I really enjoy Field Day, I think you do too. It is the one event I impatiently wait for each year. I know I will have a great time. I love the hustle and bustle to get all the antennas, radios, shelters, and refreshments set-up. I have sat with you at the picnic tables visiting everyone then hop from station to station to help set-up. After the first contacts are made I like to go from station to station to see, hear and engage in what's going on.

My most memorable contact was talking to Joe Rudi. He was a professional baseball player for the Oakland A's. I enjoyed that contact! My most fun contact was the Nantucket Lightship/LV-112 berthed on the East Boston waterfront. I was driving on highway 376 in my truck and made the contact, mobile! It was pretty cool.

Field Day is my favorite. I have to say that Pa QSO parties on the air rate pretty high on my list also! You asked about a Fox Hunt, I have never been on one but it sounds like a good time. I would participate. I think there would be a lot of interest from other area Hams.

I had a great time talking to Doug. I think you would too. If you see Doug start a conversation with him. If you hear his call on the air, join in the conversation, have a good rag chew with him.

Be courteous on the air, be safe and have fun with your hobby. Till next month, 73 KC3BXC.

nterview with a Ham

Name : Doug Lawrence

Call sign and license class: K3GTX Extra Class

Year of first FCC License : 2009

Did you ever make a crystal radio? No. I have a kit here somewhere to put together.

Did you ever listen to short wave radio? A little when I was a kid

Did you ever use CB radio? Yes, in my early teen years.

Did you ever build a Ham radio? No.

How did you get interested in Ham Radio? My dad. I had to, it was self defense. Dad was talking radio and I didn't have a clue. (I wanted to have an intelligent conversation with him.)

What was your first radio? A Yaesu VX 7 P handheld.

What was your first antenna? The handheld's rubber duck.

What is your current antenna & radio? HF Yaesu FTDX 3000 and a G5RV.

What are your favorite modes to operate? SSB phone voice and FT8 digital.

Your most memorable contact? Oakland A's baseball player, Joe Rudi.

What was your most fun contact? A mobile contact I made with a sailing ship the Nantucket Lightship in Boston Massachusetts.

What part of the hobby interests you the most? (field day, home brewing, contesting, Hamfests, restoring old radios) Field Day is number one, then Pa QSO parties.

Have you ever been on a fox hunt? No, it sounds like fun though.

Do you use a logging program? (what is it) Yes, N3FJP

Would you purchase a Software Defined Radio? Yes.

Do you use automation with your Ham Radio? Yes, during digital modes.

If you had a magic wand and could change Ham radio what would you change and why? I would continue advancements in amateur radio and get more people interested in the hobby.

Where do you see ham radio in ten years? More software defined radios, I think that they will be pocket sized if not smaller.

It's Your Dime

Remember back when you could communicate by "Pay Phone" for ten cents? This page is for anyone who wants to communicate with the BVARA community and beyond. Please send me your article that you would like posted on this page. Please, only topics and language in good taste. As the editor I reserve the option to post it or ignore it. Send your dime to me at: <u>kc3bxc.73@gmail.com</u>



A common thread on my "Interview with a Ham" series has overwhelmingly been to get young people interested in the amateur radio hobby.



I have given "How do we invite new hams into the hobby?" considerable thought.

When was the last time that you invited a licensed ham under 25 to your shack and got them to talk on the radio or type in a message on PSK31? Before I get too far about invitations, I often wonder if we have short-changed potential candidates. Do we show off the many facets of Amateur Radio by trying it by example? Have we done a disservice to our hobby by not personally trying the many facets of the hobby? For starters...What of the old fashion Morse Code? When propagation is down, DITS & DAS can get through. During Field Day one year I witnessed many voice only stations having no activity, the CWs were busy making contacts... It must be fun because so many people use this mode. It may even be one of the fastest growing facets. The FCC dropped the requirement and now it seems to draw radio hobbyists.

One amateur radio excitement that I received was, a well-wish message after passing my general exam from a person I never met, via a "three station passed-on" Morse coded message from Germany to me in the states.

If we do not participate in the uses of the hobby how can we encourage others to try? If we don't use a Portion of the hobby, others cannot enjoy their

It's Your Dime

radio privileges with us. The more the merrier. When was the last time you got on the air in support of a High School Round Up (February 12-16 2018) or a Rookie Round Up (April 15 2018)? If there are limited contacts (**You**) on the air, there is limited fun. Be a part of it. Make an effort to find out when these events are and get on the air so you and the newbies can have fun. The fun and excitement that newbies bring is contagious! It may be just the thing you need to recharge your amateur radio hobby fun battery.

Back to the "Interview with a Ham" series, seems not many have participated in a fox hunt. Some didn't know what it was. I had to explain it. Who will be the first BVARA Club Member to host such an event some Saturday? Have you ever used your frequency privileges to fly a radio controlled airplane, control a boat or RC car? Have you gotten into the digital aspects? What about Slow Scan Television with the International Space Station.

There is more than just voice communications to explore. There are beacons, digital modes, telemetry, satellites, moon-bounce, meteor scatter, remote control, APRS, JT65, FT8, fox hunting, and amateur TV to name just a few that make our hobby interesting.

Okay that rabbit was chased.

Sorry, I got off track. I think to get more young people interested we have to invest in them. <u>You</u> have to share your time. <u>You</u> have to do more than help them get them their ticket. <u>You</u> have to show them how to enjoy the hobby. <u>You</u> have to be on the air and seek out the newly licensed. When was the last time <u>You</u> invited your niece, nephew, grandson, granddaughter, the kid next door or the kid down the street to your station, a Field Day, Club meeting, other Ham related event or just talked about Radio to seed their interest? Are <u>You</u> sensing a theme? Yes, it is <u>You</u> that makes a difference, it takes <u>You</u> to get young people interested.



So what are <u>You</u> going to do?

David KC3BXC, over....

Some Interesting Links



Grey line <u>ht</u>	tp://dx.qsl.net/propagation/greyline.html
What is a DX spotter	http://www.dxer.org/clusters.html
Ham Radio Deluxe spott	er <u>http://dxcluster.ham-radio.ch/top_50_ALL.html</u>
Ohio Penn DX bulletin	http://www.papays.com/opdx1345.html
Internet atlas <u>ht</u>	p://www.hamatlas.eu/index.php?setlang=ENG⟨=ENG
World time zone map	http://www.lib.utexas.edu/maps/world_maps/time_zone_world_98.jpg



Hello BVARA Club Members,

It is with the deepest regret I notify all that Dick Hanna - K3VYY, one of our long-time BVARA and Triple "A" club members, passed away the evening of December 30, 2017 from complications following major surgery several months ago. Dick was a talented engineer and



played a major role in the development and licensing of one of the earliest repeaters in the country, he also was key in many club happenings; including training for new ham radio candidates and was extensively involved in many club activities that reflected his high level of technical expertise and skills that helped others enjoy the hobby. He will be sorely missed.

Visitation and burial arrangements will be made on Tuesday. Gabauer-Lutton Funeral Home and Cremation Services at 117 Blackhawk Road in Chippewa will have visitation tentatively on Wednesday afternoon and evening with burial on Thursday. Complete information will be available at :

http://www.gabauerfamilyfuneralhomes.com/category/obituaries/

Our sincere and deepest sympathy to his wife, two grown sons, their families and friends; may he rest in peace.

Rich Soltesz - K3SOM Club Trustee and VE Liaison