

THE BULL THISTLE BUGLE

"BLOWING OUR OWN HORN" since 1965

Chenango County, NY

"We are ARRL affiliated"

Official Publication of the Chenango Valley Amateur Radio Association, Inc. Owner and operator of memorial amateur radio station W2RME/ R on 146.085T/146.685R MHZ, PL Tone 110.9, to the late Duncan "Dunc" Copley.

Published Monthly by the HAMS of CVARA



The President's Corner de KG8MOE



VOL. 59 May 2023

Hi all,

We are back! To snow!! The grass is a beautiful green, the daffodils are blooming and it is snowing. The weather in the Caribbean was wonderful and I was not prepared to come back to snow. Enough of that non-sense.

The Hamfest was last Saturday (15th) and it is too soon to know how we did but I know, from plowing through my e mails that everyone worked hard for the club for which I thank you all. I hope everyone had a great time and everything went well.

We are moving forward into a great summer with the Science and Technology fair on May 20th. Contact Tom Monday, KC2SFU and tell him how you can help with that. On Memorial Day weekend, we have the Canoe Regatta. I have no information on that yet. If anyone does, please get me in the loop as soon as possible.

Field Day always comes up on the fourth weekend of June and Brian, KF6C is in charge so please contact him with information on how you plan to help. We have Brian, KF6C on CW on 10, 15, 20, 40 and 80 meters, Tom KC2SFU on the GOTA station, LU, N2SLN on 6 meters and Lois will take one station, All of this is a great start. If you do not want to be a station manager, please sign up for operating at your favorite frequency and your favorite time. Please allow a little time for sleeping and eating. Brian and I are going out to the site today to see what is available, snow permitting. (kidding!)

Please plan on attending the May meeting as Bill Pratt, K2WMP will be presenting the changes to the By-Laws and we need to approve them. Bill has put in some serious time on this job and we are exceedingly grateful to him for all his hard work. Thank you again, Bill.

Lastly, I am encouraging ALL of you to attend the meetings that you can so we can encourage and support all those who are prepared to give their time to us by volunteering to do the things the club needs to be done to help us all in our own chosen hobby.

Have a great month!

Jean Comer, KG8MOE, President.

CVARA Meeting Minutes for April 6, 2023

Called to order at 1900 by President Jean Comer (KG8MOE) held at the Grange Hall in Norwich and via Zoom

Minutes:

Motion to accept minutes as printed in the Bugle by Jon Englert (W2BDN) 2nd by Tom Mathewson (AD2TM); Motion passed

Treasurer's Report:

Motion to accept Treasurer's Report as presented by Bill Pratt (K2WMP) 2nd by Tom Mathewson (AD2TM); Motion passed

Committee Reports:

Youth/Education: Tom Monday (KC2SFU) briefly updated the club on the upcoming "Science & Technology Fair" That comes up on May 30th

Co-Chair Jon Englert (W2BDN) reported on working to put together an antenna building & foxhunt exercise for the youth at the Richfield Springs Community Center.

ARES/RACES: The General Clinton Canoe Regatta is coming up on May 27 & 28. The Scout races on Saturday will require our usual spotter and relay setup with net control being on the Canoe Regatta Grounds.

On Sunday for "the big race" we have been requested to provide some spotters as well some video camera footage from along the course.

General ARES/RACES training will take place on Saturday, 9am to 11am at the CVARA Shack.

Tech Night: All projects welcome! A suggestion was made to work on building a nice electronics workbench.

Bugle: Many thanks to all the contributors this month... we almost had too much material to fit in one edition!

Repeater: Discussion was had regarding the tower project. Tom Monday (KC2SFU) had been in contact with a company regarding the removal of

our existing tower. No real proposals have been received as of yet.

Membership: New chair will be appointed next month along with any other committee appointments which may be needed.

Old Business:

New Business:

Hamfest: A motion was made by Tom Monday (KC2SFU) and seconded by Tom Mathewson (AD2TM) to purchase a raffle barrel and allot up to \$100 for the purchase of the same. **Motion passed**.

Field Day: A motion was made by Jon Englert (W2DBN) and seconded by Lois Strong (NK2A) to reserve the Mount Upton Park for Field Day. Motion passed.

A Field Day committee meeting will take place on Thursday, April 20 at 7pm during Tech Night.

Bylaw Cleanup: A special edition of the Bugle will go out via email containing a couple of files regarding cleaning up our bylaw documents a bit. We will be discussing and voting on the changes at our May meeting. Many thanks to Bill Pratt (K2WMP) and committee for all the work that has been done.

For the Good of the Membership:

Dues: As a reminder: many have not submitted their dues... If you have not done so already, please submit your dues and/or consider a donation to the club. We have many expenses & need to cover our obligations.

CLUB FUNDRAISER: Doug's Fish Fry, May 19th at the Chenango County Grange Hall. 11-6

<u>**Closing:</u>** Motion made at 2015 by Matt Jenne (KD2HKB), 2nd by Tom Mathewson (AD2TM).</u>

If you want to attend the meeting via Zoon

Time: May 4, 2023, 07:00 PM Eastern Time (US and Canada)

https://us02web.zoom.us/j/84435172692?

Local On The Air CW Practice

Hello All in the CVARA family,

pwd=MmNBaHIFZWpCK2ZCY240SHZ0NUw1dz09

To dial in via phone: +1 (929) 436-2866 Meeting ID: 844 3517 2692 Passcode: 712861

I know this has been done before, but I am trying to drum up participants for On The Air CW Practice, OTACWP; let's agree to never say or use that. One change this time around is that we will have Zoom as a fallback / coordinating room so we know what is going on other than hearing static. Ideally we will use 2m or 6m, I have a vertical for both, but we could switch to a few HF bands if people want/need to venture that direction. If anything this is a decent way to try out a simplex net, even though it is not on FM. If you are interested please email me at <u>KB2YSI@GMAIL.COM</u> for details.--... Don, KB2YSI

2023 General Clinton Hall of Fame Induction Ceremony

> Saturday, May 27, 2023 General Clinton Park 1:00 P.M.

Free Hor d'oeuvres will be served compliments of the Bainbridge Chamber of Commerce. Cash bar, beer and wine also will be available. Tickets are limited so order early. Deadline for Tickets is Mother's Day Please email John Harmon at jharmon80@outlook.com or call John Harmon at 607-237-6008 to reserve a spot.

> <u>New Inductees</u> Holly Crouch, Paddler Alec Davis, Paddler Roger Henry, Paddler Terry Kent, Paddler Ray Darling, K2DAR, Contributor Gary & Tracy Smith, Contributors

ARES This Month

In May ARES is all about the General Clinton Canoe Regatta. This Month we will be active on both May 27 and 28th.

On the 27th we will be providing safety along the Chenango river for Scouts races. We will need 10 to 12 portableor mobile 2 meter operators. The race starts at 1:00 p.m. so I expect we will want to meet at about 12;00 noon. As in the past we will meet at the fishing access area in Mt Upton. We will setup at 5 different areas along the river. Having enough operators has been difficult over the last couple of years so please consider helping us keep this tradition alive.

Ray Darling, K2DAR

Has been coordinator of the traditional Ham Radio operators who have offered their monitoring services for safety purposes since 1967. He assumed coordinator status in 1969 and is still active today – mainly at the finish line. Led crews of 50+ during the 1970s-1980s; present day crews number around 20. Member of the Chenango Valley Amateur Radio Association, Inc. for nearly 60 years.

Gary and Tracy Smith

One of two sets of spouses to be General Chairmen (Dick & Jean Davis also served), yet always approached their leadership roles as a team. Tracy took charge in 1993 after a dozen years at the Chamber Food Booth, while Gary had a three-year reign from 1999-2001 in addition to years in the Rotary booth. Devised a volunteer worksheet for efficiency. Made Regatta Weekend a family affair.

On Sunday the 28th we will be providing monitoring stations along the Susquehanna River between Cooperstown and Bainbridge. These will be AREDN stations coordinated by Matt KD2HKB. Thanks Matt for all of your hard work! We will need help setup and monitoring these stations. If you are available please let Matt and I know via email. Again, please consider helping with this very important public service event. Please contact me via email Kc2sfu@yahoo.com if you can attend. 73, Tom KC2SFU

ARRL Chenango County Emergency Coordinator

the Bull Thistle Bugle

V.E. Session
CVARA Hamfest
15 April 2023
Ray Darling, K2DAR, VEC

Upgrade to "Extra Class" Mark Silver, KB1LPO Schenevus, NY

Congratulations to all and many thanks to our participating

V.E's Stanley White, N2SW Steven Burdick, N2BRD Charles Davenport, N2CHD Shaun Newcomer, N2EWC

I am happy to report the following results of the V.E. Session Candidates attending: 6

> Upgrades to "General Class" Ryan Antinore, KE2AVG McDonough, NY Mark Olson, KE2AZS Binghamton, NY Jeffrey Barlow, KE2AVB Oneida, NY

CVARA Radio project Part 2

Discounting the product detector there are 2 mixers in a double conversion superheterodyne receiver. In older terminology conversions were referred to as heterodyning hence the name superheterodyne. The CVA-RA receiver uses a pair of Plessey <u>SL6440</u> integrated circuit mixers that were state of the art in the early 1980's. You will not find these on the market, they are no longer generally available, but we have about 1000 new old stock.

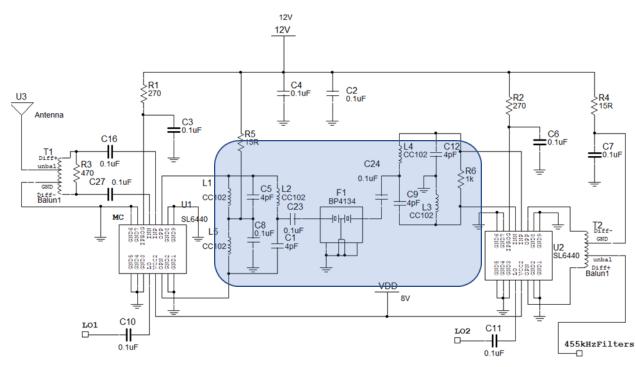


Fig 1`

Figure 1 shows the schematic of both mixers. The SL6440's have better performance when used <u>differen-tially</u>, T1 and T2 are toroidal <u>baluns</u>, T1 to convert a single ended antenna input to differential input into the first SL6440, and T2 to convert the differential output of the second SL6440 to a single ended 455 kHz output. L2, L5, C5 and C8 form a discrete balun centered on 10.7 MHz matching the first SL6440 output to F1 a 10.7 MHz crystal filter with a 2.4 kHz bandwidth. Similarly, L3, L4, C9 and C12 form a balun to

(Continued on page 5)

the Bull Thistle Bugle

(Continued from page 4)

match F1 output to the second SL6440 inputs. L1 is needed to provide DC bias to the first SL6440 collector output OPP. The local oscillator inputs are derived from the Si5351 to be described later. LO1 frequency being the signal input frequency + 10.7 MHz and LO2 10.245 MHz. The SL6440 requires two supply voltages, the first is derived directly from the 12-volt input the second via a voltage regulator. They also require a current programming resistor, in this case R1 and R2. R4 and R5 are for supply isolation. All unmentioned capacitors are either for decoupling or DC isolation.

Although this description is about the use of these mixers for the receiver, they have been designed to be used in reverse when a transmitter module is added to make a transceiver.

Note: The CVARA receiver primarily uses two printed circuit boards, referred to as T and S, with through hole parts on one and circuits requiring surface mount parts on the other. The shaded section in figure 1 uses many surface mount parts and is wired on board S (surface mount) the surrounding parts are on board T. Part 3 follows next month.

And So It Should Be Written

<u>By Ray Darling, K2DAR, CVARA Historian</u>

<u>Chapter 9</u>

<u>Welcome To – May 2023</u>

Get Yourself Right

How complicated is the world and how impossible is it to make it a better place? Maybe not as hard as it seems.

It never ceases to amaze me that month after month for the past several months, I have been able to put together something which is apparently still holding the interest of the attending members. With that said, I'd like to share an article written around 1969 by previous CVARA Member - Tom McConnell, (previous calls: WN2YME, WB2YME, KI2Y) now N7NY, residing in Scottsdale, AZ.

"I think it is gratifying to note that even within our fraternity, we can be thankful for the freedom to pursue whatever branch of our hobby that most interests us, without being dictated to. Our interests are varied and although we jokingly poke fun (cw vs. phone, etc.) I think we should still look to the person's accomplishments rather than a narrow minded attitude of how he accomplished it. I think this is what Ham Radio is all about. After the DX hound has earned all the awards and worked all the countries, does this mean he turns in this badge? After the VHFer has WAS on 50 Mhz does he just curl up in the corner and go to sleep like an old dog? After the Homebrewer (Radio that is) has custom built a complete station, does he just sit back and look at it with admiration while it collects dust? I don't really think so. With so many outlets for energy and imagination in Ham Radio, I don't think there is any reason for a person or a club to become stagnant. There <u>must</u> be something for everybody who has gone to the trouble of getting a ticket. Why not ask yourself "What have I done with my license this past year?" If you have nothing to show for it, even if only an occasional over the fence rag chew, then what value do you place on you license? I'm not talking about license advancement. I'm talking about license usage. If everybody who held a license were to become an EXTRA by next November, why would we need the bands segregated? This is to say that some people will always be Generals, Advanced, Technicians and Extras etc. This is why there will always be "room" someplace for Hams under the heading DX, Contest

Page 6

the Bull Thistle Bugle

Ragchew, VHF and others too numerous to mention. I don't include Novice in the above, since it is self explanatorythat if now after 2 years you are still a Novice then could there have been any genuine real interest in Ham Radio? I would like to poll the club members (and non-members as well) to determine what about Ham Radio still interests them the most and maybe find something of a joint interest to produce a shot in the arm for our club. Something has already died within the organization and if we are to bury it in the coming year, then so be it, but I want to go on record as saying I am in favor of doing something to bring more of us together in an United group!"

Personally, I could not agree more. Since becoming involved with CVARA, I have seen the transition from exciting, to dull or uninteresting and back again. We've experienced great gatherings, as well as club meetings that we were lucky to draw a crowd of five (5) members. Were you aware that Thomas Edison failed his way to success by discovering 10,000 ways the electric light would not work. How many of you have attempted to learn Morse Code over the years? Have you failed and given up? If we fail, consider it a blessing, not a state of misery. The secret of a failure is to learn by it, not to let it stop us. Don't worry about failing; worry if you don't.

Well, following the construction and assembly of the Éico 720 xmtr and the 717 electronic keyer, my shack suddenly took on a new look. Exciting and scary – yes. Using the new CW transmitter and the electronic keyer and Vibroplex Paddle made life a real pleasure, but still getting over the nerves and anxiety of getting on the air with confidence. I thoroughly enjoy the CW mode and making those first DX contacts made my decision to become a DX Hound. The first year on the air made contacts not only stateside, but on to England, Czech. Republic, Netherlands, Switzerland, Sweden, France, Spain, Germany, Brazil and Angola to name a few. My newly arranged shack at the time looked like this, <u>note – still crystal controlled hi hill</u>



Let's face it, my favorite mode of operation is still Morse Code (CW) and from where I sit today, will remain so for the duration of my Ham Radio career. Don't get me wrong, I will be a DX'er for life, using not only CW but many other enjoyable modes available to me as a Ham Radio operator. I hope that many of my peers will follow, making long and lasting friendships, worldwide. It's always a pleasure to work a new ham, foreign and domestic, and discuss their interests and likes in the hobby. How diverse were and are the possibilities. Try it, you might like it as well.

During this period of time, I was fortunate to meet and become friends with a number of local hams. Already mentioned were the group at GLA, and Tom McConnell, WB2YME, Joe Dolgos, WB2UTR, Howie Bradley, W2QHH, Joe Marso, K2JVE, Donald Schlafer, K2UZM, Bob Sumner, WA2STE, Stan White, WB2PPN, Wayne Shevlin, WA2AME, Joe Pinckney, WB2VNM, Lewis Tower, W2HJG, Ken Wackford, WA2PQK, George Heppe, W2PII just to name a few. I could go on and on with names and callsigns of old friends and treasure the time spent with them all over the years.

Have you found your niche in the Ham Radio world to date? If not, give as many of the avenues available a try and see which fits you the best. Don't be afraid to try as many as you're comfortable with, but don't rule out the other possibilities.

And So It Should Be Written - See you again in June 2023 -

CALENDAR OF EVENTS FOR 2023

May 4,CVARA Meeting 7:00 PM Grange Hall, .Hale St, Norwich as well as online via Zoom

May 18, Tech Night

May 25, Exam Session Norwich Grange Hall May 27, 28 General Clinton Canoe Regata

June 1, CVARA Meeting 7:00 PM Grange Hall, .Hale St, Norwich as well as online via Zoom June 3, Rochester Hamfest, Hilton, NY June 10, Cortland Hamfest, Cortland, NY June 10—12 June ARRL VHF Contest June 15 Tech Night June 22,Ex am Session Norwich Grange Hall June 24—25 ARRL Field Day

July 6, CVARA Meeting 7:00 PM Grange Hall, .Hale St, Norwich as well as online via Zoom July 8, Roger's RAGS Hamfest, Camillu, NY July 14, Tech Night July 27, Exam Session Norwich Grange Hall

August 3,CVARA Meeting 7:00 PM Grange Hall, .Hale St, Norwich as well as online via Zoom

August 17, Tech Night August 24, Exam Session Norwich Grange Hall

Do not forget that every Wednesday **night** at 7:30 local on the W2RME/R 146.085/146.685 PL 110.9. The CARES net meets.

If you know of, or hear about any activities that should be listed here, Please pass them on to the editor.

May 2023							
	1	2	3	4 meeting	5	6	
7	8	9	10	11	12	13	
14	15	16	117	18 Tech Night	19	20	
21	22	23	24	25 Exam Ses- sion	26	27	
28	29	30	31				

Permanent committees

ARES/RACES: KC2SFU

AWARDS: AD2TM

BUGLE: AD2TM Chairman

COMMUNITY SERVICE;

NEW Ham development K2FRY

FIELD DAY: K2FRY Chairman

MEMBERSHIP: K2FRY Chairman

PACKET:/ Digital: KC2SFU Chairman, N2SPI

PUBLICITY/PUBLIC RELATIONS:AD2TM, N2YP, KD2HKB, K2DAR

TECHNICAL: WA2IZB

VE TEAM: K2DAR, KD2HKB

HAM OF THE YEAR: KD2HKB

Club Station/ Shack: K2DAR, N2YP, KC2SFU

Repeater Trustee: KD2HKB

CVARA CLUB OFFICERS

President: Jean **Comer. KG8MOE** Vice Pres: Tom Mathewson, AD2TM Treasurer: Emily Goehner WA2LFI Secretary: Matt Jenne, KD2HKB Directors: Lois Strong, NK2A;;Tom Monday, KC2SFU; Jon Englart W2BDN

Tom, AD2TM, editor of the Bugle is ALWAYS looking for submissions Your views, comments, and articles will gladly be considered for publication. Send your articles to.....

Thomas Mathewson 680 Plymouth N.Norwich Rd Norwich, N.Y. 13815 We encourage promoting our organization and welcoming new members to join our group. We hope we can continue to grow and maintain a successful club. Your continued support can make this happen.

Internet...ad2tm@arrl.net

Visit the club WEB site at: http://www.cvara.net

Deadline for the June 2023 Bugle is May 20, 2023



PO Box 1324 Norwich, N.Y, 13815