DELAWARE-LEHIGH AMATEUR RADIO CLUB Inc.

FEBRUARY 2025

Club Meeting **February 6th**, 7 PM at the Nancy Run Firehouse. 3564 Easton Avenue, Bethlehem, PA 18020 Will be also a Zoom meeting.

ORRA

February's Program

Susan Filo of "SUSU Sewing Stuff" "MACHINE EMBROIDERY"







JANUARY MEETING MINUTES

President, Terry, KC3JH, called the meeting to order at 1902 hours at Nancy Run Firehouse.

Pledge of Allegiance was led by Terry.

President's Report: Terry said that there is a need for a Program Chair. Terry tried to get Bob, Atlantic Division Director, but was not able to get a confirmation. There are many programs waiting for the persons who are giving the program send Terry a confirmation.

Guests: Ed Quaranta, KB3YKS and XYL and Steve Walter, K3SW who are both new members who will be voted into the Club tonight.

Secretary's Report: John, N3IGA, asked if there was any additions or corrections to the Meeting Minutes as printed in the Newsletter last month. A motion to accept the Minutes was made by Dean, AB3BD and second by Doug, K6PGH. A vote was taken and motion was carried.

Treasurer's Report: Larry presented the Treasurer's report for the month of November. Dean, AB3BD made the motion to accept. It was seconded by Jay, KC3ZFR. A vote taken and motion was carried.

Committee Reports:

Membership: The following applications were voted into the Club. Steve Walters, K3SW, Ed Quaranta, KB3YKS, Roseann Esposito, KD3AGK, and Richard Young, KC3MLD. I make the motion to accept them into the Club. George, N3SQD seconded it. Vote was taken and motion passed. There are 8 Life Members and 129 voting members. That brings a total of 137 Voting members. There are 8 Assoc. Members. That makes a total of 145 members including the new members just voted in.

I would like to inform those that did not know, Gabe Lantos, KZ2A became a Silent Key on 22 October 2024. Gabe was on the Board of Directors for many years.

Club Station: No Report

Tech Committee: No Report

Repeater: Working

Website: No problems

New Business: Bob, KE3AW, announce the Classes will start on March 4th. Rooms for both General and Tech are already set up.

Terry announced about Winter Field Day on January 25 and 26. The 24-hour operational period starts at 1900 UTC (2pm local) on Saturday, the 25^{th,} and ends at 18:59 UTC (1:59pm} on Sunday, the 26th.-If you want more information about this, you can go to the website, https://winterfieldday.org and check out what it is all about.

Old Business:

Adjournment: There being no further business, the meeting was adjourned at 1922 hours.

Program: Submarines by Terry, KC3JHT.

John Holmes, N3IGA DLARC Secretary

Product Review TIDRadio H3 by Barry G. Kery, KU3X

There are a lot of low-priced HT's imported from China that are flooding the market. The problem with some of these HT's are that they do not meet FCC specs for harmonic attenuation. The FCC requires any VHF and UHF radio with the output power of under 50 watts to have all harmonics a minimum of 40 db down from the fundamental frequency. Over the last two years I have evaluated numerous HT's and found some to meet FCC specs and others do not. This past year I kept track of my tests and posted the results on my web page. https://www.ku3x.net/ht-spectral-displays

Radios like the Baofeng UV-21R and the Baofeng BF B8HP-PRO did not even come close to passing FCC specs. Both of these HT's the second harmonic is only down about 19 db. **These should never be used on the VHF bands**.

I decided to get a low-cost Chinese HT that would cover the VHF, UHF and AM aircraft bands. The trick here is to find one that passes the FCC requirements. I was told about the TIDRadio H3 that is sold on Amazon at a reasonable price of \$28.

The H3 comes with a 2500 ma battery. Charging is done via USB C cable that is supplied. I actually have two of these radios. One radio came with a charging stand and you supply the AC to USB wall adapter. The other radio did not come with a charging stand. Instead, it came with the AC to USB wall adapter.



The above picture is my H3 after it was programmed. When I received the radio, I noticed that I could transmit on almost any frequency that the radio would display. This is totally unacceptable to me. The last thing I need is a radio that transmits anywhere. This can lead to an easy mistake by punching in the wrong frequency by mistake, transmitting and violating FCC rules. There is a setup procedure that one can go through to correct this and I did it post haste. On the lefthand side of the radio are three buttons. Two are PTT buttons and one is for turning on the little LED on top of the radio. To make this radio that you can only transmit on the ham bands, push the top PTT button, hold down the star (*) key on the keypad and turn the radio on. The following screen will appear.



Now you have to make one of three choices. From default the radio choice was #3-normal. This is what allows the radio to transmit anywhere. Choice #2-GMRS will put the radio in a mode that will only allow you to transmit on the GMRS frequencies. I chose #1-Ham that will only let the radio transmit on the ham band frequencies. None of the above choices effect the receive frequency range of the HT. Once you make your selection, whatever is programmed in the HT will be erased. You can now program your favorite VHF and UHF frequencies. But wait, there is more! I was informed that by going to menu #52 I can turn it to the on position and the radio will allow me to transmit on the 220 mhz ham band. Now you have three ham bands to choose from.



There are four ways to program the H3. You can use the keypad on the radio, you can use Bluetooth along with OD Master, you can clone the radio from another H3 or you can use Chirp.

Programming with the use of the keypad is a little cumbersome but not all that bad. You can program the frequency and then go through the menus to enter any other information like PL tone.

Programming is super easy with the use of Chirp. Chirp is a free internet download. First connect the H3 to your computer via the supplied USB cable. Not all USB cables support date transfer. Some cables are only used for charging w/o data transfer. Now open chirp and select download from the radio. For a new radio, always do this first. Chirp will ask you what radio you are using. Once you perform the download you will see numerous memories that are already preprogrammed. Either erase them or over write them. I noticed mine had NOAA weather frequencies already programmed. I did not erase them. If you want to program frequencies in the 220 mhz range, make sure you go to menu #52 first and turn that feature on. Once finished entering the data, upload the information to the radio and then save your work to your computer.

The next way to program the radio is by the cloning feature.



To enter the cloning feature, push and hold the bottom button on the left-hand side of the radio that controls the LED. Also depress the star (*) key on the keypad while turning the radio on. Do this to the HT you want programmed and also the HT you are cloning from. Put the radios side by side and then depress the button that controls the LED on the radio you are cloning from. You are now cloning and it will take about 1 minute to complete. If the radio that you are cloning from is in the Normal mode, meaning it can transmit anywhere and the HT you are cloning to is in the Ham only mode, that HT will now be in the normal mode. So, make sure the radio you are cloning from is in the ham only mode if you want the cloned radio to be in the ham only mode.

The third way to program the H3 is via Bluetooth and use your cell phone. In the manual that comes with the radio, they

address this. So, this feature is sanctioned by TIDRadio. I use the word, "sanctioned" for a reason.

WARNING!

A friend of mine purchased two H3's off of Amazon. He brought them to my house for a demo and for me to evaluate them to see if they pass FCC specs. He programmed the W3OK VHF repeater into one of his H3's, via the keypad and brought up the club's repeater. The HT worked perfectly. Next, he wanted to demo programming the H3 via Bluetooth with his cell. Once he entered a few new frequencies, I wanted to check the H3 on my spectrum analyzer. I keyed the H3 and the fundamental frequency, as shown on the H3's display, was 146.100 mhz. The spectral display showed 139 mhz? Obviously, something was wrong. We double checked everything and even reset and reprogrammed the radio. Same results. We even tried to update the firmware and try again. Same problem. The radio was stuck transmitting on 139 mhz and there was nothing we could do to correct the problem. Next, he took the second H3 and programmed it using ODMaster. He tried to bring up the 70 repeater and no luck. We then connected it to the spectrum analyzer and it actually showed the same, transmit frequency was 139 mhz? The end result was both HTs were sent back to Amazon. The only conclusion we could come up with was he used his iPhone with ODMaster to program both of his radios. As I said above, using ODMaster was written, in the manual, as a way to program the HT's. He ordered a replacement and programmed it with Chirp. No more issues, it worked great.

Shown below are the two spectral displays taken from my H3. Remember, all harmonics have to be a minimum of 40 db down from the fundamental frequency.

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dBm	3			Hz -68,8		4	436.5MHz -	63.3dBm		dBm	3	1.334	15GHz -60	.1dBm		4 1.791	.9GHz -62.8	dBm	
10/ Pausei	>5	58	3 1. 9M	Hz -53.:	2dBm				-10	10/ PAUSED									-10
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Spur: AUTO	\vdash	-							-30	Spur: AUTO									-30
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VBW: 100kH:	z			l.	2				-40	VBW: 300kHz									-40
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On the VHF side, the second harmonic was down 41.5 db from the fundamental frequency. I have evaluated other H3's and all of them were even better. On the UHF side, all harmonics were down close to 60 db down. I evaluated mine on the 220 mhz band and it passed FCC specs. When it comes to 220 mhz, the supplied antenna is not rated for 220 mhz. I attached the antenna from my Kenwood TH F6A, that is designed to work on 220 mhz and I then compared the results of keying up the 224.740 mhz repeater using the F6A's antenna and the original antenna that came with the H3. Where I could not key up the repeater with my F6A's antenna, nor could I key up the same repeater with my H3's antenna. Where I could bring up the repeater with my F6A's antenna, so could I with my H3's antenna.

They really did a nice job designing the display and the information that is always displayed.



The above left picture shows that VFO-A is active. VFO-A is in the memory mode and the large numerical part of the display shows the actual frequency, 449.900 mhz. Under that you can see that it is on memory channel #20. In the smaller window you can see that the active frequency is labeled W3OK UHF band. The little green arrow tells us that is the active frequency. VFO-B, that is again a memory channel is the W3OI repeater. You have a choice of listening to only one VFO or both VFO's. You have to go into the menu to choose what you want. The above right picture shows I am now on VFO-B's memory channel. To toggle between A and B, just tap the A/B key on the keypad.

If you choose to listen to both bands at the same time, here is a neat feature. On the left side of the radio are two PTT buttons, the second button is below the top PTT button. If you have VFO-A active and you want to talk on VFO-B, you do not have to toggle between the two VFO's. All you have to do is to push the lower PTT button and you will transmit on VFO-B.

The H3 has two power levels, 1 watt or 5 watts. By default, the screen will time out and go black in 5 seconds. You can

change this to time out from 5 seconds to 30 seconds. Or you can choose to have it not time out and stay on all of time. This was my choice, stay on all of the time. Menu #5 will address this feature.

The H3 will also talk back and tell you what you are doing. I found this annoying and turned this feature off post haste. Menu #14 will address this feature.

Conclusion:

This radio fits my needs to the T. It is not too big to carry around. The 2400 mah battery allows for a reasonable amount of operating time and is super easy to charge. I have a USB-C cable in my vehicle for charging my cell and can use the same cable to charge the H3 while driving. The menu is quite easy to navigate through and makes the H3 easy to tailor to fit your needs. Audio quality for both transmit and receive are exceptionally good. I like the cloning feature. Since I have two of these, when I make a change on one H3, I just clone the second H3 off of the first one. Since it only costs \$28, it will not break the bank and buying two of them is something for one to consider. I use one around the house and take that HT on my morning walks. I can leave the other H3 in my vehicle so I do not forget to take it with me.

Amazon offers numerous package deals. You can get a twin pack or just one HT along with a spare battery.

DLARC Board Meeting Minutes

Monday, 20 January 2025 100 Gracedale Avenue, Nazareth, PA 18064

A meeting of the DLARC Board of Directors was at the 991 Center, with the following in attendance:

Board Members Present:

President, Terry Swinney, KC3JHT Secretary, John Holmes, N3IGA Treasurer, Larry Butler, KC3JTK Dean Guth, AB3BD Bill Carlsen, KD3FLY Dave Frankenfield, N3LWY Absence:

Vice-President, Diana Lambert, KC3ZGQ

Steve Harper, W3NAM

Adam Gauntz, N3LAG

Doreen Grambling, K3PDL

Proceedings:

A quorum being present, the Secretary called the meeting to order at 1901 hours.

President's Thoughts: Terry said that the security system is still a work in progress. Both Adam and he tried to set up the system with the information that had. It did not work. Terry called the company that made the system. They worked on the system until Terry had to leave on a personal reason. So, now Terry is waiting to meet with Adam whenever Adam is available to either get the system working or getting a whole new system.

The other item Terry had was an email that John got from the PA QSO Party about sponsoring a plaque for the Party. They would

send a list of what plaques are available yet to be sponsored. There was a discussion about it. It was decided that Terry would give the gentleman that sent the email, Larry's email since Larry volunteered to check it out since he is the Treasurer.

Secretary's Report: John, N3IGA, asked if there were any corrections or additions to the minutes as printed in the Newsletter. Motion to accept the report was made by Dean, Seconded by Larry. Vote was taken and motion carried.

Treasurer's Report: Larry, KC3JTK, presented said Treasurer's report for the month of December. A motion to accept the report was made by Dean. Seconded by John. Vote taken and motion carried.

New Business: Bill, the Webmaster informed the Board that he had done some updating on the website. He mentioned that it is still a work in progress on somethings. He had a question about the Repeater section. There was something he did not understand about a repeater out in Fleetwood. After discussions, Dave texted Barry, N3NVA, about it. Barry said that Fleetwood is no longer there and that he will update the information.

John was asked about Membership. He said there is still 138 members. A lot of them have not renewed. All membership cards have been sent that have renewed. John is still waiting for information from Larry on members that paid by check. Larry said that he would send that inform to him.

John mentioned a problem from last month. John got Spam emails from persons saying they were Terry. After looking at the email address, John copied the IP to look up. They were from out of state and some were from out of the country. John was looking for how they got his email address and knew about Terry. He found out that nonmembers can click on the Newsletter and eventually get the Newsletter to read. The last page has all the Executive Committee's email addresses. After an interesting discussion with help from all members and Bill, it was decided that all personal email address will be removed from the Newsletter starting in February's Newsletter. The only email address will be the ones using dlarc.club. Board Members will still be listed but without an email address. The Officer's email address will be the only email address shown.

John said that he got a message from Adam, who could not be on Zoom because of work. He was asking the Board for an answer for selling the Rohn tower that is in the barn. He is looking at setting up a definite date on cleaning up the barn and getting rid of the stuff that is no good. Terry said that the April program was going to be a mini Hamfest. So, we need to clean out the Barn before that. Terry suggested that I send an email to George and Al and they can give me a price that should be on it. Make sure I copy him on it so he knows. That way the four of us will get an answer and I can report back next month.

Old Business: None

Adjournment: Meeting adjourned at 1947 hours.

Minutes submitted by John Holmes, N3IGA DLARC Secretary

DLARC 50 Years Ago

In 1975, DLARC began holding meetings in the Greystone Building, which was Northampton County's Alternate Emergency Operations Center, at the Gracedale County Home in Upper Nazareth Township. Club members spent months providing the needed renovations for a meeting room and new electrical work to move the club station to the building. In January 1975, a new antenna for the repeater was installed on the Northampton County tower.

Fifty years ago, the club began several new activities holding an annual Ladies Night, providing communications for non-profit and charity events (the first event was the 100-mile Lehigh Valley Gap Valop Century), and donating an ARRL handbook to the Easton Area Public Library to encourage new hams.

In 1975, Field Day was held at Hackett Park in Easton, and the Bethlehem Boat Club was the location of the annual picnic. DLARC had 78 members (including 5 females); dues were \$6. The only 1975 officer that we know was treasurer Robert Rothrock K3MAZ.

DE Barb Wiemann, W3ATC Charge of the DLARC Archives

MY MASS EMAILING TO CLUB MEMBERS

I am always getting emails from members about different items they think it may be interesting to other Club members or Ham equipment for sale. I have no problem doing a mass email to all Club members to get the information out.

I need all pertinent information so that members have no problems finding a website or where to find the information. Do not just send a message about something and leave it at that. I need the information or I will just tell any member that contacts me to email the original sender. Every article I do a mass email I put "From the Desk of" That should inform members that it is not from me and not to contact me for more information. What was in the email I sent out was only information I was given. So, you know what I know.

It is not hard to put all information in the email that anyone who reads will not have any problems understanding the information. So, in the future, please send all pertinent information so any Club member can read the information and understand it without any questions.

As I said in the beginning, I am glad to provide mass email on anything any member may find interesting. Not everyone is computer savvy. I am just trying to help pass information on. All I am trying to do is make sure Club members get the information that they may or may not be interested in.

De John, N3IGA

DLARC NET QUICK CHECK CALENDAR

FEBRUARY 2025

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
						1 G
2	3	4	5	6	7	8
GROUND			7 pm	CLUB		
HOG			DLARC NET	MEETING		
DAY				7PM	3	
9	10	11	12	13	14	15
			7 pm		VALENTINE'S	- 10
			DLARC NET		DAY	
16	17	18	19	20	21	22
	PRESIDENTS'		7 pm DLARC			
	DAY		NET			
		P			\times	57
23	24	25	26	27	28	
		R	7 pm DLARC NET	0		

WEDNESDAY NIGHT NETS

Additional Net Controls are needed for the Wednesday Night ARES, RACES & DLARC net. If we have enough interested operators, it will only be necessary for each operator to have only one net session in each three-month period. 13 weeks in a period, then 13 net controls would be ideal, and some extras to fill in if needed.

This would give us a pool of experienced controls, for any emergency which would arise. Interested operators should contact George, N3SQD at <u>george@bioserv.com</u>. The NIMS IS-700 and ICS-100 courses are not needed to be a net control, but should the need arise, and we do supply controls and operators for real emergencies, then the courses requirement will be in effect and EMA issued IDs will be needed to be on the scene of an emergency.

NORTHAMPTON COUNTY ARES, RACES AND DLARC NET

All Radio Amateurs are welcome to take part in the ARES, RACES and DLARC net. This net meets Wednesday at 1900 hours local time, on the W3OK Repeater 51.76, 146.70 and 444.90 (pl 151.4). With an alternate frequency of 147.135 + DPL 315) W3OI Repeater.

QCWA Chapter 17 holds a net Monday evening at 7:30 PM on 3958 +/- depending on conditions.

Other inputs are the 146.85 repeater, (151.4 PL) and Echolink at K2PM-R.

Mid-Atlantic D-Star Net meets each Tuesday at 7:30 PM. The following repeaters Dstar repeaters are available in the Lehigh Valley. W3OK -145.11000MHz -0.600 Port C – W3OI -147.16500MHz +0.600 Port C, – W3OI - 445.02500MHz -5.000 Port B

All repeaters on the net are linked through **Reflector 020 port A**, so all stations checking into the net should make sure that they have *their local repeater call sign followed by the letter "G" in the eight positions of the RPT2 field*. Otherwise, you will only be heard locally and not over the Reflector. Dongle users wishing to check into the net should Log On by connecting directly to Reflector 20, port A, rather than through your local repeater to conserve local bandwidth.

EXECUTIVE COMMITTEE 2023–2024 OFFICERS

President – Terry Swinney / KC3JHT	president@dlarc.club
Vice President - Diana Lambert / KC2ZGQ	-vicepresident@dlarc.club
Secretary – John Holmes / N3IGA	secretary@dlarc.club
Treasurer – Larry Butler / KC3JTK	treasurer@dlarc.club

BOARD of DIRECTORS

Dean Guth / AB3BD Bill Carlsen / KD3FLY Adam Gauntz / N3LAG Dave Frankenfield / N3LWY Steve Harper / W3NAM Doreen Gramling / K3PDL (Past Pres.)

PHONE NUMBERS FOR THE EXECUTIVE COMMITTEE OF THE DLARC CAN BE FOUND ON THE WEBSITE / MEMBERSHIP LISTING CLUB MEETINGS.

All regular meetings of the D.L.A.R.C. Are held on the first Thursday of each month at 7 PM at the Nancy Run Firehouse. TALK IN ON 146.700 (PL 151.4) Club Station Telephone Number **484-291-1527** Email Address – <u>W3OK@arrl.net</u>

THE W3OK TRUSTEE --- Barry Vogt / N3NVA

The W3OK Corral is published monthly and is the Official Publication of the

DELAWARE - LEHIGH AMATEUR RADIO CLUB INC. 14 Gracedale Avenue

Nazareth, Pa. 18064-9211

THE NEWSLETTER STAFF

Editor – John Holmes / N3IGA	newsletter@dlarc.club
Web Master - Bill Carlsen / KD3FLY	website@dlarc.club
Circulation – John Holmes / N3IGA	newsletter@dlarc.club
Photographer - Dave Blankenship / N3EYT -	photographer@dlarc.club