

Airwaves on the Azalea Coast



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Officers

President - Jeff McCulloch
K4JEL

Vice President - Mike Hartman
NI2S

Secretary - Gene Costa
KD2RRP

Treasurer - Bill D'Innocenzo.
K3WMD

Upcoming Events

Jul 04	11:45am	Luncheon (Jason's Deli)
Jul 07	7:00pm	ARES Meeting - 114 Cinema Dr
Jul 11	11:45am	Luncheon (Pete's Choice)
Jul 15	6:00pm	Elmer Hour
	7:00pm	Club Meeting - Pine Valley Baptist Church
Jul 18	11:45am	Luncheon (Cape Fear Seafood)
Jul 25	11:45am	Luncheon (Henry's)

More details on these and other scheduled events can be found here:
[AC4RC Club Calendar](#)



From the President's Desk



As you read this we are only a few days away from Field Day. I hope everyone tries to make it out and see the club's effort for this event. And you will certainly have the opportunity to get on the air and make some contacts. There will be plenty of help around for those that are new to HF. It is a great opportunity for anyone interested in ham radio.

This past month the club had the opportunity to work from the Battleship North Carolina for Museum Ships Weekend. We hosted a group from CFARS for the event. We worked predominantly SSB, but also had CW and FT8 contributions. Several members came out and made many contacts helping keep the Battleship North Carolina alive with history.

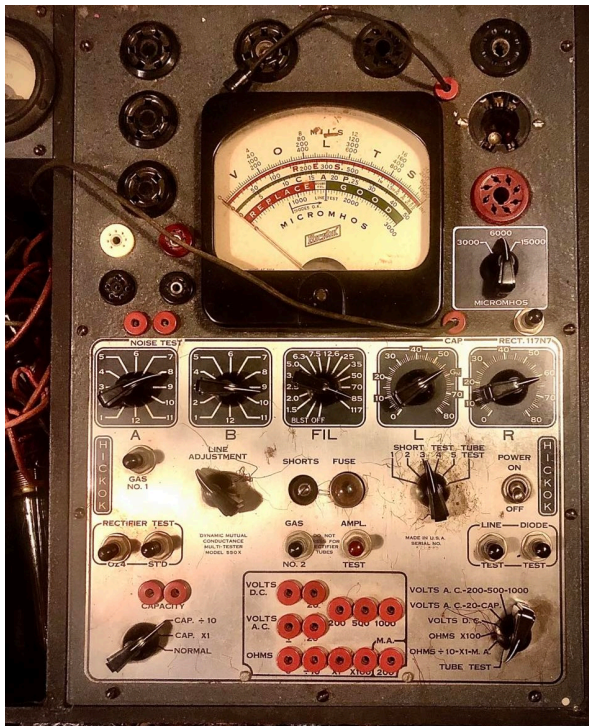
While the club has big events like Field Day and Museums Ships Weekend we also have other activities and opportunities to be involved. Stay tuned to our reflector and net to find something that interests you and..... get radioactive.

Jeff
K4JEL



699 contacts during Museum Ships Weekend despite poor band conditions and poor weather on Sunday. The Cape Fear Amateur Radio Society (CFARS) came to Wilmington to help out. 17 operators from CFARS made a great contribution to the effort.

- Well done Azalea Coast and CFARS operators!



Curt Sellers, Jeff McCulloch, and Mike Hartman were on the battleship working on two vacuum tube testers that will be needed to test tubes on the old communication gear on the ship. More work is needed, but the team made some good progress today. Before we get into the meat of restoration, we need to be confident that our test equipment is in good working order!

Hickock Tube Tester 550

Model: OZ-1

USS North Carolina Radio



Member Spotlight - Gene Costa



Gene operating solo overnight on 80M (Field Day 2021).

My call sign is KD2RRP (Roasted Red Pepper) and I am an AE. I retired from full time work at age 69 and finally pursued an Amateur Radio license. I received my Technician ticket in March 2019, my General in May 2019 and the Amateur Extra in 2021. The long pause in between the General and the AE was filled with ARES/FEMA/ARRL courses for EmComm and becoming a VE.

My favorite part of Amateur Radio is helping new hams. As a former teacher and life-long educator, I have always taught something. At a young age I taught piano and accordion to neighbors. Later in college I taught fellow students how to repair stringed instruments. As an older adult, I taught pistol instruction privately and held 23 classes for women shooters. Now, I share the little that I have learned about the hobby with those who are a few steps behind me in the journey.

What I enjoy the most in this hobby are the friendships that I have made and continue to make at almost every meeting and the knowledge that I am gaining through the work of the Technical Committee.

Note from the Editor: Gene also serves as our Club Secretary.

ARRL Special Recognition



Dear Jeff,

ARRL Roanoke Division Director Jim Boehner, N2ZZ, joins me in extending our congratulations to the Azalea Coast Amateur Radio Club on being named an ARRL Special Services Club (SSC). This honor is bestowed by ARRL to only a handful of ARRL affiliated clubs. SSC status portrays an active club which is engaged extensively with both the local Amateur Radio community and the general community beyond. An SSC club goes the extra mile in educating members and the general Ham Radio population by consistently offering training and numerous opportunities to operate and to perfect their skills.

73 de Bill Morine, N2COP
Vice Director - Roanoke Division

Nationwide, only 6% of all 2,887 ARRL affiliated clubs have earned the prestigious designation as a Special Services Club. In ARRL's Roanoke Division - which consists of the states of North Carolina, South Carolina, Virginia and West Virginia - 17 out of a total of 237 ARRL affiliated clubs in those four states is an SSC. Here in North Carolina, the Azalea Coast Amateur Radio Club becomes the 5th out of 96 ARRL clubs to earn the distinction. ACARC joins the Raleigh Amateur Radio Society (RARS), the Cape Fear Amateur Radio Society (CFARS) of Fayetteville, the Appalachian club in Hayesville and the High Point Amateur Radio Club..

ACARC First Half 2025 Financials

Financial Update

Bill D'Innocenzo

K3WMD

The first half of 2025 has been outstanding for the club in terms of membership growth. We currently have 80 members which includes several new members/hams this year! Financially the club started the year with \$8,700 and as of June 30th we have just over \$8,200 in our coffers. Our membership dues just about cover our annual "fixed costs" for insurance, hospitality, bank and postal fees. Add to the dues our donations- mostly from club members who throw in a "few extra bucks" with their dues, Battleship Guest Operators, 50/50 Raffles - and we end up with a sustainable financial model for our club's long-term viability.

We recently did some much needed maintenance on our beloved repeaters - located atop the Novant New Hanover Regional Medical Center on 17th Street, for NO COST to the club. This included a much-needed controller upgrade, battery backup battery replacement and some general cleanup. Our Repeater team, chaired by Curt, K4JCS, with fantastic technical support from Gene, KD2RRP, Jeff, K4JEL, Mike, NI2S, and Paul, KW4GI, have kept those old "ladies" on the air and humming. With the new controller we are now able to link the 2M 147.18 and the 70CM 442.50 repeaters together, allowing more of our members to join our weekly rag chew net.

Our recent dues increase is meant to build our reserves for potential further repeater maintenance and upgrades to include digital capabilities, EchoLink, and who knows what. We are also preparing ourselves should we encounter the need to replace the aging antennas, cabling, duplexers or power supplies. Our approach is to be prepared rather than encounter a financial problem and assess in an "emergency" situation. I am more than happy to provide you with a full detailed report of the club's income and expenses for the first half of 2025. Just drop me and email at bill.k3wmd@gmail.com and as soon as I get all the June income and expenses recorded, around mid-July, I will send you the first half report.

Monthly Tech Tip

Lightning Protection

Protecting your amateur radio equipment from lightning strikes is crucial, as lightning can cause significant damage to your equipment, your home, and even pose a risk to your personal safety. Here are some steps you can take to minimize the risk of lightning damage to your amateur radio station:

- **Disconnect antennas when not in use:** Disconnecting antennas from your radio equipment when not in use is a simple yet effective method to reduce the risk of damage from lightning. It is especially important to do this during thunderstorms or when lightning is anticipated.
- **Lightning arrestors:** Install lightning arrestors, also known as surge protectors or coaxial protectors, on all coaxial feed lines entering your home. These devices help divert lightning surges to ground, reducing the risk of damage to your radio equipment.
- **Grounding:** Proper grounding is essential for lightning protection. Establish a single-point grounding system for your amateur radio station, connecting all equipment, antennas, and lightning arrestors to a common ground point. Use heavy-gauge copper wire or copper straps to connect your equipment to ground rods driven into the earth. The grounding system should be bonded to your home's electrical service ground to create an equipotential ground plane.
- **Grounding antennas and towers:** Ground your antennas and antenna masts or towers to prevent the buildup of static charge and to provide a path to ground for lightning energy. Use ground radials or ground rods connected with heavy-gauge wire or copper straps to create a low-resistance path to ground.
- In addition, you can use spark-gap devices or air terminals on the top of your tower to help dissipate static charges.
- **Protect other connections:** Don't forget to protect other connections to your amateur radio equipment, such as power supplies, phone lines, and network cables. Use surge protectors or lightning arrestors designed for these specific connections to minimize the risk of lightning damage.
- **Unplug equipment during storms:** If a thunderstorm is imminent or already in progress, unplug your radio equipment from power outlets, antennas, and other connections. This helps to further reduce the risk of damage from lightning-induced surges.
- **Tower placement:** When installing a tower or antenna mast, avoid placing it near power lines or tall trees. This reduces the likelihood of lightning striking your tower or antenna system.
- **Maintain your lightning protection system:** Regularly inspect and maintain your lightning protection system to ensure its effectiveness. Check all connections, grounding rods, and wires for corrosion or damage, and replace any damaged components.

While it's impossible to guarantee complete protection from lightning, following these steps can significantly reduce the risk of damage to your amateur radio equipment and help ensure your safety.

*Posted April 8, 2023 Updated August 1, 2023
By Ham Radio FAQ*

Wilmington Area Amateur Radio Repeaters v
On-Air Within 40 Mile Radius Of Downtown Wilmington - JUNE, 2025

V1.0 for June, 2025

ANALOG FM

<u>Freq.(MHz)</u>	<u>Call Sign</u>	<u>Location</u>	<u>PL Tone</u>	<u>Remote Access</u>	<u>Nets</u>	<u>Club Affiliation</u>	<u>Miscellaneous</u>
145.170	N4JDW	Leland	88.5				
145.250	KN4UKU	Leland	88.5				Brunswick SKYWARN
145.370	N4GM	Bolivia	88.5			BSARC	Also C4FM Fusion
145.410	NC4NH	Wilmington	67.0		Mon. 7:00PM	NHC ARES	
146.730	N4ILM	Porters Neck	88.5			WVHFA	Upgrades in progress, 05/2025
146.820 *	N4ILM	Winnabow	88.5		Thurs. 8:00 PM	WVHFA	Use 147.060 as alternate, 05/2025
146.940	N4JDW	Hampstead	88.5			HH	
147.060	N4ILM	Malmo	88.5			WVHFA	Upgrades in progress, 05/2025
147.180	AC4RC	Wilmington	88.5		Mon., 9:00 PM	ACARC	Net Linked To 442.500
147.315	N4GM	Bolivia	118.8	EchoLink	Mon. 7:00PM ARES Mon 8:30 AM Ragchew	BSARC	Fulltime link 444.750 EchoLink Node 825587
147.345 *	N4ILM	Winnabow	88.5			WVHFA	
147.375	NC4PC	Burgaw	88.5		Mondays 8:00 PM	HH	Fulltime Link 443.550 except when in P-25 mode
224.520	WA4DAN	Kelly	91.5				
224.680 *	N4ILM	Winnabow	91.5			WVHFA	
442.025	N4JDW	Burgaw	88.5				
442.500	AC4RC	Wilmington	88.5		Sundays 8:00 PM	ACARC	Net sometimes on 147.18
442.600	N2MH	Oak Island	141.3				
443.550	NC4PC	Hampstead	100.0		Mondays 8:00 PM	HH	Fulltime Link 147.375 except when in P-25 mode
444.500	K4FXC	Wilmington	67.0				Relocating repeater, 05/2025
444.750	N4GM	Calabash	118.8			BSARC	Fulltime Link 147.315
444.85 *	N4ILM	Winnabow	88.5		Thurs. 8:00 PM		Swap Net - Thue=rsday Night
444.95 *	N4GM	Bolivia	118.8			BSARC	Also C4FM Fusion
444.175	N4JDW	Winabow	88.5				.

DIGITAL

<u>Freq</u>	<u>Call Sign</u>	<u>Location</u>	<u>Mode</u>	<u>CC</u>			
144.390	N4ILM-4	Winnabow	APRS			WVHFA	
144.900	K4BLA	Delco	DMR	CC1			2.5 MHz positive offset
145.370	N4GM	Bolivia	C4FM		East Coast WIRES-X	BSARC	PL 88.5 in Analog FM
442.600	N2MH	Oak Island	C4FM		Local Coverage	N2MH	PL 141.3 in Analog FM
444.075	N4JDW	Hampstead	P-25				
444.1875	N4JDW	Winnabow	P-25				
444.2375	N4ILM	Winnabow	DMR	CC1			NC-PRN --Internet intermittent 05/2025
444.95 *	N4GM	Bolivia	C4FM			BSARC	PL 118.8 in Analog FM
444.975	NE4SC	Shallotte	DMR	CC1			

NOTES: * Temporarily Off The Air
 # Receiver temporarily offline since 147.06 site being used for 146.82 transmit

LEGEND ON CLUB TRUSTEES OR OWNERS

ACARC - Azalea Coast Amateur Radio Club www.ac4rc.org

BSARC - Brunswick Shores Amateur Radio Club www.n4gm.org

HH - Hampstead Hams www.hampsteadhams.com

NHC ARES - New Hanover County Amateur Radio Emergency Services <http://nc4nh.org/>

WVHFA - Wilmington VHF Association www.n4ilm.org

Every effort is made to keep this list accurate, but not responsible if there are errors