



Azalea Coast Amateur Radio Club



**December
2019 Edition**

From The Editor

The article submissions keep rolling in and I want to send out a heartfelt THANK YOU to those who have contributed. This is YOUR newsletter and the more varied input I get the better the newsletter gets. Keep sending them in! If you have an idea or topic you want to see in the newsletter but either can't or don't want to be NC's newest author just email me the idea. I'll research & write it for you!

Congratulations to the newly elected club officers. I am sure the club members look forward to another year of great leadership and expansion of the club and it's activities.

Have a question you want answered? Curious about something ham related but need some ideas or guidance? Stumped about something and need help? We have Elmers that can probably give you the advice you need. Please email to: W4BIX@arrl.net

73!

ACARC

President
Pete Long
(WB3FYR)

Vice President
Jeff McCulloch
(K4JEL)

Secretary
Norman Clemmons
(KI4YSY)

Treasurer
Anita Jacobs
(KG4IIL)

**Azalea Coast
Amateur Radio Club**
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www.ac4rc.org



Upcoming Important Events

*****No club meeting in December*****

Dec 5th Club Christmas Dinner

Dec 7th Pearl Harbor Remembrance Day, BB-55

Jan 21st Elmer session, 6:00 pm
Monthly club meeting, 7:00 pm
CFCC North Campus
USE YOUR PARKING PASS!

Every Monday 2 Meter Rag Chew, 9:00PM
147.18MHz, +0.600 offset, 88.5 tone
Norman (KI4YSY) is net control

Welcome New Members

by Pete (WB3FYR)

Welcome to the Azalea Coast Amateur Radio Club (ACARC). Whether you are new to the hobby or are returning to amateur radio after a period of some years, welcome.

This club has been in existence for a long time (1977) and as with any club, its membership has varied over the years. Currently, thanks to you, the membership is in a growth spurt. And if the amount of construction of new homes and apartments is any indication, this trend will continue.

Our club is one of a handful of radio clubs in the Wilmington area primarily focusing on using the High Frequency bands (HF). In all of North Carolina there are 85 ARRL-affiliated amateur radio clubs and perhaps a couple clubs that are not affiliated with the ARRL. HF doesn't mean there are not other things that may interest you if you have a Technician's license. In general, the spectrum of HAM activities is very broad. Take VHF, a starting point for most new HAMs.

Yes, the club operates a VHF repeater (147.180 / PL 88.5) and a UHF repeater (442.500 / no PL) for local communications. But is that all you can do with VHF? You know the answer, NO. Other repeaters listed on the club website are connected in various ways to the internet, which will allow more than just local communications via FM (Frequency Modulation). If you don't want to use the internet, you can use your FM handheld to talk via a satellite (repeater in the sky) or ARISS, the space station.

Then there is Single Sideband (SSB) VHF for longer point-to-point communications without a satellite though it isn't quite as reliable as HF but it can be done. Not satisfied? Check out the privileges for a Tech Class and you may find something that interests you such as operating on the 6 meter band or even parts of 10 meters.

After moving up to General Class, you have a much better chance of using SSB on HF to literally go anywhere in the world. Then there are digital

mode communications. Which digital modes? The current front runner is the FT8 mode using the free downloadable software WSJT-X, but there are modes in WSJT-X just waiting for you to try them. Another free downloadable software package is FLDigi. This software has many, many modes each with pluses and minuses although PSK31 may be the most popular.

Note: I haven't mentioned DSTAR, moon bouncing (not at a county fair), Morse code, TV ... the list of HAM communication methods, types and uses goes on and on.

In general, your HAM activities will include:

- technology/computer and radio fields that send RF (Radio Frequency) signals to
- antenna(s) that you can buy or make and play with, and those signals will be influenced by
- space and atmospheric conditions (propagation) so that you can
- communicate or QSO (contact another ham) anywhere in the world, and get an QSL acknowledgement (a confirmed QSO) maybe for one of the many awards like WAS (worked all states) or make points in a contest like the NC QSO Party (next one 3/1/2020) or to simply look up a contact's location (QTH) to find out a little about the QTH like Andorra (where?).

You can go as deep as you want in any or all of the above depending on your own interests.

I'm rambling too much, but I have to mention the social aspect of our club: Field Day, the Battleship, luncheons, Triathlons and many other activities. Bottom line: WELCOME to HAM radio, a life-time hobby.



Mark These Dates

by Pete (WB3FYR)

Continuous .. Mondays, Rag chew Session @9pm 147.180/88.5

Thanks to Linwood and Jack these mini-programs gives us insight into many ham topics, such as protect your gear from lightning, to grounding, to RG58 with more to come. Have a topic that you think would fit the Monday format? Let someone know.

Elmer sessions: Remember before the club meeting every month @ 6pm ANY ham problem or topic can be discussed with experience hams.

Continuous: Fridays, Lunch Bunch meets somewhere in the area. Joe sends out the location on the club reflector. Not getting reflector messages? Let Jack (WD4OIN) or someone else know. Ham topics discussed at meeting as well as any other topics but note, we never forgot to eat our lunch and enjoy each other's company.

January 21st @ 7pm Club Meeting at CFCC North Campus:

6pm starts Elmer Session. Elmer is a Ham Radio guide for new ham operators, so have questions? Come @ 6pm!

7pm Formal Meeting starts

***BRING YOUR PARKING PASSES, DISPLAY ON DASHBOARD** - Don't have one? Go to club website, left side, see CFCC Parking Passes – print one

----- Upcoming December Happenings -----

12/5 @ 6:30pm - Club Holiday Season Dinner at Carolina BBQ

*No Club Meeting in December as many of us travel or have company coming in.



Marine Mobile!

by Jeff (KI4JDE)

Just over two years ago my ham operations shifted from occasional periods of marine mobile to full time marine mobile. And as a point of clarification, marine mobile is distinguished from maritime mobile. In the latter definition, the station is expected to be off shore, as opposed to being in inshore waters. Our intention was not to set out to cross the Atlantic but to cruise southward in colder weather and northward during hurricane season, keeping us marine mobile most of the time.

In the summer of 2017 we made the decision to rent our house in Wilmington and move aboard a sailboat and cruise full time - for an indeterminate period. It is still indeterminate. As I write this, we are not in the water, but sitting on the boat in a boat yard in Solomon's, Maryland undergoing the annual ritual of having anti fouling paint applied to the bottom of the boat. When we are launched, we will begin the trek back to Wilmington.

Prior to this extended cruise, we had spent several months at a time aboard. So coping with the vagaries of mobile operations was not a new experience. The major difference between mobile and fixed base activity for me is the shift away from spontaneous HF activity and to a pattern that focusses almost exclusively on meeting boating oriented nets. It is fairly rare that I sit down and explore contacts across several bands. And unlike fixed base operation from the house in Wilmington, I am able to work some nets on maritime frequencies which are not ham bands at all.

Typically I check into the daily session of the Waterway Radio and Cruising Club morning net (0745 to 0830 on 7.268 LS), That net has been meeting for more than fifty years every day, seven days a week. A few years ago I served as Commodore (net manager) which was a rewarding challenge as one works with a dedicated team of hams to man the slots necessary to produce each day's net content of weather, safety information,

position reports and general exchange amongst members and non members.

If band conditions are poor I have two options in the morning for reporting position. Marine station KPK holds a net reaching into the Caribbean which begins at 0815. It is a non ham net reached on 8.104 US, Another morning net is the Cruiseheimers Net, also on marine frequency 8.152, While designed to reach boaters and serve their needs, these nets have substantial participation by hams,

Afternoons provide an opportunity to touch base with hams again through contact with the Maritime Mobile Service Net on 14.300 US. This is another long standing net supported by dozens of hams throughout the country who act as net controllers. I underwent the apprenticeship for that job and once considered qualified, one is expected to fill a minimum number of net control slots each month. I might add that the most effective controllers have beams and towers and my G5RV at home was sometimes lacking. The MMSN has a long record of service to boaters in both Atlantic and Pacific Oceans and works closely with the United States Coast Guard to augment emergency communications.

As for equipment on board BLUE MOON, our home/boat, it consists of an ICOM M 802 transceiver with an AT 140 antenna tuner. The antenna is a section of the back stay for the mast, insulated to isolate the forty feet or so of stainless steel rigging serving as the driven antenna. It is up about fifty feet in the air. Generally I run about 75 watts, adequate to reach from South Texas to Maine.

I look forward to getting back to terra firma and dragging my mothballed equipment out and starting fixed operations again. In the mean time I keep the hobby alive while afloat. I would welcome a QSO in the morning or at any time. It is probably a good idea to give me a heads up if you plan a contact since I often will check in and then out rather than standing by during the entire net period.

CQ WW DX SSB Contest Report

by Mike (N1ZS)

Despite the poor propagation forecast, I participated in the CQ WW DX SSB Contest the weekend of October 26th and worked 46 countries, and according to the N3FJP logging software, I traveled a total of 282,360 "radio miles", and averaged 2,768 miles per contact. I don't need no stinkin' sunspots (but I'm sure they would have been a big help). This was accomplished mostly on 20m and 40m, as I found 15m and 10m mostly dead, except for some brief interludes where the bands opened somewhat. I had fun though....that's all that matters!



Coming Attraction

by Jeff (W4BIX)

The internet is all abuzz with news of a new Icom radio set to debut sometime in the Spring of 2020. It is the IC-705 and it seems to have been created to compete with the Elecraft KX-2 & KX-3 line of radios.

The Icom IC-705 Transceiver brings the advanced features of the IC-7300, IC-7610 and IC-9700 to a portable QRP package. It features SDR Direct Sampling technology for low noise and low distortion receiver performance and incredible voice and digital transmission capabilities. Along with the same color touch screen and high speed, high resolution of the real-time spectrum scope

and waterfall display, the rich set of features in the IC-705 will easily place this radio as the "Best Ever" All-Band All-Mode Portable!

Here are many of the advanced features for the highly anticipated Icom IC-705 Portable Transceiver:

- * "Base Station" performance in compact package that you can hold with one hand!

- * Dimensions (WHD): 7.9 x 3.1 x 3.3 in. (20.0 x 8.0 x 8.5 cm)

- * All-band All-mode Transceiver Capability: 160-6m+2m+70cm; SSB/CW/RTTY/AM/FM/DV (D-STAR)

- * Full D-STAR capabilities including DR mode and Terminal Mode/Access Point Mode

- * Send, receive and view images on the IC-705 with no application software required

- * "General Receive" coverage from MW through 148 MHz, 430-450 MHz (product frequency coverage is subject to change)

- * Receives AM and FM Broadcast Bands and Air Band

- * Output power is 10W on external 13.8V supply or 5W with included clip-in rear panel battery pack (BP-272 Li-ion); supports QRP and QRPP operation down to 0.5 W

- * 4.3 in. color touchscreen display – same as used in the Icom IC-7300 and IC-9700

- * High-speed high-resolution real-time spectrum scope and waterfall display

- * SDR Direct Sampling below 25 MHz and Down-conversion IF above 25 MHz

- * Built-In GPS tracking logger, repeater locator and finds nearby D-STAR repeaters

- * USB port (micro-B) for direct interface

- * Wireless LAN (Wi-Fi) for remote operation

- * Bluetooth - supports smartphone linking, remote control and Bluetooth wireless headsets and headphones

- * microSD Card Slot (microSD card not included)

- * Includes HM-243 Speaker/Mic with multi-function buttons

- * Includes VHF/UHF Flexible Antenna; antenna connector is BNC

- * Optional LC-192 Multibag Backpack for easy portable operations

Some distributors like DX Engineering are taking pre-order reservations to set your place "in line" once the radios become available. You will be entitled to a first right of refusal on a first come, first served basis and your "reservation fee" will be applied to the total purchase price. See DX Engineering's webpage for more info.



Bald Head Island Operation

by Bill (N2COP) - Vice Director – Roanoke Division
Representing ARRL members in North Carolina,
South Carolina, Virginia and West Virginia

My XYL Pam and I travel often to Bald Head Island. Architectural restrictions there are strict, so here's a picture of my MFJ-1623 balcony antenna. It has a 12 foot whip, a coil for 80 and 40 meters and a built in tuner. I hang an 80 meter 1/4 wave counterpoise off the ground terminal. SWR gets down to 1.7:1 on 80, and 1.3:1 on 40.

So does it work? Yes. Let's face it -it's a compromise antenna. But it works well throughout Eastern U.S., Western Europe and Central America with my Yaesu 991A. I use it on CW, SSB and FT8. TIP: Take your antenna tuners apart every couple of years and spray them with contact cleaner. Truly improves SWR.



November 2019 Club Meeting

by Bill (N2COP)) - Vice Director – Roanoke Division
Representing ARRL members in North Carolina,
South Carolina, Virginia and West Virginia

The club held it's monthly meeting on November 19th with the highlight being the annual election of club officers. There were 27 people in attendance which is the most in quite awhile. The ACARC club officers for 2020 are:

President: Pete Long (WB3FYR)
Vice President: Jeff McCulloch (K4JAL)
Treasurer: Anita Jacobs (KG4IIL)
Secretary: Norman Clemmons (KI4YSY)

Congratulations everyone!



(l to r): Norman, Pete, Anita, Jeff



Member Spotlight

by Norman (KI4YSY)



My name is Norman H. Clemmons. I was born on November 26, 1940 in Wilmington, NC

My childhood was a very happy time, where I attended Elementary, Junior High and High School with-in walking distance of my home. I never had to ride a school bus to school. When I was eleven years old I joined the Boy Scouts of America. My troop was #211 sponsored by Spofford Mills Inc. In 1955 I achieved the rank of Eagle Scout. I worked in the cotton mill after school and during the summer. In 1959 I won a scholarship to NC State to study Textile Engineering. After a year and a half I decided to join the Air Force and signed-up in February on 1961.

My job in the Air Force was Medical Technician, flying patients all over the world. This job was not radio related. After I was discharged in 1965 I was hired by Southern Bell Telephone Co. While volunteering on the USS North Carolina with my friend Jack Jacobs, (WD4OIN) I became interested in radio. Along with Jack and other ham operators we restored a lot of original radios used on the ship during World War II. I was licensed in 2007 and currently hold a General Class License. My Call is KI4YSY.

I am currently secretary of the Azalea Coast Amateur Radio Club and net control on the

Monday night rag chew net on the clubs repeater. My current radio is a Kenwood TS-440Sat for HF and an Icom IC-229H for two Meters. Also I have a Baofeng dual band hand held. My HF antenna is a 40 meter dipole and a vertical two meter antenna for my Icom.

There has not been a time when I needed to use the radio in an emergency. I feel Ham Radio has a bright future as more people are applying for a license.

ed. note: the following photos are of Norman at last month's Warbirds Over Monroe air show in Monroe, NC.





Contest Calendar

www.contestcalendar.com by WA7BNM

December 2019	
+ ARS Spartan Sprint	0200Z-0400Z, Dec 3
+ QRP Fox Hunt	0200Z-0330Z, Dec 4
+ Phone Fray	0230Z-0300Z, Dec 4
+ CWops Mini-CWT Test	1300Z-1400Z, Dec 4 and 1900Z-2000Z, Dec 4 and 0300Z-0400Z, Dec 5
+ QRP ARCI Topband Sprint	0000Z-0300Z, Dec 5
+ NRAU 10m Activity Contest	1800Z-1900Z, Dec 5 (CW) and 1900Z-2000Z, Dec 5 (SSB) and 2000Z-2100Z, Dec 5 (FM) and 2100Z-2200Z, Dec 5 (Dig)
+ SKCC Sprint Europe	2000Z-2200Z, Dec 5
+ NCCC RTTY Sprint	0145Z-0215Z, Dec 6
+ QRP Fox Hunt	0200Z-0330Z, Dec 6
+ NCCC Sprint	0230Z-0300Z, Dec 6
+ ARRL 160-Meter Contest	2200Z, Dec 6 to 1600Z, Dec 8
+ UFT Contest	0500Z-0800Z, Dec 7 and 1500Z-1800Z, Dec 7 and 0700Z-1000Z, Dec 8
+ Wake-Up! QRP Sprint	0600Z-0629Z, Dec 7 and 0630Z-0659Z, Dec 7 and 0700Z-0729Z, Dec 7 and 0730Z-0800Z, Dec 7
+ SKCC Weekend Sprintathon	1200Z, Dec 7 to 2400Z, Dec 8
+ PRO CW Contest	1600Z, Dec 7 to 1559Z, Dec 8
+ International Naval Contest	1600Z, Dec 7 to 1559Z, Dec 8
+ FT Roundup	1800Z, Dec 7 to 2359Z, Dec 8
+ EPC Ukraine DX Contest	2000Z, Dec 7 to 1959Z, Dec 8
+ QRP ARCI Holiday Spirits Homebrew Sprint	2000Z-2300Z, Dec 8
+ 4 States QRP Group Second Sunday Sprint	0100Z-0300Z, Dec 9
+ NAQCC CW Sprint	0130Z-0330Z, Dec 11
+ QRP Fox Hunt	0200Z-0330Z, Dec 11
+ Phone Fray	0230Z-0300Z, Dec 11
+ CWops Mini-CWT Test	1300Z-1400Z, Dec 11 and 1900Z-2000Z, Dec 11 and 0300Z-0400Z, Dec 12
+ NCCC RTTY Sprint	0145Z-0215Z, Dec 13
+ QRP Fox Hunt	0200Z-0330Z, Dec 13
+ NCCC Sprint	0230Z-0300Z, Dec 13
+ PODXS 070 Club Triple Play Low Band Sprint	0000Z, Dec 14 to 2359Z, Dec 16
+ ARRL 10-Meter Contest	0000Z, Dec 14 to 2400Z, Dec 15
+ TRC Digi Contest	0600Z, Dec 14 to 1800Z, Dec 15
+ CQC Great Colorado Snowshoe Run	2100Z-2259Z, Dec 15
+ Run for the Bacon QRP Contest	0200Z-0400Z, Dec 16
+ NAQCC CW Sprint	0130Z-0330Z, Dec 18
+ QRP Fox Hunt	0200Z-0330Z, Dec 18

+ Phone Fray	0230Z-0300Z, Dec 18
+ CWops Mini-CWT Test	1300Z-1400Z, Dec 18 and 1900Z-2000Z, Dec 18 and 0300Z-0400Z, Dec 19
+ NCCC RTTY Sprint	0145Z-0215Z, Dec 20
+ QRP Fox Hunt	0200Z-0330Z, Dec 20
+ NCCC Sprint	0230Z-0300Z, Dec 20
+ AGB-Party Contest	1600Z-1700Z, Dec 20
+ Russian 160-Meter Contest	2000Z-2400Z, Dec 20
+ OK DX RTTY Contest	0000Z-2400Z, Dec 21
+ Feld Hell Sprint	0000Z-2359Z, Dec 21
+ Gedebage CW Contest	1200Z, Dec 21 to 1159Z, Dec 22
+ Padang DX Contest	1200Z, Dec 21 to 1159Z, Dec 22
+ Croatian CW Contest	1400Z, Dec 21 to 1400Z, Dec 22
+ ARRL Rookie Roundup, CW	1800Z-2359Z, Dec 22
+ SKCC Sprint	0000Z-0200Z, Dec 25
+ Phone Fray	0230Z-0300Z, Dec 25
+ CWops Mini-CWT Test	1300Z-1400Z, Dec 25 and 1900Z-2000Z, Dec 25 and 0300Z-0400Z, Dec 26
+ DARC Christmas Contest	0830Z-1059Z, Dec 26
+ NCCC RTTY Sprint	0145Z-0215Z, Dec 27
+ NCCC Sprint	0230Z-0300Z, Dec 27
+ RAC Winter Contest	0000Z-2359Z, Dec 28
+ Original QRP Contest	1500Z, Dec 28 to 1500Z, Dec 29
+ Stew Perry Topband Challenge	1500Z, Dec 28 to 1500Z, Dec 29
+ RAEM Contest	0000Z-1159Z, Dec 29
+ QCX Challenge	1300Z-1400Z, Dec 30 and 1900Z-2000Z, Dec 30 and 0300Z-0400Z, Dec 31
+ Bogor Old and New Contest	0900Z-2359Z, Dec 31