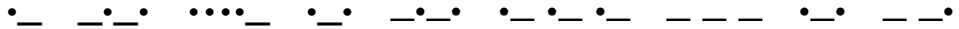


# ACARC

Azalea Coast Amateur Radio Club

March 2017  
Edition



## ACARC

### President

Julian Bradberry  
(WD4FTR)

### Vice President

Jean-Paul Louis  
(N1JPL)

### Secretary

Norman Clemmons  
(KI4YSY)

### Treasurer

Anita Jacobs  
(KG4IIL)

### Newsletter

acarcnews@gmail.com

**Azalea Coast  
Amateur Radio Club**  
PO Box 4044  
Wilmington, NC 28406

**www.ac4rc.org**

## *From The President*

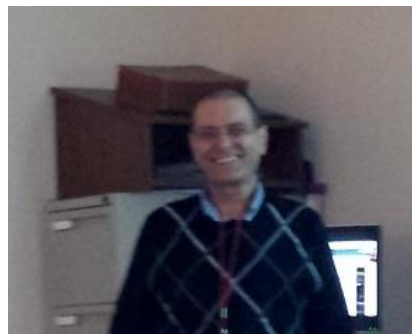
*The next club meeting will be held at 7:00 pm on Tuesday, March 21st, 2017 in the McKeithan Center, Room 339, North Campus Cape Fear Community College, 4500 Blue Clay Road*

**Julian Bradberry, WD4FTR**  
**President**

## *From The VE*

license testing was conducted on Saturday, February 11, 2017 at the North Campus Cape Fear Community College . We have one new General Class and two new Technicians. One of the Techs was only 12 years old

**Steve Wilder, AJ4JJ**  
**VE Tester**



*VP Jean-Paul (N1JPL) gave a presentation at the February 21<sup>st</sup> Club Meeting. The subject was Ham Radio Carrier Modulation.*



## Raleigh Amateur Radio Society

Worldwide Friendship • W4DW/W4RNC • Raleigh, NC • An ARRL Special Service Club  
146.64 • 145.13 (82.5) • 444.525 (82.5)



# 45th Annual RARSFest and ARRL Roanoke Division Convention 8AM-3:00PM Saturday April 15, 2017

*Click on the following link to get all detailed information*

<http://www.rars.org/rarsfest/>



*I visited Jake (KQ4TG) at the Silver Stream Rehab Center. He does not show much improvement. He still can't walk and is on dialysis. He also seems to be having some memory problems.*

*I took him the February Newsletter and some QST's from Joe (W2KJ).*

*Visitors are welcome*

**George (KM4DSI)**



The First Day of Spring will be March 20<sup>th</sup>, which is the day before our next Club Meeting.

Also, don't forget to set your clocks up to Daylight Savings Time on March 12th

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*Alan (KX2H)*

***How I got interested in Ham Radio -***

I am the second son of an immigrant father and first generation mother, both of German origin. In the so called Golden Age of radio broadcasting, the forties, our living room contained a typical floor model console radio made by Philco. Virtually all of those living room consoles of that period were multi-band, i.e Standard AM Broadcast 550KHz to 1500KHz and one or more Short Wave bands covering up to 24 MHz. Our Philco was connected to a single end fed wire antenna strung across the peak of the roof of the house I grew up in. During WW2 and up through the early fifties my father listened often to German and other language broadcasts on Short Wave. I collected foreign stamps at the time and was able to listen to SW broadcasts from some of the nations that I had stamps from. I learned geography and a smattering father's help. Ham band operations at that time were either CW and a very few RTTY stations. Ham Phone operation was all double sideband AM. Listening to hams on phone caught my interest and I wanted a license

***First Licensed -***

After self teaching CW Morse Code at 5 WPM by keying a door buzzer powered by two dry cells, I passed the Novice exam in 1954 at a regular meeting of the Radio Association of Western New York, RAWNY, in a church basement in Buffalo, NY. RAWNY still exists today. I was only fifteen years old at that time. I had to wait six weeks for the actual license to arrive in the US Mail. I received Novice license KN2JVF. I upgraded my license to General K2JVF in April, 1955.

***A Young Alan --On The Air***



My General Class license lapsed in 1965. I was off the air until the mid 70's, when I Took General, Advanced and Extra license exams including 20 WPM CW in one sitting and received new call WA2CSD. I Requested my current call KX2H and within a few months I was back on the air with a Heathkit HW-101 transceiver and a long wire antenna.

***Areas of Interest to me -***

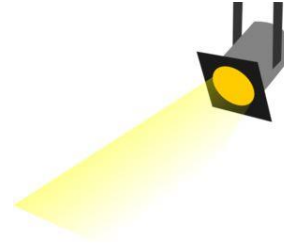
Today I still operate mostly CW, RTTY and PSK. I own a classic old Astatic D-104 microphone that sits on the floor next to my desk and is rarely connected. CW is still music to my ears. I mostly chase DX and now and then do longer chat type QSO's. My DXCC standing is 276 confirmed on CW and 108 on RTTY. I have WAS on CW also but still lack just SC and DE for a RTTY WAS. All of this with never more than a 100 watt transceiver and simple wire antennas.

## *Member in the Spotlight for Alan Continued*

### *Some of the most exciting times in my tears of Ham Radio*

My ham radio experience and a recommendation from my vocational high school telephony teacher landed me a job as a "Telegraph Serviceman" with AT&T Long Lines in 1956 at the age of 17. A lifetime career job with full benefits that lasted until December 31<sup>st</sup> 1989. I worked in the "Telegraph" department alongside of men who were in their fifties and sixties who had worked as commercial telegraphers since the 1920's. I learned a little American Morse sent with a straight key and received on a sounder. I never got really good at it. I could send it slowly with many mistakes but I never got good at copying it from a sounder. What I did learn from this was a high level of respect for those who could handle land line Morse telegraph.

When I entered the US Army in 1958 I was assigned to the Army Security Agency (ASA) as a Morse intercept and Radio Direction Finder operator. I was a cold war warrior listening in on the East Germans and Russians copying five letter encrypted groups at 30 WPM on a manual typewriter. After three years of this I went back to my Telegraph Serviceman's job along with a wife and young son. Attending night school EE classes plus working full time and raising my family left scarce time or money for amateur radio. That's when my General Class ,K2JVF expired. I kept my 1957 Hallicrafters S-85 Receiver.



### *More Excitement*

Through a chance CW QSO with SP2ASJ, Jurek in Elblag Poland I acquired a long time friend. He enabled me and my wife Judi to come to Poland to visit the city where my father was born then known as Elbing East Prussia. He stayed with us in Rochester, NY for several months in the mid 90's. We lost touch for a while and reconnected last March in Warsaw Poland. He has remarried and started a second family and now lives near Oslo Norway where he occasionally operates in contests using club station LA2AB (Check that club station out on QRZ.COM) but he still retains is original SP2ASJ call.

***I am proud to say that ham radio kept me off the streets when I was a teenager and now that I am retired it still keeps me off the streets.***

*Beginning in January 2017, Alan became The USS NC Battleship Liaison for our Club . He was previously the Treasurer. He has worked several years on restoring the ship's radios. As mentioned in Jack's Spotlight Article in last month's Newsletter, you can see those projects on the Club Website, [www.ac4rc.org](http://www.ac4rc.org) . Alan also operates CW on the Battleship station as **NI4BK** during Club events*

DC



*The following is a Technical Publication*  
*DC Grounded Antennas – The Myth, The Legend, The Fantasy*

This is a subject that we just had to write about. In the lightning protection business we come into contact with many people who have had both dangerous and disastrous experiences with Mother Nature. And one that has perplexed antenna users for decades is the very common damage and destruction to radio equipment when connected to a so-called "DC Grounded" antenna system.

For many years, antenna manufacturers have touted the positive advantages of owning and operating a station with antennas whose feed systems are a direct DC short across the input terminals, and hence both sides of the coaxial feeder cable are placed at "ground" potential at the antenna site. In reality, there are no such advantages to this kind of feed system, but it is singly the most dangerous ever used from a lightning perspective.

The reason is pretty easy to both explain and understand. Lightning bolts that streak from clouds to ground frequently hit exposed metallic structures like towers and high antennas. This is simply because the metallic nature of the object electrically shortens the striking distance between ground and sky. When a large voltage potential is reached between the two during a storm the metal antenna acts like a prod, sticking up in the air and drawing the first arc.

Lightning wants to reach ground, and that's pretty much all it wants. And it will get what it wants in the easiest and least resistive way possible. Just about anything in the way can be easily vaporized out of the way by a good sized lightning blast. If ten different paths to ground are presented to a striking bolt (such as numerous transmission line conductors, the tower frame, etc.) then the currents will divide quite nicely between all of them, with the larger amount of current flowing in the path of least resistance and so on.

"DC Grounded" type antennas provide a very neat dual path for those lightning currents. Some of the blast will flow down the shield of the cable to ground level earth terminal connections while the rest will simply flow down the center conductor and ravage the radio connected at the other end. Keep in mind that at the point of impact a bolt of lightning can easily deposit 50,000 volts or more relative to ground. And for an instant the voltage at the radio equipment end will be the same. By the time the balance of the surge comes to an end the equipment will have long since been toasted, probably beyond repair. The myth is that "DC Grounded" antennas offer good lightning protection. The legend is that antenna manufacturers have been claiming it for decades. The fantasy is that some of them still actually believe it. But it's not all hopeless. Here's how you can tell if your present antenna is one of these and what you can do about it. Disconnect the transmission line at the equipment end and measure across the center and outer conductors with a VOM on the R X 1 scale. If only a few ohms are measured then the antenna at the other end is a DC Grounded type.

*Continued on next page*

If you're satisfied with the performance of the antenna otherwise and wish to continue using it then you have two choices. First, disconnect the antenna whenever a storm approaches and hope you'll always be there to do it on time. Or second, install a blocking-type lightning arrestor that will shunt center conductor voltage to ground while blocking voltage from passing through the arrestor. Be sure to install the arrestor at ground level and ground the body of the device well.

If your in the market for an antenna and wish to enjoy a bit of protection select the ones offered that use capacitor or link feed systems. Capacitor feed systems such as gamma matches are excellent feed systems and lightning protectors as well. They isolate the center conductor and force lightning into the shield.

[Linwood \(NT4F\) submitted the DC Grounded Antenna Article to the Newsletter](#)

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## ***Marijuana and Ham Radio Noise***

*from the Associated Press*

AUGUSTA, Maine (AP) - Retired Coast Guard officer and Ham Operator Roger Johnson sometimes notices a harsh buzz when he turns on his amateur radio, and he blames high-powered lighting used to grow pot

*Amateur radio operators say the legalization of marijuana is creating a chronic nuisance thanks to interference caused by electrical ballasts that regulate indoor lamps used to grow pot. The American Radio Relay League wants the Federal Communications Commission to take a stand against devices that give off much more interference than federal law allows in homes.*

*Ham radio operators generally say they don't have a problem with pot but worry amateur growers may not be aware that cheap ballasts can have phony FCC-compliance stickers. The operators point out they serve as backup communication during emergencies - but concede it's unlikely any lighting devices would still be on if the power goes out.*

*Johnson, one of the radio league's 166,000 members, said he worries interference will only become a bigger inconvenience in years to come in Maine, which recently legalized growing up to six flowering marijuana plants, 12 immature plants and unlimited seedlings.*

*When he recently heard suspicious noisy static, Johnson said, he drove up and down side streets with a spectrum analyzer hooked up to his laptop to determine the source, which turned out to be a licensed grower a mile away who said he had no idea he was causing a disturbance.*

*"My prediction is that as more and more states legalize marijuana, the number of growers is going to increase exponentially and overwhelm the FCC's ability to regulate it," he said.*

*The American Radio Relay League has filed four complaints against the FCC and said it hasn't heard back, and says complaints concerning alleged interference continue to trickle in, particularly in Colorado and California. Cultivation of recreational marijuana is also now legal in Maine, Massachusetts, Oregon, Alaska, Washington state and the District of Columbia.*

*Will Wiquist, an FCC spokesman, said the agency takes all interference issues seriously and sends warning letters after receiving complaints about unlawful interference, including from lighting. He declined to comment further.*

*Grow lamps are distinctive because they power on and off for 12 hours at a time, and marijuana grow lighting can be powerful enough to produce the same amount of radio interference as a 1,000-watt AM radio station, said Bill Crowley, the Maine section manager of the Radio Relay League.*

*The interference often sounds like the kind of harsh, grating static generated by a lightning strike - except it doesn't stop, said Tom Thompson, an amateur radio operator in Boulder, Colorado*



**Roger Johnson**

Maybe That Article will explain some of the noises that I have been hearing about at Club Meetings

### ***From The Newsletter Editor***

*This will probably be my last Newsletter. If anyone would like to be the new Editor, please contact me and I will I will give you training like Jeff (W4BIX) did for me, when I got started. The job also includes monitoring the email address [ACARCNEWS@GMAIL.COM](mailto:ACARCNEWS@GMAIL.COM)*

*Make sure you read the last 2 pages of this Newsletter, which will very valuable, if you intend to be involved in the Club's Azalea Festival Special ON-the Air Event.*

## **2017 North Carolina Azalea Festival Special Event**

### **WHEN:**

Special Event Operational Dates: April 7<sup>th</sup> Starting at 0000Z (2000L on the 6<sup>th</sup>) thru the 9<sup>th</sup> at 2359Z (1959L), 2017

### **WHERE:**

**Station location:** Individual Azalea Coast Amateur Radio club members home stations.

**Frequencies:** Up from the bottom of general portion of the CW and Phone bands and the digital frequencies

**W.A.R.C. Bands not encouraged**

### **WHO:**

Who can participate? **Azalea Coast Amateur Radio Club members only**

### **CONTACT RULES:**

Stations may work (contact) Azalea Coast Amateur Radio stations on as many bands and modes as they like. 160, 80, 40, 20, 15, and 10 meters.

Also: CW, Digital, Phone, would count as three contacts. Contacts with a different Azalea Coast station on the same band would count as a separate contact, so they could work NT4F in all three modes on 20 meters then work WD4OIN on all three modes for an additional three contacts. Total of six contacts.

### **CONFIRMATION:**

Club has purchased generic QSL cards for use during this event.

Club will produce color certificates.

All contacts will be logged using N3FJP Contest Software or other software that the data can be exported in ADIF format to one central log for checking contact data

Contacts confirmed via LOTW "FREE"

Contacts confirmed via QSL card require a "SASE"

Contacts confirmed via certificate require "\$4" for postage and handling.

### **"NO" EQSL's**

Encourage each station to send only one QSL card with multiple contacts listed.

At the end of the event all logs will be consolidated into one data base (date to be determined). As QSL request are received a team of members, Allan, KX2H and several other volunteers will verify the contacts and send out the conformation.



**Example of Contact:**

On phone: "CQ CQ CQ AC4RC the North Carolina Azalea Festival Special Event, Celebrating the 70<sup>th</sup> Annual Festival of the Azalea Flower"

On CW: CQ CQ CQ AC4RC NCAF

**Spotting on DX cluster will be the responsibility of each individual station**

**Azalea Coast Radio Club members who would like to participate please contact Linwood, NT4F at [NT4F@arrl.net](mailto:NT4F@arrl.net), so we can get an idea how many station would be on the air for this event.**

**Member stations should be familiar with Festival activities and why it's called Azalea Festival.**

- Airlie Luncheon Garden Party
- Art Unveiling
- Azalea 5K/10K/Fun Walk
- Azalea Sweep
- Boxing
- Brigade Boys & Girls Club Community Visit
- Cape Fear Garden Club Azalea Garden Tour
- Celebrity Reception
- Chase Rice with Kane Brown
- Children's Art Contest
- Children's Tea
- City Rock Fest Tour
- Coin Show
- Concerts
- Fireworks
- Historic Home Tour
- Juried Art Show
- Parade
- Patrons' Party Gala
- Queen's Coronation:
- Scholarship Pageant
- School Visit
- Street Fair
- Street Fair Children's Area
- Street Fair Multicultural Stage
- Special guest performances
- Visiting Ships

**NOTE: Must have enough members on the air during the time frame for stations to work multiple Azalea Coast Amateur Radio club member's stations.**

*If at all possible (Highly Encouraged) when operating, monitor 147.180 + 600, 88.5hz for coordinating what bands and modes that are in use at that time, so we won't all be on the same band and mode simultaneously .*