

The "Official Organ"

The official newsletter of the Johnston Amateur Radio Society, Inc.

August 2018 edition

President's Report:

JARS Meeting this Thursday:

Our monthly JARS meeting is this Thursday, August 16th at Bernie's Southern Gourmet Buffet located at 10365 US Hwy 70 W, Clayton, NC 27520 Dinner starts at 6:30pm with the meeting following at 7pm.

THE PRESIDENT'S REPORT

147.270 Nightly Net 8:30 PM | JARS Prep Net
Tuesday 9 | Traders Net Wed 9

In this month's "Official Organ"

President's Report

Life on the Farm

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Ham Humor

Johnston County ARRL VE Team

Our August Meeting

Thanks to everyone that worked on the constitution to get it passed. We will now be voting on the officers. I look forward to hearing from the nominating committee to hear about the candidates.

Meeting Attendance

April ----- 44

May ----- 24

June ----- 34

July ----- 30



Life on the Farm:

Boy, what a month! Either it has been too hot or too wet to cut the grass. For a couple of weeks, we couldn't even pay for some rain and the grass had all turned brown. Then, for a couple of weeks, it wouldn't stop raining. The grass got so tall, that I lost our little hairy hound a couple of times and if it weren't for the antenna on the truck, I would have lost it too. When I finally did get to cut the grass, it took four hours to do a two-hour job.

Velda had her shoulder "freeze" up and had to go back to the hospital and have it manipulated. Since then, she has been making lots of improvement. That's the good side, now for the bad side. She has been complaining of elbow pain ever since she fell back in February. The doctor says she has cubital tunnel syndrome, (carpal tunnel in the elbow), which will need an operation to fix. We are going to try to put that off until October, if possible.

Well, that's life on the farm.

73 from Mike (KD4MC), Velda (K4VJC), Remington (Hairy Hound) and Tabitha (Krazy Kat).

Recap of July JARS Meeting:

JARS Meeting 07/19/2018 Minutes:

The meeting was called to order at about 7:05 pm.

Members introduced themselves

Minutes from the June meeting were read and approved

Treasurer Report: \$17,200.00 in bank

Membership: no new applications

Local Interference Committee: none heard and none created

Net Whip: still need net control operators

VP: nothing to report

Repeater Report: The Auburn Repeater Corporation was able to keep the AK4H call sign on the repeater

JARSfest committee meetings need to start. If you were on the committee last year, you are on it this year.

Town of Benson wants JARS to provide communications for Mule Days Parade to coordinate keeping the parade together. We voted as a club to do this as a club activity and will be using the Benson Repeater to coordinate this event.

Constitution and bylaws were voted on by secret ballot and passed 25 yeas and 4 no's

The suggested order of business at the end of the constitution and bylaws were voted against.

Nominations: anyone that wants to volunteer for an officers position, contact either Ryan Leathers or Mike Callam. Nominees will be presented at the August meeting. Nominations will be accepted from the floor. Elections will be held for one position at a time. That way, if someone does not get elected for the position they were nominated for, they can be nominated for another position.

Paul wants help installing radios in JARSComm

LOM award is held over to next month

We voted to stay at Bernie's at least until September.

List of Candidates:

This month we have our annual election of officers. As part of the nomination committee, below is a list of candidates for each office. Nominations will be taken from the floor at the meeting. Also, this year, instead of voting on all officers at one time like we have done in years past, we will be voting on one position at a time. The reasoning for this is as follows. If a person gets nominated for one position, but does not win then he/she can be nominated for another position.

Here is a list of candidates:

President	Mike Callam	KD4MC
V. President	Scott Wilkinson	KJ4TUC
Secretary	Velda Callam	K4VJC
Membership	Dianne Young	KE4VNX
Net Whip	Stephen Fowler	KJ4QNW
	Pete Memolo	KN4OO
Media/Newsletter	Mike Callam	KD4MC
Parliamentarian		
Members at Large	Stan Disbrow	WA2KQY
	Doug Williams	KS4TI

I would love to see more than one person per position.

Ryan Leathers N4RL & Mike Callam KD4MC

ARRL News:

Amateur Radio Emergency Service
Volunteers Assist in California Fire Response

Amateur Radio Emergency Service® (ARES®) volunteers pitched in to assist where needed to provide or support communication during the catastrophic fire in California. Volunteers from multiple ARRL Sections in the state stepped up to help. The fires have claimed several lives, destroyed more than 1,000 homes, and forced countless residents to evacuate, including radio amateurs. ARRL Sacramento



Valley Section Emergency Coordinator (SEC) Greg Kruckewitt, KG6SJT, said that the last ARES volunteers deployed to support American Red Cross shelter stood down on August 7. Other shelter communicators deployed earlier remained on duty for 10 days. Initially, there were four shelters in Redding. On August 5, the Shasta-Tehama ARES team was able to take its communications trailer to Trinity County to support a shelter in Weaverville opened for Carr Fire evacuees, he said.

"This relieved the Sacramento County ARES volunteers who had been up there for several days," Kruckewitt said, adding that communications at the shelter were important, as power and cell phone coverage was often spotty, with power going off for hours at a time. [CalFire](#) reported on August 9 that the Carr Fire in Shasta and Trinity counties covered more than 176,000 acres and was 47% contained. Evacuations and road closures are in effect. At one point, more than a dozen ARES volunteers from Shasta, Sacramento, Butte, Placer, Trinity, and El Dorado counties were working at shelters opened in the wake of the Carr Fire.



Sacramento Valley ARES member Michael Joseph, KK6ZGB, at the Red Cross Gold County Region Disaster Operations Center.

Sacramento Valley ARES member Michael Joseph, KK6ZGB, served as the liaison at the Red Cross Gold County Region Disaster Operations Center (DOC) in Sacramento, Kruckewitt noted, adding that Joseph had been in the DOC since the fire started.

Kruckewitt said *Winlink* was the go-to mode, as fire has damaged several repeaters and no repeater path exists to the Gold County Region of the Red Cross in Sacramento.

"One difficulty we ran into this weekend was that the Red Cross needed [ARES Emergency Coordinator and SEC] contact information for various counties that also are experiencing fires and having to open shelters," he said. Completing that task involved lots of phone calls. "We encourage all ARES members to get to know their

neighboring ARES groups and...check into their nets."

Joseph reported last weekend that the Mendocino Complex Fire was being closely monitored, although no additional requests for ARES assistance were being made. The Ranch Fire in the Mendocino Complex as of August 9 covered some 253,200 acres and was 46% contained. The Mendocino Complex Fire is being called the largest wildfire in California history, although the Carr Fire has been more devastating.

ARES teams in other California Sections remained on standby in case they were needed.

ARRL Comments in "Strong Opposition" to Part 15 Modification Petition Affecting 5 GHz

ARRL has [commented](#) in "strong opposition" to a [Petition for Rulemaking](#) by RADWIN Ltd. that seeks to amend certain Part 15 rules to permit point-to-multipoint (P2MP) communication services in portions of the 5 GHz band, at power levels now permitted only for point-to-point unlicensed systems. ARRL has focused its concern on proposed high-power P2MP operation in the band from 5.725 - 5.850 MHz, but points out that the entire 5.650 - 5.925 GHz allocation has been "subjected to a continuing series of overlays domestically" for more than 2 decades. Amateur Radio is secondary to military radars on the band.



ARRL said the Amateur Radio national "weak-signal" calling frequency of 5.760.1 GHz already has experienced a "very substantial" rise in ambient noise in many areas that has significantly affected Amateur Radio operation in the 200 kHz centered on that frequency, where extremely weak received signal levels are typical. Only low-density usage and the low-power levels permitted for unlicensed national information infrastructure (U-NII) devices have sustained "a good deal of compatibility" between Amateur Radio and U-NII devices at 5 GHz, ARRL said.

"It is quite obvious that RADWIN's proposal for simultaneous point-to-multipoint transmission, with higher input power and [effective isotropic radiated power (EIRP)], using an electronic steerable antenna system, presents an exceptionally high interference potential to ongoing, weak-signal Amateur Radio Service communications," ARRL said in its comments filed on July 30. With users located "at all points of the compass from the distribution point," ARRL said, the potential for interference to Amateur Radio "is *much* greater." Greater yet, ARRL noted, is the potential of interference to users of RADWIN's system.

ARRL said the FCC "has no idea at all" about aggregate noise levels in the 5 GHz band in general, while Amateur Radio and Amateur Satellite users have reported increased ambient noise levels in the band, especially near 5.760 GHz. "Both the *Petition* and the technical statement accompanying the *Petition* are silent on potential interaction between P2MP simultaneous transmission systems operating at high power, and any Amateur Radio facility," ARRL said. "As a result, the petition is fatally flawed and should be dismissed, relative to the 5.725 - 5.850 GHz band."

ARRL asserted that the FCC lacks jurisdiction to authorize Part 15 device operation by rule, "absent a specific finding that the device will not predictably cause interference." Unlicensed, very low-power Part 15 devices may not cause interference to licensed services and must accept any interference caused by a licensed station and must shut down if notified by the FCC that the device is causing harmful interference.

Collegiate QSO Party to Debut in September

ARRL's Collegiate Amateur Radio Initiative ([CARI](#)) will sponsor the first [Collegiate QSO Party](#) in mid-September, just as the fall semester gets under way. The new operating event is part of the larger effort to promote a renaissance of Amateur Radio clubs on college and university campuses.

"Discussion of this sort of event has come up in multiple forums at

hamfests," the Milluzzi brothers -- Andy, KK4LWR, and Tony, KD8RTT -- told ARRL.

"It gained more interest in the last couple of years and was a hot

topic of debate at the ARRL Collegiate Amateur Radio Initiative Forum at Hamvention® this past May. The rules were formulated by current students, faculty, and alumni of collegiate clubs. We are excited to see things materialize and are happy to help organize the event."

The inaugural Collegiate QSO Party will begin on Saturday, September 15, at 0000 UTC and continue until Sunday, September 16, at 2359 UTC. Using phone, CW, or digital modes, participants will exchange call sign, college/university name, or abbreviation and mascot, and operating class

"Existing contests are great for club activity, but there is a critical need to get collegiate stations on the air early in the semester and drum up attention," Andy Milluzzi said. He said the ARRL School Club Roundup ([SCR](#)) has been popular with college students, but it's later in the semester, when college students are more deeply involved with their studies. The Society of Midwest Contesters also created the North American Collegiate



Championship in conjunction with the North American QSO Party ([NAQP](#)) SSB event. Andy Milluzzi said the Collegiate QSO Party hopes to capitalize on the success of both events.



In a

Andy Miluzzi, KK4LWR, speaks at the CARI Forum at Orlando HamCation 2018. [Bob Inderbitzen, NQ1R, photo]

nutshell, the concept is an Amateur Radio operating event that focuses on collegiate Amateur Radio, with the goal of promoting student activity, alumni engagement, and community awareness. The contest is open to all radio amateurs, including school clubs from around the world, the Milluzzis said. There is no explicit bonus for DX and no US-specific awards. Points may be earned by individuals, clubs, and collegiate stations. New hams are welcome and collegiate clubs are encouraged to accommodate newcomers.

Full details on the Collegiate QSO Party will appear in the September 2018 issue of *QST*.

Hamvention Officials Say No New Building for 2019

Hamvention® and Greene County, Ohio, officials have been unable to reach agreement on erecting a new building that could accommodate Hamvention activities at the Greene County Fairgrounds and Expo Center in Xenia, Ohio.



The Greene County Fairgrounds and Expo Center in Xenia, Ohio, has been home to Hamvention since 2017. [Greg Ordy, W8WWV, photo]

"Hamvention/Dayton Amateur Radio Association has spent many hours working with Greene County officials to reach an agreement on a long-term contract where both the Fairgrounds and Hamvention would feel comfortable erecting a new building," read an August 5 statement from Hamvention General Chairman Jack Gerbs, WB8SCT, and Assistant Chair Rick Allnutt, WS8G. "Unfortunately, we have currently been unable to successfully reach an agreement satisfactory to all parties." Gerbs was quick to reinforce that Hamvention continues to have an excellent relationship with the county and the Fair Board, but it does mean there will not be a new building in time for Hamvention 2019.

In January, Hamvention walked back an earlier announcement that a new building would be erected in time for the

2018 show. At the time, then-General Chair Ron Cramer, KD8ENJ, anticipated that construction would be completed this year in time for Hamvention 2019.

Gerbs cited some significant upgrades accomplished in 2018, including improved tent shelters, permanent paths in the flea market area, and an additional forum room. "More improvements are planned for 2019," Gerbs and Allnut said. "We hope the Amateur Radio community will understand and continue to support the event as enthusiastically as in the past."

Amateur Radio Satellite Pioneer, Past AMSAT President Bill Tynan, W3XO, SK

A giant of the Amateur Radio satellite world has fallen. William A. "Bill" Tynan, W3XO, of Kerrville, Texas, died on August 7, following a lengthy illness. A past [AMSAT](#) President and the editor of QST's "The World Above 50 MHz" column from 1975 until 1992, Tynan was 91.

As a youngster in Washington, DC, he was entranced by shortwave broadcasts and police radio traffic on his three-band table radio. "I started listening to hams on 20 meters and was hooked by the thought of becoming one," Tynan said in his Amateur Radio biography, [My Radio Life](#). That didn't happen until after World War II in 1946, when he became W3KMOV. He was an early enthusiast and proponent of FM, which helped to put him on his path to broadcasting, VHF, and ham radio satellites.



In late 1951, he signed on with the Johns

Hopkins Applied Physics Laboratory, where he worked on US Navy weapons system projects. He rose to the level of Senior Staff Engineer before retiring in 1988, when he and his wife Mattie relocated to the Hill Country of Texas.

In 1961, Tynan and Bob Carpenter, W3OTC (SK), founded the Washington, DC, market's first FM stereo station, WHFS in Bethesda, Maryland. After he passed his Amateur Extra exam in 1974, Tynan opted for W3XO, the call sign of Washington's first FM radio station in the experimental years.

His eager curiosity for VHF and above led him in 1969 to attend the first meeting of what would become AMSAT. He would become AMSAT President in 1991, serving for 7 years and rubbing shoulders with other Amateur Radio satellite titans. In his later years, Tynan served as AMSAT's OSCAR Number Administrator, the individual who confers alphanumeric designators on qualifying Amateur Radio satellites. He stepped down from that volunteer role in July after 2 decades of service.

Through his QST column, Tynan was an early proponent of using grid squares as VHF/UHF contest multipliers. That led

directly to ARRL's VUCC operating award program for 50 MHz and above. He also was a strong proponent of establishing beacon stations on VHF as well as a DX window and 50.125 MHz domestic calling frequency on 6 meters, and later 144.200 MHz on 2 meters.

Tynan played a key role as AMSAT's Vice President for Human Spaceflight (earlier "Manned Space") in convincing NASA to permit Amateur Radio operation from the space shuttles. The early SAREX (Shuttle Amateur Radio EXperiment) led to the current Amateur Radio on the International Space Station ([ARISS](#)) program that offers students a chance to speak directly to International Space Station (ISS) crew members via ham radio. He also was a significant supporter of the ARISS interoperable radio system project, soon set to fly to the ISS.



Tynan was among the initial proponents of AMSAT's ambitious Phase 3D geostationary satellite program, working tirelessly to raise the considerable funds needed and to recruit the personnel to determine the project's direction. The Phase 3D satellite, designated as AO-40, was successfully launched in 2000.

Tynan was a Life Member of ARRL, AMSAT (holding Life Member No. 10), and IEEE. In addition to his time as AMSAT President, Tynan served on the AMSAT Board of Directors from 1986 until 2003 and was its chairman for his final 5 years. In 1996, he was named as the 1996 Hamvention® "Amateur of the Year."

"Amateur Radio is becoming more exciting to me every day," he said in concluding *My Radio Life*, written while he was in his 80s. "And, I'm still learning."

Launch of *Es'hail-2* with First Phase 4 Amateur Transponders Expected Later this Year

Es'hailSat, the Qatar Satellite Company, has tweeted that it's anticipating that SpaceX will launch its geostationary *Es'hail-2* satellite sometime in the fourth quarter of 2018. The commercial Qatari satellite will provide the first Amateur Radio geostationary communication and will be capable of linking amateurs from Brazil to Thailand.



Es'hail-2 will carry two AMSAT-DL-designed Phase 4 Amateur Radio transponders operating in the 2.4 GHz and 10.450 GHz bands. A 250 kHz

bandwidth linear transponder is intended for conventional analog operation, while an 8 MHz bandwidth transponder will serve experimental digital modulation schemes and DVB amateur television. The satellite will be positioned at 26° east. Es'hailSat said the new satellite "will allow also the AMSAT community to validate and demonstrate their DVB standard."

The narrowband analog linear transponder downlink will cover 10489.550 - 10489.800 MHz with 100 W output. The uplink will be 2400.050 - 2400.300 MHz. The wideband digital transponder will downlink on 10491.000 - 10499.000 MHz with 100 W output. The uplink passband will be 2401.500 - 2409.500 MHz.

Both transponders will be equipped with antennas capable of providing full coverage over about one-third of Earth's surface. The Qatar Amateur Radio Society (A71A) and Qatar Satellite Company are cooperating on the Amateur Radio project. AMSAT-DL is providing technical support.

In Brief...



Microwave Update (MUD) 2018 has issued a call for papers. The international conference,

dedicated to microwave equipment design, construction, and operation, is focused on, but not limited to, Amateur Radio on the microwave bands.

Sponsored by the Midwest VHF/UHF Society, the event will take place October 11 - 14 at the Holiday Inn, 2800 Presidential Drive, Fairborn, Ohio. The program committee is calling for papers and presentations on the technical and operational aspects of microwave Amateur Radio communications. [Email](#) your proposals, questions, and submissions to John Ackermann, N8UR. Presentations selected for the technical program may be given in person or by proxy. Abstracts and expected length are due by August 25. Presenters may submit a companion paper for publication in the *Proceedings* (this could be a copy of a slide presentation), no later than September 1. Additional material for inclusion on the *Proceedings* CD must arrive by September 25. All conference attendees will receive a copy of the book and CD. [Details](#) are on the MUD website.

The [BIRDS-2](#) CubeSats will deploy from the ISS on August

10. All three carry APRS digipeaters.

The trio --

BHUTAN-1,

MAYA-1, and UiTMSat-1 -- will transmit

30 minutes after deployment. Initial

mode should be CW on 70 centimeters; each satellite uses the same frequency

of 437.375 MHz. The normal

transmission order is BHUTAN-1

(JG6YKL), MAYA-1 (JG6YKM), and

UiTMSat-1 (JG6YKN). Each CubeSat

also has an APRS digipeater on

145.825 MHz. Because the CubeSats

will be released at the same time, it's

possible that the beacon signals from



three CubeSats will interfere with each other, as they will turn on at almost at the same time, making copy difficult. Once on, one of the first things it does is transmit the beacon signal, but the CubeSats are programmed so that each will wait a certain amount of time before transmitting the beacon signal. The first satellite released will be the first to transmit, but it will remain silent for long enough to let other two satellites finish their beacon transmissions.



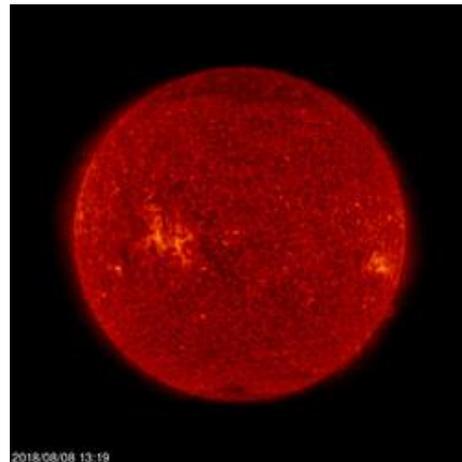
Great Lakes HamCon 2.0, set to occur in October at

Michigan International Speedway, has been cancelled. The second Great Lakes HamCon had been sanctioned as the 2018 ARRL Michigan State Convention. In announcing the cancellation, sponsors said failure to come to a final agreement for the use of the Speedway led to the difficult decision to cancel the event. "With just 2 months remaining before the event, the issues caused by the lack of agreement were found to be insurmountable," sponsors said. All who purchased tickets will receive refunds. PayPal ticket purchases will be handled via PayPal.

The K7RA Solar Update

Tad Cook, K7RA, Seattle, reports: According to Spaceweather.com reported on August 8, "Solar minimum conditions are in effect. The sun has been without sunspots for 39 of the past 42 days." Spaceweather.com said a similar stretch of blank suns has not happened since 2009, "when the sun

was experiencing the deepest solar minimum in a century."



For the third week in a row, we report an

average daily sunspot number of 1.6, because in the three most-recent reporting periods, there was only 1 day with any sunspots, and each time that daily sunspot number was 11.

Average daily solar flux rose slightly from 68 to 69.7, while average daily planetary A index rose from 5 to 5.7, and average mid-latitude A index edged upward from 5.1 to 6.9. Six meters has experienced some excellent openings recently, with some operators taking advantage of FT8.

Sunspot numbers for August 2-8 were 11, 0, 0, 0, 0, 0, and 0, with a mean of 1.6. The 10.7-centimeter flux was 69.9, 70.2, 70.4, 69.2, 69.1, 69.5, and 69.6, with a mean of 69.7. Estimated planetary A indices were 6, 6, 5, 4, 4, 10, and 5, with a mean of 5.7. Estimated mid-latitude A indices were 6, 6, 8, 6, 5, 11, and 6, with a mean of 6.9. My Friday propagation bulletin will include additional details.

Just Ahead in Radiosport

- August 11-12 -- WAE DX Contest (CW)
- August 11-12 -- SKCC Weekend Sprintathon (CW)
- August 11-12 -- Maryland-DC QSO Party (CW, phone, digital)
- August 11-13 -- MMonVHF/DUBUS 144 MHz Meteorscatter Sprint (CW, phone, digital)
- August 13 -- 4 States QRP Group Second Sunday Sprint (CW, phone)
- August 15 -- NAQCC CW Sprint

See the [ARRL Contest Calendar](#) for more information. For in-depth reporting on Amateur Radio contesting, subscribe to [The ARRL Contest Update](#) via your ARRL member profile email preferences.

Ham Humor:

I HATE BEING
SEXY
 BUT I'M A
HAM RADIO
OPERATOR
 SO I CAN'T HELP IT

Johnston County ARRL VE Team:



The Johnston County ARRL VE Team will be hosting our next test session on Monday, August 27th at 7PM at the American Red Cross in Smithfield. The address is 805-A S. 3rd Street. This will be the last session before the new question pool goes into effect for the technician class license

Cost is \$15.00. You will also need a valid photo ID. If you do not have an FRN, you should go to:

<http://wireless.fcc.gov/uls/index.htm?job=home> and register for one. This will keep you from having to disclose your SSN. More information can be obtained by contacting Mike Callam KD4MC at mcallam@centurylink.net.

JARS Officers

Pres. Mark Gibson N4MQU

VP Stan Disbrow WA2KQY

Sec. Peggy Lee KJ4OPH

Treas. Paul Dunn KD4BJD

Membership Dianne Young KE4VNX

Net Whip Stephen Fowler KJ4QNW

Ham of the Year Dianne KD4VNX

Editor Mike Callam KD4MC

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That does it for another edition of the *“Official Organ”*. Don't forget that this month, we will be voting for officers this month.



73 de KD4MC