



GRAYSON COUNTY AMATEUR RADIO CLUB NEWS

JULY 2017

WWW.GRAYSONCOUNTYARC.COM

VOL. 23, No. 7

THE PRESIDENT'S QSO

Hi All,

We had a good time with the W5I special event station at the Perrin AFB Museum last weekend. We made about 50 contacts.



The next event will be the Kiwanis Bike Rally on August 12th. Contact Ben KF5OEB (kf5oeb@arrl.net) if you can help with it. Still looking for volunteers.

We are also needing members to work as Net Control for our Sunday information nets. Let me or Trevor KG5BFI know if you are interested.

73
Mark
KF5UZW

CLUB INFORMATION

OFFICERS

President:	Mark Pilkilton KF5UZW
Vice President:	James Frank KW5CW
Secretaries:	Stacy Branam W5ORD Nancy Pierce KG5PIZ
Treasurer:	Marvin Schiavone KG5GMA
Activity Director:	Trevor Reed KG5BFI
Trustee:	Rick Simmons K5ECX

MEETINGS

When:	3 rd Friday of each month
Time:	7:00pm (1900 hours)
Location:	Grayson County Courthouse 2 nd Floor Assembly Room 100 W. Houston Street Sherman, TX 75090
GPS:	33.38.18N, 96.36.59W

MAILING ADDRESS

Grayson County Amateur Radio Club
P.O. Box 642
Sherman, Texas 75091

MEMBERSHIP DUES

Individual:	\$20.00/yr
Family:	\$30.00/yr
Associate (non-Ham):	\$15.00/yr

Memberships are from January 1 – December 31

NEWSLETTER

Published:	Monthly via e-mail
Editor:	Mike Bernier KF5NPM
To submit news or e-mail changes:	Send E-Mail to KF5NPM@gmail.com
Submission	12 midnight on the Sunday
Deadline:	following each monthly meeting

WEBSITE & SOCIAL MEDIA

Address:	www.graysoncountyar.com
Webmaster:	Ben Sly KF5OEB
Facebook	www.facebook.com/groups/K5GCC
Page:	

DUES AND DONATIONS

Membership dues are payable upon joining and renew on January 1st of each year. Donations to support the club are always welcome. Dues and donations may be paid by cash or check at any monthly GCARC meeting and by mail, or by using a credit or debit card online at the GCARC website.

GCARC, ARES, AND SKYWARN PATCHES

GCARC club patches are available and may be purchased at each club meeting; cost is \$5.00 each. These are round patches with the club logo, and are great for wearing on vests and other non-club clothing, placing on equipment bags, go-kits, etc.

ARES and SKYWARN patches may also be purchased at each club meeting; cost is \$4.00 each. If you choose to wear patches on your club shirt or jacket, we recommend ARES members place the ARES patch first on the right shoulder and any other patch (SKYWARN, RACES, CERT, etc.) should go below it. Since some members have tactical shirts with pen pockets on the left sleeve we do not recommend placing any patches on that side.

CLUB CLOTHING ORDERS

Several times each year, members have the opportunity to purchase club-related clothing (shirts, caps, jackets, etc.). These items have the GCARC logo and the member's name and callsign embroidered on them. An order form with instructions will be included in the newsletter each time orders are being taken.

"It shall be our purpose to further the exchange of information and cooperation between members, to promote radio knowledge, fraternalism and individual operating efficiency, and to so conduct club programs and activities as to advance the general interest and welfare of Amateur Radio in the community."

From the GCARC Constitution

GCARC MEETING MINUTES

GCARC Meeting Minutes – 7 July 2017

- 7:01pm meeting called to order
 - 21 in attendance
 - previous minutes approved
 - treasury report read, total of \$1864.10
 - currently have 36 paid members/3 free
- Field Day was a success, special kudos to Rick K5ECX for breakfast
- Tower project is still progressing; Mark KF5UZW and Ben KF5OEB are currently in discussion over the best way to mount the bracket to the building; we have most of the equipment for the tower project but are lacking an HF antenna
- The Kiwanis Red River Bike Rally is coming on August 12th. The club is still looking for volunteers, please contact Ben at KF5OEB@arrl.net or Trevor at KG5BFI@gmail.com if you are interested in helping; we will be using the Branam trailer for HQ again; you will need a mobile radio that will be able to reach the 147 repeater, preferably with APRS if you are a rover or tail-end Charlie, Oklahoma routes will need a 50 watt radio and longer antenna to reach the repeater; you can check the Ride GPS website for the most current maps of the routes
- We are currently running the Red River Bridge War Special Event July 22, 2017 to July 30, 2017 at 2359 Zulu time (6:59 pm); you may use your own call sign to participate; make sure you are operating within your band plan; please log contacts on paper or computer and send those logs to Lee Sly N5SLY at the conclusion of the event at N5SLY@arrl.net
- Meeting closed at 7:44 pm

The next meeting will be Friday, August 18, 2017 at 7:00pm in the Grayson County Courthouse, 2nd Floor Assembly Room, 100 W. Houston St., Sherman TX.

Respectfully Submitted,
Stacy Branam W5ORD
Nancy Pierce KG5PIZ
GCARC Secretaries

GCARC TREASURER'S REPORT

Bank Balance as of 07.01.2017 1,844.98

Operating Fund Beginning Bal 1,667.33

Deposits	Dues	Checks	
		Cash	
		Online	20.00
		Clothes	

Less expenses

online fee	0.88
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Operating Fund Balance 1,686.45

** Members YTD 36 + 3 Free

Available Equipment Funds 177.65

Donation

Less expenditures

Equipment Fund Balance 177.65

OPERATING BUDGET

Post Office Box	64.00
Checks	9.25
Website	103.92
<i>Special Events Deposit</i>	
Perrin	50.00

Food for Special Events

Donations

Memorials	
Wade's mother Troop 605	20.00
(not cleared as of 6.15.17)	
Total	247.17

EQUIPMENT NEEDS

Tower Bracket	151.89
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Amount Budgeted	0
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Ending Bank Balance
as of July 12, 2017 1,864.10

Marvin Schiavone KG5GMA
GCARC Treasurer

CLUB MEETINGS, LOCAL ACTIVITIES, AND UPCOMING EVENTS

Club Meetings

Grayson County Amateur Radio Club (GCARC)

3rd Friday at 7:00pm

Grayson County Courthouse 2nd floor assembly room, 100 West Houston Street, Sherman TX

<http://www.graysoncountyar.com>

Cooke County Amateur Radio Club (CCARC)

2nd Thursday at 7:00pm

Cooke County Library, 200 S. Weaver Street, Gainesville TX

<http://www.gainesvillehamfest.org/club.htm>

Durant Amateur Repeater Association (DARA)

3rd Tuesday at 7:00pm

Bryan County Emergency Management, 2808 Enterprise Drive, Durant OK

<https://www.facebook.com/pages/Durant-Amateur-Repeater-Association-Ham-Radio/292030700959672>

Fannin County Amateur Radio Club (FCARC)

3rd Saturday at 9:00am

First Presbyterian Church, 818 North Main Street, Bonham TX

<http://www.k5frc.org>

McKinney Amateur Radio Club (MARC)

2nd Tuesday at 7:00pm

Spring Creek Barbecue, 1993 North Central Expressway, McKinney TX

<http://www.mckinneyarc.org>

ARES® / SKYWARN®

Grayson County ARES® Training

4th Tuesday of each odd-numbered month (Jan / Mar / May / Jul / Sep / Nov) at 7:00pm

Sherman Municipal Airport Terminal Building, 1200 S. Dewey Ave., Sherman TX

<http://www.tecoares.org>

Ragchewing & Other Informal Meetings

Ham Talk at The Java Stop

Every Saturday 11:00am-2:00pm

The Java Stop Café, 5700 North FM 1417, Sherman TX

<http://www.facebook.com/thejavastop>

GCARC Events

Red River Bridge War Special Event

Operating Period: July 21-30, 2017

The club will operate a special event station using the callsign W5I to commemorate the Red River Bridge War in July 1931 (https://en.wikipedia.org/wiki/Red_River_Bridge_War).

Kiwanis Bike Rally

August 12, 2017

The club will be providing communications support for this annual charity bike rally. Contact Ben Sly KF5OEB (kf5oeb@arrrl.net) for information or to volunteer.

VE Testing Sessions

Texoma VE Team – Bi-Monthly Testing

1st Thursday of each even-numbered month (Feb / Apr / Jun / Aug / Oct / Dec) at 7:00pm

Grayson College Center For Workplace Learning, Seminar Room C, 6101 Grayson Drive, Denison TX

Contact: Moe NT7C (903) 564-7115 or nt7c@arrrl.net

Durant Amateur Repeater Association – Monthly Testing

3rd Tuesday of each month at 8:00pm (following the DARA monthly meeting)

Bryan County Emergency Management, 2808 Enterprise Drive, Durant OK

Contact: Jim K5BNK (jharmon1940@gmail.com)

Fannin County Amateur Radio Club – Appointment-Only Testing

First Presbyterian Church, 818 North Main Street, Bonham TX

Contact David WA0URJ (wa0urj@yahoo.com) to schedule a session

**Hamfests and
Swap Meets**

Austin Summerfest (South Texas Section ARRL Convention)

August 4-5, 2017

Crowne Plaza Hotel, 6121 North I-35, Austin TX

Talk-In: 146.34/146.94 (107.2 PL)

Public Contact: Joe Makeever W5HS (512) 345-0800 or w5hs@arrl.net

Website: <http://www.austinsummerfest.org>

CW CORNER

This note is for ALL amateurs that read this column. Our hobby is not just about the modes of CW, or SSB, or Digital, it's about communications using the modes that we love. As a Christian, and more-so as a devout Catholic, I was taught by my parents to practice what you preach. Are we good models for our hobby? We most definitely believe that we are, but are we really?

I have so much fun getting on the air and working other hams on CW. But recently, I had discovered that I really, really, really like Digital, like JT65, or JT9 or PSK31. Oh my. For the longest time I can see that now I was in a cage not interested in getting out, but satisfied with the tools that I had, which was my ability to operate CW. Thanks to Lee - N5SLY, he has helped me get out of my shell.

What is it going to take to get you out of your shell? Our club meetings seem to be lacking enthusiasm at times, as the same folks participate at the meetings, the same people volunteer for the activities, and the same people show up for our events. I was hoping to see a few more club members at our latest event that is still in operation by the way, which is the operating event using the special call W5I - The Red River Bridge War event. As a club member, you hear about it every year when the event takes place, but do you really know what it is about? Do you realize that it's still running until the end of the week? Have you at least tried to make one contact using the call W5I from your home? Now let's really get honest here. Have YOU looked at the article written by Lee on QRZ.com about the event?

You will discover as I have venturing out trying new modes of operation of Ham Radio, that participation in the club can be so rewarding. So why is it that many have decided not to participate, but still elect to come to meetings, maybe just to go to our monthly special event at 'Braums'. Are you paying your club dues each year just to go to Braums?

I cannot speak for each and every one of you. I can only speak for myself. I can only express what I see in our group.

For me, I want the very best for our club. I want to see more leadership amongst the ranks, and you don't have to be a club officer to take leadership. For me, the past 2 years being the Vice President of our club has gone so quickly, but even if I must step down because our club bi-laws require it, I'm hoping that others may want to step up.

For me, my life is about to change considerably. Not only may I not be an officer of the club next year, I will finally retire from my job at IBM by March 1, 2018. I will have a lot of time on my hands then, and I plan to make the best of it while I still can.

The club can count on me to help with just about anything I can help with when there is a need. Can the club count on you?

As expected, the interest in learning CW has dropped off drastically, except from some of the new members of the club that show interest. That's ok. Ham radio is not just about CW, it's about US, it's about what we like to do, it's not just about CW. So, let's profess our faith, and let's 'practice what we preach'.

At the next meeting, I would like to hear some ideas from people who would like to be active in the club, and who would like to step up and participate. You know who you are, now let our president and other members of the club know.

73

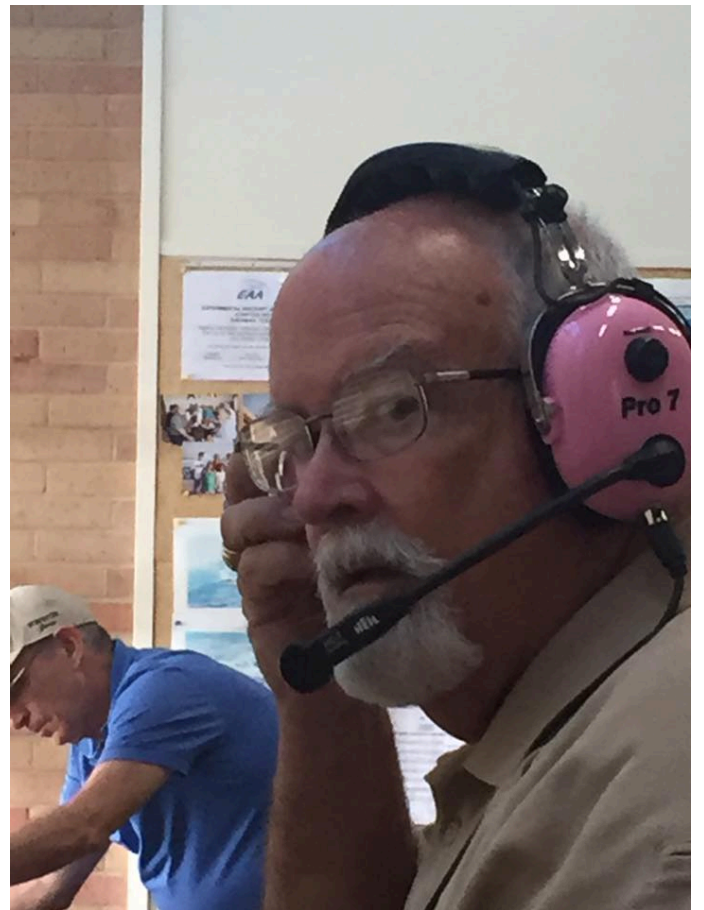
James Frank KW5CW

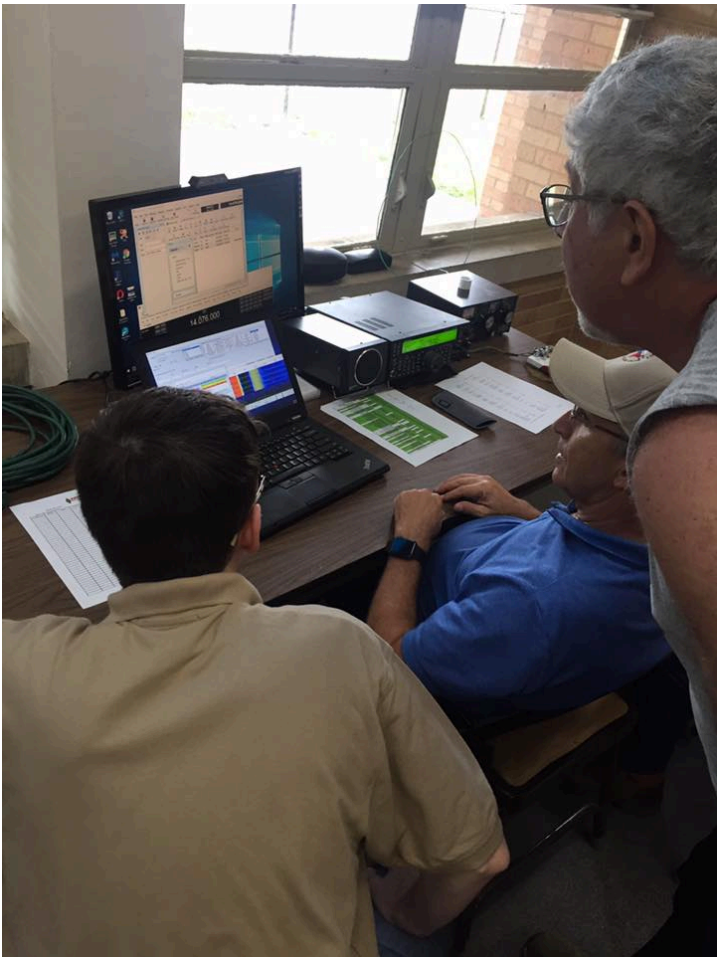
GCARC Vice President

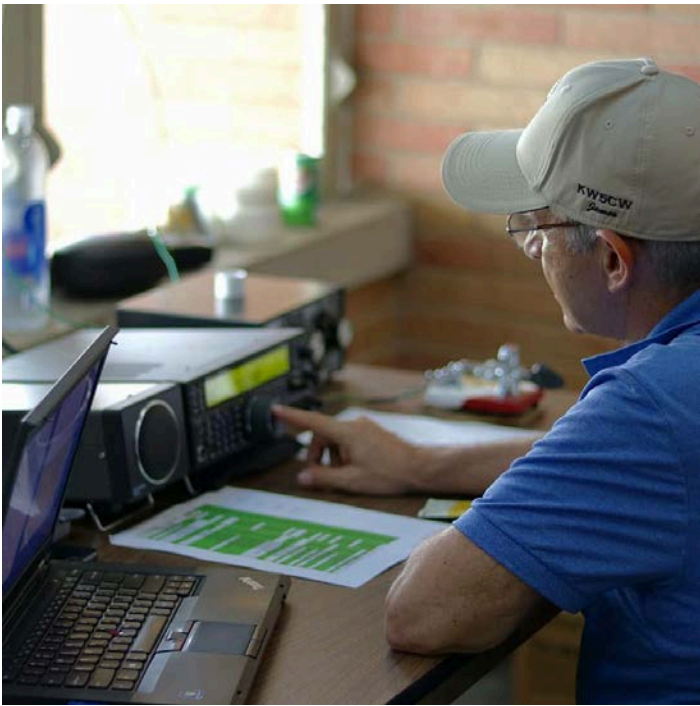
CLUB ACTIVITIES

Field Day – June 24-25, 2017









QSL MANAGER'S DESK

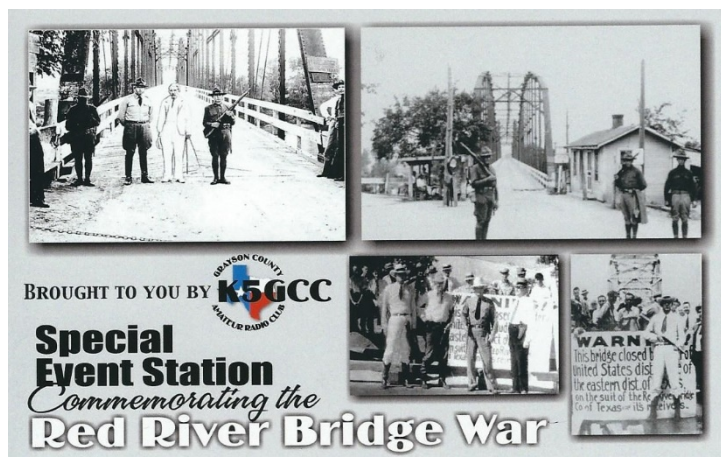
The Red River Bridge War Special Event is underway. We're off to a great start. We already have lots of QSO's to be confirmed on the eQSL web site. I won't upload our log book until the event is over.

I, however, am off to a late start. Just got back from a short vacation over in Arkansas over the weekend. Got back Sunday evening just in time to make one contact and then the thunder storm rolled in and we lost power here at my QTH. Didn't get it back until the next morning. It was a hot and humid night for us...we are spoiled by the AC.

By now all of you should know the routine...

All club members can participate using the W5I call sign during the event. You can use any band and any mode you want to any time during the event. There are only two rules...you must follow the band plan for the license you have and you must send your logs to me when the event is over. ADI files of your computer logs would be appreciated, but if you only have a paper log that is OK too. Email your logs to n5sly@arrl.net or give them to me at the next club meeting.

Information about the event can be found at www.qrz.com/db/w5i



If you would like to participate but don't have a radio or want to find out about some new modes...give me a shout. I would be happy to have you come over and use my radio. Give me a call at 903-818-7463 or email n5sly@arrl.net and we'll set something up.

Let's see if we can make 700 QSO's during this event. We'll only be able to do that if y'all join in.

Have fun...that's what this is all about.

73

Lee – N5SLY

HELPING HAMS

The idea behind Helping Hams is simple – all hams need a little help sometimes, but they might not know who can help them. Our club has many talented members, with some better at certain jobs than others. What we hope to do here is match up hams needing help with other hams who have the skills to help them. Working together, we can all help our fellow hams and encourage them to continue pursuing their interests in this wonderful hobby.

The currently-requested needs are listed below. If you have a need, or know of a ham with a need, or if you or someone you know can help, contact our newsletter editor by sending an e-mail to kf5npm@gmail.com. Be sure to include the following: 1) Who needs the help and how to contact them; 2) What needs to be done; 3) When can someone come out to do the work; and 4) Where is the location of the work that needs to be done. **You don't have to be a member of GCARC to ask for help or make an offer to help.** We're all in this together – that's what the hobby is all about!

Current Requests:

Bennie K5DIZ	Antenna install	Sherman
Bob Sholl	Needs help with a rotator on a 100' tower.	Denison
W5DSA		
Sheila Sammons	Needs help with antenna repairs – damaged from falling tree limbs. Looking at	Sherman
KF5TDP	sometime later in the year.	

Mike Bernier
KF5NPM

Needs help with replacing damaged HF antenna plus installing two additional antennas and grounding. Looking at sometime later in the year.

Denison

SWAP MEET

(Disclaimer: This section is provided for hams to list items they wish to buy, sell, or trade. GCARC will not be responsible for the accuracy or completeness of any descriptions, will not guarantee any items function as described, and will not participate in any transactions. The individual buyer and seller are responsible for all discussions, negotiations, and resolving of differences.)

To submit items to be listed, send the information in an e-mail to the GCARC Newsletter Editor at kf5npm@gmail.com. Photographs are encouraged. There is no charge for listings, and you do not need to be a member of GCARC to participate.

FOR SALE: Heathkit DX-60

DX-60 in great condition. Finals replaced.

Asking \$85.

Contact: David Reeder WA0URJ
wa0urj@yahoo.com



FOR SALE AS IS: Assorted Electronics/Test Equipment

The following items were donated to GCARC and are in need of a new home. No set price per piece – make us an offer!

- Heathkit RF Signal Generator
- Square Wave Generator Model 71
- Broel & Kjoer Voltmeter
- Sierra Electronic Corp. Carrier Frequency Voltmeter 104A
- Polytechnic Research Heterodyne Frequency Meter Type 504

NOTE: These have not been tested and are offered “as is” with no refunds.

Contact: Lee Sly N5SLY
E-mail: lee.n5sly@gmail.com

Amateur Radio Parity Act Introduced in U.S. Senate

The [Amateur Radio Parity Act](#) of 2017 was introduced in the US Senate on July 12, marking another step forward for this landmark legislation. Senators Roger Wicker (R-MS) and Richard Blumenthal (D-CT) are the Senate sponsors. The measure will, for the first time, guarantee all radio amateurs living in deed-restricted communities governed by a homeowner's association (HOA) or subject to any private land use regulations, the right to erect and maintain effective outdoor antennas at their homes. The Senate bill, S. 1534, is identical to H.R. 555, which passed the US House of Representatives in January.

"Amateur Radio continues to be a critical part of our emergency communications operations," Wicker said. "Mississippians learned firsthand after Hurricane Katrina how Amateur Radio operators can provide a resilient, distributed network to first responders and disaster relief organizations when other communications tools fail."

"Amateur Radio operators provide an invaluable service to their communities by assisting local emergency communication efforts when disasters occur and main lines are down," Blumenthal said. "This bipartisan measure ensures that operators have access to the tools they need to support our first responders when lives are at stake."



FCC Chairman Ajit Pai applauded the bill in late January, saying that it would "help Amateur Radio operators, and take several steps to promote public safety."

ARRL President Rick Roderick, K5UR, expressed the League's appreciation to the Senate sponsors. "ARRL is grateful for the support of Senators Wicker and Blumenthal for sponsoring this important piece of legislation, and for advocating this bill for the past 3 years," he said. "Their continuing support is critical to the success of our efforts." President Roderick also thanked Senator John Thune (R-SD), who chairs the Senate Commerce Committee, for "championing the Parity Act in the Senate since the beginning of our effort."

The bill has enjoyed widespread, bipartisan support. In the 114th Congress, nearly 130 cosponsors signed onto the legislation in the House and the Senate. The legislation, which strikes a carefully crafted balance for all concerned parties, is the result of months of work culminating in the accord reached by ARRL and the Community Associations Institute (CAI). The measure provides for the guarantee of an effective outdoor antenna while protecting the aesthetic concerns of HOAs.

In a statement, ARRL said it looks forward to working with the bipartisan leadership of the Senate and the Commerce Committee to help move the Wicker-Blumenthal legislation through the Senate and to the President's desk.

- Originally published online at ARRL.org

Motorola Files Additional Patent Infringement Complaints against Hytera

Motorola Solutions ratcheted up its legal battle with competitor Hytera, filing new patent infringement [complaints](#) in Germany against both Hytera Communications Corporation Ltd of Shenzhen, China, and Hytera Mobilfunk of Bad Münders, Germany. The latest legal actions, announced on June 24, are in addition to Motorola's previously filed patent infringement complaints in Germany.

"With these additional patent infringement actions in Germany, Motorola Solutions now has five pending [patent infringement] litigations against Hytera," Motorola said in a news release. These include complaints filed with the US International Trade Commission and separate patent infringement and trade secret misappropriation complaints filed last March in the US District Court for the Northern District of Illinois.

The complaints filed this week in Germany assert that Hytera's two-way wireless communication devices with improved squelch functionality infringe on a Motorola Solutions patent. Motorola says the focus of the new cases differs from earlier cases and represents the second patent covering acoustic performance of two-way radio devices.

Already known for its Land Mobile Radio Service products, Hytera entered the Amateur Radio digital mobile radio (DMR) market last year.

In its latest suit, Motorola is seeking seeks an injunction preventing Hytera from offering and delivering products with the acoustic squelch feature in Germany, as well as the recall and destruction of infringing products and various unspecified damages.

Last March Motorola alleged in its US District Court complaint that proprietary and patented information was taken illegally by three former company engineers who now work for Hytera, and that this was done as "part of a deliberate scheme to steal and copy" Motorola's technology. Motorola contended that its digital radio products were rendering Hytera's analog systems obsolete, and rather than develop its own digital products, Hytera stole Motorola's ideas. Motorola said technology features it developed started showing up in Hytera products soon after Hytera began hiring engineers who had left Motorola in 2008, according to the earlier lawsuit.

Hytera offered no immediate comment on the latest court actions by Motorola.

- Originally published online at ARRL.org

Revised FCC Form 605 Will Ask Applicants "the Felony Question"



A revised FCC Form 605 – *Quick-Form Application for Authorization in the Ship, Aircraft, Amateur, Restricted and Commercial Operator, and General Mobile Radio Services* – going into effect in September will ask all applicants to indicate if they have been convicted of or pled guilty to a felony. The Communications Act obliges the Commission to ask "the felony question," as it did on the old Form 610 and still does on other applications. This action will correct its omission on Form 605, which has existed for years. Applicants' responses and explanations will be used to determine eligibility to be a Commission licensee. The FCC told ARRL that it's still deciding whether to issue a public notice on the change.

"The Commission is revising the basic qualifications section of the form to include a question regarding whether an applicant has been convicted of a felony in any state or federal court," the Office of the FCC Secretary explained in a May filing with the Office of Management and Budget (OMB), which must okay the revision. "Applicants answering YES must provide an explanation regarding the conviction. This item enables the FCC to determine whether an applicant is eligible under sections 310(d) and 308(b) of the Communications Act of 1934, as amended, to hold or have ownership interest in a station license."

The revision also will apply to NCVEC Form 605 – the *unofficial* Amateur Radio-specific version of the application that is completed and filed at volunteer examiner coordinator (VEC) examination sessions. VECs will have to start using the revised form on September 7. Responding to VECs' questions, the FCC offered some guidance, with a particular focus on NCVEC Form 605.

ARRL VEC Manager and NCVEC Vice-Chair Maria Somma, AB1FM, thanked the FCC for honoring a request to amend the effective date of the change, initially in early August. "At the urging of the NCVEC leadership, the FCC took into consideration the undertaking to change and distribute all affected forms and update software and agreed to push back the execution date by 1 month," she said. The NCVEC will create a revised NCVEC Form 605 and release it to VE teams before September 7.

Once the Form 605 update has been implemented, assuming all other information is correct, negative felony question responses will result in a license grant, the FCC said. A YES will place the application in the "pending file for review" category. Applicants answering YES would have to, within 14 days, provide the FCC with a statement explaining the circumstances, and a statement "giving the reasons why the applicant believes that grant of the application would be in the

public interest, notwithstanding the actual or alleged misconduct,” the revised Form 605 instructions state. The FCC said an applicant’s answer to the felony question and explanation will be public via ULS, unless a separate request is made to the FCC that the applicant’s explanation be kept confidential. The FCC will review applications on which the felony question has been answered in the affirmative and decide whether to grant them or designate them for hearing.

“The applicant must provide sufficient information for the FCC to determine whether there exists any material and substantial question of fact regarding whether the applicant has the character qualifications to be a Commission licensee,” the FCC said. There is no set checklist of items, but useful information would include such information as details regarding the conduct that resulted in the conviction or guilty plea, including time and place; the date of the conviction or guilty plea; the penalty imposed and whether it has been satisfied, and “any efforts taken to remedy the wrongs committed and ensure that the applicant will not engage in such conduct in the future,” the FCC said.

The FCC said the only additional information that VECs will have to collect is the response to the felony question; any explanatory exhibits and confidentiality petitions will go directly to the FCC, and VECs will have no information as to the status of such applications.

The FCC said the felony question must be answered every time – even if previously answered – for New, Modification, Renewal/Modification, and Amendment applications. “Assuming that nothing has changed, the attachment to the subsequent applications can simply reference the file number of the application where the complete explanation was given, rather than having to set forth the complete explanation each time,” the FCC memo said. “Clubs are not exempt from the felony question. The question applies to the club as an entity and to the trustee, but not to any other individual officers.”

Individuals convicted of a felony and later pardoned or whose record has been sealed should answer YES, and include information regarding the pardon, “as that will be relevant to whether the conviction still presents any material and substantial question of fact regarding whether the applicant has the character qualifications to be a Commission licensee,” the FCC told VECs. “An overturned conviction need not be disclosed – but a conviction still on appeal must be disclosed.”

- Originally published online at ARRL.org

BIRDS-1 CubeSats Deployed from ISS, Carry Amateur Radio Payloads

The five CubeSats making up the [BIRDS-1](#) (Joint Global Multi-Nation Birds) constellation were deployed into orbit from the International Space Station (ISS) on July 7. Each carries an Amateur Radio payload but no transponders. The Japan Aerospace Exploration Agency (JAXA) module’s remote manipulator arm was used to accomplish the launches.

“Another great example of international cooperation today on @Space_Station – launched 5 micro-satellites from 5 countries off the JAXA arm!” tweeted ISS crew member Jack Fischer K2FSH (@Astro2fish).



The BIRDS-1 constellation of five 1U CubeSats – BIRD-B, BIRD-J, BIRD-G, BIRD-M, and BIRD-N – are all of the same design, and all use the same Amateur Radio frequency. They were launched to the ISS on June 3. The main mission of the 2-year project is to use the constellation to carry out radio communication experiments via a network of UHF/VHF Amateur Radio ground stations around the world.

Four faculty members – including Yasuhiro Tokunaga, JG6YBW – and 15 students at Japan’s Kyushu Institute of Technology (Kyutech) are coordinating the experiment, with participation from student engineering teams at universities in Bangladesh, Ghana, Mongolia, Nigeria, Thailand, and Taiwan.

The challenges will be to distinguish each CubeSat from its companion spacecraft transmitting on the same frequency, hand over operation of a satellite from one ground station to another, and assemble the satellite data – such as housekeeping telemetry, music and Earth images – obtained at different ground stations.

Radio amateurs have been invited to join the network to assist in the data downlink and reconstruction of patchy satellite data into meaningful data. Orbit information and the operational plan of each satellite is to be made available to the Amateur Radio community, along with software to decode the satellite data.

One unusual onboard mission is a digi-singer (SNG), aimed at broadcasting music from space to Earth. The SNG music-exchange mission will take music in MIDI format uploaded from Earth, process it onboard using a vocal synthesizer, and retransmit it back to Earth on UHF FM.

Amateur Radio stations that successfully decode the telemetry data, music, and Earth images will receive a QSL card from the BIRDS team. The reconstructed data will be posted.

According to the IARU, the satellites have CW, 1.2k bps AFSK FM, audio FM, and 9.6k bps GMSK downlinks on a coordinated downlink frequency of 437.375 MHz.

- Originally published online at ARRL.org

WWV 25 MHz Signal Swapped to Circular Polarization, Reception Reports Invited

The resurrected 25-MHz signal of time and frequency standard station [WWV](#) is now emanating from a circularly polarized turnstile antenna. WWV had used a vertically polarized antenna on 25 MHz in the 1970s. Silent since 1977, the 25-MHz signal returned to the air on an “experimental basis” in April 2014, and it’s been transmitting ever since – initially on a broadband discone until August 2015, when it switched back to a vertical, which it used until the July 7 switch to circular polarization.

“[W]e are broadcasting with 2 kW from a circularly polarized turnstile antenna,” WWV lead electrical engineer Matt Deutch, NØRGT, told ARRL. “It is just your standard plain-vanilla turnstile – two horizontal orthogonal dipoles with a quarter-wave phase-shifting coax linking them.”

Deutch has explained that when the 25-MHz transmitter was shut down in 1977, the antenna’s radiating element was “tossed in the bone yard, and a new longer section put on the tower to make it a 15 MHz stand-by antenna,” Deutch recounted. When WWV first reintroduced the 25-MHz broadcast some 37 years later in response to requests, it used a broadband monopole. But, it was later decided to use that antenna for WWV’s 2.5-MHz stand-by transmitter and to rebuild the 25-MHz antenna. The old radiating section was retrieved and the antenna rebuilt, so that it looked like what was being used in 1977.



Deutch said it’s hoped that the latest antenna change to circular polarization might be helpful to anyone studying propagation during next month’s total solar eclipse, which will be visible across the US. “My effort right now is focused on getting the word out, just to make people are aware that [the 25-MHz signal] is available, if it can be useful to them.”

Before the change, Deutch said WWV had received reports on the 25 MHz signal from across the Atlantic. The 25 MHz broadcast includes the same information transmitted on all other WWV frequencies and at the same level of accuracy.

Located in Fort Collins, Colorado, WWV is operated by the National Institute of Standards and Technology ([NIST](#)). WWV has [invited](#) listeners’ comments and reports on its 25-MHz signal.

- Originally published online at ARRL.org

LOCAL RADIO NETS

Daily

Texas Slow Net (CW only)

Daily 7:45pm CT on 3.570 MHz

This is a training net for operators interested in building proficiency in CW and learning about handling procedures for CW traffic nets.

Weekly

South Texas Section ARES Net (HF)

Mondays 7:30pm CT on 3.873 MHz LSB

This is an information net open to South Texas (STX) Section ARES members. Other Amateur stations are welcome to listen in.

Durant ARA Weekly Net

Tuesdays 7:00pm CT on the 147.390+ (118.8 PL) repeater.

No net on the 3rd Tuesday of each month due to the DARA monthly meeting.

Fannin County ARC Weekly Net

Tuesdays 8:00pm CT on the 147.200+ (100.0 PL) repeater.

This is an informal information net.

McKinney 6 meter AM Net

Wednesdays 10:00pm CT on 50.400 MHz

Ladies Net

Thursdays 8:00pm CT on the 147.000+ (100.0 PL) repeater.

Net Control: Linda KE5YUC

McKinney ARC Info Net

Sundays 8:00pm CT on the 146.740- (110.9 PL) repeater.

Semi-Monthly

Grayson County ARC Information Net

1st & 3rd Sunday at 8:00pm CT on the 147.000+ (100.0 PL) repeater.

This is an informal information net and buy/sell/swap net.

Grayson County ARES Net

2nd & 4th Sunday at 8:00pm CT on the 147.000+ (100.0 PL) repeater.

This is a directed information net used for training.

RACES Command Net Check (HF)

2nd & 4th Sunday at 2:00pm CT on 7.255 MHz LSB

This is a RACES Command Net check for statewide RACES Command Net members ONLY. All other Amateur stations are welcome to listen, but DO NOT check in!

Monthly

North Texas Section ARES Net (HF)

2nd Wednesday at 8:30pm CT on 3.860 MHz LSB

This is an information net open to all ARES members in the ARRL North Texas (NTX) Section.

McKinney ARES Net

2nd Sunday at 9:00pm CT on the 146.740- (110.9 PL) repeater.

AREA REPEATERS

Sherman TX	147.000+ MHz (100.0 PL) 147.280+ MHz (107.2 PL) 444.750+ MHz (100.0 PL)	W5RVT W5COP W5RVT	Gainesville TX	147.340+ MHz (100.0 PL)	WB5FHI
Allen TX	145.350- MHz (100.0 PL)	N5GI	Kingston OK	146.085- MHz (103.5 PL) (currently out of service)	K5BQC
Bonham TX	147.200+ MHz (100.0 PL) 145.470- MHz (100.0 PL) 443.750+ MHz (100.0 PL)	K5FRC K5FRC K5FRC	McKinney TX	146.740- MHz (110.9 PL)	W5MRC
Denison TX	145.330- MHz (100.0 PL)	W5DWH	Melissa TX	443.200+ MHz (100.0 PL)	W5MRA
Durant OK	147.390+ MHz (118.8 PL) 147.255+ MHz (114.8 PL) (currently out of service)	K5KIE K5CGE	Paris TX	146.760- MHz (203.5 PL)	WB5RDD
			Rosston TX	145.490- MHz (85.4 PL)	WD5U
			Van Alstyne TX	443.800+ MHz (103.5 PL)	W5VAL
			Whitesboro TX	442.875+ MHz (100.0 PL)	WC5GC

GRAYSON COUNTY ARES AND RACES

Sparks, Crackles, and Other Random Thoughts

By Rick Simmons K5ECX
Grayson County ARRL EC

Same Old Story

Well, have you noticed it's HOT?!? I have to dwell on this a bit because it's so important we know the issues we face with heat index values pushing 105 in the afternoons. I came home this morning from our Men's bible study and while watering the garden found a water leak. That was at 7:30. I finished up about 9:45 and the heat index is 98. I'm melted. Lots of water, several breaks and the fortune of having the right extra parts on hand, and now I'm showered and chillin' in the AC, water leak fixed. But I'm done outside till this evening. Learn the warning signs of heat stroke and heat exhaustion. Watch those around you, and for goodness sakes if you carry little ones or pets in the car be smart and don't leave them behind. Ok, I'll get off my soap box.



Now last night Wade KF5AUD and Moe NT7C gave two very different but very good presentations at our face to face training. Wade discussed the Storm Ready Supporter initiative of the NWS. It's a cousin to the Storm Ready program some of our Cities and the County have participated in. It's pointed at raising awareness of preparation and safety when the weather gets too frisky. Moe brought a portable (sort of) repeater and shared how he built it, how it works, and what all the parts are. For many this was their first time to see the components and hear how they work. Considerable time was spent on the cavities and the notch filtering they give to enable the repeater to function. I say it's sort of portable as the cavities weigh about 70-80 pounds, so it's not a grab and go item. Frequency is 145.25 with a PL of 67. He has a couple of adjustments to make but it will be operational at his QTH. It has limited range and power to comply with the VHF coordination group's guidelines. As a tool it will give ARES the ability to add a frequency to an area that might need coverage in a small foot print, and allow normal repeaters for other use.

Enjoy the summer that's left. Fall will be here before we know it, and Christmas is only 20 some odd weeks away. HO HO HO!

73
Rick
K5ECX

