



GRAYSON COUNTY AMATEUR RADIO CLUB NEWS

MAY 2015

WWW.GRAYSONCOUNTYARC.COM

Vol. 21, No. 5

THE PRESIDENT'S QSO

Hi everyone,

This is Lee N5SLY, your Vice President.

We are coming up on the busy time of the year for GCARC. We are going to be very busy during the coming months.

Our next meeting has some very important agenda items to deal with.

Number one is our Special Election for a new club president. To be honest with you, I have not been overwhelmed with members volunteering to be president. So...I'm not sure what will happen during our meeting. Remember that the president's job is all work and no pay...but you do it for the love of ham radio and the personal satisfaction you get from helping our club and the gratitude of its members. So... with such a great offer there has to be someone who would like to take over this position. All you have to do is show up at the meeting and say, "I'll do it."

Number two is our Perrin Field Special Event that will be held on Saturday, May 16. We'll be setting up our radios at the Perrin Field Museum starting about 8 AM. We hope to be on the air about 9 AM and will work it until sometime in the afternoon. We'll also be having a Fox Hunt. Need to get all the logistics planned so we can pull this off.

Next...our new Web Master, Ben, has some items that need to be addressed regarding the club's web site.

Oh...I almost forgot. We were planning to do the "US Islands One Day Getaway" this month, but due to problems with one of our boats we have postponed this event until later this year. We'll talk about when we may want to do this.

We are also looking for volunteers to be Net Control operators for the GCARC Information Nets that are held the 1st and 3rd Sundays of every month. Roy, AF5VA, will be net control for the net on Sunday, May 17. I just hosted our last net for the 1st time and enjoyed the experience. I was a little nervous but managed to get thru it OK. I enjoyed the net even more than usual because I was really involved in it. Just let us know when you would like to be the net control operator.

Looking forward to seeing y'all at the meeting on Friday.

73
Lee
N5SLY
lee.n5sly@gmail.com

CLUB INFORMATION

OFFICERS

President: (open)
Acting President: Lee Sly N5SLY
Secretary: Stacy Branam W5ORD
Treasurer: Sheila Sammons KF5TDP
Activity Director: Mark Pilkilton KF5UZW
Trustee: Rick Simmons K5ECX

MAILING ADDRESS

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

NEWSLETTER

Published: Monthly via e-mail
Editor: Michael Bernier KF5NPM
To Submit News or to Add/Remove from E-Mail List: Send E-Mail to KF5NPM@GMAIL.COM
Submission Deadline: 12 midnight on the Saturday prior to each monthly meeting

MEETINGS

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

MEMBERSHIP DUES

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

Memberships are from January 1 – December 31

WEBSITE & SOCIAL MEDIA

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

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, the ARES patch should be placed 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, April 17, 2015

Meeting called to order at 7:00

Lee Sly N5SLY, GCARC Vice President, announced that Daniel Boehmisch AF5OY has stepped down as President. We will need to elect a new president. Nominations for president will be taken and voted on at the May meeting.

Old Business:

- We discussed the May 9th Island Program, and plans were tentatively set. One of the boats we were to use needs a starter replaced. Ben Sly KF5OEB will work on that.

Please note This event was eventually cancelled due to continuing boat issues and will be rescheduled for a future date.

- We officially made Paul Caputo K1PKZ a Lifetime Member, but he was unable to make the meeting to receive his certificate. Jim Hubble N5COP is our other Lifetime Member and will be recognized at a future date.

New Business:

- The previous club website is no longer available. Daniel AF5OY purchased a new site and Ben KF5OEB has been working on getting a new website up and running. The club offered to reimburse Daniel and Ben for any costs associated with the new website, but upon being asked the website was donated to the club. The new site is www.graysoncountyar.com
- A newly appointed position, Webmaster, was discussed and Ben KF5OEB was appointed. Mark Pilkilton KF5UZW will assist.
- May 16th is our first official event at Perrin Field, in conjunction with Armed Forces Day. We will run the station until mid-afternoon using the call sign W5I. Plans at this time are to setup at the museum at the airfield.

Lee N5SLY presented a short program on what a special event station is.

The meeting was closed at 7:55.

Next Meeting will be 7:00pm on Friday, May 15th, 2015, in the Grayson County Courthouse 2nd Floor Assembly Room, Sherman TX.

Respectfully Submitted,
Stacy Branham W5ORD
GCARC Secretary

GCARC TREASURER'S REPORT

Bank Balance for the Month of April, 2015

Operating Fund Beginning Bal	509.62
Funds Received from dues	60.00
(3 members dues received)	
Fund Received from patches	0.00
Less expenses	
	0.00
	0.00
Operating Fund Balance	569.62

OPERATING BUDGET	
Mail Box	180.00
Perrin Special Events	50.00
ARRL Field Day - Food	75.00
Red River Bridge War	75.00
RR Bridge War Cards	80.00
Denison Main Str Festival	75.00
Christmas Dinner	75.00
Donations to Fund Raisers	
RR Bike Rally (Kiwanis)	250.00
Marine Corps League (Toys For Tots)	250.00
Amount Budgeted	1,110.00

Available Equipment Funds	272.56
Less expenditures	
	0.00
	0.00
Equipment Fund Balance	272.56

EQUIPMENT NEEDS	
	0.00
	0.00
Amount Budgeted	0.00

Ending Bank Balance as of April 30, 2015	842.18
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Sheila Sammons KF5TDP
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.k5gcc.org>
- 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>
- Quarter Century Wireless Association (QCWA) Chapter 41**
1st Saturday at 11:00am
Midway Point Restaurant, 12801 Midway Road, Dallas TX
<http://www.texasqcwa41.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** **Perrin Field Special Event Station (Armed Forces Day)**
May 16, 2015
North Texas Regional Airport-Perrin Field, Denison TX
The club will operate a special event station at the Perrin AFB Museum using the callsign W5I during Armed Forces Day. Specific frequency bands and modes TBA.
- Training Classes** **Radio & Electronics Lab for Hams**
2nd Saturday of each month from 8:30am-12:30pm
Grayson College Center for Workplace Learning, Seminar Room C, 6101 Grayson Drive, Denison TX
This is a hands-on class where students learn basic principles of electronics, proper use of tools and test equipment, and other tips and techniques applicable to Amateur Radio. Class content will vary.
Contact: Moe NT7C (903) 564-7115 or nt7c@arrl.net
Class Fee: No charge for the class; however, there may be costs for tools and/or supplies used in the class
Registration: Required; contact Moe to register

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@arrl.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 (jharmon@netcommander.com)

Texoma Amateur Radio Association – Monthly Testing

3rd Saturday of each month at 2:00pm
The Java Stop Café, 5700 North FM 1417, Sherman TX
Contact: Dave K5YM (281) 743-7478

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

Ham-Com (ARRL West Gulf Division Convention)

June 12-13, 2015 8:00am-5:00pm (now an all-indoor event – no tailgating)
(VE & GROL Testing: Friday 11:00am-5:00pm, Saturday 9:00am-4:00pm)
Irving Convention Center, 500 W Las Colinas Blvd, Irving TX
Talk-In: 146.380MHz
Contact: Bill Nelson AB5QZ (214) 532-3848 or ab5qz@swbell.net
Website: www.hamcom.org

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. When listing items for sale or trade, photographs are encouraged. There is no charge for listings, and you do not need to be a member of GCARC to participate.

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
- MFJ Versa Tuner II MFJ-941D
- 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

FOR SALE: Vintage Heathkit Gear

1. Heathkit AJ-53 Hi-Fi AM tuner 4 tube with doubling detector. Similar to the Heathkit AF-63. \$30.00
2. Heathkit AJ-33A AM/FM Stereo receiver. \$40.00
3. Heathkit AV-3 AC (audio) VTVM. Meter cracked. \$10.00 works.

Contact: David Reeder-WAØURJ

E-mail: WA0URJ@yahoo.com

Home 903-583-1023 – Cell 972-658-6773

FOR SALE: Drake TR-3 with MS-4 Power Supply/Speaker

Drake TR-3 with matching MS-4 power supply/speaker. Has been completely realigned, new final tubes, and other tubes replaced where needed. New SSB filters replaced as well as 20 and 10 meter crystals replaced.

Asking \$325. Will deliver or arrange to meet locally. I will ship but price doesn't include shipping.

Contact: David Reeder-WAØURJ

E-mail: WA0URJ@yahoo.com

Home 903-583-1023 – Cell 972-658-6773



FOR SALE: Cushcraft ASL-670 Log Periodic Antenna

The Cushcraft ASL-670 is the ultimate multi-use antenna. Since the antenna is a log periodic, it offers continuous coverage through the 2 and 6 meter bands as well as 220 and 440 MHz. So while being a terrific antenna for operating those bands, it's also a great aviation and public safety band monitoring antenna.

Use the antenna for contesting and mountain topping if you like. The antenna is compact and easy to assemble and disassemble with no tuning required. Yet it is rugged enough for permanent installations.

This antenna has excellent gain f/b with good VSWR bandwidth to boot. Enjoy the fun of high performance operation *and* multi-frequency.

Asking \$190. Pick Up Only in Bonham, TX

Contact: David Reeder WAØURJ

E-mail: WA0URJ@yahoo.com

Home 903-583-1023 – Cell 972-658-6773



FOR SALE OR TRADE: GAP Titan DX Vertical HF Antenna

I have a GAP Titan DX 10m-80m vertical HF antenna for sale or trade. It is in good but used condition. Please go to the GAP Antenna website (www.gapantenna.com) for details and price when new. I also have the optional heavy duty tilt over mounting plate. It is currently assembled and I want buyer/trader to see it that way. However, I think it will have to be taken apart to transport as it is 30 ft. tall. No ground radials needed as it has its own ground plane wires.

For sale or trade at half its new price

Contact: Sarge KE5YPB

E-mail: 0101.smd@gmail.com

FOR SALE: Computer and Radio Station Desk

Desk is light oak, 62" w x 33" d with glass panel to see monitor from below. Power distribution panel included. Hutch is white pine stained to match the desk, 60" w x 42" h with adjustable shelves. Desk can be disassembled for transportation and reassembled easily.

Asking \$400 for the set.

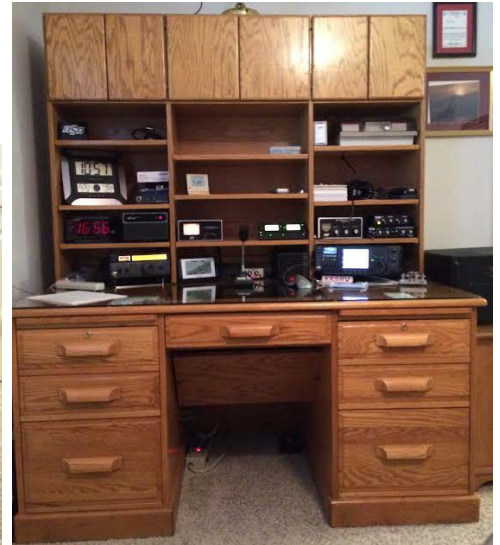
Radios not included.

Contact: Bill KK5RW

Phone: (281) 217-9942

E-Mail:

3bewens@gmail.com



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. **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 Needs:

Alan W5ZMH	Needs a wire antenna installed	March 2015
Gordon N5TPO	Needs a tower-mounted 440Mhz yagi antenna realigned	March 2015
Rick K5ECX	Needs help with lowering/servicing/raising antenna tower. Note: must be done in very dry weather due to tower location.	March 2015
Mike KF5NPM	"Station Building Part 2" – needs help installing rooftop 2m/440 J-pole and 2.4GHz antennas, grounding cable, and lightning arrestors. Also needs HF antenna adjustments. Note: steep roof.	March 2015
Bennie K5DIZ	Needs help installing an antenna	March 2015

FCC Proposes to Permit Amateur Access to 2200 and 630 Meters

Amateur Radio is poised to gain access to two new bands! The FCC has allocated a new LF band, 135.7 to 137.8 kHz, to the Amateur Service on a secondary basis. Allocation of the 2.1 kHz segment, known as 2200 meters, was in accordance with the *Final Acts* of the 2007 World Radiocommunication Conference (WRC-07). The Commission also has proposed a new secondary 630 meter MF allocation at 472 to 479 kHz to Amateur Radio, implementing decisions made at WRC-12. No Amateur Radio operation will be permitted in either band until the FCC determines, on the basis of comments, the specific Part 97 rules it must frame to permit operation in the new bands. Amateur Radio would share both allocations with unlicensed Part 15 power line carrier (PLC) systems operated by utilities to control the power grid, as well as with other users. In addition, the FCC has raised the secondary Amateur Service allocation at 1900 to 2000 kHz to primary, while providing for continued use by currently unlicensed commercial fishing vessels of radio buoys on the “open sea.”



The allocation changes, associated proposed rules, and suggested topics for comment are contained in a 257-page FCC [Report and Order, Order, and Notice of Proposed Rulemaking](#) addressing three dockets -- ET-12-338, ET-15-99, and IB-06-123 -- which affect various radio services in addition to the Amateur Service. The FCC released the document on April 27.

With respect to the new LF sliver band at 135.7-137.8 kHz, the FCC concluded that Amateur Radio and PLC systems can coexist there. “Since the Commission last considered this issue, amateurs have successfully operated in the band under experimental licenses without reported PLC interference,” the FCC said. In 2003, the FCC turned down an ARRL proposal to create a 135.7-137.8 kHz Amateur Radio allocation, after utilities raised fears of a clash between Amateur Radio and PLC systems operating below the AM broadcast band. This time, the FCC said, “It is clear that we will have to establish appropriate requirements for amateur use of the band, if we are to ensure compatibility with PLC systems.” WRC-07 set a maximum effective isotropic radiated power (EIRP) limit of 1 W, which is what the FCC is proposing.

The FCC said it “explicitly” rejects the suggestion that it choose one use of the spectrum over the other. “Our objective is to allocate spectrum on a secondary basis to amateur stations in a manner...compatible with existing PLC systems,” the FCC said. “However, we also expect to permit amateur operators to make use of the allocation in a manner that is less burdensome and more productive than they are currently afforded under the experimental authorization process.”

The Commission said that if it concludes, after considering the record, that Amateur Radio and PLC systems cannot coexist, it would “defer the adoption of service rules, and amateur users will have to continue to use the experimental licensing process to operate in the band.”

With respect to the proposed 630 meter allocation, the FCC has proposed limiting amateur stations in the US to a maximum 5 W EIRP. The ARRL submitted a *Petition for Rule Making* in 2012, asking the FCC to allocate 472-479 kHz to the Amateur Service on a secondary basis and to amend the Part 97 rules to provide for its use. Several countries, including Canada, already have access to the band. The ARRL has pointed out that during its extensive course of [experimentation](#) in the spectrum around 500 kHz, no interference reports have been received.

The FCC said that the “cornerstone” of the technical rules it’s proposing for both bands is “physical separation between amateur stations and the transmission lines” carrying PLC signals. “Such a separation, in conjunction with limits on the amateur stations’ transmitted EIRP and antenna heights, will enable PLC systems and amateur stations to coexist in these bands,” the FCC asserted. “In addition, we propose to limit amateur stations to operations at fixed locations only, to ensure that this separation distance can be maintained reliably.”

The FCC said it wants to hear from both PLC system users and radio amateurs regarding technical requirements it would have to put into place to permit both users to operate comfortably and without compromising the PLC systems. The

Commission suggested that other requirements might include limits on antenna heights, transmitter power limits, and operating privilege limits based on license class or mode. The ARRL will file comments in the proceeding.

- Originally published online at ARRL.org

Boston Marathon Amateur Radio Support Adjusts to a “New Normal”

More than 250 Amateur Radio communication volunteers participated on Patriots Day (April 20) in the 119th running of the [Boston Marathon](#), sponsored by the Boston Athletic Association (BAA). This event was the second since the bombings that tragically marred the 2013 race. Amateur Radio volunteers have supported Boston Marathon communication for decades. Starting with the 2015 event, a Communications Committee the BAA, formed last year, established a “new normal” for marathon support by integrating Amateur Radio, public safety, and commercial radio providers into a single team. In step with the BAA’s mandate to “review the entire communications program,” the seven-member Amateur Radio management team raised the level of training to a professional caliber and developed better documentation for volunteers. Tight coordination with the BAA as both leader and “client” of the Amateur Radio communication support “led to further advancement in overall effectiveness as evidenced by a very successful outcome despite difficult weather,” the Amateur Radio team said in a media release.

“Development of detailed communications plans for each race segment was at the heart of the Committee’s work,” the Amateur Radio team said. “We expect this arrangement to continue, along with an increasing emphasis upon further training and standards, all intended to enhance the work of Amateur Radio public service, and to raise confidence in our capabilities to integrate with other organizations as effective team players.”

Cool, damp weather made the volunteers’ role more difficult, but execution of communications tasks in accordance with the 2015 plan went smoothly. “Many Boston Marathon race officials favorably commented on the advancement in communications provided by Amateur Radio and other entities both in the planning stage and on event day,” the Amateur Radio team said.

“Through all the meetings, conference calls, and documents produced, I would say we all fulfilled what we set out to accomplish and more,” said Chris Troyanos, Medical Coordinator for the Boston Marathon. “From the public safety side, to all involved with the BAA, our communications program set new heights of excellence.” Organizers from the Red Cross also expressed satisfaction with 2015 Boston Marathon communications.

Event logistics were coordinated more tightly. Added to Amateur Radio’s tasks this year was reporting of hourly medical statistics from each of the 26 medical field units, and a new medical re-supply system, both relying on Amateur Radio communication. The ham radio volunteers also were able to offer situational awareness regarding rain and wind conditions along the route. The cooler weather meant fewer heat-related medical emergencies, but from mile 12 onward, many runners suffered chills and had to stop at medical stations to warm up before moving on.

Efforts were organized in segments that included start, course, transportation, and finish. A back-up medical dispatch communication plan, included in the public safety matrix, was among the many operational plans in place. Amateur Radio volunteers shadowed key race officials at the start and finish line, augmenting commercial radio services. They also staffed medical and hydration stations along the course; vans that travelled the course transported runners unable to complete the race to the finish line. Amateur Radio volunteers also were stationed at the Massachusetts Emergency Operations Center (WC1MA) as well as at the Amateur Radio Station at the National Weather Service-Taunton (WX1BOX), given the concern with the potential for heavy rain and strong winds to affect the marathon.

Volunteer Steve Ostrovitz, KB1OCI, was among those recognizing the efforts of the Amateur Radio leadership at the 2015 Boston Marathon. “You all brought the level of organizational professionalism to our roles to a new level that I think most had never contemplated as being possible,” he said after the race. “This was not just ‘upping our game’ but really a whole new way of approaching what we do and how we do it.”

- Originally published online at ARRL.org

Australian Ham's "PicoSpace" Balloon Circumnavigates the Globe

A foil, party-type balloon carrying a ham radio payload has circumnavigated the globe. Launched on April 6 by Australian radio amateur Andy Nguyen, VK3YT, of Kensington, Victoria, Australia, the balloon, designated [PS-41](#), completed its round-the-world journey on April 16 and is still in the air. Along the way, it has been tracked by a network of Amateur Radio operators. Nguyen has been trying since early last year to have one of his launches go full circle.

"PS-41 crossed the starting longitude of 144.903 at 11:20 AM AEST (0120 UTC) this morning, completing the first PicoSpace around-the-world trip," Nguyen posted on April 16. "Thanks to everyone for assistance with tracking and providing encouragement for the project; the trip would not have been possible without you." In January, Nguyen's PS-30 balloon went down in suspected poor weather off the east coast of Africa near Madagascar.

The solar-powered, helium-filled PS-41 balloon carried an HF payload, sending *WSPR* spots and *JT9* telemetry on 30 and 20 meters from a 25 mW transmitter. The high-altitude PS-41 took a path over Tasmania, then south of New Zealand, the southern tip of South America, directly over the South Georgia and South Sandwich islands, well south of Africa, and back across to Australia.

Nguyen's companion PS-42 balloon has made its way to the South Pacific between New Zealand and South America.

"PS-41 and PS-42 are still in the air and will continue to be tracked in the coming days," Nguyen said. The balloons have been extensively tracked via *JT9* by a network in Australia, New Zealand, South America, South Africa, and Ireland. *WSPR* spots have as received all over the world. Dial frequencies are 10.1387 MHz and 14.0956 MHz. PS-41 is at 900 Hz, and PS-42 is at 1100 Hz on the waterfall.

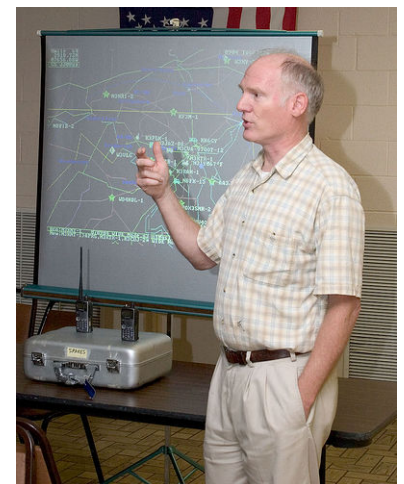
- Originally published online at ARRL.org

U.S. Naval Academy CubeSat Launch to Include Next APRS Satellite

Sometime on or about May 20, the next US Naval Academy satellites and Brno University PSK31 transponders head into space from Cape Canaveral on an Atlas 5 launcher into an approximately 50° orbit. The launch will include the Psat APRS satellite — a pair of identical 1.5 U cubesats (A and B) -- as well as the BRICsat and USS Langley (Unix Space Server Langley) nanosatellites.

"Psat is a Naval Academy student satellite project named in honor of one of our graduates, Bradford Parkinson, of GPS fame, which contains an APRS transponder for relaying remote telemetry, sensor, and user data from remote users and Amateur Radio environmental experiments or other data sources back to Amateur Radio experimenters via a global network of Internet-linked ground stations," explained APRS developer Bob Bruninga, WB4APR. In addition to the data transponder, a secondary [Brno University](#) transponder will support multi-user PSK31 text messaging. The APRS downlink will be 145.825 MHz (1200 baud AX.25 APRS).

"We welcome radio amateurs worldwide to tune into the downlinks and either IGate packets into the global APRS-IS system or to [e-mail](#) me," Bruninga said. "After launch, the next several orbits will be over USA and Europe." Bruninga said PSAT, including the PSK31 transponder, would not be available for use until all on-orbit checks are complete, a process he said could take "many, many days." He also requested reports on any PSK31 (FM) heard on 435.350 MHz (the PSK31 uplink is 28.120 MHz).



Bob Bruninga, WB4APR

The PSK31 multi-user FDMA [transponder experiment](#) on Psat and BRICsat is similar to the one on [RAFT](#) and [PCSAT2](#). It will allow messaging among up to 30 modest ground stations simultaneously, Bruninga said.

Psat is one of five APRS-networked Amateur Radio satellites that will be in orbit during 2015, and all will appear on the live [APRS downlink page](#). The others include [PCsat-1](#), in orbit since 2001, [QIKcom-1](#), set to launch in September,

[QIKcom-2](#), set to launch in December, and the [ARISS](#) packet radio system on board the International Space Station since 2007.

According to AMSAT-UK, BRICsat will carry a PSK31 transponder with a 28.120 MHz uplink (2.5 kHz bandwidth) and a UHF FM downlink on 435.350 MHz. [Gunter's Space Page](#) describes USS Langley as "a proof-of-concept mission for providing global internet access via a nanosatellite constellation." The satellite will act as a web server and router in space, using Internet Protocol and Linux. Downlinks 437.475 MHz (9600 baud AX.25 packet telemetry) with uplink at 145.825 MHz.

Bruninga said satellite experiments such as Psat "serve our educational and outreach goals for student projects encouraging young people to be interested in Science, Technology, Engineering and Math." He said he hopes other schools will build either additional 145.825 MHz relay satellites or experimental sensors. "We hope that Psat will be the 'egg' in this chicken-egg conundrum," he added.

- Originally published online at ARRL.org

LOCAL RADIO NETS

Daily

Texas Slow Net (CW only)

Daily 7:45pm CT on 3.570MHz.

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

Weekly

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 145.130- (no PL) repeater.

This is an informal information net.

McKinney 6 meter AM Net

Wednesdays 10:00pm CT on 50.400MHz

Ham Talk Net (sponsored by the Texoma Amateur Radio Association)

Thursdays 8:00pm CT on the 145.330- (100.0 PL) repeater.

This is an informal ragchewing and buy/sell/swap net

Ladies Net (temporarily off the air)

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

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

Scout Ham Net

1st Tuesday at 8:00pm CT on the 147.000+ (100.0 PL) repeater.

This net is for all active Scouts, Adult Leaders, and Merit Badge Counselors who are Amateur Radio operators.

North Texas ARES HF Net

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.

Other

5th Sunday Ragchews

March 29, May 31, August 30, and November 29 at 8:00pm CT on the 147.000+ (100.0 PL) repeater.

Net Control: Trevor Reed KG5BFI

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	146.985- MHz (103.5 PL) (currently out of service)	K5BQG
Bonham TX	145.470- MHz (100.0 PL) 145.130- 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
			Grayson County ARES	441.375+ MHz (67.0 PL) (emergencies/training only)	WC5GC

GRAYSON COUNTY ARES AND RACES

Sparks, Crackles, and Other Random Thoughts

By Rick Simmons K5ECX

Grayson County ARRL EC

Go TEAM ARES!

I'll keep this short as we all have had a busy few days and the next few may provide a new set of fun things to do.

First, we have had multiple activations that have been very active and yielded a great deal of information. Accurate, timely and well received. You folks have trained for these and done an admirable job. I have received recognition praising your work that included our OEM Director, NWS, County Judge and Fire Marshals. As you all know we use radios and once it's out there it's open for anyone to hear. Our ARRL Section folks have been listening in order to facilitate their awareness and congratulated you on a job well done. The ARRL Section has been at work with the State EOC just as we have been here. They were very complimentary of your work and effectiveness.



Second, personal experience: we need to very careful while operating as a mobile. On more than one occasion I found that while I was focused on the clouds other vehicles had parked or moved close to mine while I was parked. As I started to

move away, I had to pay close attention to the other vehicles. Please try to set up so you don't have to back up. My past construction work experiences taught us to park so we didn't have to back up. Our backing accidents dropped significantly.

Third, the Legislation. HB 2722 was a bill recently introduced in the Texas Legislature which, among other things, would have made it illegal for hams to have mobile antennas installed on their vehicles unless they were working for an emergency service group such as we do during an ARES or SKYWARN activation (it also would have outlawed rooftop lights, grill guards, and other forms of vehicle-mounted equipment that are used not only by services such as ambulances, police and fire departments, but also by many companies and private individuals in the course of their day-to-day work and livelihoods). After much discussion with our local representative, the restrictive issues regarding all those items were deleted from the bill via an amendment. As it now reads we as hams are pretty much no longer a factor, except for using the word "emergency" on a sign. And that's covered by the first couple of paragraphs of the bill as long as we are working for SKYWARN and/or our OEM. I have talked to local officials, and as the intent of the bill is to stop unscrupulous persons, we are not going to draw attention with our typical ARES work. Your efforts in contacting Representative Phillips to share your concerns are appreciated all the way up to the Section Manager.

Fourth, we had a radio fail at the EOC, the TM-V71. Thanks to fast actions of our OEM, its replacement was delivered today (the 12th) and Wade wants to have it operational Wednesday. This may help with some of the low audio issues we have had on Echolink and NWS communications.

Again, thanks for all you do to make our ARES team respected in our county and now throughout the state!

73
Rick
K5ECX

