



The Greensboro Amateur Radio Association

# Feed Line



Providing Amateur Radio news for the Triad

Betty Williams , KC2BFN Editor

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## This Month's Program

Back in January, we tried to have Dr. Bob Heil as our special guest for our meeting, but unfortunately it didn't work out then. Well, we've finally been able to make arrangements so that Bob can join us via Skype for July's meeting! Bob will talk some about the history of Heil Sound (since it's the company's 50th anniversary this year), talk about some technical stuff relating to ham radio, and take your questions at the end. This will be an excellent meeting that you won't want to miss. Plan on being at Captain Bill's early this Monday, July 25 to eat and get ready for a fun time with Dr. Heil. See you then!



- ❖ GARA has new name badges. If you do not have yours, you can get your name badge at any meeting.

**Continuing recovery wishes go out to Allen Minter AI4NG who came down with viral pneumonia on June 6<sup>th</sup>, was in the hospital and rehab until July 8<sup>th</sup>.**

### NEXT MEETING Monday, June 27th

The next meeting of the Greensboro Amateur Radio Association will be Monday, July 25th, at Captain Bill's Seafood & Steakhouse, 6108 West Market Street, Greensboro, NC 27409, between Guilford College Road and Swing Road. Guest speaker will be Dr. Bob Heil, owner of Heil Sound.

## GARA Meeting Minutes

### Regular Meeting Minutes June, 2016

Due to Field Day, there was no regular monthly meeting in June.

### Board Meeting Minutes - July, 2016

The GARA board of directors held their monthly meeting on July 11<sup>th</sup> 2016 at the Forge Greensboro located at 219 W Lewis Street in Greensboro. The members present were; Cameron Conover AJ4TW, Scott Toth KV4UP, Patrick Moore K2CPR, David Bond KK4VCG, Jesse Lindley K4AX, Tom Bertolino KB1P and Greg Spencer KG4UQV.

Cameron called the meeting to order at 7:00PM

After a tour of the building we got down to business

We discussed field day and what went good and what could use some improvement. Cameron said that we made 100 more contacts than last year and we made a \$60.00 profit on the food for the picnic.

Scott said that Bob Hiel is scheduled for the July meeting Via Skype but there is a possibility that could change.

We discussed the Equipment inventory and what we need to keep insured.

Jesse said he will try to get out to the repeater site this week to check on things. Jesse is also looking to streamline the D-star registration.

Patrick said the Eccolink node is back up after some changes to the computer settings. Patrick also said a Yaesu fusion radio has been donated for the eccolink node and it should be here soon

We discussed making some website changes to make it easier to keep track of membership records  
Cameron said any request for donations should be approved by the board.

#### The Greensboro Amateur Radio Association

President Cameron Conover, AJ4TW

Vice-President Scott Toth, KV4UP

Treasurer David Bond, KK4VCG

Secretary Greg Spencer, KG4UQV

Financial Patrick Moore, K2CPR

Engineering Chair Jesse Lindley, K4AX

Operations Chair John Strandberg W4DX

Member-at-Large Ed Miller, AD4YB

Member-at-Large Thomas Bertolino, KB1P

*Appointed Position:*

Public Information

Officer

Newsletter Editor

Betty Williams KC2BFN

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We discussed Donation to GARA as well as the need for keeping a rainy day fund in case of any equipment issues.

Scott said we need to discuss the mixed mode use of the repeater at the next meeting and see if there are any issues members have noticed.

Tom Bertolino KB1P made a motion to Adjourn, David Bond KK4VCG seconded and the motion passed.

Respectfully submitted by Greg Spencer KG4UQV  
GARA Secretary

## From the President's Shack

July 2016

Field day was great! I think we are learning each year a little bit about how to make it better and better. I'd like to thank everyone who pitched in to make Field Day 2016 a success, especially Patrick Moore and Scott Toth who headed up the committees to bring us Field Day and the cookout. If you missed it, you really missed it. We had a lot of fun out there. We made more contacts this year than we did last year even with much worse band conditions. I think that is due in large part to Patrick's idea to make each station mode agile, meaning each one could do CW, Digi, or SSB. That was a great idea. I think we could probably stand to scale it down to two stations in the future, three might be one too many for the number of participants that we have. Although we are a rather large ham radio club, maybe we'll get more of you out there in the future!

I think we are hovering right around 25-30% member participation in Field Day over the last two years. I'd love to see that number climb; Field Day and the cookout are both for the members, and a great way to build our club into a community. People who operate together and eat together, erect antennas together, in times of need we will work together much better if we have a history of working together already. I'd also like to recognize Scott Toth for arranging the cookout on such short notice. Scott did a fantastic job, I think everyone really enjoyed it, and we as a club didn't lose money on the cookout/picnic for the first time in years. We did a little better than breaking even, which is good for the health of the club in the long term. Not to mention, there was plenty of great food and shady places to enjoy it. It just goes to show you what you can do on short notice with a little effort.

At the July meeting we were going to revisit the status of the 145.15 repeater being in automatic mode and possibly have another vote on it. My hope was that we would have had the new controller on the air for at least a few weeks before the July meeting, but this has not happened. It's not anyone's fault at all, there have just been some unusual issues pop up with the controller. I think Jesse will detail those in the engineering report, so I won't try to get into that here. I would like to suggest that we continue with the repeater in automatic mode and at least give it a chance to run with the controller active for a while before we make any decisions.

I'd also like to point out that we are learning a new machine. I understand this from my work in racing cars. When we get a new race car, or build a new car, it takes some time before you can start running up front or even win races with it. You have to test it, you have to run it and see how it behaves. It's a complex machine and it takes some time to get it tuned in. But you can't tune in a race car in a garage, it needs to be run on the track, and you'll have things break, the car will shut down, it'll lose power, all kinds of things can happen. But unless you put it in its environment and let it run you'll never find out what kind of bugs and issues are waiting for you. It's the same with a repeater, a repeater is a complex machine. It's not just a factory shipped black box that you plug a couple of cables into and sit back and watch it run. It's got many parts that have to work together to create a successful machine. And just like a race car needs to be on a race track, a repeater needs to be on the air on the tower it's going to run on. Otherwise you will never find all the little issues that will pop up to surprise you. We are tuning in a high performance machine, it takes some time, it takes a lot of effort by a lot of people, and it takes a little

## President's Shack (continued from page 3)

monetary investment. So, what I'm saying is bear with us, chip in to support us if you can. Please understand that what we are aiming for is not a simple out of the box bare bones repeater. We want to end up with a strong flagship machine that we can all feel proud of, but it's not going to happen overnight. So do what you can to encourage those working on this and try to keep an open mind when you hear things you don't like or if the machine isn't quite living up to your expectations. This is a development year for the 145.15 repeater; we've got some new hardware, new software, and even a new crew of people to get up to speed with. Once we do get up to speed, I promise that you will see that the hard work and sacrifice have paid off.

73,

Cameron AJ4TW

## July Engineering Update

*From Jesse Lindley, K4AX*

It was great seeing everyone at Field Day this year! It went off really well considering the poor propagation conditions during the day Saturday, we still managed to pull out as many contacts as last year and get some DX in the log as well. It was a good time, and I personally was impressed with the solar charging station that Carl Fenske setup on the 80m station. In the end we had several batteries chained together, most of them his and one of mine. When I brought my battery home and set it back up in the shack as backup power it still had a decent charge on it. I'd love to see the club do a full solar setup one year, it's certainly doable and a lot more quiet than generators for sure. Special thanks for Carl Fenske for helping me setup the 80m station and bringing the equipment needed to power it all up.

### VHF Repeater

This month Patrick K2CPR and I worked on installing the controller to the repeater but again ran into trouble with keying issues and audio not passing through. I've been in contact with Arcom about it and hope to have it resolved shortly. The repeater sounds a lot better when the controller is on it with a longer hang time, courtesy tones, announcements and echo function among other things. I personally don't like a repeater that "talks" a lot, but I think if done at the right amount it's ok and I look forward to having that squared away.

On that note I'd like to thank Patrick for all of his help this month. I've definitely taken advantage of his availability this month and it's great having someone to work with at the site for a second pair of hands and eyes. On that note Patrick and Cameron went out and fixed the squelch on the repeater yet again after we "fixed" it last time. Sounds much better and I'd like to also thank Cameron for his time and the use of his signal generator at the site, it's great to have access to it and a spectrum analyzer to get things done. While I'm on the thanking mode, Bill N8KSG the president of the Rockingham County Amateur Radio club and also a G.A.R.A. member yet again loaned us the use of his FTM-400dr control head

which allows us to align the DR1x repeater. I recently picked one of these up used on QRZ for a good price so I hope we don't have to bother him again.

## Engineering (continued from page 4)

I remain impressed with the repeaters RX ability and especially the CF4M mode. Everyone I've talked on so far on C4FM has sounded great, with no audio glitches and just perfect. Hearing is believing and I think it's the best voice digital mode I've heard. Near FM quality audio without the background hiss or mobile picket fencing, with everyone sounding loud and crisp.

UHF Dstar Repeater.

The Dstar repeater has been humming along well the past month with no issues. Since we installed the IP switch at the site, the internet connection seems to solid. I've not had to reset it in a few months now.

Steve, KB7SQI helped me out a lot by setting up a email notification on the Dstar Gateway server that sends me an email letting me know when I need to approve someone's Dplus registration. We have been getting more of them recently as more Icom repeaters moving to IRCDDDB gateways and G4KLX software. In the past I just had to log into the site every day or every couple days if I forgot to see if registrations are in there. Steve also setup a Dstar quick registration page similar to what the Charlotte Digital Group uses, and at some point we may have a similar registration jump off page like they use. <http://charlottedstar.org/registration.htm> The Charlotte Digital Radio Group has a multiple repeaters on the air and are a great group of guys. The Greensboro users have known many of them for years through the Dstar Tuesday net and from linking to the NC Dstar reflector.

As always I'd like to thank everyone in the Engineering Committee, they have really helped out so much the past year and it make my life easier. Due to my job most of my weekends and evenings are wiped out and it doesn't give me a lot of free time.

### Operating Ethics and Operating Procedures

In 2008 John Devoldere, ON4UN, and Mark Demeuleneere, ON4WW, wrote a comprehensive document entitled "[Ethics and Operating Procedures for the Radio Amateur](#)." The purpose of this document was for it to become a universal guide on operating ethics and procedures.

This document was accepted by the [IARU Administrative Council](#) as representing their view on the subject.

During subsequent Regional IARU meetings it was emphasized that the document be made available to the Amateur Radio Community via all available means, at no cost, and in as many languages as possible.

The document has since been translated into more than 25 languages. In some countries the document is also offered in printed format and many Amateur Radio websites have a link to the document. Our most sincere thanks go to all our friends who spent hundreds of hours to take care of these translations.

To achieve easier access to all of the existing versions and languages of the document, the authors have set up the [Ham Radio Ethics and Operating Procedures](#) web site. It contains a listing of all versions/languages, sorted by country, where you can download the translations in any of the following forms:

- PDF or Word documents from various countries
- Directly from the different Radio Societies' web sites
- A downloadable PowerPoint (available in one of three languages--English, French and Dutch)

John, ON4UN, and Mark, ON4WW

## New ISS Crew Increment with Two Radio Amateurs Arrives on Station

NASA astronaut Kate Rubins, KG5FYJ, astronaut Takuya Onishi, KF5LKS, of the Japan Aerospace Exploration Agency (JAXA), and cosmonaut Anatoly Ivanishin of Roscosmos officially joined their Expedition 48 International Space Station (ISS) crew members on July 9, when the hatches opened between their *Soyuz MS-01* and the space station. Four radio amateurs now are on board the ISS.

Expedition 48 Commander Jeff Williams, KD5TVQ, of NASA, and Flight Engineers Oleg Skripochka, RN3FU, and Alexey Ovchinin of Roscosmos greeted the newcomers. Rubins, Onishi, and cosmonaut Ivanishin replaced Expedition 47 Commander Tim Kopra, KE5UDN; Flight Engineer Tim Peake, KG5BVI/GB1SS, and Yuri Malenchenko, RK3DUP, who returned to Earth in mid-June after a little more than 6 months in space.

Later this summer, Williams and Rubins are scheduled to install the first of two international docking adapters, soon to launch to the ISS. The adapters will allow commercial spacecraft to dock to the station in the near future when transporting astronauts as part of NASA's Commercial Crew Program.

Rubins, Ivanishin, and Onishi are scheduled to remain on station until late October. The trio launched early on July 7 from the Baikonur Cosmodrome, traveling to the ISS onboard an upgraded *Soyuz MS-01* spacecraft on its maiden voyage. Williams, Skripochka, and Ovchinin will return to Earth in September.



Front row: Expedition 48/49 crew members Kate Rubins, KG5FYJ; Anatoly Ivanishin, and Takuya Onishi, KF5LKS. Back row: Oleg Skripochka, RN3FU; Alexey Ovchinin, and Commander Jeff Williams, KD5TVQ. [NASA TV image]

## FOLLOW UP TO APRIL'S MEETING WITH AMSAT NA PRESIDENT BARRY BAINES WD4ASW

**Fox-1C and Fox-1D Launch Window Shifted:** AMSAT reports that the launch period for Fox-1C (Cliff) and Fox-1D has been moved. The new launch window will be between September 1 and November 30. Fox-1Cliff and Fox-1D will be integrated onto the Spaceflight SHERPA platform for its maiden flight aboard a SpaceX Falcon 9 launching into a sun-synchronous orbit from Vandenberg Air Force Base. Fox-1Cliff and Fox-1D carry university experiments from Pennsylvania State-Erie, Vanderbilt, University of Iowa, cameras provided by Virginia Tech, as well as Amateur Radio voice repeaters capable of U/V or L/V operation. The Nayif-1 CubeSat, developed by Emirati students from the American University of Sharjah, is expected to be put into orbit on the same launch. Nayif-1 carries an inverting 435/145 MHz transponder (FUNcube-5) for SSB/CW. -- *Thanks to AMSAT News Service, Southgate Amateur Radio News*



## Congratulations! You passed.

Testing results from July 9<sup>th</sup> – Greensboro

Zachary R. Marshall	KM4UOC	Earned GENERAL
Ronald E. Biddle	KM4VAS	Earned TECHNICIAN
James L. Reynolds	KM4VAU	Earned TECHNICIAN
Marlon B. Marshall	KM4VAT	Earned TECHNICIAN
Ronald E. Newton	KW3WE	Earned EXTRA

Every month on the second Saturday, except in March when it is the third Saturday, W4VEC holds a testing session for those who live in the area. This provides an opportunity for individuals to be able to test for their amateur radio license or upgrade. Thanks to David Macchiarolo, AJ4TF, and his team of volunteer examiners for taking time out of their busy schedules each month to help new or upgraded hams in our area.

Next month's testing session will be on June 11th at Hinshaw United Methodist Church, 4501 High Point Road, Greensboro, 27407, at 9am. While walk-ins are welcome contacting the lead VE is preferred. Please contact David Macchiarolo, AJ4TF, email [aj4tf@arrl.net](mailto:aj4tf@arrl.net), phone (cell), 336-420-9424.

If you cannot make it to this test session, W4VEC holds a second test every month in this area. Test sessions are held at 10am on the last Saturday of each month at the Red Cross High Point Chapter, 815 Phillips Ave., High Point, NC 277262. Walk-ins are welcome. Contact information is David Macchiarolo, AJ4TF, email [aj4tf@arrl.net](mailto:aj4tf@arrl.net), phone (cell), 336-420-9424.

**Special Event Stations to Mark Pope's Visit to Poland:** Several special event stations are poised to mark the visit of Pope Francis to Poland. The Pope will be in Poland July 27-31 to once again take part in [World Youth Days](#) in Kraków. This is Pope Francis' first visit to Poland, where he will also make stops at the national shrine in Czestochowa to honor 1050 years of Christianity in Poland and pay respects to the victims of the former Auschwitz Nazi concentration camp. World Youth Days is a biannual event initiated by Pope John Paul II, the first Polish Pope (Karol Wojtyła). Some 2 million young Catholics are expected. Special event call signs will include HF0F in Kraków, as well as HF31WYD, HF2SDM, and HF7SDM.



## Calendar of Events

Jul 25	GARA General Meeting (Captain Bill's Seafood & Steakhouse, Greensboro)
Jul 30	WCARS Hamfest (Waynesville, NC, <a href="http://wcars.org/">http://wcars.org/</a> )
Jul 30	VE Session (Red Cross Building, High Point)
Aug 08	GARA Board Meeting
Aug 13	VE Session (Hinshaw United Methodist Church, Greensboro)
Aug 13	18th Annual Cape Fear ARS Swapfest (Fayetteville, NC, <a href="http://www.cfarsnc.org/">http://www.cfarsnc.org/</a> )
Aug 22	GARA General Meeting (Captain Bill's Seafood & Steakhouse, Greensboro)
Aug 27	VE Session (Red Cross Building, High Point)
Sep 03	North Carolina State Convention (Shelby Hamfest, Shelby, NC, <a href="http://shelbyhamfest.org">http://shelbyhamfest.org</a> )
Sep 10	VE Session (Hinshaw United Methodist Church, Greensboro)
Sep 12	GARA Board Meeting
Sep 24	VE Session (Red Cross Building, High Point)
Sep 24	FreeGate 2016 (Greensboro, NC, Qorvo Amateur Radio Club, <a href="http://kd4rf.org">http://kd4rf.org</a> )
Sep 26	GARA General Meeting (Captain Bill's Seafood & Steakhouse, Greensboro)
Oct 8	VE Session (Hinshaw United Methodist Church, Greensboro)
Oct 10	GARA Board Meeting
Oct 24	GARA General Meeting (Captain Bill's Seafood & Steakhouse, Greensboro)
Oct 29	VE Session (Red Cross Building, High Point)
Nov 12	VE Session (Hinshaw United Methodist Church, Greensboro)
Nov 14	GARA Board Meeting
Nov 26	VE Session (Red Cross Building, High Point)
Nov 28	GARA Elections/General Meeting (Captain Bill's Seafood & Steakhouse, Greensboro)
Dec 10	VE Session (Hinshaw United Methodist Church, Greensboro)
Dec 12	GARA Board Meeting
Dec 31	VE Session (Red Cross Building, High Point)
Jan 9	GARA Board Meeting
Jan 14	VE Session (Hinshaw United Methodist Church, Greensboro)
Jan 23	GARA General Meeting (Captain Bill's Seafood & Steakhouse, Greensboro)
Jan 28	VE Session (Red Cross Building, High Point)
Feb 11	VE Session (Hinshaw United Methodist Church, Greensboro)
Feb 13	GARA Board Meeting
Feb 25	VE Session (Red Cross Building, High Point)
Feb 27	GARA General Meeting (Captain Bill's Seafood & Steakhouse, Greensboro)

The purpose of this calendar is to provide information on events in and around our area that might be of interest to our readers. As you might expect, there are many more events (public service, hamfests, flea markets, etc.) taking place in North Carolina and around the Greater Greensboro Area. If you know of an event that would be of interest to our readers, please contact Tom, KB1P at [kb1p@arrl.net](mailto:kb1p@arrl.net).



# Area Happenings

**FOURTH MONDAY** – at 6:30pm, the Greensboro Amateur Radio Association have their regular monthly meeting at Captain Bill's Seafood & Steakhouse, 6108 West Market St., Greensboro, NC 27409. Please plan to gather at 6:30pm for dinner. The meeting is scheduled to start at 7:15pm

## CLUB NETS:

**SUNDAYS** – at 7:30pm, the Technical Forum on the 145.150;-at 9pm, the GARA News and Information Net. This net features News Line and is on the 145.150, W4GSO repeater. Patrick Moore K2CPR is always looking for net controls. Contact him if you would like to help.

**TUESDAYS** – at 8:30pm The Triad SkyWarn Net meets on the 147.225, K4ITL repeater, no tone required.

**TUESDAYS** – at 9pm, the D-STAR Net meets on 442.8625 (W4GSO B and Reflector 54C)

**WEDNESDAYS** – at 8:30pm, The Guilford Amateur Society Rag Chew Net holds their weekly net on the 145.250, W4GG repeater with an 88.5 Hz. tone. Jim Hightower, W4JLH is the net control.

**THURSDAYS** – at 9pm, The Guilford County ARES Net meets on the 145.150 repeater (100 Hz. tone).

## OTHER ACTIVITIES:

**FIRST MONDAY** – The Guilford County A.R.E.S. monthly meeting is held at 1002 Meadowood St. off W. Wendover Ave, in the EMS building, beginning at 7pm.

**THIRD MONDAY** – at 6:15pm The Guilford Amateur Society holds their monthly meeting at Tex & Shirley's Restaurant in Friendly Shopping Center. Eat at 6:15pm and the business meeting begins at 7pm.

**THURSDAY** – at 11:15am, Greensboro Hams get together for lunch. Thursday lunch group is meeting at the K&W Cafeteria, 300 Forum VI Mall at Friendly Shopping Center. Talk-in is on the 145.150, W4GSO repeater with a 100 Hz. tone.

**EVERY FRIDAY** – at 8pm (approximately) Greensboro Hams get together for coffee at Starbucks at Edney Ridge Rd.

## The W4VEC Testing Schedule Aug. to Nov., 2016

Aug. 13, 2016

Sept. 10, 2016

Oct. 8, 2016

Nov. 12, 2016

Location: Hinshaw United Methodist Church, 4501 High Point Road, Greensboro, NC

Time: 9:00am

Contact: David Macchiarolo

Phone: 336-420-9424

E-mail: aj4tf@arrl.net

## GARA REPEATERS

145.150 MHz - offset, 100 Hz. tone

442.8625 MHz. + offset, Digital D-Star



**Greensboro Amateur Radio Association**

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[www.w4gso.org](http://www.w4gso.org)

**FIRST CLASS MAIL**

*The Official Publication of GARA*