



The Greensboro Amateur Radio Association

# Feed Line

Providing Amateur Radio news for the Triad



Brian Wilson, NX4U, Editor

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## US Amateurs Now 700,000 Strong!

From ARRL

As the third quarter of 2011 came to a close, ARRL VEC Manager Maria Somma, AB1FM, began calculating the number of licensed Amateur Radio operators in the US, as well as the number of new licensees. "At the end of September, I saw that the number of hams in the US was high," she said. "When I started comparing that number with other years, I found that it was an all-time high." For the first time, there are more than 700,000 radio amateurs in the US.



"When looking at the three current license classes -- Technician, General and Amateur Extra -- these numbers are impressive," Somma explained. "The number of Technicians peaked in March 2011 at 342,572, while in September 2011, we saw both Generals and Extras peak at 159,861 and 125,661, respectively. As new Technicians earn their Amateur Radio licenses, and current Technician licensees

move on to General and Generals upgrade to Extra, this can cause up-and-down fluctuations for these totals."

Somma said these high numbers mean that hams are upgrading and renewing in larger numbers and staying interested in hobby: "These are compelling statistics and I am thrilled to see

## Thank You, Doggetts, A BBQ Recap

By Brian Wilson, NX4U

I have only been a member of GARA for a little over two years now, but each year when summer fades and the fall arrives, I can be sure of the coming of few amateur radio activities. While the GARA Open House is a GREAT service to the community to expose non-hams to amateur radio; the Doggett BBQ, is a tremendous benefit to the entire ham radio community.

Each year the Doggett family prepares for a feast-for-all. There are extended family, school buddies, running friends that join with amateur radio families for a time of

### NEXT MEETING

Monday, October 24

The next meeting of the Greensboro Amateur Radio Association will be Monday, October 24th, at the Golden Corral Steak House, 4404 Landview Dr, Greensboro, NC 27407, off Wendover Ave. near Sam's Club.

the highest number of amateur radio licensees ever! When I began working at the ARRL back in the mid 1980s, there were approximately 450,000 amateurs in the US. Our VEC program conducted an

**see US Hams, page 7**

feasting and fellowship.

At no cost to the guests, the Doggett family treats everyone to some great food and plenty of it. This year you could choose from two different types of barbecue, and ALL the fixings. Deserts and drinks were also provided, and out at the Doggett Ranch, you can bring your chairs and enjoy the wide open spaces of northern Guilford County. This year they provided propane heaters since it was just a little cool.

A BIG "Thank You" goes out to Clark Doggett, KG4HOM, and his entire family. They worked tirelessly so we could enjoy a great night and great food. THANK YOU!

## GARA Meeting Minutes

### Regular Meeting Minutes September 26, 2011

The Greensboro Amateur Radio Association held their monthly meeting on September 26, 2011, at the Golden Corral restaurant located near the intersection of Wendover Avenue and I-40.

Chris Thompson, K4HC, was under the weather and was unable to attend the meeting so Todd Smith, AK4TS, called the meeting to order at 7:15pm and asked everyone to identify themselves.

Todd then asked for reports from the officers.

Ernie Wall, NC4EW, said that the finances are looking good and the bills are paid. Ernie said that Madeline Bradley, KD4SVJ, had passed along two public service grants from the Greensboro United Soccer Association.

Al Allred, K4ZKQ, said the finances are close to forecast.

Greg Spencer, KG4UQV, said

that he has found a prospective new meeting place at Captain Bills Seafood restaurant on West Market Street. Greg described the room and menu but was unable to show pictures due to the projector not being available. It was decided to wait until the next meeting to vote on whether to have the meetings there.

Roy Smith, N4BYU, said that on October 1st, we will have the GARA Open House and the Doggett Barbeque.

Madeline Bradley, KD4SVJ, thanked those who volunteered for the soccer tournaments and said we have one more coming up in November.

Rick Mainhart, NM3G, said that RF Micro is looking for a section of Rohn 45 tower.

Todd said that the GARA Open House is coming up so please invite someone. Todd spoke about T-shirts and asked for a show of hands of people who would buy one. Todd also spoke about the Mt Mitchell trip coming up on October 15th. Pictures of last year's trip are online at [tinyurl.com/gara3](http://tinyurl.com/gara3)

Todd spoke about the recent

workday at the Natural Science Center, K4NSC station.

Todd said that he has found a group buy opportunity on Arrow dual band J-pole antennas.

Todd asked about the minutes from the last meeting, Brian Wilson, NX4U, made a motion to accept as published. Chan White, KJ4ADX, seconded, the motion carried.

David Macchiarolo, AJ4TF, gave an update on the special event station - N4G, plans. David said that there are no engineering issues at this time. Roy said there will be no meeting in December and elections are coming up in November. Roy said that Gaither Fry, KD4CTY, will be out of town for a while and we need someone else to host the Technical forum on Sunday nights.

Rick said he will be making some antenna insulator kits soon.

The meeting ended at 8:33pm.

*Respectfully submitted by Greg Spencer,  
KG4UQV,  
GARA  
Secretary.*



#### The Greensboro Amateur Radio Association

President Chris Thompson, K4HC  
Vice-President vacant  
Treasurer Ernie Wall, NC4EW  
Secretary Greg Spencer, KG4UQV  
Financial Al Allred, K4ZKQ  
Engineering Chair David Macchiarolo, AJ4TF  
Operations Bob Mays, KE4MOW  
Member-at-Large Todd Smith, AK4TS  
Member-at-Large Betty Williams, KC2BFN  
*Appointed Positions:*  
Webmaster Tom Forrest, N4GVK  
Newsletter Editor Brian Wilson, NX4U

The Feed Line is ©2011 by the Greensboro Amateur Radio Association and published monthly. Our address is P.O. Box 7054, Greensboro, NC 27417. The purpose of the newsletter is to provide the club and prospective members information about the club and amateur radio in general. Material and information should reach the editor by the 2nd Friday of the month for the next edition of the newsletter. Opinions expressed in "The Feed Line" do not necessarily represent the views of the officers, directors, editor or members of the Greensboro Amateur Radio Association. Material may be reproduced, provided proper credit is given to GARA.

## Coming Soon: Official GARA T-shirts

The Greensboro Amateur radio Association will soon offer official T-shirts for sale. The T-shirts will feature the GARA logo on the front and the back. We plan to offer the shirts in sizes Small, Medium, Large, Extra large, and 2X Extra large. Pricing has not been finalized, but is

expected to be no more than \$10.00 per shirt.

We will be taking advance orders for the shirts and will require pre-payment. Be sure to look for email announcements, as well as announcements in future issues of the *Feed Line*.

## Board Meeting Minutes October 11, 2011

The GARA Board of Directors held their monthly meeting on October 11, 2011, at the Benjamin Branch Library. The meeting started at 7:09pm with Chris Thompson, K4HC; Todd Smith, AK4TS; Ernie Wall, NC4EW; Al Allred, K4ZKQ; David Macchiarolo, AJ4TF; and Greg Spencer, KG4UQV, present.

The board discussed the issue of the surplus equipment rack that the club has. It has been suggested that we donate it to the High Point ARC to help get their repeater back on the air. There has been a good bit of discussion going on about this so HPARC has agreed to purchase the rack for \$30.00. Roy made a motion to return the check to them and give them the rack, Greg seconded. After some discussion the motion was rejected. Chris said this is surplus equipment, we have been

storing for a long time.

Todd said he has broken down the sign-in sheet from the GARA Open House to show members and non-members. We will follow up with non-members.

We discussed some membership issues; this topic was tabled for now.

Todd said that he talked with John Ghormley, KJ4UFG, with SERA about SERA membership discounts for club members. This issue was tabled for now.

Todd said he would like to see more in the way of membership benefits.

Todd said that he polled club members about GARA T-shirts. Todd also said that he thinks

we should cancel the Mount Mitchell trip this year as he has not received enough interest in the trip.

Todd and Greg spoke about the Captain Bills meeting place and said the discussion was tabled until the next club meeting.

Todd said the Natural Science Center has given a go ahead to put up the tower that they have. Chris



said that in the interest of liability a professional should install the tower.

Todd said we need to get back to having a program topic posted ahead of time.

David said that the phone line has been repaired at the repeater site. He and Arch, KT4AT, went out and checked the SWR on both repeaters, and he also stated that there was no sign of the interference we were having a few months back. David said SERA will run an ad for the special event station in their November edition.

Ernie spoke about the public service grants that we received from the Greensboro United Soccer Association.

Roy said we need to get out press releases for the special event station soon. We discussed things to be done in respect with N4G. There will be a short meeting of N4G volunteers after the October GARA club meeting.

We discussed ways to generate more revenue.

Roy made a motion to adjourn; Al seconded the meeting ended at 8:41pm.

*Respectfully submitted by Greg Spencer, KG4UQV, GARA Secretary.*





## From the President's Shack

Fall is in the air, and the annual contest season is getting ready to kick off, starting with the CQ World Wide SSB Contest the last weekend in October, just after this goes to press.

While I recognize that contesting isn't for everyone, it can be a great tool to hone operational skills, and identify areas that might need attention. This is a great chance to check out your HF station and make sure it's ready for action; practice copying stations in sometimes difficult and crowded conditions, ensure your logging program is working properly, identify interference issues (both from your station and to your station), work some DX, and have fun doing it.

You can work this on YOUR schedule, and to YOUR interest level. With the increase in solar activity, 10 meters is starting to hop again, and everyone, from Novice to Extra has the privileges necessary

to make contacts.

Don't have an HF station, you say? What about visiting Greensboro's Natural Science Center over the weekend and using the facilities there? All licensed amateurs get free access to the center and the ham station, by merely showing their license. All that's asked in return is to answer questions from passers-by.

A big part of what has kept me interested in Ham Radio over the years is trying new things. I encourage you all to try something new, and broaden your horizons.



Until next time, keep havin' fun!  
73,  
Chris K4HC

## Postage Rates to Increase in January

From ARRL

The US Postal Service has announced that as of January 22,

2012, the cost to mail first class letters, postcards and packages within the US will go up. The cost to mail a first class letter will be 45 cents, an increase of 1 cent. According to the USPS, this is the first increase since May 2009. The cost of mailing a postcard will

be 32 cents, an increase of 3 cents. This is the second increase for postcard postage in less than a year; in April 2011, the USPS boosted the postcard stamp price from 28 cents to 29 cents. You will also pay more to send letters to Canada, Mexico and other international destinations.

[Editors Note: All the more reason to use LOTW!]



## Congratulations! You Passed!

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 Glenda

Nicholson, AG4NC, and a group of volunteers, each month there are new or upgraded hams in our area.

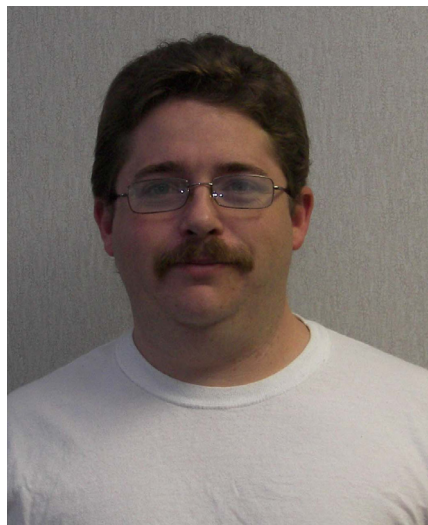
In October, we had 3 individuals who passed their test(s) and earn either their Technician, General or Extra class license.

Next month's testing session

will be on November 12th at #3 Centerview Dr, Hickory Building, Greensboro, NC 27407 at 9:00am. While walk-ins are welcome contacting the lead VE is preferred. Please contact Glenda Nicholson at (336) 674-3810 or by email at [ag4nc@bellsouth.net](mailto:ag4nc@bellsouth.net)



**Scott E. Hovey - KK4EAS**  
**Upgrade to General**



**Brian J. Montgomery - KK4EPM**  
**New Technician**



**Archibald Fortune Lowe, Jr -**  
**KK4EPL - New Technician**



**All Photos Courtesy of Todd Smith, AK4TS**

*Volunteer Examiners at work: (L to R) John, W8CCW; David, AJ4TF; Larry, W4JLC; and John, W4DX*

*During the testing session the Volunteer Examiners watch while the participants work to answer the questions correctly. After the examinees are finished the test are graded and checked by at least 3 VEs.*



## Engineering Update for October, 2011

From David Macchiarolo, AJ4TF

This month, we experienced some minor difficulties with our repeater equipment: we lost the phone line into the site for several days. The phone line is used both as the autopatch line for the VHF repeater, and also carries the DSL internet connection that is used for the UHF D-Star machine to link to other D-Star machines and carry D-Star voice and data traffic to the rest of the world. The first symptom was when the D-Star monitor web page (which anyone can view at <https://65.13.128.238/>) randomly dropped out, and randomly failed to update user's call signs when they keyed up the repeater. I have the capability to make a remote connection to the D-star system to troubleshoot it, and that connection also randomly dropped out, but I could see that the system was still running. The second symptom is that the autopatch on the 145.15 machine refused to dial out, and a call into the phone line always rang as "busy". At this point we were

convinced that the problem was the phone line. A trip to the repeater site confirmed that the phone line was not working, and the DSL connection was intermittent.

Roy, N4BYU, put in a call to BellSouth/AT&T, and they located the problem, which was not actually at the site, but about 1/4 mile away from it. Everything is working normally now, and we have both autopatch capability, and internet connectivity.

A week before the GARA open house, Arch KT4AT, and myself visited the repeater site, and performed backups of the D-Star system, and checked the output power and SWR of both the VHF and UHF transmitters. We also observed and measured the receiver input noise floor on the VHF machine, and we did not see any signs of the interference that we were getting earlier this year. The SWR of the VHF antenna was about 1.3:1 with an output power at the duplexer output of almost 50 watts, which is normal for that antenna, the UHF antenna was very close to 1.0:1 with an output power of about 60 watts.

The macros on the D-Star repeater controller to automatically link reflector 30C and reflector 1C are still in use. The macros will link to 1C during

mid-day, and 30C during evening commute hours. As always, you can also manually link and unlink the repeater using over-the-air commands. If you have any questions on how to do this, I can demonstrate it or explain how to do this, it is not difficult at all.

For those of you with D-Star equipment, give a listen, and join in the conversations! For those of you without D-Star equipment, go get some... there are many options to get you on the air with D-Star!

As always, if you have any questions or concerns about the club repeaters, either VHF or D-Star, please contact me at [aj4tf@arrl.net](mailto:aj4tf@arrl.net)

73,  
AJ4TF

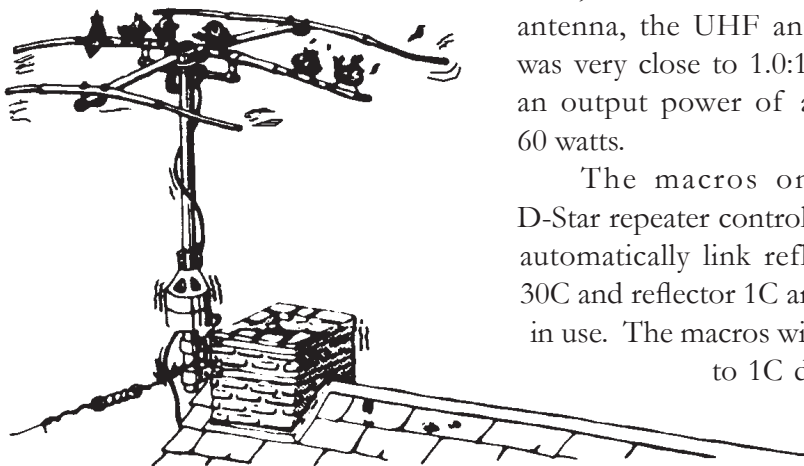
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## For Sale

Contact Tom Forrest, N4GVK, [n4gvk@bellsouth.net](mailto:n4gvk@bellsouth.net) or call 336-202-8650

### HEATHKIT 1 KW LINEAR AMP. SB-200 w/ Manual

Was purchased a while back. Never used it as I don't have the antenna system to do it justice. It was suppose to be in good working order when I purchased it. This is a 1 KW on CW and 1200 on SSB using 2 - 572-B tubes - wired for 110, but can be wired for 220 Volts. Asking \$300 (they have been advertised on QRZ for \$400) - sold as-is, no warranty. No shipping, pick-up only. Over all it's very clean. More information: [www.rigreference.com/rig/5254-Heathkit\\_SB\\_200](http://www.rigreference.com/rig/5254-Heathkit_SB_200)



## US Hams

continued from page 1

average of 55 sessions a week. Today, we administer approximately 150 exam sessions each week, and our total number of licensees across all three license classes continues to grow each year.”

In the past 40 years, the number of Amateur Radio operators in the US has grown at a remarkable rate:

December 1971: 285,000

December 1981: 433,000

December 1991: 494,000

December 2001: 683,000

September 2011: 700,221

Source: 1971, 1981, 1991: print editions of *Radio Amateur Callbook*. 2001, 2011: [www.ab0a.org/FCC/Graphs.html](http://www.ab0a.org/FCC/Graphs.html). Please note: While the number of licensees has grown considerably over the years, we realize that these numbers include some who are no longer active in Amateur Radio.

FCC LICENSEES BY LICENSE CLASS							
Year	Ending Month	Extra	Advanced	General	Tech*	Novice	Total
2011	Sep	125,661	58,224	159,861	341,658	14,817	700,221
2010	Dec	122,951	59,387	155,781	342,191	15,731	696,041
2009	Dec	119,403	60,795	150,970	334,245	17,084	682,497
2008	Dec	115,625	62,104	144,832	322,660	18,343	663,564
2007	Dec	112,022	65,368	142,680	315,314	20,458	655,842
2006	Dec	108,223	69,915	131,224	323,073	23,633	656,068
2005	Dec	107,440	74,221	135,067	319,125	26,747	662,600
2004	Dec	106,090	77,948	138,292	319,742	29,765	671,837
2003	Dec	104,894	82,034	141,498	322,821	32,812	684,059
2002	Dec	103,257	84,326	139,848	321,805	36,072	685,308
2001	Dec	97,977	86,545	138,625	319,735	40,155	683,037
2000	Dec	93,807	88,783	134,144	319,874	45,632	682,240
1999	Dec	75,392	103,471	110,386	335,768	52,375	677,392

*A recent survey of ARRL members, however, indicates that more than 80 percent of those responding are active.*

“As technology changes and advances, it is especially vital to keep up or be at the forefront,” Somma said. “I believe that Amateur Radio

has done just that! The measurable results are our indisputable license numbers. It amazes me after all these years how important and relevant Amateur Radio remains. I am proud to be one of the 700,221 licensees and to see this historic and important milestone.”

## GARA: Membership Has Its Benefits

By Todd Smith, AK4TS

Do you like to save money? The Greensboro Amateur Radio Association is working hard to help you stretch your dollars. We have introduced a new member benefit that pools our



resources to purchase items in multiple quantities in exchange for a discount. We just completed our first group purchase, which consisted of ten of the venerable Arrow Antenna model OSJ 146/440 antennas. The GARA participants saved 38% versus ordering one antenna from the manufacturer!

GARA is working on arranging more group purchases, so be sure to read the notices in

The Feedline, and also be on the lookout for email announcements. We are currently in discussions with distributors for possible group purchases of the Vero UV-X4 micro-sized dual-band HT, Icom ID-880H mobile transceivers, and possibly Icom IC-80AD HTs.

If you have a suggestion for an item that would be a good candidate for a group purchase, send an email to [todd@ak4ts.net](mailto:todd@ak4ts.net).

# Area Happenings

**FOURTH MONDAY** – at 6:30pm, the Greensboro Amateur Radio Association have their regular monthly meeting at the Golden Corral, 4404 Landview Dr, Greensboro, NC 27407, off Wendover Ave, near Sam's Club. 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 *NewsLine* and is on the 145.150, W4GSO repeater. Roy Smith, N4BYU 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 17C)

**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 Sept. to Dec. 2011

**November 12, 2011**

**December 10, 2011**

**January 14, 2012**

**February 11, 2012**

**March 17, 2012**

**Location:** #3 Centerview Dr,  
Hickory Building,  
Greensboro, NC 27407

**Time:** 9:00am

**Contact:** Glenda Nicholson

**Phone:** (336) 674-3810

**E-mail:** ag4nc@bellsouth.net

## GARA REPEATERS

145.150 MHz - offset, 100 Hz. tone

442.8625 MHz. + offset, Digital D-Star



**Greensboro Amateur Radio Association**

P.O. Box 7054

Greensboro, NC 27417

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

**FIRST CLASS MAIL**

*The Official Publication of GARA*