



Brandon Amateur Radio Society, P.O. Box 2307, Brandon, FL, 33509-2307

**- Officers -**

Pres: Doris Haskell  
WB9VDT  
V.P: Bernie Huth  
W4BGH  
Sec: Scott Irwin  
W8UFO  
Tres: Jim Moorehead  
WF4AC  
Trust: Tony Stone  
W4TAS  
Editor: Mark Haskell  
WB9UJS

**- Repeaters -  
K4TN**

2 Meters VHF  
147.165 MHz (+) PI=136.5  
w/EchoLink Node 22440  
via K4PPK-R

1-1/4 Meters UHF  
443.500 MHz (+) PI=127.3

**- Nets -**

2M: Mon, 8 PM  
147.165 (+) PI=136.5  
6M: Tues, 7 PM  
50.2 MHz USB  
10M: Tues, 8 PM  
28.365 MHz USB

**-Web Page-**

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

**- Meetings -**

Monthly: 3rd Thursday  
Time: 7:30 PM  
Location:  
The Brandon Assembly  
of God Church  
710 South Kings Ave.  
Brandon, FL 33511

**CLUB MEETING... Reminder for 7/21/2016, 7:30 PM**



*Hickory Dickory Dock  
B.A.R.S. Hams observe the clock  
The date and time display  
Our meeting hour and day  
Do note the monthly site  
This meeting is at night  
Important is our special date  
So come ya'll make it great!*

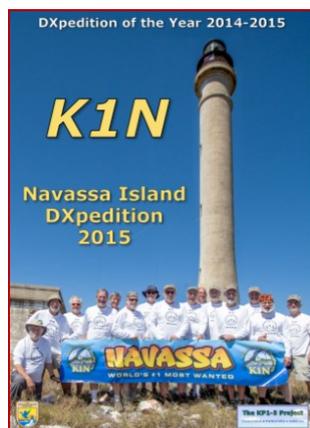
The monthly B.A.R.S. Club meeting is the happening place to be for the latest club reports, news, and views—did I mention the pre-meeting eyeball QSO's? Reduce all resistance for abstaining and suffer no impedance in conducting yourself to Brandon Assembly of God, 710 South Kings Avenue; Rest your mega-cycle or other motion conveyance on the asphalt anti-static pad, and direct your carbon composition self into the Annex.. 7:30 p.m. sharp—Doris (WB9VDT) will sound the gavel to begin.

*The program* includes video of the 2015 K1N [Navassa Island DXpedition](#)... It took over 15

**QRA**

- Meeting Plan
- VE Testing/FCC
- Field Day 2016
- Digital Voice
- 4th July Parade
- Night-of-Nights
- Progress Reports
- Calendar

years for the planners to get permission to go to Navassa Island in February, 2015. The island is in the Caribbean Sea between Haiti and Jamaica, and is a "closed" National Wildlife Refuge controlled by the U.S. Fish and Wildlife Service.



The 15-man team made 140,000 QSOs with 35,649 unique callsigns in a 14-day period becoming the #9 ranking DXpedition on the Mega-DXpedition Honor Roll.

*Maybe  
we'll hear your call !*

**VOLUNTEER EXAMINER... Testing**

The publicized monthly B.A.R.S. opportunity is:

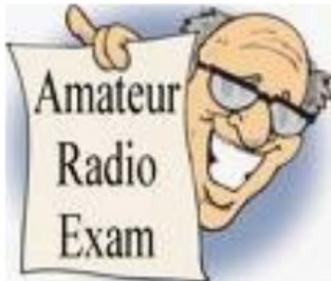
**First Saturday of Each Month**

**11:30 AM**

**Brandon Assembly of God**

**710 South Kings Avenue**

Contact BILL JOHNSON [ moo.bill@verizon.net ]



Although there was no B.A.R.S. testing scheduled in July, due to the holiday weekend, there is one VEC complication episode reported... It seems as though our favorite Uncle,

Frank C. Charlie (FCC), has encountered some untimely and unexpected electronic processing failures. On July 6, the ARRL VEC had more than 900 applications and nearly 275 exam sessions in the queue awaiting FCC processing. Painfully aware of the backup and delay, IT teams collaboratively worked to resolve. By July 14 the problem was seemingly fixed, and the increased backlog of more than 1200 applications and 300 exam sessions cleared. Hopefully the flow of automated, batch-filed applications and exam sessions are now able to resume. Hope you were not affected!



**Oh, be sure to check out [FCC's improved web site](#) and note the modern style logo splash.**

**FIELD DAY 2016**

It was a great weekend for some Radio-activity! A large scale radiation event was anticipated and proved to be the dominant case. It was expected that enthusiasm would be the principal outcome. Things began to reach critical mass early, as a division of readiness descended to the designated operations area. Fully



equipped control habitats, thanks to Bill Johnson (WJ4G) and Art Lusk (KI4SGM), were established within the perimeter to administer **CW** and **Phone** emissions, including a **GO-TO** zone for public training and practical demonstrations. Electromagnetic implementations of mass construction were raised skyward and tested as ready for gathering and releasing wave actions. Even the solar radiation experts were in agreement for favorable energy disbursements. Clear skies and a positive weather prediction emboldened everyone's anticipation. Except for some apparent dirty carburetor complications at the CW station, all was in readiness and a substitution was dutifully made.



Just before the explosion of radio activity, members and guests paused to direct their attention to the cool indoors, at the Church Annex, to enjoy a picnic feast—prepared by

Doris Haskell (WB9VDT). I wonder what low frequency IR radiation Sonny's (the Caterer) used to activate the "delicious" molecules in those most satisfying fixens?

Then, it was activate the **Mic** and press on the **Key**

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*Continued from Pg-2*

time! Operating focus mostly included the 40 and 20 Meter bands, as it seemed the bulk of never ending contacts were most plentifully there.

Each station was equipped with a computerized logging application and the details of each contact steadily accumulated.



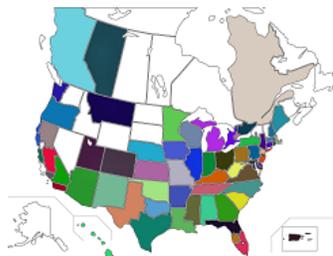
Operators worked in shifts as previously agreed, sometime with one person operating and another logging, or just single person multi-tasking. As afternoon turned into evening, and then early morning, hours of contacts streamed into the logs. During the less active times, several 80 Meter phone contacts were attempted, but lack of activity and a picky antenna soon found operations returning to 40 Meters.

Conditions were very encouraging, and there was even one Venezuelan DX station that happened by the dial, and into the contact log. Another 1:00AM surprise happen when the WCF ARRL rep appeared at the site to meet, great, and encourage the operating teams. We were his last stop in a whirl-wind all day driving tour.



By sunrise things were winding down, as the Club had agreed to be clear of the property by just after 8:00AM, so as to not infringe on the Church's worship activities.

Accounting the event deeds became the labor of Jim Smith (K4PPK). He prepared a summary report that compiled and processed on-line to the ARRL. Jim also updated Club members with a very complete and detailed report by email. There were a few missing states, but no one was complaining... it was a fine(!) effort that everyone put forth. The event netted the B.A.R.S. Team brag rights recognition for



224 CW and 159 phone contacts. There were 43 GO-TO experiences and various multiplier/bonus structures for a final total score of ... *DRUM-ROLL PLEASE!* **2304 points.**

It can not simply go without saying... The success of B.A.R.S. Field Day 2016 was due to the immense preliminaries, tireless unnoticed hours of preparation, coordination, getting involved in provisioning, equipment setups, organizing, installation, operation, and clean-up. Special thanks goes to each one involved! What a grand team effort! Yikes... Only 11 more months until Field-Day 2017! **Thank you Doris and Mark Haskell** for being our coordinators! .AND. To the Brandon Assembly of God Church for use of their facilities and property!

**This year's [Documentary Video](#) is available on-line for your viewing pleasure**

*Thanks Mr. & Mrs. Huth*

**DIGITAL VOICE:**

So, you ponder... Broadcast-Quality audio, full HD surround sound, DX arm-chair copy from signals buried in the noise, no QRM... and just what brand of moldy candy bar have you munching on? The Matrix salesman for Digital Everything Inc. has convinced you life "needs" to be better., and a digital hallucination is the ticket to happiness and fulfillment — MAYBE! But, as they say, "Where's the Beef?" - - Sorry if that leaves you wondering. Yes it's true that digitizing everything seems to be possible these days, but is it better, at what expense, and who else can we convince.? Don't get me wrong, **I am** a digital fan—I'm just not what they call an early adopter.

CW, AM/FM Phone, SSB, Digital— so the progression goes. OK, so what *should* we be technologically aware of? For VHF/UHF communications: Motorola's Digital Mobile Radio (DMR), the P25 APCO Open-Source

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Continued from Pg-3

Public Safety realm, D-Star championed by Icom, and System Fusion by Yaesu, to suggest a few.



The promise... as soon as you transform into a Digital environment many otherwise impossible processing options take form. That sounds like OK motivation! As in; multiple channels, encryption, routing, data tags, error correcting status feedback, geo-location, and etc.

Now picture the complexities of spoken language — English, Spanish, French, Russian, and so on. In some language you might be much more word efficient, or in another have deeper meaning skill. BUT,



you'll need a translator to go between them—and they are written differently too. So it is with Digital. Each digital “method” is a protocol (set of rules), and literally none is compatible with the other. Hear that salesman again... “X does more with fewer bits, Y has error correction, Z uses less spectrum and has greater dynamic range— all TRUE! I am absolutely astonished at what has become possible because of the creativity of vast quantities of individuals with much more brain power than I. I'll just take a moment now and shout...



**Challenge:** Take analog voice signals and package them up into a digital format for sending over radio. Then, transport them and eventually play the original analog voice back on a speaker for Mr. Human.

**Wish list:** Efficiency (most with least); Minimum bandwidth utilization; Flexible modulation techniques; Fidelity; Reliability (all factors); Control hardware costs; Ease of interface use.

**4 Primary Contenders:**

- D-Star (Icom)
- DMR (Motorola)
- SystemFusion (Yaesu)
- P25 APCO-25 (Open-Source Public Safety)



**Here is the first simplified technical detail:** Bandwidth; 6.25/12.5 KHz are what is being implemented—as opposed to say a 10KHz channel (+/-) 5 KHz. Easy to think - **Wide** is the 12.5, and **Narrow** is the 6.25 .AND. You then you can optionally have two 6.25's in a 12.5 package. All variations on a similar theme.



You'll need to become conversationally familiar with terms like: Analog voice signal, A/D Conversion, Vocoder processing and compressing, Forward error correction, Formatting into serial data, Packaging, Uniform length packet, Header data additions, Sync bits, Routing, User identity, Additional data interleave options

OK, buy a radio, open the box, who can I talk to? The answer is only the other people who have a like-kind radio. Think of the national simplex calling frequency 146.52 MHz. You're driving around the country and pick up the microphone and say “ This is <your call> listening five-two, anybody on the band today?” Only those with like-kind radios will be able to decode your transmission—all other listeners monitoring will presumably just hear the raw data stream in their speaker .OR. nothing, because they have a radio in a different format.. Advocates, who have experienced the bleeding edge of technology, suggest if you're just getting into digital, first see who is on what in your neck of the woods. There is a relatively steep learning curve in *terms* and *operational techniques*, but nothing that



**MOTOROLA**

you can't overcome. D-Star has the edge, simply because it's been out there the longest—and many contributors have facilitated add-on things and interface gizmos. All this digital Audio is NOT HD quality, rather much more like what you hear typically in the cell phone arena. Motorola *MotoTrbo* has the commercial endurance vote. As their technologies spill over into amateur, equipment becomes available—Like DMR. If you're betting on the most often implemented upcoming pseudo-standard, then the APCO P25 gang is attractive. **AGAIN(!)** It's who/what is happening in the circles you run in.

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Here in the Tampa area we have some of everything. Yaesu is making their new System-Fusion so very attractive, that many clubs are opting for the favorably priced equipment. Our recent Club vote to embark down this route is now a reality—**The Fusion Repeater was shipped and has been delivered.** Interface investigations are on-going as we speak—details probably being discussed at our next meeting.

**There ARE Champions:**

- Roland Kraatz K9HPX, Charlotte Digital Radio Group, [Comparison of Amateur Radio DigitalVoice Systems](#)
- WB8NUT Blog, [D-Star, DMR, and Fusion Observations and Comments](#)
- Mike Myers, K3DO Blog, [D-Star, DMR, Fusion, Which is Right For You](#)

And of course there is now a “New Kid” on the block; a UK based team that showed off a SDR unit at the Dayton Hamfest this year that can **DO IT ALL.** It’s called: **DV4 Mobile All Mode Digital Tri-Band (2M, 222MHz, 440MHz) Transceiver plus LTE GPS**

The radio isn’t available yet, but due to speculated popularity, [GigaParts](#) is already selling \$35 serial number positions.

*Isn’t Technology wonderful!*

**JULY 4TH PARADE:**

**Happy 140th Birthday America!** The Brandon 4th of July Parade, famous and well accounted in the media as the best in the state, is now but a 2016 most-satisfying, celebration memory—and a hot one at that. How can you not get a lump in your throat as the Color Guard passes, or cheer and clap as



waves of patriotic eye candy streams almost endlessly along. Cheers to all for an excellent event! *Pause!*

Isn’t it amazing that few know of the massive preparation, coordination, and background logistics needed to accomplish this popular feat! Yet, to everyone who labored tirelessly, the two hour moment is amazing and full of citizenship gratification—the ultimate participant reward. So although mostly unnoticed, applause go to all those in the back-

ground, including the Amateur Radio coordinators and



communicators that helped facilitate this year’s Parade Team. Except for an occasional stuck microphone and the personal evaporation of several pounds of electrolytes, there were no major incidents or emergencies this year—a good thing on a perfect weather day.

**B.A.R.S. members participating in this great public service opportunity included:**

- Mike Dumond ..... KI4NLA
- Fred Hendershot ..... N3BUL
- Mark Haskell ..... WB9UJS
- Bernie Huth ..... W4BGH
- Richard Jones ..... KW4MB
- Robert Luke ..... KB4BOB
- Art Lusk ..... KI4SGM
- Jim Moorehead ..... WF4AC
- Art Powers ..... KA4BIM
- Phyllis Powers ..... KA4EHQ
- Ron Perrett ..... K4FZU
- Dana Perrin ..... KM4DTJ
- Jim Smith ..... K4PPK
- Janet Watts ..... KB4PUM
- Ken Watts ..... WB4NSV
- Dave Welty ..... N4DLW

An appreciation dinner for all event workers is to be scheduled in the future. Be proud of your personal contribution and the service accolades attributed to our Club! Special thanks to Fred Hendershot (N3BUL) for his promotion of our Club within the Parade Committee—and organizing us volunteers!

**MARITIME NIGHT-OF-NIGHTS**

The Maritime Radio Historical Society International Commercial Communications promotion happened the evening of July 12th—8:00PM, onboard the Heritage Ship SS American Victory, docked right here in Tampa.



MF/HF Station KKUI, and others could be heard exchanging Morse Code messaging on multiple commercial maritime frequencies. If you were a listener and documented your

SWL activity, commemorative “Brag” QSL confirmations are available from coastal, ships, and Amateur participants. Perhaps you even had opportunity to QSO with K6KPH or W4WLO



on the ham bands.



It was a very stormy evening in Tampa, with lightening bolts darting all around—no one wanted to go on deck and hug the antenna tuning unit. Keeping the local museum alive in a radio fashion are

both a local ham club W4AMV, and eight commercially licensed telegraph operators. Hope you participated in between the static crashes! Able ship-side volunteers



included: Thomas Small (K4NMR) manning the Amateur facility, Chief Radio Officer Don Berger (W4CQC) and Radio Operators Dean Server (N8IM) and Ron Perrett (K4FZU) all keeping the KKUI key going.

**PROGRESS REPORTS:**

- 1) QCWA Chapter Application: Received, determined very complete, and awaiting next National “ad-hoc” Board meeting for consideration.
- 2) The “NEW” System Fusion Repeater is here! The awaited Yaesu item came on July 13th and was delivered into Bernie Huth’s (W4BGH) hands for interface development and testing.

**DID YOU KNOW TRIVIA:**

*What Character Was Removed from the Alphabet?*

**dictionary.com** offers the following: Johnson & Johnson, Barnes & Noble, Dolce & Gabbana: the ampersand today is used primarily in business names, but that small character was once the 27th part of the alphabet. Where did it come from though?

The origin of its name is almost as bizarre as the name itself. The shape of the character (&) predates the word ampersand by more than 1,500 years. In the first century, Roman scribes wrote in cursive, so when they wrote the **Latin word et** which means “and” they linked the **e** and **t**. Over time the combined letters came to signify the word “and” in English as well. Certain versions of the ampersand, like that in the font Caslon, clearly reveal the origin of the shape.

The word “**ampersand**” came many years later when “&” was actually part of the English alphabet. In the early 1800s, school children reciting their ABCs concluded the alphabet with the &. It would have been confusing to say “X, Y, Z, and.” Rather, the students said, “**and per se and.**” “Per se” means “by itself,” so the students were essentially saying, “X, Y, Z, and by itself and.” Over time, “and per se and” was slurred together into the word we use today: ampersand. When a word comes about from a mistaken pronunciation, it’s called a **Mondegreen**.

ANS The and per se and. —>



CALENDAR... *Upcoming of Interest*

July 21: B.A.R.S. Club Meeting

July 23: LARCFEST [Hamfest](#)—(Lakeland)

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Aug 06: VE Testing—Amateur Exams  
Contact Bill (WJ4G)

Aug 18: B.A.R.S. August Club Meeting

Aug 20: TARC [Fest XXXVII](#) (Tampa)

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Sept 16: ARRL/TAPR (16-17-18th)  
[Digital Communications Conference](#)  
St. Petersburg, FL

Sept 24: Pasco County [Hamfest](#)—Odessa

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Oct 07: Melbourne [Hamfest](#) (7th-8th)

Oct 14: Scouting [Jamboree On-The-Air #59](#)  
Annual JOTA event—Worldwide  
(14th-15th-16th)



• *Only Dark Matter...*