

## License Examinations Resume

*Bill Johnson (WJ4G)*

We held our first Amateur Radio license test session since March on June 6. Twelve of the 23 pre-registered candidates showed up despite the inundating rains from Tropical Storm Cristobal.

Eleven new licenses were earned: one extra, three general, and 7 technicians.

Thanks to [Arise Assembly of God at Brandon](#) for providing a venue large enough to accommodate all of the candidates and the test team members.

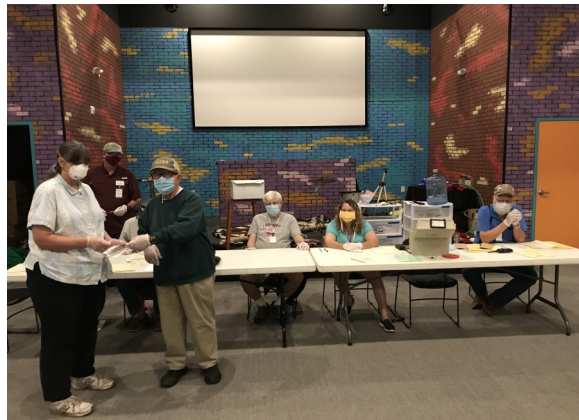
Also, thank you to team members Rodney Biddle (KX4HD), Karen Jacobi (K4KZF), Jim Moorehead (WF4AC), Dick Shaffer (W7RRS), Jim Smith (K4PPK), Dave Welty (N4DLW), and Bill Johnson (WJ4G). Karen attended her first session as a volunteer examiner!

The team conducts exam sessions for all amateur radio license levels on the first Saturday of each month at [Arise Assembly of God at Brandon](#) (401 Pauls Drive). The session starts at 11:00 AM.

Candidates must bring: a legal photo ID (or two forms of other identification); a copy of their existing license (if applicable); 2 number two pencils with erasers; a pen; and \$15 cash (exact amount appreciated) or check for the exam fee. Candi-

dates may also bring a calculator with memory erased and formulas cleared. No other devices can be used.

Candidates should review the full requirements [here](#) and contact [Bill Johnson](#) to pre-register.



Bill Johnson (WJ4G) accepting paperwork from a candidate. Others at the table (L to R): Rodney Biddle (KX4HD), Dave Welty (N4DLW), Karen Jacobi (K4KZF) and Dick Shaffer (W7RRS). Photo by Jim Smith (K4PPK)

## The Brandon Amateur Radio Club, Inc. is Born

*Dana Perrin (KM4DTJ)*

At a Special Membership Meeting held on June 11, 2020, BARS members approved incorporating as a 501(c)(3) Non-Profit Corporation and authorized the board of directors and officers to take all steps necessary to incorporate.

The process is moving along. Registering as a Florida Non-Profit Corporation, has been completed and ["The Brandon Amateur Radio](#)

[Club, Inc.](#)" is active according to the state. We also have obtained a Tax ID Number, and filed form 1023 with the IRS for 501(c)(3) tax exempt status. Review is expected to take 60 days.

Steps are underway to register our use of "Brandon Amateur Radio Society" with the state. Watch for the ad in the La Gaceta on July 17. Watch your e-mail or this space for updates.

**Next Meeting**

**July 16, 2020**

**7:30 PM**

This meeting is virtual.

Register [here](#).

Tell a Friend!

## Brandon Amateur Radio Society

### Officers of the Society

**President**  
Dana Perrin  
KM4DTJ

**Vice President**  
Ron Perrett  
K4FZU

**Treasurer**  
Jim Moorehead  
WF4AC

**Secretary**  
Art Powers  
KA4BIM

### Board Members

**Past President**  
Scott Irwin (W8UFD)

**Repeater Trustee**  
Tony Stone (W4TAS)

**Director**  
Bill Johnson (WJ4G)

**Director**  
Dick Capell (KJ6HNV)

### Newsletter Staff

**Editor (Layout/News)**  
Scott Irwin (W8UFD)

**Proofreader**  
Nancy Lessard (KM4WMD)

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**Thank you  
for your  
participation!**

## From The President's Desk

*Dana Perrin (KM4DTJ)*

At our Special Membership Meeting on June 11th, our club voted to form a 501(c)(3) Non-Profit Corporation. We have filed the incorporation application documents with the State of Florida and expect to hear back sometime in early July. After we receive approval from the State, we intend to file the appropriate documents with the IRS to achieve 501(c)(3) tax exempt status. This process is expected to take about 2 months. We will have a short debriefing at our next regularly scheduled mem-

bership meeting on Thursday, July 16th at 7:30 by Zoom. I'm grateful to all who participated.

I want to thank Jim Smith for stepping up to organize our club's Field Day experience. I also want to thank the 16 club members who participated and together made 728 contacts. Considering the outside temperature on Field Day Saturday was 99 degrees, I think it was a good thing we were able to take part from the comforts of our homes. Thanks again Jim!

Finally, as I look at the Florida Department of Health website, it

appears that the numbers of new cases of Covid-19 are continuing to increase in Florida as well as in Hillsborough County. Based on this, I'm still being very cautious and will continue to follow the guidelines for social distancing, hand washing, and mask wearing.

Stay Safe Out There!

*It is amazing what you can accomplish if you do not care who gets the credit.*

*-Harry S. Truman*

## Club Field Day Recap

*Jim Smith (K4PPK)*

To put it in a younger generation's vernacular, Field Day was "COOL" this year. There was no sweating involved with putting up antennas or tents and no carrying our equipment from the car to the RVs. In fact there was not much setting up to do at all. COVID-19 changed almost everything this year, and yet with all of the changes we still had to operate our radios, call "CQ Field Day this is K4TN", and log our contacts.

At one of the virtual coffee meetings in May, the Brandon Amateur Radio Society membership voted, for the safety of all members, to conduct field day from home this year rather than gather at Davis Park where we normally operate. We decided to conduct operations using three separate modes all using the club call sign. So a sign-up sheet was made available to the membership for all who wanted to participate in field day while operat-

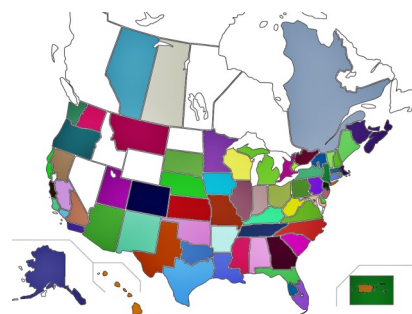
ing their home station. Result -- sixteen members signed up to operate either as a CW station, a phone station or a digital station.

On June 27, BARS Field Day began in fourteen different homes with the first contact being made at 2:01 PM on Saturday by JR (W4MIG) and the last contact being made by Jim (K4CWD) at 1:59 PM on Sunday. (I've done a lot of Field Days here with BARS but I have never seen one run two minutes short of 24 hours. I think that has something to do with the COOL part I mentioned earlier).

Well how did we do, you ask. Not since 2014 have we made as many contacts as we made this year. The CW key pounders accounted for 155 contacts, the phone station made 151 contacts and the digital operation made 422 contacts giving the club a total of 728 contacts. We made contacts with other amateurs in 46 different states and about half of the Canadian provinces. Our most distant contact was made by Ron (K4FZU) and I don't know whether it was with Hawaii or France. (I did not

check the mileage). Our score this year will be 2,610 points for contacts plus 550 bonus points resulting from messages sent and received as well as media publications attempted. Our total points should be 3,160. A very good Field Day indeed.

I would like to thank all of the sixteen club members who volunteered to operate field day. I have heard from a number of them indicating they had as much fun as I did. Propagation conditions weren't the best, in fact far from it. But that may be why our success was so much fun.



Map summary of contacts. Courtesy of Jim Smith (K4PPK)

Total Contacts by Band and Mode:

Band	CW	Dig	Phone	Total	%
160	0	1	0	1	0
80	14	58	5	77	11
40	48	97	68	213	29
20	40	110	37	187	26
15	13	89	4	106	15
10	38	65	35	138	19
6	2	2	2	6	1
<b>Total</b>	<b>155</b>	<b>422</b>	<b>151</b>	<b>728</b>	<b>100</b>

Summary courtesy of Jim Smith (K4PPK)

## A Field Day Dream Come True

Ken Watts ([WA4NSV](#))

This year's Field Day was truly a dream come true for me. From my earliest years as a ham, I have wanted to operate Field Day from my front yard using a portable antenna and an alternative power source. The COVID-19 virus gave me the opportunity to do just that.

Preparation began when I bought an FT-891 last year, a solar panel, a Duracell 35-AH battery (overkill, for sure), and the ongoing acquisition of Buddipole antenna parts. I started in earnest a week before Field Day with a dry run putting up the

and I used a TRSB (Triple Ratio Switch Balun) set at 1:1. My resulting SWR was 1.5:1 or lower all across the 20 M band.



There is a lot of discussion amongst Buddipole users about the counterpoise; is one sufficient or do you need 4 or more? I used 4, all at 16' 9", but I had all day to set up. It does seem, though, that one is enough. It will make the antenna slightly directional in the direction of the single counterpoise but it is reported to be negligible. If I take this on the road, and I am sure to, I will use only one counterpoise. By the way, I used plastic electric fence posts to keep the counterpoise off the ground.

Over the course of our 2-hour block on Saturday, Janet ([KB4PUM](#)) "the PUM", and I logged 17 contacts in Texas, Tennessee,



Indiana, Ohio, and others up and down the eastern seaboard. We stayed on 20 meters because to QSY would have been very time consuming since we didn't use any coils on the antenna. The PUM handled the logging chores and she didn't intend to get on the air, but when a station requested YL's, she couldn't resist. After that, she made one more contact and then she went back to logging.

At 6 pm we turned K4TN over to Dave, N4DLW, and commenced tearing down and stowing the Buddipole, a generator, the solar panel, FT-891, and other equipment. By the time we were done, we were sore, hot, and exhausted. Nevertheless, it was everything the dream could be and more.

Sunday morning I did another two-hour stint from the comfort of my home where I used a Kenwood TS-450S that a friend had given me when he moved to Austria. Even though I was using a beam antenna, I only logged another 10 contacts. I attribute that to being Sunday morning and hams being tired, asleep or burned out. Nevertheless, I moved around a bit and I think that I logged both 10 and 20 meters for those 10 contacts.

Jim Smith ([K4PPK](#)), assures me that if this was fun, then I'll enjoy Parks On the Air (POTA) even more. I have taken my FT-817 out with the Buddistick in the past, but my setup included using a coil, which gets in the way, with limited success. My next outing will be with the FT-891, the 20 M Buddistick, and one counterpoise, and we'll see if my results are duplicated. I can hardly wait!

73, Ken, WA4NSV

**From my earliest years as a ham, I have wanted to operate Field Day from my front yard using my portable station.**



Buddipole as a vertical Buddistick. I discovered that the longer of my 2 mast poles, which I had wanted to use, has a diameter too big for the early generation tripod that I have. Buddipole rushed a new tripod to me to support the larger mast and it was hoisted some 15 feet into the air, guyed, of course. I measured out the 4 extension arms and the long whip to 16' 9", ¼ wavelength for 20 meters. I also measured out the counterpoise

## BCI Communications Seeks Help

*Timothy Courtier (KB8AFS)*

Are you looking to use your ham radio (or other) skills to make some money?

BCI Communications has been a long time supporter of BARS through various activities such as providing a temporary home

for our repeaters when we were asked to leave our previous site, providing business radios to help support communications for the Brandon Community Foundation Fourth of July Parade, and allowing Hillsborough County ARES/RACES to use the W4BCI Repeater for it's weekly UHF Net.

They have full and part-time openings in their sales and service departments and will accept retirees. You can also join the W4BCI Amateur Radio Club if hired.

For more information call me at 813-628-4900 or send me an e-mail at [timothy@bcicomm.com](mailto:timothy@bcicomm.com).



## App of the Month: Morse-It

*Scott Irwin (W8UFO)*

Morse-It is an easy to use application available on devices which allows you to encode, decode, and practice Morse code. It costs 99 cents and offers an in-app purchase to unlock additional features.

You can type some text or copy/paste it into the encode window and it will be automatically encoded into Morse code...the screen will flash as you hear the dits and dahs at the speed you set in settings.

You can also use the flash on your device and send code visually (such as a SOS).

The app can also decode as well. When you place the app in this mode and place the phone by the

radio speaker it will put decoded characters on the screen. To eliminate the gibberish you can set the sensitivity level.

Looking for some sending practice? The app does it. Practice sending morse code by tapping the screen and it will display the text. You can even change the type of key used: Novice, Straight key, Memory Paddle, Iambic Paddle (A and B), or Microphone. Left and right handed modes are supported.

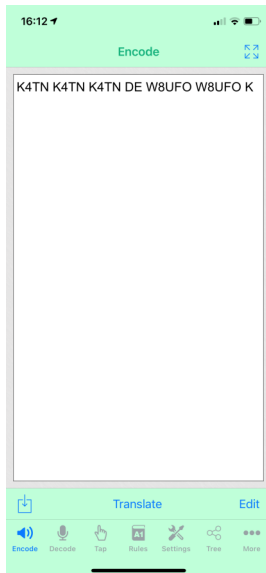
Besides encoding, decoding, and practice, the app has a Koch trainer and CW Academy lessons (requires the in-app purchase)

One of the neat things this app can do is create audio files containing Morse code you tap or

paste in. The files can be used to train your decoding skills or be used as ringtones for your phone or assign them to contacts so you know who is calling/texting you.

Click [here](#) to learn more about the app and what you get when you purchase the premium features (we could not cover it all in this article).

*Do you have a favorite ham radio related app you would like others to know about? Send it to our editor and we will include it in a future issue.*



Morse-It main screen.  
Photo by Scott Irwin (W8UFO)



## Solar Weather Corner – Connecting Amateur Radio and Astronomy

*Kelly Anderson (KE4GS)*

Thus far in this series I talked about what we know about our Sun, how it creates the “solar wind” and how that, in turn, affects propagation for amateur radio operator QSOs. Last month I focused on the visible section of the electro-magnetic spectrum and, in general, the types of instruments we use to see the wonders of the Universe.

This time I’ll be sharing a few things that we don’t know about the Sun, and what’s happening to shorten that list of unknowns. We’ll begin with the adventure to discover the true nature of our solar systems power source.

NASA developed a “High Resolution Coronal Imager,” nicknamed “Hi-C.” (No, really, astronomy nerds do this kind of thing all the time.) This amazing system has allowed scientists to improve their understanding of the nature of the Sun’s electro-magnetic field by providing extremely high definition images of Sol’s surface and atmosphere.

The Hi-C system is not a space-based device, but rather is carried aloft by a sub-orbital rocket that returns to Earth in a few minutes. In those short bursts of observing the system has produced images of the Sun’s atmosphere with a resolution of 43 miles (69 km), or just 0.01 percent of the Sun’s width. The new images show, for the first time, bundles of million-degree plasma

threads. Each thread is about 310 miles or 500 km wide.

Scientists are studying these images to help them understand what generates these fine magnetic field lines, and how they affect things like the solar wind and coronal mass ejections.

On February 23, 2020, the European Space Agency and NASA, as a joint effort, launched what promises to be the closest look ever at our favorite star. The “Solar Orbiter” (no silly acronym this time) rode atop a NASA-provided Atlas rocket. After passing Venus twice and then coming close to Earth to slow the orbiter’s velocity, it will descend to an elliptical orbit around the Sun, coming as close as .28 astronomical units (AU), closer to the Sun than the orbit of Mercury. One AU is the distance from the Earth to the Sun, about 93 million miles (150 million km); 0.28 AU equates to 26 million miles (42 million km). Now that’s really close, and you can imagine how hot it’s going to be. It reminds me of the Greek mythology story of Icarus. Let’s hope what’s holding the Solar Orbiter together doesn’t melt.

The Sun contains 99.86 percent of the total mass of the solar system. It is 865,000 miles (1.4 million km) in diameter. It is a broiling sphere of plasma made up of three-quarters hydrogen and one quarter helium. It has a

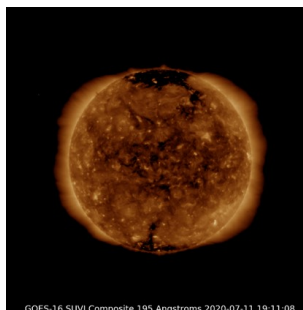
core more than 13 times the density of lead that generates temperatures of 15.6 million kelvins. That heat will cook your TV dinner a lot faster than your kitchen microwave. It (the Sun, not the microwave) sustains life on the only planet we know for sure has life. While we know a lot about what happens in stars, there’s much more that we don’t know. Hopefully the Hi-C and the Solar Orbiter will help us travel a bit farther in our understanding of the intimate workings of our own star, and possibly all other stars in our expanding Universe.

Oh, by the way, Sun observers have determined that we are now well into the next solar cycle. A few more sunspots have been observed, and solar activity has shown some increase. So, better DX is coming.

Just so you don’t forget, DON’T EVER LOOK AT THE SUN DIRECTLY WITHOUT BENEFIT OF APPROPRIATE FILTERS. I’M SERIOUS.

To keep up to date on the latest and greatest Sun happenings, cruise over to the NOAA Space Weather Prediction Center at

[www.swpc.noaa.gov](http://www.swpc.noaa.gov).



GOES-16 SWMI Composite 195 Angstroms 2020-07-11 19:11:08

## Upcoming Club Events

- > July 16, 2020  
BARS Club Meeting  
7:30 PM Online. Register [here](#) (one registration works for all monthly meetings).
- > July 22, 2020  
Virtual Coffee Hour  
7:30 PM Online. Register [here](#) (one registration works for all instances).
- > July 29, 2020  
Virtual Coffee Hour  
7:30 PM Online. Register [here](#) (one registration works for all instances).
- > August 05, 2020  
Virtual Coffee Hour  
7:30 PM Online. Register [here](#) (one registration works for all instances).
- > August 12, 2020  
Virtual Coffee Hour  
7:30 PM Online. Register [here](#) (one registration works for all instances).
- > August 19, 2020  
Virtual Coffee Hour  
7:30 PM Online. Register [here](#) (one registration works for all instances).
- > Mondays, 8 PM ET  
VHF Net (147.165 MHz)
- > Tuesdays, 7 PM ET  
6 Meter Roundtable  
(50.200 MHz USB)
- > Tuesdays, 8 PM ET  
10 Meter Roundtable  
(28.365 MHz USB)
- > Fridays, 7 PM ET  
80 Meter Roundtable  
(3.830 MHz LSB)

*The Brandon Amateur Radio Society (BARS) has been serving Brandon, Valrico, Mango, Seffner, Palm River, Gibsonton, Riverview, and the East Tampa area for over 43 years providing public service and emergency preparedness communications as well as license classes and radio operator training programs.*



Thank you to the members and staff of Arise for their kindness

In allowing BARS the use of their facility!

### Our Repeaters

147.165 MHz (+ offset, 136.5 Hz PL Tone, Analog FM) - N4DLW-R Echolink Node  
443.500 MHz (+ Offset, 127.3 Hz PL Tone, Analog FM, C4FM) - N4DLW/R Wires X



Brandon Amateur Radio Club, Inc. is a registered Florida Non-Profit Corporation

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<http://www.brandonhamradio.org/>



<https://fb.me/brandonhamradio>



<https://www.twitter.com/brandonhamradio>

### Need Help? Ask YOUR Club!

*Scott Irwin (W8UFD)*

Do you need help putting up an antenna, configuring software or your radio to do a digital mode, or have another ham radio question? If so, you've come to the right place!

BARS has over 60 members with a variety of experience and a willingness to help.

In June, members assisted Dick Hoff (AA5NT) with putting up a High Frequency (HF) vertical antenna.

In preparation for Field Day, Jim Smith (K4PPK) and JR Calvert (W4MIG) worked together to get their digital stations set for the big event.

These are some of the mentoring opportunities that occur every month on an informal basis. Feel free to ask your question on the

BARS e-mail group, the Facebook page, the VHF Net, one of the roundtables, or during the virtual coffee hour. We're here for you!



Jim Moorehead (W4FAC) analyzes the situation. Photo by Ken Watts (WA4NSV)



Jim Smith (K4PPK) works to assemble the antenna. Photo by Ken Watts (WA4NSV)



Antenna Raising Party. Photo by Ken Watts (WA4NSV)



Submit your articles & photos for the next edition of *The Antenna* by August 10, 2020!

Send electronic submissions to  
w8ufo (at) arrl (dot) net