



## Newsletter of the Big Bend Amateur Radio Club, K5FD April, 2018 Alpine, Texas

**SKYWARN Class**  
Alpine, TX  
Tuesday April 10<sup>th</sup>: 6:30-8:30 PM CDT  
Turner Range Animal Science Bldg

- Want to learn more about severe storms?
- Want to know how you can report severe weather to the NWS?
- Want to become a Spotter for the NWS?
- Classes are FREE and open to everyone!
- Full schedule can be found on our webpage ([weather.gov/midland](http://weather.gov/midland)).

Allen has been an outstanding member of the club and will be sorely missed. He will continue to maintain the club website though.

### *Big Bend ARC to Host Barbecue*

Some of you have been asking, ‘What happened to our annual banquet?’ This year, our banquet will be in the form of a Barbecue!

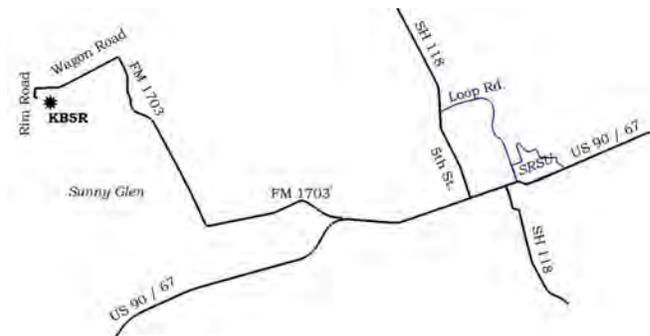
The menu includes smoked brisket by N5NYM and will be hosted at the QTH of KB5R on Saturday, April 14th starting at 5pm. **BYO-Beverage...**

### **N5NYM to Resign as Club President; will move to Port Lavaca**

Allen Moore, N5NYM, and XYL Diane, have decided to move to Port Lavaca. Allen, of course, can work from anywhere. Diane has taken a position at a local hospital.

The couple expects to be in Port Lavaca by mid-May.

N5NYM is currently the President of the Big Bend ARC. Marvin, KG5LMG will take over the reins of the club as the Vice-President.



### **BBARC is Testing a New Radio Repeater Installation in Alpine**

*April 2, 2018, Alpine, Texas*

Alpine has a new frequency to access the club's repeater system. It is an odd configuration and is

only in test mode at this time, but as we work out the details, we hope we can make it permanent.

The frequency is 446.150 SIMPLEX with 146.2 PL tone. Do note, as you try to program your radios for this frequency, most modern radios may try to use an offset transmit frequency for 446.150. You will likely have to force the radio to use SIMPLEX.

This is one of our Cross-Band repeater boxes that we have been using for some events in the Big Bend Ranch State Park and will probably use in Big Bend National Park. We have three of these boxes and each time we need them we have to borrow someones dual band radio, get it programmed and mounted inside the cross-band box.

After the event we extract the borrowed radio and return it to its owner and put the box back on the shelf. We can go into more detail on the box at another time, but in short, it is an empty equipment box with a removable top. It has power terminals on the outside, a coax connector on the back and an NMO mobile antenna mount on the top cover. Inside the box we mount a mounting bracket for a mobile radio. The power terminals, coax connector, and mobile antenna mount have pig-tails to complete the connections to the mobile radio.

Recently, an older model Kenwood TM-V7A dual band radio was donated to the club so at least one of the three cross-band boxes could be equipped and ready to go at a few moments notice.

That is nice, but as experience has taught us, as with the 145.23 emergency repeater, equipment that sits "Ready to Go," inactive on a shelf for long periods of time, may not be quite as ready as we would like when we need it.

Today the unit was installed at the Alpine True Value store. In this 'Phase One' part of our test, a

mag-mount dual-band mobile antenna has been mounted on top of a commercial down-draft water cooler on the True Value store roof and coax runs into the offices inside the store to the cross-band box.

Performance tests were very promising. There is full quieting HT performance from inside the store, which is an all steel building, and also from inside the old Wool and Mohair building on Murphy street. This is good since the Wool and Mohair building is now a Morrison True Value property and its owner is Bob Ward, wa5roe, who is also our ARES Emergency Coordinator.

But aside from giving Bob HT monitoring capabilities from downtown Alpine, it also provides HT access to our repeaters for visitors to Alpine who might only be traveling with HT radios.

So phase one, is the idea of maintaining a ready to go cross-band, in service and monitored on a daily basis? The answer seems to be yes.

For now we don't know how far the usable range extends, but a more efficient antenna may be considered later.

Phase 2 is a technical matter of operation format for a permanent station. Then phase 3 will be the consideration of higher gain antennas.

For now this project is considered under development and temporary for the time being. But we expect to work out the details to make it permanent in the future.

As we are an open repeater system, the cross-band is open as well. While we know the range is very limited, (good within a mile probably, but local building obstructions will have an effect), we will be interested in signal reports. What we will be looking for is whether a station is a mobile or an HT station? What is the station location? If it is HT, is it from inside a building, is it from

inside a car or bus or train, etc., is it using an OEM rubber duckie antenna, a high gain HT whip antenna, or an HT connected to an external mag-mount or other antenna? And since this station is just installed and the frequency not widely published, BBARC members will probably be the only users for some time.

So for those members who are in the Alpine valley, or those who travel in and out of Alpine regularly, please feel free to work this cross-band and note its performance.

IF AT LEAST ONE STATION IS ON THE CROSS-BAND, we would like a signal report.

Here is the info we are interested in on signal reports: Were you on a local repeater or the cross-band? Was the other station on a local repeater or the cross-band? If a local repeater, which repeater and which station? Precisely where was the cross-band being worked from, (location, outdoors or indoors?) What was the location of the other station? Was the signal full quieting, solid but noisy, did the audio drop out and how bad?

Collect your signal reports and you may give them on the Wednesday 2-meter net so everyone can share, and/or you can e-mail to [billato@mzstv.net](mailto:billato@mzstv.net).

## Cycle 25 – A Prediction

*This article, by Frank Donovan, W3LPL, is reprinted from the Daily DX*

Solar precursors correlating solar physical phenomena with the level of future solar activity are much better indicators of progress towards solar minimum -- a broad phase of the solar cycle -- than forecasting a specific event such as the bottom of a broad solar minimum by observing the statistics of numeric values such as solar flux. They're also useful estimators of the future strength of Cycle 25.

Here's an example of how one solar precursor --

spotless days -- can be used to assess progress towards solar minimum.

We entered the Cycle 24 solar cycle minimum with the onset of eight spotless days in June 2016. We had only 32 spotless days in 2016.

We had 15 spotless days in a row in March 2017, followed by relatively infrequent spotless days for the next seven months. The frequency of occurrence of spotless days accelerated in early November 2017 when we had 13 spotless days in a row followed by many more spotless days over the next five months. We had 104 spotless days during 2017.

The frequency of spotless accelerated again last month when we had 25 spotless days. We've already had 54 spotless days during the first 25% of 2018.

So where are we in our progress to solar minimum?

This chart shows the number of spotless days -- in red -- since the tenth spotless day of the onset of solar minimum in July 2016. Shown in blue are the average numbers of spotless days during sunspot minimums following weak sunspot cycles similar to Cycle 24. This data suggests that we may have just begun a period of very frequent spotless days for approximately the next two years.

[http://www.sidc.be/silso/IMAGES/GRAPHICS/spotlessJJ/SC25\\_month1015.png](http://www.sidc.be/silso/IMAGES/GRAPHICS/spotlessJJ/SC25_month1015.png)

The next solar precursor is frequent long periods of spot-free days. We had a 14 spotless days in a row in 2016, 15 in a row in March 2017, 13 in a row in November 2017, and 14 in a row early last month. Long periods of spotless days will become even more frequent as we go deeper into solar minimum.

We'll see another important solar precursor after

long periods of spotless days become more frequent. New high latitude, opposite polarity Cycle 25 sunspots will then begin to appear more frequently, perhaps by late next year. More frequent Cycle 25 sunspots will signal that we're approaching the bottom of the solar minimum hase of the solar cycle.

So what about the intensity of solar cycle 25?

An ongoing solar precursor of the future strength of Cycle 25 is the intensity of the solar polar magnetic fields prior to our current solar minimum. The good news is that the solar polar magnetic field strength is already slightly stronger than it was prior to the last solar minimum which suggests that Cycle 25 will be somewhat stronger than Cycle 24.

If the long periods of spotless days ends in about a year, it will be a solar precursor of a stronger Cycle 25. If it ends in more than two years it will be a precursor of a weaker Cycle 25.

73  
Frank  
W3LPL



**BIG BEND EMERGENCY NET REPORT  
From WA5ROE**

Date	Net Control	Check-ins	Length	Remarks
03/25/18	W5NPR	43	34	
03/18/18	WA5ROE	49	39	
03/11/18	WA5ROE	37	36	
03/04/18	W5NPR	42	36	

Remember – the BBEN meets **every** Sunday on 3922 KHz at 8:15 a.m. Central time (either CST or CDT). Visitors are always welcome. Early check-ins are welcome beginning around 8:05 a.m. on 3922 kHz or on the BBARC repeater system or on EchoLink.

**2 Meter Net Report**

Our 2 meter net meeting EVERY Wednesday at 8:00 PM (local time) on the clubs repeater system network. These are good training ground for possible emergency situations, as well as helping the new hams in the area to have an easy way to get use to "talking on the radio".

The club website ([www.bigbendarc.com](http://www.bigbendarc.com)) has ALL the information on the 2 meter net. Included is the Net Control members schedule, the "script" (supplied ONLY as a guide to ensure the important information is given out weekly - you can use it anyway you see fit) and a list of the recent check-in members.

If you have an interest in joining the Net Control stations please call me ([432/837-2257](tel:4328372257)) or holler at me during the Wednesday evening net (either before or after the net).

The month of February had four Wednesdays in it and it went this way:

Date	Check-ins	Net Control
03/28/18	19	KF5KMA
03/21/18	24*	W5RHN
03/14/18	23	N5BBJ
03/07/18	22	KG5LMG

\*I think this is the most single night check-ins we've EVER had. Thanks one and all for the support!

88 Total check-ins for March

If you don't have the time to check-in to the net and stick around for the round-table discussion, take a minute of your time and check-in as an "in-and-out" (where you're there for the head count but don't have the time to participate). All participation is much appreciated and encouraged. Any of the new hams in the community, if you have questions or problems with trying to get radios and antennas set-up feel free to bring them up during the net. We may not have the answer

right off the cuff, but somebody can find the info and get back with you shortly!

During the month of March we had check-ins from the following ham on the Echo-Link System as follows:

KD5KC - Mike checked in from El Paso, Texas  
W4JF/mobile – Jeff from Montgomery, Alabama  
KC5WSH – Bill from Kingston, Washington

I would like to thank KG5HEJ, Al in Terlingua, for keeping us apprised of the Echo Link!

**BBARC Club Officers**

President - Allen Moore, N5NYM  
Vice-President – Marvin Voiers, KG5LMG  
Secretary - Billy Roberts, W5NPR  
Treasurer - Angie Otoupol, N5MVV

**THE BARK  
Newsletter of the BBARC**

Big Bend Amateur Radio Club  
1402 N. 5<sup>th</sup> St.  
Alpine, Texas 79830

Publisher: Bob Ward, WA5ROE  
[wa5roe at juno.com](mailto:wa5roe@juno.com)

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[bill.ke5og at gmail.com](mailto:bill.ke5og@gmail.com)

**BIG BEND AMATEUR RADIO CLUB**  
<http://www.bigbendarc.com>

Meetings on the second Tuesday of each month at the West Texas National Bank Building in Alpine, 7:30 P.M. CST/CDT.

ARRL Affiliated Club

**MEMBERSHIP AND NEWSLETTER  
SUBSCRIPTION**

activity during our net times! Very Much Appreciated.

73,  
Chuck Dobbins – KA5PVB  
2-meter Net Manager

**2018 Dues are due**

Annual membership is Jan. 1 to Dec. 31 each year. Dues are \$36 per year for individual or individual & spouse.

Membership allows you to participate in all club activities and vote at the monthly meetings.

Dues can be mailed to Bob Ward, WA5ROE at 1402 N. Fifth Street, Alpine, Texas 79830.

Newsletters are available by e-mail for members, subscribers, and interested recipients. Send your e-mail address to [bill.ke5og at gmail.com](mailto:bill.ke5og@gmail.com) to be put on the list.

**ABOUT THE BBARC**

Founded December 17, 1974

ARRL affiliate since 1986

The BBARC is a 501(C)3 organization. Contributions are tax deductible.

**Big Bend Emergency Net, 3.922 MHz**

Founded September 18, 1977

Meets every Sunday morning at 8:30 A.M. CST/CDT

Controlled net format. Welcomes new participants and visitors.

Established by Bob Ward, WA5ROE.  
Net Manager, Bob Ward, WA5ROE, [wa5roe at juno.com](mailto:wa5roe@juno.com)

## Big Bend 2-meter Net

Founded July 9, 2008

Meets every Wednesday evening at 8:00 P.M. CST/CDT

Controlled net format. Welcomes new participants and visitors.

Established by Bob Ayer, KA1AAJ (SK)

Net Manager, Chuck Dobbins, KA5PVB,  
[charles.dobbins52 at yahoo.com](mailto:charles.dobbins52@yahoo.com)

## BBARC REPEATER SYSTEM

**All standard offsets. All repeaters require 146.2 Hz PL tone encoded on your transmit signal. All repeaters are linked.**

147.120+	Shafter, Cibolo Creek
147.020+	Elephant Mt. south of Alpine. System hub
146.620-	Ft. Davis located at McDonald Observatory
146.720-	Alpine, Pearce Mountain
146.820-	Terlingua, Study Butte
146.920-	Glass Mountains, Alpine / Ft. Stockton
145.230-	Emergency Repeater

## Big Bend ARC CALENDAR OF EVENTS

Skywarn training, April 10, 6:30-8:30 pm, Turner Range Animal Science Center, SRSU, Room 130.

Club Barbecue, April 14 at the QTH of KB5R.  
(See map in this issue).

Texas State Parks on the Air, 1400Z, April 7 to 0200Z, April 8 and 1400z – 2000Z, April 8

North American Sprint SSB, 0000Z to 0400Z,  
April 8

ARRL Rookie Roundup, SSB, 1800Z – 2359Z,  
April 15

*[www.contestcalendar.com/](http://www.contestcalendar.com/)*