



Newsletter of the Big Bend Amateur Radio Club, K5FD

July, 2017

Alpine, Texas

BBARC Hosts Successful Field Day

The Big Bend ARC held their annual Field Day event at the Double Diamond Pavilion on June 23 and 24.



The crew, raising the Jeff Davis County trailer mounted antenna. Steve, W5JSR; Jim, KD5KBU; Rusty, KB5R; Chuck, KA5PVB; Bob, WA5ROE and Rachel in action.

The Club scored 7,894 points. While not as good



The CW Crew: Robert, W5AJ, and Dave, N5DO. (WA5POK not shown).

as they were last year, that score should get the BBARC in the top twenty. We were shy a few bonus points and Murphy spent some time at the side band station.

Our CW ops, N5DO, W5AJ and WA5POK, carried the load with 1,222 Q's. We also had a great effort by our GOTA station with 141 QSOs.

On side band, we had 753 contacts which was pretty good considering the way we started.

The important thing was we had a great time and everyone got in a lot of operating.

More photos on the Club Web Site at www.bigbendarc.com.

Club Meeting This Tuesday

The regular meeting the Big Bend Amateur Radio Club will be this Tuesday at 7:30 in the West Texas National Bank Community Room.

After a post-Field Day report, we will hear from Allen, N5NYM, on a preliminary report on his Magnetic Loop antenna project after which we will discuss ideas for club meeting presentations.

All are invited to attend.

Solar Minimum is Coming

This article appeared on the PhysOrg website on June 28, 2017. I thought it might be of interest to amateur radio operators.

High up in the clear blue noontime sky, the sun appears to be much the same day-in, day-out, year after year.

But astronomers have long known that this is not true. The sun does change. Properly-filtered telescopes reveal a fiery disk often speckled with dark sunspots. Sunspots are strongly magnetized, and they crackle with solar flares—magnetic explosions that illuminate Earth with flashes of X-rays and extreme ultraviolet radiation. The sun is a seething mass of activity.

Until it's not. Every 11 years or so, sunspots fade away, bringing a period of relative calm.

"This is called solar minimum," says Dean Pesnell of NASA's Goddard Space Flight Center in Greenbelt, MD. "And it's a regular part of the [sunspot](#) cycle."

The sun is heading toward solar minimum now. Sunspot counts were relatively high in 2014, and now they are sliding toward a low point expected in 2019-2020.

While intense activity such as sunspots and solar flares subside during solar minimum, that doesn't mean the sun becomes dull. Solar activity simply changes form.

For instance, says Pesnell, "during solar minimum we can see the development of long-lived coronal holes."

Coronal holes are vast regions in the sun's atmosphere where the sun's [magnetic field](#) opens up and allows streams of solar particles to escape the sun as the fast solar wind.

Pesnell says "We see these holes throughout the solar cycle, but during solar minimum, they can last for a long time - six months or more." Streams of solar wind flowing from coronal holes can cause [space](#) weather effects near Earth when they hit Earth's magnetic field. These effects can include temporary disturbances of the Earth's

magnetosphere, called geomagnetic storms, auroras, and disruptions to communications and navigation systems.

During solar minimum, the effects of Earth's upper atmosphere on satellites in low Earth orbit changes too.

Normally Earth's upper atmosphere is heated and puffed up by ultraviolet radiation from the sun. Satellites in low Earth orbit experience friction as they skim through the outskirts of our atmosphere. This friction creates drag, causing satellites to lose speed over time and eventually fall back to Earth. Drag is a good thing, for space junk; natural and man-made particles floating in orbit around Earth. Drag helps keep low Earth orbit clear of debris.

But during solar minimum, this natural heating mechanism subsides. Earth's upper [atmosphere](#) cools and, to some degree, can collapse. Without a normal amount of drag, space junk tends to hang around.

There are unique space weather effects that get stronger during solar minimum. For example, the number of [galactic cosmic rays](#) that reach Earth's [upper atmosphere](#) increases during solar minimum. Galactic cosmic rays are high energy particles accelerated toward the solar system by distant supernova explosions and other violent events in the galaxy.

Pesnell says that "During [solar minimum](#), the sun's magnetic field weakens and provides less shielding from these cosmic rays. This can pose an increased threat to astronauts traveling through space."

Solar minimum brings about many changes to our sun, but less solar activity doesn't make the sun and our space environment any less interesting.

Read more at: <https://phys.org/news/2017-06-solar-minimum.html#jCp>

Classifieds:

For Sale: WX0B Six-Pack antenna switching system. Two transceivers in, six antennas out. Excellent condition with control box. \$300.

Steppir DB18 40 meter through 6 meter Yagi. Has two trombones. Good condition and partially disassembled on the ground in Alpine, Texas. Includes controller. Price is less than half of what it costs new. \$1,600.

Also, 3-element Steppir Yagi. Fiberglass covers are faded somewhat but still in excellent operating condition. Includes controller. Less than half price. \$900. Partially disassembled on the ground in Alpine, Texas.

Contact Bill, KE5OG, at 432-244-8863 or bill.ke5og@gmail.com.

For Sale: Alpha 99, Original owner, purchased in January, 2000. Has original 4 CX800-A7s. Works Fine. \$2,700 plus.

ALS-600 Solid State Amp. Purchased, October, 1994, AES. Works Fine. \$650

Ameritron AL-572. Took unit in Trade 2016. Applied AC and tubes and dial lights lit ok. Did not operate. Asking \$600.

Two Kenwood TS-940s, both checked out by Cal Fisher in Dallas. Both work fine. MC-60 mike available as option. \$700 each.

Kenwood TS-180 Transceiver w/speaker and PS, works fine, very nice condition. \$300.

Kenwood TS-820 w/VFO, spker, PS, works fine. \$425

Kenwood TS-850S, no tuner. \$600

Kenwood TS-520, SE, Re-tubed and aligned, with MFJ 4-pin mike. \$225

Yaesu FT-990 very nice, almost new, was in storage for many years. No mike. \$650

Yaesu FRG-7700 solid state receiver. Was sent in for general checkup several years ago, works fine. \$200.

Ameritron ATR-30 tuner. Sent in for checking to MFJ, works fine. \$375

Ameritron ATR-10 tuner, works fine. \$75

Murch 2000 Tuner, works fine. \$75

Plus receivers, speakers, power supplies, amp parts, mikes, rotator, tubes, military receivers, tower parts.

Tom Gius, N5NYZ, 206 West Arcadia Ave, Alpine, Texas 79830 Call 432-837-3679

.....

BIG BEND EMERGENCY NET REPORT From WA5ROE

Date	Net Control	Check-ins	Length	Remarks
06/04/17	WA5ROE	42	30	
06/11/17	WA5ROE	45	33	
06/18/17	WA5ROE	41	36	
06/25/17	W5NPR	33	35	

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) 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 March had four (4) Wednesdays in it and it went this way:

Date	Check	Net Control
06/07/17	19	KA5PVB
06/14/17	18	KG5BMK
06/21/17	16	KA5PVB
06/28/17	16	N5BBJ

69 total check-ins for June.

If you don't have the time to check-in to the net and stick around for the round-table discussion,

BBARC Club Officers

President - Allen Moore, N5NYM
Vice-President - Bill Brooks, KE5OG
Secretary - Billy Roberts, W5NPR
Treasurer - Angie Otoupol, N5MVV

THE BARK Newsletter of the BBARC

Big Bend Amateur Radio Club
1402 N. 5th St.

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 June the net had check-ins from the following hams on our Echo-Link System:

***Special thanks to Al KG5HEJ for helping us out by monitoring the Echo-Link System for us, so we DON'T miss anyone! ***

W5JSR - Steve Tucson, AZ.

KK5ROB - Robin Tucson, AZ.

W5WLZ - Danny Fort Worth, TX.

N5BBJ - Bruce Hickory, NC.

W5RHN - Bob Crystal Falls, MI.

K5FRN - Fran Crystal Falls, MI.

** it's always interesting where our Echo-Link check-in's reside and how they came to find out about us out here!

73's and hope to talk to you soon.

Chuck Dobbins – KA5PVB

2-meter Net Manager

Alpine, Texas 79830

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

Editor: Bill Brooks, KE5OG
[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

2017 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.

Newsletters are available by e-mail for members, subscribers, and interested recipients. Send your e-mail address to 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@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@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

BBARC CALENDAR OF EVENTS

Club Meeting, July 11, 7:30 p.m., West Texas National Bank, Alpine

IARU HF World Championship, 1200 UTC, July 8 to 1200, UTC, July 9

North American QSO Party, RTTY, 1800 UTC, July 15, 0559 UTC, July 16.