

Nacogdoches Amateur Radio Club

2014 CLUB OFFICERS

Pres: John Cechin - W5FWR

VP: John Chapman - KC5MIB

Sec/Treas: Army Curtis - AE5P

Visit our web site at

<http://w5nac.com/>

MISSION STATEMENT

The Mission of the Nacogdoches Amateur Radio Club is to support and promote Amateur Radio by public service, offering training to unlicensed interested parties and licensed Amateurs, mutual support of other Amateurs, engaging events that promote Amateur radio to the general public and other Amateur radio operators, and continuing fellowship by regularly scheduled organized meetings and events.



DECEMBER MINUTES

The December meeting of the Nacogdoches Amateur Radio Club (NARC) was held as scheduled on December 4th. **President John W5FWR**, opened the meeting at 6:00 p.m. in the Parish Hall of Christ Episcopal Church. Thirteen members and eight guests were present. Each person present introduced themselves. Minutes of the previous meeting were not available. The Treasurer's report was read.

New Business:

Marshall K5QE announced that he and Bill will be doing another 6 meter grid expedition in early January

to EL08 south of San Antonio. Look for them on 50.128 MHz.

With there being no other business to conduct, the meeting was adjourned at 6:12 p.m.

This being our annual Christmas Party as well as the December meeting, a blessing was offered by W5TV and everyone enjoyed a fine pot luck meal.

White Elephant Auction

Auctioneer **John KC5MIB** presided over our annual White Elephant Auction. 32 items were donated for the auction which raised \$234 for the club. Many thanks to all who donated items and to those who bid on and purchased the items.

MY 2 CENTS FOX WILLY ROGER

December:

The time has come to say goodbye... M I C see you real soon, K E Y why because we like you, N>A>R>C>.

That's right its BYE BYE time, thanks for letting me be one of your officers once more, thanks for letting me be your VP,

But now it's time to slip into the delegating chair as President.

As some of you may know this position is not new to me but it may seem so, hold tight, I might get something right yet.

This past year we "the club" have done so much, as a group as well as singly. **K5QE** with his gang doing GRID chasing and FIELD DAY, it is always neat to see what that segment of our club will come up with next, thanks guys.

SES our annual honor to the COLUMBIA SHUTTLE CREW, this was the tenth anniversary of that event

and our ninth year to honor the crew. Just over 200 QSL's were mailed out, and as the saying goes "and fun was had by all".

FIELD DAY, another good time to hone our hobby skills and to get together and have a little "R&R" fun time and storytelling.

The VHF contests are always fun and we have a few that our club members work in both as base stations and as rovers, the rovers have more fun, the members have marked out some of the best places to stop and eat, if you don't believe me ask AE5P.

Club members also lend a hand at events such as bike rides and river runs mostly organized by the LUFKIN chapter. Don't forget the Lufkin hamfest too.

This year the first annual JULY ICE CREAM SOCIAL was launched with a big splash. Fun was had by all that attended, sorry you slackers missed out on some good ice cream good talk and some good times,

maybe next year you won't take that expensive trip and join us.

I understand that a group within our group has sprung up, the Slackers, according to my informants the total is about 3-4. I will not name names but if look closely you can pick them out.

The Wells Fargo wagon that dropped off the new 6700 Flex to AE5P's QTH made one very happy ham, as you all can remember, when he gave the program Army was all smiles,

And now W5TV is saving his penny's to get one of his own, I guess that's what happens when someone forgets how to use the radio he/she already has.

This next year, 2014, the club should do better, better in the contests, at Field Day, at the SES and the ICE CREAM SOCIAL.

A trip to the back yard and the word tree produced little fruit. I guess the birds got there

first. I guess I will have to wing this month's article, so what else is new.

Remember; keep your powder dry and your head below the horizon.

Happy Trails

73 Enjoy

What do you think, let me know?

73,

John Cechin W5FWR

Carrots4ever2u@suddenlink.net

VEEPS CORNER

Happy New Year! I hope everyone had a great Christmas and a good New Year. I hope 2014 is very good to all.

I have talked to some folks about programs for this year. I have a friend who worked at NASA who will talk about the last minutes of Columbia, Tommy Gober will talk about Technology in the Classroom. Dr Tom said he may have a little something as does Army, we may be

able to twist Marshall's arm to talk about the work they are doing with grid openings and of course Ice Cream in June.

But you always have some input on what programs you would like to see and hear. Please let me know and drop me a line at jlchapman2@juno.com.

Again, Happy New Year, good DX and good radio fun

73 de

John

KC5MIB

jlchapman2@juno.com

CONGRATULATIONS

To new Nacogdoches Hams:

KF5ZPU Roy Blake Jr

KF5ZPV RM Blake III

KF5ZPW Jim Boiles

As well as new Tech

KF5ZPT Walter Fink of Colmesneil and

KF5ZPX Scott Hill of Brookland upgrade to General.

VE TESTING

Our next VE testing is scheduled for Wednesday, January 15th at 7:00 p.m. in the Parish Hall of Christ Episcopal Church. Applicants should bring a picture ID, the original and a copy of their current Amateur license, the original of any CSCE's and \$15 to cover the cost of the exam(s). Correct change is always very much appreciated. 73 de AE5P
email: ae5p@arrl.net

CLUB NETS

Remember to join us each week for the 2-meter nets sponsored by NARC. Each **MONDAY** is the **NARC ARES/RACES** net, at 8:00 p.m. on the club's 146.84 repeater (PL 141.3). Second, on **THURSDAY** evenings at 8:00 p.m. is the **Deep East Texas Skywarn Emergency Weather Net**

on the 147.32 repeater (PL 141.3). Please join us for one or both. We are always looking for folks who would like to become net control operators. If you are interested, please contact any of the existing net controls. We will be pleased to help you in any way we can.

NEXT MEETING

The next meeting will be on **Wednesday January 1st** at 7:00 p.m. in the Parish Hall of Christ Episcopal Church. The church is at the corner of Starr and Mound Streets in Nacogdoches. Please come join us and bring a friend.

BALLOONS IN SPACE

New Ham Roy Platt, KF5YSG, who teaches school in Timpson, advises that his class launched a balloon NS-IV (Near Space, Project 4) on December 16th. The balloon came down into the top of

a big pine tree near Alexandria, LA and was found on December 20. Forest Service personnel were enlisted to shoot the limb that held the flight package and it was finally recovered after spending 5 days in the tree. Roy advises they got some great video and learned a lot from the flight. They plan another launch for Spring of 2014 with ham radio equipment aboard. I'm hoping we can get a program from Roy and his students for a future meeting.



If you look closely, you can see the flight package stuck on a limb near the top of the tree. A picture of the flight package just prior to launch can be found at the end of this newsletter.

BASIC SIGNAL PROPAGATION PART 7

by

Thomas Atchison W5TV

Another method of determining solar activity is the measurement of **solar flux**. The formal definition of solar flux is that it is a measure of energy received per unit time, per unit area, per unit frequency interval. One solar flux unit equals 10^{-22} joules per second per square meter per hertz. Solar flux is measured daily at 2800 MHz (10.7 cm) at The Dominion Radio Astrophysical Observatory, Penticton, British Columbia. This daily value is sent to Boulder, Colorado, where it is incorporated into WWV propagation bulletins. Solar flux values are more reliable for determining *current* propagation conditions than sunspot numbers. These values are an excellent indicator of overall solar activity levels and correlates well with solar UV emissions.

Unfortunately, there is no precise mathematical relationship between sunspot numbers and solar flux values, but it is useful to have some way to convert from one to the other. Sunspot numbers are valuable as a long-term link with the past and solar flux values are useful for more immediate predictions.

One relationship that is used to convert a smoothed sunspot number to a solar flux value is

$$F = 63.75 + 0.728 S + 0.99989 S^2$$

where F is the solar flux number and S is the smoothed sunspot number. Conversions from smoothed sunspot number to solar flux are usually rounded to the nearest whole number since this is only an approximation. To make conversions from flux to sunspot number, the following approximation may be used

$$S = 33.52\sqrt{85.12 + F} - 408.99.$$

There are several software packages that can be used to make propagation predictions. Most of these require as input either a smoothed sunspot number or a smoothed solar flux number. Some software packages have a moderate cost but there is one that does a fair job and it is free. This is the Voice of America Coverage Analysis Program (VOACAP). Use the URL www.voacap.com to see more information on this package. There is an online version that can be used for point-to-point predictions and there is a lot of explanation at this web site on how to use the

software. You may also download a version of the software for use on Windows or Linux.

A good web site for more information on this topic is contained in WM7D's Solar Resource Page at <http://www.wm7d.net/hamradio/solar/index.shtml>

If you have an interest in pursuing propagation predictions I recommend that you start with the above mentioned site because there is a wealth of information there.

Here is a picture of the Timpson ISD flight package just prior to launch:

