

FEEDLINE

FEBRUARY 2011



The record crowd at the December 2010 Christmas Party
(there wasn't even standing room)

All had fun, good chats, good food, and great prizes

Thank you Donna KC0SKD

The **FEEDLINE** is the official journal of the *Forx Amateur Radio Club, Inc.*, PO Box 14773, Grand Forks, ND 58208-4773. The Forx ARC is incorporated in the State of North Dakota and is a non-profit organization as defined in section 501I(3) of the Internal Revenue Code.

Permission is hereby granted to copy any original article published in this newsletter, provided the source is credited.

Articles are solicited for publication. Content must be geared towards amateur radio or advancement of the communications art. Articles that will not be published are those of a personal nature or that constitute an attack against an individual. The editor reserves the right to revise all material for space consideration

MEETING MINUTES

January 25, 2011



The meeting was called to order by Jeff KD0BTT at 7:30 PM and turned over to Karen N0TKP at 7:35 PM. There were 14 members present

Secretary's Report - The minutes from November 2010 were distributed by John KA0SVY and were approved.

Treasurer's Report - From Truman KD0MTD was accepted.

ARES/EC - Gerry N0NGW said it would be a good idea to think about supporting Fargo for this year's flood.

Activity's Report - Donna KC0SKD said that the Christmas party was a success with 40 people attending. She would like to see things done differently next year. The matter will be discussed later. Also in the future will be a picnic and Field Day.

VE Report - John KA0SVY said that there will be testing at the Northside Cafe this Saturday at 9 am

Repeaters - Paul KA0CAF said there is nothing new to report.

Old Business

A. Hamfest review - Karen N0TKP said she would like someone to be

cochairman for the Hamfest. Donna KC0SKD volunteered.

B. Dog Races - The race has been canceled. The ice is not in good shape.

C. Dues Reminder - Dues for this year is due now.

D. Dec. Skywarn results - We had a good turnout and did well. We even got one 2M QSO.

E. Website - Donna KC0SKD said she has asked John WA0LPV for access to the website. She can now get in and make changes but thinks someone local should take charge of it. John WA0LPV is working on an upgrade to allow more access.

New Business

There was no New Business

The next club meeting will be February 22, 2011 at 7:30 PM

The meeting was adjourned at 7:50 PM

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ATTENTION

Please note that if there is a membership form attached to this newsletter, club records indicate your dues for 2011 are not paid.

**Have you paid
your dues for 2011?**

Article VI, Section 1 of the *BYLAWS* of the Forx Amateur Radio Club states:

“The club, by two-thirds vote of those voting members present at any regular meeting, may levy upon the general membership such dues as shall be deemed necessary for the business of the organization within its objects as set forth in the Articles. If dues are not received within 60 days, membership shall lapse.”

The Forx Amateur Radio Club has essentially only two sources for operating funds. The primary source is dues. The secondary source is the annual Hamfest. However, there is no guarantee that the Hamfest will produce additional funds for the club.

Dues that you pay provide a source of funding for club activities, which include Field Day, the annual Hamfest, postage for mailing the club newsletter, club liability insurance, etc. These funds also help in the maintenance and repair of the club’s repeaters.

February’s issue will be your last issue of the FEEDLINE if your dues remain unpaid on March 1, 2011.

DATES OF INTEREST

February 2011

- 14-18 School Club Roundup
- 19 ARRL DX Contest – CW
- 19 St Cloud, MN Hamfest
- 22 Club Meeting
- 26 Bismarck, ND Hamfest
- 26 North American QSO Party – Digital

March 2011

- 5 ARRL DX Contest – Phone
- 19-20 ND QSO Party
- 29 Club Meeting

April 2011

- 26 Club Meeting

May 2011

- 7 Zeroland QSO Party
- 31 Club Meeting

June 2011

- 25-26 Field Day
- 28 Club Meeting

July 2011

- 8-10 Peace Garden Hamfest
- 26 Club Meeting

**GRAND FORKS
MONDAY
NIGHT
NET
9:00 PM
146.940 (-)**

Special Notice:

Every three months of the year names of all those who have checked into the net each Monday night during that time are put in a lottery and one name is drawn to receive an ARRL Gift Certificate. The more Monday you check in the better your odds are to get selected.

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FOR SALE

**Cushcraft A3S –
TriBand Beam.**

3-element for 20, 15 & 10 meters
8 dB gain - 2000 watt capacity
Tuned to SSB band ranges
New: 2005.
Current New Price: \$ 599.
Selling Price: \$325. or offer

Contact: K0VDP John Jarman
701-746-9781 or 218-779-4520

John T. Jarman, LPCC
1015 Reeves Drive
Grand Forks, ND 58201

**Congratulations
To
Jerry KCØGWK
For recently making
WAS**

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**FORX AMATEUR
RADIO CLUB
MEETINGS**

**Last Tuesday
Every Month
7:30 PM**

**Basement of
Altru Hospital
Meeting Room E
(next to cafeteria)
Come early for
informal discussions
prior to the meeting**

**[Please Note:
Use of radios within
Altru Hospital
is prohibited]**

**VE Test Session Held
January 29, 2011**

The following passed their
General Exam:

Evan Trosvik KDØLWT
Donald Roberts KDØNMM

The following passed their
Technician Exam:

Eric Tweton KDØNML
Howard Gladwin KDØNMK

Congratulations to all!

**FRACTAL ANTENNAS:
HYPE OR HOPE?
By Dan Romanchik,
KB6NU**

QRZ.Com currently has a very interesting item on fractal antennas (<http://forums.qrz.com/showthread.php?t=277623>). While the idea of applying fractals to the design and construction of antennas has been around for quite some time, very few hams have actually built them, and there are currently no companies building commercial fractal antennas for the ham radio market. The question, of course, is why?

Those that are hyping fractal antennas—most notably W1YW, CEO of Fractal Antenna Systems—claim several advantages. These advantages purportedly include wider bandwidth and smaller size when compared to traditional antennas, such as verticals and dipoles. Those that are trying to debunk these claims contend that this is all just hogwash, and that there's no real scientific basis for these claims.

One thing that's confounding this debate is that there have been very few articles published on the topic. For commercial reasons, W1YW has made his articles unavailable. He says that he will be publishing something real soon now, but there is nothing definite at this point.

There is at least one article on the Internet that describes the construction of a fractal antenna for

amateur radio use. "FYI:FYQ: Another look at the Fractal Quad Yagi"

(<http://www.scribd.com/doc/18788401/FYIFQY>) was published in the October 1999 issue of 73 magazine. It describes the construction of a two-element, 10m antenna. Like most 73 articles, it's not incredibly technical, though, and doesn't really contribute to the technical debate, except to demonstrate that physically small antennas can be made using fractal design.

The PDF contains several photos of the antenna. It's a crazy contraption that looks relatively difficult to build. So difficult, in fact, that it makes me wonder if it's even worth it to try building one. After all, 10m antennas are not really all that big or all that difficult to build to begin with.

Even more interesting than the antennas are the personalities on both sides of the debate. The QRZ.Com discussion quickly devolved into a flame war, with neither side scoring a knockout.

Personally, I think the brouhaha is much ado about nothing. It seems to me that it's been demonstrated that you can build antennas using fractal design techniques. They are physically smaller than traditional antenna designs, but you really don't get something for nothing. Overall, they don't have as much gain as yagis or quads, and they're more complex to build.

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My opinion on this is that if W1YW can build antennas that radiate a signal and can sell those antennas to someone, then more power to him. In the end, his company will live and die by how well, his antennas work and how much they cost when compared to antennas from other companies.

As for me, I think I'll stick with the more traditional HF antennas. If I need to make my antennas smaller, I'll use loading coils or designs such as the Moxon. I may not be on the bleeding edge of technology, but I'll certainly avoid a lot of headache trying to figure out who's right.

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When not avoiding flame wars on QRZ.Com, Dan, KB6NU, operates CW on the HF bands, writes and publishes license exam study guides, and teaches ham radio classes. You can find his ham radio blog at www.kb6nu.com.

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Dan KB6NU reports that there is a new e-book versions of the No-Nonsense Technician Class License Study Guide

There is both an Amazon Kindle version (<http://www.amazon.com/No->

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Nonsense-Technician-Class-License-ebook/dp/B004G8QVD2/ref=tmm_kin_title_0?ie=UTF8&m=AG56T WVU5XWC2&qid=1295917361&sr=8-1) and a Barnes & Noble Nook version (<http://productsearch.barnesandnoble.com/search/results.aspx?WRD=kb6nu&page=index&prod=univ&choice=allproducts&query=kb6nu&flag=False&r=1&ugrp=1>). Both cost \$9.99. Of course, the PDF version is still free on my website at www.kb6nu.com.

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January 2011 ND Section News

Welcome to the North Dakota ARRL Section News for January 2011.

North Dakota winter is in full swing with snowy roads and lots of wind. Now is the time to clean up the shack or plan out your next antenna project for spring. The North Dakota Legislature is in session and sounds like the oil money will be a big issue for 2011. Maybe a good idea to start explaining to the spouse about the big tax refund you will get this year and that you need a new ham rig!

****NORTH DAKOTA NEWS****
No real national issues for the month of January. KE0VF changed his call to K0VF, W0HS

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left for Arizona and now reports he is staying for the Yuma Arizona Hamfest in February, KOUB is on Skype, CQ100 at 11:00 AM and on the 80 Meter nets remotely.

**** Upcoming Events ****

- February 26, 2011 is the CDARC Hamfest in Bismarck at St. Mary's Grade School. There will be an ARRL Forum at 11:00 AM & the ND Traffic net meeting at Noon.

- March 19-20, 2011 is the ND QSO Party Contest. Contest rules to be released the 1st week of February 2011. They have changed a little. Go to www.w0nd.com for updates.

- May 7, 2011 is the "ZQP" Zeroland QSO Party Contest. The object is to contact as many stations as possible with a focus on contacting stations in Zeroland (Colorado, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota). Contest Period: 16:00 UTC Saturday to 04:00 UTC Sunday. www.zerolandqsoparty.com

- June 25, 2011 is ARRL Field Day

- July 8-10, 2011 is the Peace Garden Hamfest

**** December Net Report ****

The ND WX Road Net on 75 Meters- 3.935 MHz, 8:30 AM & 12:30 PM CST, Monday thru Saturday reported 50 Sessions, 1099 Check-ins & 5 Messages passed, and the DataNet on 75 Meters- 3.937 MHz, 5:00 PM CST, daily reported 30 Sessions, 525 Check-ins & 7 Messages passed. The Goose River Sunday Morning

Net on 160 Meters reported 4 Sessions, 63 Check-ins & 1 message passed. Thanks to net control ops - W0TF, W0ND, KR0W, W0HS, W0FC, K0HDA, ND0B, ND0CW, KD0YX, W0OSP, K0TLW, AI0Q, and K0MAD.

Information about the Flower Fund for N7TGC's funeral - received \$160, spent \$90 for funeral, balance going to ARRL Spectrum Defense Fund on behalf of N7TGC. Thanks to the list of donors: Williston Basin Amateur Radio Club, ND Weather & Road Net Gang, Dakota Amateur Traffic Association, WA0CSL, ND0CW, KA0ETO, K0GGH, WD0GMD, K0GRM, K0HDA, W0HS, KF0IL, KB0INN, N0JDP, K0JIM, W0ND, W0OSP (USMC), KB7QWG, WA5TLP, K0UJ, K0VF, KR0W, KD0YX, and K0RST. The names as well as calls were on the flower card. Thanks everyone - Dave ND0CW

MAKE SURE YOU CHECK THE NORTH DAKOTA SECTION NEWS FOR THE LATEST NORTH DAKOTA ACTIVITIES AT www.arrl.org. If you have any special announcements, feel free to email me w0nd@arrl.org. Check www.w0nd.com for the latest list of ND stations and activities. Until next month... 73's Lynn - W0ND

ARRL North Dakota Section
Section Manager: Mr. Lynn A
Nelson, W0ND
w0nd@arrl.org

**QST de W1AW
Space Bulletin 001 ARLS001
From ARRL Headquarters
Newington, CT January 20, 2011
To all radio amateurs**

**ARLS001 NASA Seeks Amateur
Radio Operators' Aid to Listen
for Nanosatellite's Beacon Signal**

On Wednesday, January 19 at 1630 UTC, engineers at Marshall Space Flight Center in Huntsville, Alabama confirmed that the NanoSail-D nanosatellite ejected from Fast Affordable Scientific and Technology Satellite (FASTSAT). According to NASA, the ejection event occurred spontaneously and when engineers at Marshall identified and analyzed onboard FASTSAT telemetry; the ejection of NanoSail-D also has been confirmed by ground-based satellite tracking assets.

NASA is asking radio amateurs to listen on 437.270 MHz for the signal and verify NanoSail-D is operating. Hams should send information to the NanoSail-D dashboard via the web at, <http://nanosaild.engr.scu.edu/dashboard.htm>.

NASA said that the NanoSail-D science team is hopeful the nanosatellite is healthy and can complete its solar sail mission. "This is great news for our team," said Dean Alhorn, NanoSail-D principal investigator and aerospace engineer at the Marshall Center. "We're anxious to hear the beacon which tells us that

NanoSail-D is healthy and operating as planned. The science team is hopeful to see that NanoSail-D is operational and will be able to unfurl its solar sail." As of Thursday, January 20, the NanoSail-D dashboard is reporting that beacon data has been received, but NASA still wants amateurs to track and report the signals.

On December 6, 2010, NASA triggered the planned ejection of NanoSail-D from FASTSAT. At that time, the team confirmed that the door successfully opened and data indicated a successful ejection. Upon further analysis, however, the team found no evidence of NanoSail-D in low-Earth orbit (LEO), leading them to believe NanoSail-D remained inside FASTSAT. The FASTSAT mission has continued to operate as planned with the five other scientific experiments operating nominally.

"We knew that the door opened and it was possible that NanoSail-D could eject on its own," said FASTSAT Project Manager Mark Boudreaux. What a pleasant surprise we had Wednesday morning when our flight operations team confirmed that NanoSail-D is now a free flyer."

If the deployment is successful, NASA said that NanoSail-D will stay in LEO between 70 and 120 days, depending on atmospheric conditions. NanoSail-D is designed

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to demonstrate deployment of a compact solar sail boom system that could lead to further development of this alternative solar sail propulsion technology and FASTSAT's ability to eject a nanosatellite from a micro-satellite -- while avoiding re-contact with the FASTSAT satellite bus.

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WEBINARS

Dakota Division, The Atlantic Division is sponsoring two webinars coming up in the last week of February. Atlantic Division Director Bill Edgar is making these available to Dakota Division members without charge.

The first is a seminar on radio clubs obtaining 501 c(3) status. This is hot topic for many clubs lately, and the presenters have a lot of experience in this area. I expect this will be a popular subject.

The second webinar covers some aspects of message handling within today's emergency management systems. This is of interest to all ARES members, especially those involved with digital messaging.

I've attended a number of webinars offered in this system, and I can vouch for it that they work smoothly. The audio is supplemented with still images that illustrate key points. I encourage

everyone interested to attend, and I am interested to hear reactions from Dakota Division following the webinar(s).

Registration goes very smoothly and quickly. Please let me know if you have problems or comments.

73,
Greg, KØGW
Director, Dakota Division

Announcement from the Atlantic Division--

We are very excited to announce the two webinars listed below. These webinars are open for any interested ARRL member to watch and listen to. All you need is a computer connected to the internet with computer speakers. You can watch the presentation on your computer monitor and listen to it through your computer speakers.

501-c-3 Webinar
Thursday, February 24, 2011 –
9:00pm through 10:30pm (EST)

Saturday, February 26, 2011 –
10:00am through 12:00pm (EST)

This NBEMS webinar will cover advanced features such as the use of NBEMS FLWRAP and FLMSG for the use of sending and receiving spread sheet/database data and form-based messages such as the ICS-213 and NTS/Radiogram

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forms. We will also be covering HF digital net procedures and protocols and hope to incorporate a live HF demonstration that will be viewable by all those attending the webinar.

Our speakers for this session will be Harry Bloomberg W3YJ – Western Pennsylvania Assistant Section Emergency Coordinator and Dave Kleber KB3FXI. Harry and Dave are the developers of this program

To register for this webinar, please go to the link below and complete the registration page at least one hour prior to the webinar start time.

<https://www1.gotomeeting.com/register/497568192>

ARRL Dakota Division
Director: Gregory P Widin, K0GW
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www.wa0jxt.org



The following trivia question is taken from *The ARRL Handbook 2006*. The answer will be published in the next issue of the *FEEDLINE*.

What is CDMA?

December's trivia question was:

WHAT IS PSK?

And the answer is:

Phase Shift Keying

This may be found on page 9.3 of *The ARRL Handbook 2006*