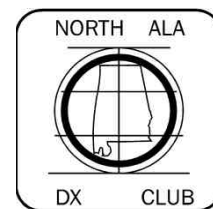


The LongPath



A North Alabama DX Club Publication

From the President's Desk



A Year of Change.....

2001 is finally over. The first year of the 21st century that I had been looking forward to for years

turned out to be nothing like I expected.

In 1968, we were all awed by the movie 2001: A Space Odyssey. I had hoped that by 2001 we would have really been closer to what the movie, 2001, had predicted.

Sadly, 2001 didn't turn out that way.

The events of September 11th changed the way we look at life, how we live it and what our future will be. We are a great people, and hams are the best when it comes to 'doing whatever it takes' in times like there.

Personal change happens too. I found out right before Christmas that I have Diabetes. Once again, for the second time in one year, my life changed, and I have to do whatever it takes to stay alive.

Our club has changed too. We're down to 49 members, and we need to do 'whatever it takes' to bring that

back up. The experience of the membership of the club can attract those who have been bitten by the DX bug. We need to pass our knowledge on to the newer ham, which just discovered the MAGIC of DX.

No, we don't have 'one ringers' anymore, we don't have spots being called out on the repeater (or simplex), we do have the packet cluster, but while it's a great tool, it doesn't pass along the passion of hearing on the repeater "The P5 is on 10 meters!!!".

So let's bring back some of the old fun. Let's use the repeater to help spot DX. If someone new comes on to the repeater, welcome them, don't let them be greeted by silence. Remember, the Techs have been working DX on the 'magic band' and we don't have much longer before the sunspot cycle starts to go into its low cycle again.

(continued on page 2)

January 8th Program

"Frequency Synthesis and the Radio Amateur"
by John Stensby, N5DF

7PM At Ryan's Steak House
1808 University Drive
Huntsville, AL

Volume 26, Issue 1
The LongPath

January, 2002

The Challenge of the Hunt

- *DX is working them all*
- *DX is All Modes*
- *DX is All Bands*
- *DX is All Power Levels*
- *DX is From Any Location*
- *DX is With Any Equipment*
- *DX is State-of-the Art*
- *DX is Classic Communications*
- *DX is for All to Enjoy!*

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**Happy New Year
from
the NADXC!**

Why Join the NADXC & How to Do It

New Hams, Hams-to-be and old salts alike should consider joining the NADXC, because there is no better way to have:

- 1) Great Fellowship—on a Global basis!
- 2) Fun, Fun, Fun and Surprises at the Monthly Meetings!
- 3) Special Monthly NADXC Challenges and Contests.
- 4) Access to State-of-the-Art Communications Equipment
- 5) Education and Skill Building Activities
- 6) Homebrew Activity Support from Experienced Experts.
- 7) Up-to-the-Minute Access to Pertinent Information.
- 8) Special Community Activities, Ham fest, Field Day, etc.
- 9) Helps you be an Ambassador to the World.
- 10) Helps you enjoy and share all aspects of the “King of Hobbies”-- a Hobby for a Life Time.

The NADXC 2001 Programs Calendar forecasts meeting activity plans for the year. But . . .we are flexible and open to any

additional ideas or program opportunities that you might have.

Please let your Program Chairman know. (He is very grateful for your help and guarantees that you'll have fun along the way.)

The calendar 2001 slate of club officers, directors and chairpersons are working hard to create a best-in-



class club environment for all of the NADXC membership. **Please get your dues in to us** soon as dues are now due for this year.

How to Join: *Come to a club meeting; or send in application by mail (form on www.NADXC.org); or call Bill Hull at (256)539-3444*

From the President's Desk cont'd...

The club needs YOU to help build it up again. No one can do this alone; it has to be a team effort.

Come to the meeting on January 8, 2002 at the Ryan's on University Drive. We have a nice dinner there starting around 6:15 and the meeting starts at 7PM. This months program is by John Stensby, N5DF on Frequency Synthesis and the Radio Amateur. You'll find an abstract on the program and John's bio inside this issue of the LongPath.

Let's make 2002 the year the NADXC made a spectacular return to the 'best of the best.'

Rick – W4PC

The NADXC Repeater is back on the air and is up on Monte Sano. The frequency is 147.30MHz with a plus offset and a 103.5Hz pl tone. Let's start using our repeater for DX spotting!

NADXC Treasurer's Report

For the treasurers report, pending getting December's bank statement we have an outstanding bank balance of \$1413.69.

This amount includes membership dues for 7 persons. There needs to be a reminder to all that the 2002 dues are now due.

Bill Hull, **W4GBF** Sec/ Treasurer

Please check the NADXC web page for the latest roster information. If you are not listed and have paid up recently or if your information needs to be corrected please send an email to:
Bill Hull at: w4gbf@arrl.net
and also to Jared Cassidy at:
kq4vt@arrl.net

Frequency Synthesis and the Radio Amateur

Modern frequency synthesis techniques have had a revolutionary influence on amateur radio communication gear. On communication transceiver design, phase-lock loop (PLL) and direct-digital synthesis (DSS) techniques have had an impact surpassed only by the introduction and use of solid state technology. In non-mathematical, intuitive terms, basic ideas will be presented that explain this amazing frequency-control technology. First, PLL synthe-

sizer techniques will be discussed along with their advantages and limitations. Next, commonly used DDS techniques will be presented. Finally, it will be argued that the "marriage" of PLL and DDS techniques overcomes some key limitations of both technologies.

John Stensby, **N5DF**

John Stensby, N5DF

An avid ham for some 37 years (and a NADXC member for 17 years), John Stensby is an active DXer on most of the HF bands. When not chasing the latest DX-pedition, he enjoys an occasional ragchew. With few exceptions, his HF operations are all CW.

On par with his passion for operating, Stensby is an enthusiastic radio/electronics technologist. He is adept with both a soldering iron (used to build/repair equipment) and a computer (used to model/simulate his circuits). He maintains and repairs his own equipment, mostly vintage Kenwood gear.

For almost 18 years now, Stensby has been on the electrical engineering faculty at the University of Alabama in Huntsville (currently, he holds the rank of Professor). Before coming to UAH, he served on the faculties of the University of Kansas and Texas A&M University (where he earned his Ph. D). While his academic interests are broad, he focuses on the study of communication theory and systems. Over the years, he has published numerous articles in academic journals, and he is the author of *Phase-Locked Loops: Theory and Applications*, CRC Press, Boca Raton, FL, 1997.

ARLB052 Comments due February 12 in "Band Threat" proceeding

Comments are due February 12, 2002, in the FCC Notice of Proposed Rule Making and Order in ET Docket 01-278. Reply comments are due on March 12, 2002. The proceeding deals in part with a potential band threat to the popular 70-cm band from Part 15 RF identification devices proposed for deployment between 425 and 435 MHz.

SAVI Technology, which markets radiolocation and wireless inventory control products, told the FCC it needs the rules changes to satisfy customer demand for increased RFID system capabilities. The FCC has proposed to allow operation of RFIDs as unlicensed Part 15 devices in the 425-435 MHz band with transmissions of up to two minutes at field strengths now only permitted for extremely short-duration, intermittent control signals.

The ARRL has argued that under the Communications Act of 1934 the FCC lacks authority to permit unlicensed devices with substantial interference potential and that such devices must be licensed. The ARRL also is looking into the interference potential posed to 20 meters by a proposal

to increase the maximum emission levels permitted by Part 15 devices operating at 13.56 MHz, as well as the maximum level of out-of-band emissions.

Commenters are advised to read paragraphs 20-27 of the NPRM&O, which is available on the ARRL Web site, <http://www.arrl.org/news/stories/2001/10/19/1/290a11.html>.

Interested parties may file comments using the FCC's Electronic Comment Filing System, <http://www.fcc.gov/e-file/ecfs.html> (search using "01-278"). Commenters should include full name, US Postal Service mailing address, and applicable docket or rule making number--in this case ET 01-278.

It's also possible to e-mail comments via the ECFS. To obtain e-mail filing instructions, commenters should send an e-mail to ecfs@fcc.gov and include the words "get form your e-mail address" in the body of the message. A sample form and directions will be sent by reply e-mail.

Don't Forget Club Dues are Due!!!!

- \$15.00 for individual membership
- \$20.00 for family membership

Send Checks to:
NADXC Secretary/Treasurer
Bill Hull, W4GBF
405 Gwendolyn Ave.
Huntsville, AL 35811-1344

ARLD055 DX news

This week's bulletin was made possible with information provided by Tedd, KB8NW, the OPDX Bulletin, WA7BNM, The Daily DX, DXNL and 425DXnews. Thanks to all.

MALDIVES, 8Q. Ian, G3TMA will be QRV as 8Q7IJ while here on a holiday operation from December 31 to January 7. His activity will mostly be CW. QSL to home call.

PORTUGAL, CT. CS5E is QRV until December 28 on 40, 20, 15 and 10 meters using SSB from Ouat Lighthouse during the Lighthouse Christmas Lights 2001 event. QSL via operator's instructions.

GERMANY, DA. DH3ZK is QRV from Peol Island, IOTA EU-098, until January 15 using SSB and PSK31. QSL via bureau.

SOUTH SHETLAND ISLANDS. Mirosław expects to be active as HF0POL from the Polish Base Hanryk Arctowsky on King George Island, IOTA AN-010, from January 1 to December 31, 2002. He plans to be active using CW, RTTY and PSK31 on all HF bands, including the newer ones. QSL via SQ5TA.

SOUTH KOREA, HL. Special Event call D902WSF, which celebrates the 2002 World Cup Sunrising Festival, will be active from Pohang from December 31 to January 4. Activity will be on 80 to 10 meters using CW and SSB. QSL via DS5UCP.

THAILAND, HS. Dave, W3VK has been assigned



to the US embassy in Thailand and is now using the callsign HS0ZDP. QSL to home call.

MARIANA ISLANDS, KH0. Nozomu, JE8KKX will be active as AH2K/KH0 from Saipan, IOTA OC-086, from January 3 to 5. Activity will be on 40 to 6 meters using CW and SSB. If time permits, he may also be active on 160 and 80 meters, and the newer bands. QSL to home call.

ARUBA, P4. Martin, VE3MR is QRV as P43MR until April 2002. QSL to home call.

EGYPT, SU. Luciano, EA7CHR is living in Egypt and has the callsign SU9LL. He is active on 20, 17, 15, 12 and 10 meters using SSB. QSL to home call.

NAMIBIA, V5. Rudi, ZS6DX is active as V51VE from Windhoek. QSL to home call.

AUSTRALIA, VK. Steve, VK6VZ, will be QRV as VK6VZ/6 from a lighthouse located at Cape Leeuwin. This includes an entry in the Stew Perry Topband Contest. QSL to home call.

NORFOLK ISLAND, VK9N. Bernd, DL1VJ is active as VK9AA/9 using mostly CW on the newer bands. QSL via DL8YR.

MEXICO, XE. Members from the Radio Club Cancun will be active as XF3IC from Holbox Island, IOTA NA-045, from December 28 to 30. Activity will be on 160 to 10 meters using CW, SSB and RTTY. QSL via XE3OYJ.

Other DX Rumors and News

The following is courtesy of the OPDX Bulletin and KB8NW/OPDX/BARF80:

3W, VIETNAM. 3W2EA and 3W2FM were active over the past weekend on 15 and 20 meters. On SSB, 3W2EA was heard on 14212 kHz between 1530 and 1700z. On CW, 3W2FM was heard on 21010 kHz after 0000z.

5N, NIGERIA. Frank, 5N1BHF, has been active on 12 meters (around 24940 kHz) as early as 1000z and sometimes as late as 1615z. When not on 12 meters he can also be found on 20 meters (14195 kHz) after 0500z. QSL via OE6LAG. 5N0NHD has also been active on 12 meters (24899 kHz) after 0700. QSL via JH8BKL.

5R, MADAGASCAR. Solofo/5R8ET and Albert/5R8GZ have both been active on 12 meters. Look for Solofo on 24947 kHz SSB after 1600z. QSL via K1WY. Watch for Albert on 24902 kHz CW or on 24966 kHz SSB between 1215 and 1530z. QSL via G3SWH.

A6, UNITED ARAB EMIRATES. Huraiz, A61AU, has been very active on 20 meters SSB (above 14200 kHz) usually after 0400z. He was also heard this past weekend with a huge pile-up on 28500 kHz after 1300z. QSL via direct to: Huraiz Al Maktoum, P.O. Box 270, Dubai, United Arab Emirates.

FR5, REUNION ISLAND. Roland, FR5AB, has been active this past week on 10 meters PSK31 and SSTV. For PSK31, watch 28120 kHz after 1030z. For SSTV, watch around 28677 kHz after 1100z. He is also active on RTTY on 20 meters after 0230z. Joseph, FR5HA, has also been active on PSK31, but on 20 meters (14071 kHz) after 1630z and again after 0245z.

HL17, SOUTH KOREA. Lee, DS1BHE, informs OPDX that the Korean Amateur Radio League (KARL) will operate a special event station with the callsign HL17FWC which celebrates the 17th FIFA World Cup Korea/Japan, and will be active from January 1st through May 30th (Just before games start). Also, KARL will operate DT#FWC (# -- 0 through 9), which celebrates the ten hosting cities in Korea and will be active from May 31st through June 30th (until the final match). QSL Manager is HL0HQ: KOREAN AMATEUR RADIO LEAGUE, CPO Box 162, Seoul, KOREA. ADDED NOTE: All the Korean Hams will change their callsign during the game period (May 31st-June 30th) as the following:

HL1ABC ---> HL17ABC
 DS1ABC ---> DS17ABC/1 (Because they have five DS#ABC)
 6K2ABC ---> 6K17ABC/2
 DS0AB, 6K0AB, 6L0AB, 6M0AB, D70AB, D80AB ..

Club station will change their 0 (zeros) to 17 (but no need to use " / "). The KARL is planning to make a special AWARD for this event. Details will be forthcoming.

JD/O, OGASAWARA. A station signing JE1PIO/JD1 was heard this past weekend on 40 meters CW (7010 kHz) around 1120z. There are no other details to report. If someone else has more details on this operator please send it to OPDX and we will publish it.

KH2, GUAM. Tetus/JF2UED and Mack/JJ2QXI will be active from here between January 3rd and 5th. They are planning to operate on 160-6 meters, including the WARC bands, on SSB/CW/RTTY. Mack informs OPDX that he knows KH2 is not so rare of an entity, but they would like to take as much time as possible to be on the air based on QSO requests. For any SKED or comments, please write to Mack via E-mail at: mori@shotoku.ac.jp QSLs should go to their home callsigns.

P5, NORTH KOREA (Great News). Toma, YU1AB, informs OPDX that Hrane/YT1AD and Voja/YU7AV have returned from P5-land (December 26th). He also reports that they have received a license to operate from P5, together with two other operators starting March 5th, 2002. In return, Hrane and Voja will instruct future Korean ham radio operators (a minimum of 20 novice operators). Their callsigns are not known. More details are forthcoming.

PJ2, CURACAO. Look for Martin, NW0L, to be active from January 2-9th. He plans to operate in the ARRL RTTY Roundup (January 5-6th), as a Single Op, High Power, category, as PJ2T. He will be active before and after the contest using the callsign PJ2/NW0L. QSL PJ2/NW0L via NW0L. QSL PJ2T via KN7Y.

VK9M, MELLISH REEF (Update). Adam, VK4CP (VK9ML Pilot/Webmaster), reports that the VK9ML team is interested in comments regarding whether they should run either PSK-31, RTTY, or neither during their DXpedition to Mellish Reef in April 2002. RTTY and PSK-31 both have pros and cons, and they are simply asking which mode you would prefer them to operate on. If neither is desirable, then, of course, they can spend more time concentrating on CW and SSB operation. Let them know your thoughts in the Poll they are conducting. Visit their Web site and let them know at:
<http://www.qsl.net/vk9ml/2002/>

XU, CAMBODIA. Claude, XU7ABN, was a catch on RTTY this past week. He was active on 15 meters around 0830z and 20 meters around 1945z.

ARLB056 FCC Denial Leaves League Eyeing Congressional Action on CC&Rs

The FCC has affirmed a November 2000 staff-level decision that declined to include privately imposed deed covenants, conditions and restrictions--CC&Rs--under the limited federal preemption known as PRB-1. That policy requires municipalities to "reasonably accommodate" amateur communication in antenna-related zoning and regulation.

The ARRL last year appealed to have the full FCC review the earlier denial. The Commission turned down the League's Application for Review December 18 in a Memorandum Opinion and Order released December 26.

"There has not been a sufficient showing that CC&Rs prevent Amateur Radio operators from pursuing the basis and purpose of the Amateur Service," the FCC said. The Commission said hams still can get on the air without installing residential antenna systems by operating away from home, while mobile or at club stations.

The FCC said it recognizes the importance of preserving the integrity of contractual relations that CC&Rs represent. But it asserted that the ARRL had "submitted no specific evidence that would persuade us to abandon our long-standing policy of excluding CC&Rs in private covenants from our ruling in PRB-1."

ARRL President Jim Haynie, W5JBP, expressed disappointment in the Commission's ruling. "The biggest problem Amateur Radio operators face today is being able to put up an antenna," Haynie said. "Our only approach now is to get a bill into Congress."

The FCC itself even hinted that Congressional action ought to be a next logical step. "However, should Congress see fit to enact a statutory directive mandating the expansion of our reasonable accommodation policy," the FCC declared in its MO&O, "the Commission would expeditiously act to fulfill its obligation thereunder."

In its Application for Review last year, the ARRL maintained that the FCC should have the same interest in the effective performance of an Amateur Radio station and in the promotion of amateur communications regardless of whether the licensee's property is publicly regulated or privately governed by homeowners' associations and their architectural control committees.

A copy of the FCC's Memorandum Opinion and Order in RM-8763 is available on the FCC Web site, http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-01-372A1.doc.

VK9M Mellish Reef DXpedition April 12-22, 2002

Team Mellish returns to the reef in 2002 for an extended stay with antennas for all HF bands (inc WARC) and a nucleus of dedicated cw operators intending to reduce VK9M's position on the "Most Wanted" lists.

The following is a brief on what we are doing, and the logic behind it.

Modes - generally more CW than Phone. Less than 15% of QSOs last trip were CW, so we can appreciate there is still a high demand for CW.

160M & 80M - We will be providing a serious low-band effort, as we did not have any low-band ops last trip. Research has indicated that very little EU has been worked from Mellish Reef on 160M, something we will try hard at.

WARC - We didn't work any WARC bands on the last trip. WARC was worked on the 1993 VK9MM DXpedition but relatively few QSOs were made, so we would like to give everyone an opportunity to work us on WARC bands.

6M & 10M - to take advantage of the decaying, but still good, solar conditions. Our 6M operator is a keen and experienced 6M DXer so this quirky band will receive the attention it deserves. He will make use of his time operating on 10M when there is no 6M propagation, although the 6M frequency will be monitored continuously.

Frequency Selection - We will take into account license types that may not have full access to band allocations, for example; JA Novices, U.S. General class, and other Worldwide Novice licences. Many DXpeditions overlook this aspect.

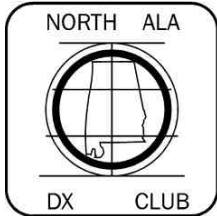
Quality Contacts - to persevere under trying conditions to make that QSO.

We will not be operating on the following:

Satellites - a lot of effort & equipment for such a small interest group, and we have to make the maximum use of the transport capacity we have, (sorry!)

A North Alabama DX Club Publication

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We're on the
Web:
www.nadxc.org

Editor's Soapbox

Happy New Year! I hope Santa was good to everybody.

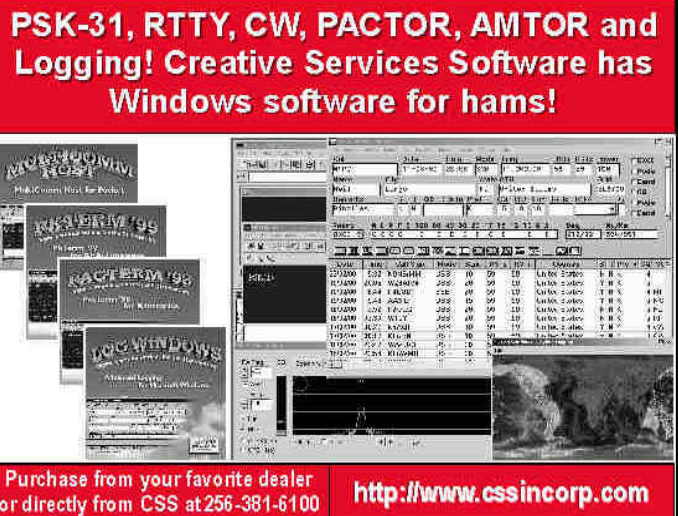
For those of you who couldn't make the Christmas party you missed a good one. Access to Redstone was easier than I thought, well at least for me; the people in front of me had to get out open their hood and trunk. We had a pretty good showing of folks, maybe around 20 or so. Also, among those who made it out was Bart Fay, W4NS, which was a pleasant surprise for everyone. We owe thanks to John, K4XH and Nancy, K4JD Morris for making the arrangements again this year.

I was saddened to read Rick's article. It is awful that bad things must befall upon good people. As always the NADXC will be there when one of our own suffers a setback. Let's do what we can to help Rick as he faces this new challenge in his life.

Well, that's about it from my end. Don't forget that club dues are due, so please get them to Bill, W4GBF as soon as you can.

Jared Cassidy, **KQ4VT**

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