



# The LongPath

A North Alabama DX Club Publication

## Special points of interest:

- From the Road
- Program Announcement
- Short Skip
- Fill the Voids
- DX Contests
- New Rigs

## How to Join

- \* Come to a club meeting;
- \* or send in an application by mail (form on [www.NADXC.org](http://www.NADXC.org))
- \* or call Jason Amos at (256)963-6833

## Message from the Road

By Tom Duncan, KG4CUY

The 2007 Alabama QSO Party is over. Not all of us are domestic contesters, but those who did participate certainly experienced an on-the-air get-together of a bunch of familiar calls. It was my first attempt at CQing in a contest. I'm seeking credit for a few missed heartbeats hearing the din of the hoard which descended after being spotted. DXpeditioners must develop an immunity to this!

On a personal note, KG4CUY will have to share the shack with XYL Janet, who from the June CAVEC testing session at the Red Cross brought home a CSCE for a technician license. While I am very pleased with my Icom 746, I understand there is the possibility for a major rig upgrade in such situations. I'll need to consult with N4HIX and KR4F about the details.

Field Day is barely around the corner. Per this month's Short Skip, Karnak believe this to be the last field day before the great upturn in high band conditions. Those seeking a second opinion, and particulars on just how high this upturn might be, would do well to check the hamfest forum list on [www.hamfest.org](http://www.hamfest.org) as we approach the ARRL National Convention. Should your interests include other areas of ham radio theory or

practice, the forum schedule will surely accommodate you.

Before I forget entirely about field day, those of you not already committed are welcome to the HARC field day at the U.S. Space and Rocket Center Marriott location we had last year. Contact Leigh Bartlow, WD4CPF ([lbartlow@hiwaay.net](mailto:lbartlow@hiwaay.net)) for further information. Leigh can let you know which station managers have a few hours available to the highest bidder on the operating schedule.

Would you like to share your DXing knowledge with new hams, and newcomers to DXing? The recent HARC general classes were successful in bring out non-HARC/non-NADXC members, introducing them to the local ham community, and giving them a license upgrade in the bargain. Might we offer sessions covering DXing tips of all sorts in a similar manner? Your opinions on this are welcome.

I'm writing this while on a business trip. Sunday is alleged to be a holiday from the festivities, and as I am in the very dropping-off place for the Mayflower (Plymouth Rock is about a half mile down the street), it is fitting for me to make a pilgrimage of my own. WCC, one of the two Marconi stations built in North America in 1901 was about 60 miles away, in Wellfleet, and only 15 miles in the other direction lies Brant Rock, from

## DX Quiz

Program by You!

Somehow the DX Quiz was not one of the program categories from which to choose on the recent membership questionnaire. Nonetheless, since last November's DX Quiz was given limited time in deference to Tim Pearson's excellent J3A DXpedition program, we've decided to devote an entire program to it this month. Bring your questions—and answers.



**The LongPath Staff**

**Interim Publisher/Editor:**

Tom Duncan, KG4CUY

**Departments:**

Tom Homsley, N4WBS, Short Skip

Chuck Lewis, N4NM, DX Contests

**Key Contributors:**

Tom Homsley, N4WBS

**Photographer/Consultant:**

Jared Cassidy, KQ4VT

**Table of Contents**

From the Road	1
June Program	1
May Meeting Minutes	2
Short Skip	3
Help Fill the Voids	3
DX Contests	4
Miscellanea	4
New Rigs	5

Call to order at 1900 local.

DX Discussed, BS7H and lots of 6m activity

No Treasurer's report given. Previous month's minutes approved as recorded in the LongPath.

Discussion of the Alabama Section Outstanding Youth Ham of the year Award

Field Day is coming up so please volunteer to help, wherever your Field Day may be.

New Business:

DX Banquet will be same place, time and cost this year. Bob Allphin, K4UEE will be the speaker.

Work W1AW/4 at the hamfest if you like, contact Tom Duncan.

Meeting Adjourned at 19:21 local.

Respectfully submitted,

Jason Amos, KD4BJW

**From the Road**

(cont'd from page 1)

which voice-modulated radio signals were first sent by Fessenden barely 100 years ago. I will do my best not to get lost finding these places, and report what I see.

Time to head off to work. These directions say "head south and turn in to the first nuke plant on your left". If I don't get lost, I hope to see you at the July meeting. Until then, thanks to N4KG for holding down the fort at the June meeting.

73 from Plymouth, MA

Tom Duncan, KG4CUY

**NADXC Officers**

President: **Tom Duncan**, KG4CUY

duncant1@ds-s.com or 256-539-7544

Vice President: **Tom Russell**, N4KG

n4kg@aol.com or 256-231-1402

Secretary/Treasurer: **Jason Amos**, KD4BJW

kd4bjw@arrl.net or 256-963-6833

Director: **Mike Maples**, K4ADK

mmaples9@comcast.net or 256-534-6563

Director: **Vic Holland**, K4RVH

k4rvh@arrl.net or 256-721-9106

**LongPath Ads**

like these may be placed by one and all. If you have stuff to sell or trade, or want to buy something, list it in the LongPath. Satisfaction is guaranteed, or your money back. Contact Tom at

duncant1@ds-s.com or 705-2147 (w)



### ARRL Front Page

Steve Wheatley, KU9C is the QSL manager for BS7H. He says if you're not in the online log to send a QSL with every QSO you believe you had, and he'll do the rest. (excerpted from the Daily DX).

### Solar Cycle 24 Prediction

Karnak (N4WBS) predicts the current solar cycle will bottom in July 2007.

### Field Day

Field Day is always the fourth full weekend of June, beginning at 1:00 PM Saturday and ending at 1:00 PM Sunday for stations setting up on Friday. Field Day 2007 will be held June 23-24, 2007. The HARC club station K4BFT will set up at the Space and Rocket Center beginning Friday at 1:00 PM.

### June Contests

Information concerning coming events is provided in the June issue of QST and on the ARRL web site at <http://www.arrl.org/contests/months/jun.html>

### DXCC blog

The latest info on approved operations for DXCC credit and other juicy tidbits can be found at <http://www.arrl.org/blog/DXCC%20Dialog>

### Dayton Awards

At the awards dinner at Dayton, ARRL former President Jim Haynie, W5JBP, was honored as Ham of the Year, and ARRL Lab Manager Ed Hare, W1RFI, received the Special Achievement Award. The Technical Excellence Award went to David Cameron, VE7LTD. This award goes each year to a person who

has made an outstanding technical advancement in the field of Amateur Radio. Cameron was instrumental in development of the software, hardware, and technology to permit worldwide radio and repeaters linking via the Internet Radio Linking Project. (ARRL web site).

### Dayton tour

If you didn't make it to Dayton, the ARRL has a tour on the web at <http://www.arrl.org/blog/Dayton%20and%20ARRL%20Expo>

So long 'til next time . . .

## *73 es gud dx . . . de N4WBS*



That's right—this half-page was empty until the staff decided to do something with it. Otherwise, it would be conspicuously vacant, like the bottom of page 5.

Indeed, many NADXCers have done something about this. Look at the Long-Path Staff column on page 2 of each issue for the past several years. Has your name appeared there? If you have something of interest to fellow club members, it should.

Another void is I fear in the offing: the nominating committee. In August, a nominating committee is appointed to formulate a slate of officers and directors for the coming year. To be appointed to the nominating committee is almost a kiss of death, because of yet another void: the dearth of candidates.

Please consider offering your services. The pay's not too good, but look at the opportunity for advancement.

Finally, the program void. No doubt the office of vice president is shunned like a visit from the IRS because it is that officer's task to round up programs. The membership survey said 57% of us would be willing to do a program. It's time for 100% of that 57% to step forward.

Help stamp out voids. We will all benefit.



## DX Contests

By Chuck Lewis, N4NM

### ANARTS WW RTTY/Digital Contest, (RTTY), 80-10 meters

Jun 9, 0000Z to Jun 10, 2400Z

Exchange: RST, CQ Zone and time (UTC)

See page 95, June QST

### All Asian DX Contest (CW), 160-10M

June 16, 0000Z to June 17, 2400Z

Exchange: RST plus age; YLs send 00

### IARU HF World Championships (SSB/CW), 160-10M

July 14, 1200Z to July 15, 1200Z

Exchange: RS(T) plus ITU zone; IARU HQ stns send HQ abbrev.

See <http://www.arrl.org/contests/rules/2007/iaru.html>

### OTHERS:

### WW South America Contest, (CW),

1500Z June 9 - 1500Z June 10

### Asia-Pacific Sprint (SSB)

1100Z - 1300Z June 9

### Portugal Day Contest, (SSB)

0000Z - 2400Z June 9

### RSGB 80m Club Championship, CW

2000Z-2130Z, Jul 13

### Ukrainian DX DIGI Contest 1200Z,

Jun 23 to 1200Z, Jun 24

### RSGB 80m Club Championship, (SSB)

2000Z-2130Z, Jun 21

### ARCI Milliwatt Field Day 1800Z,

Jun 23 to 2100Z, Jun 24

### Marconi Memorial HF Contest (CW),

1400Z June 23 - 2100Z (?) June 24

### His Maj. King of Spain Contest (SSB),

1800Z, Jun 24 - 1800Z, Jun 25

### Venezuelan Ind. Day Contest, (SSB/CW),

0000Z, Jul 2 - 2359Z, Jul 8



### VK/Trans-Tasman 160m Contest, Phone

0800Z-1400Z, Jul 7

### DARC 10-Meter Digital Contest

1100Z-1700Z, Jul 8

Dates & times often change or are misprinted in the journals; beware.

Chuck, N4NM

## Miscellanea

By the LongPath Staff

The NADXC officers and directors decided to hold the line on **DX Banquet** ticket prices in the face of rising gasoline prices. We have slightly higher miscellaneous costs for the banquet this year, but the bulk of our cost is the meal, for which our cost from the VBC is the same as last year. We are however budgeting for an A/V cart to hold the projector this year. It has remained a secret until now, but let me disclose that the little plastic wheels on the cart I stole from one of the forum rooms were glowing red by the time that cart made it from the South Hall to the Ballet

Room. So, with slightly higher expenses, we need to ensure we pack the house, and we can do it. Get your ticket order to Jason ASAP. \$29 per person. Details of the banquet will be very familiar: only the program has changed (K4UEE's Lakshadweep DXpedition experiences), but time, place, meal... are all the same: 6:30 pm Hamfest Saturday, VBC Ballet Room, Chicken and Sirloin tips. We're pleased to have Bob Allphin once again as speaker, and for those of you who haven't yet seen it, Bob's 3Y0X DXpedition video is on the forum schedule.

The **40m CW** K4BFT Field Day roster has at least one vacancy. Ready, willing, and able ops please contact Tom Russell, N4KG.

The official authorization to operate **W1AW/4** at the hamfest has been sent to KG4CUY per Bob Inderbitzen, NQ1R, ARRL Sales and Marketing Manager. We need operators! Here's a bribe—how about your picture at the controls of arguably the world's most well-known amateur station? SSB, CW, PSK-31, and RTTY will all be available. Contact Tom Duncan with your availability.

## New Rigs

By Tom Homsley, N4AWS

The new rigs at N4WBS are a Flex-Radio Systems SDR-1000 and the new High Performance Software-Defined Radio, or HPSDR, which is a design in progress. You can see the status of the various component boards at <http://hpsdr.org/>. Both of these rigs are powered by a software engine called PowerSDR which will eventually come in various skins such as below:

The addition of the currently-available HPSDR components, ATLAS, Janus, and OZY will bring the SDR-1000 receive side up to the new FLEX5000 standards. The Atlas is a passive backplane that all other modules plug into. The circuit board has provision for up to six DIN41612 connectors at 0.8 inch spacing. An ATX 20 pin power connector is fitted to the board so that 12v, 5v, 3.3v

etc. supplies from a standard PC power supply can be used for power. The Janus module is a very high performance, dual, full duplex, A/D and D/A converter board. The OZY module is an FPGA based interface controller card that provides the input and output connections to the real world. The use of an Altera Cyclone II FPGA provides numerous control lines for interfacing the various boards connected to the Atlas backplane. OZY also provides a high speed USB 2.0 interface to the controlling PC.



The 2KHz IMD dynamic range for the SDR-1000 is as follows:

Radio	MDS	IMD DR3
SDR-1000	-131 dBm	95 dB
TenTech Orion	-127 dBm	93 dB
Icom IC-7800	-126 dBm	80 dB
Elecraft K2	-129 dBm	80 dB

Soon the transmit-side boards will be available to populate the other slots in the ATLAS backplane. More pictures of the HPSDR concepts are on WE4S Grady's website <http://www.we4s.com/>. Grady and I are among 500 - 700 hams worldwide building the HPSDR. More on my evolving HPSDR rig in future articles.

*Editor's note: Thanks to Tom for this article, and Steve, AG4W for previous articles on new rigs, and in particular, software-defined radios. Please send your experiences with new radios to the LongPath so they may be shared with the NADXC membership.*