

The LongPath

A North Alabama DX Club Publication

Special points of interest:

- Our Efforts are Appreciated
- Program Announcement
- Short Skip
- Bottom of Cycle 23 Prediction
- Orion 2 vs FT-100MP

How to Join

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

Our Efforts are Appreciated

By Tom Duncan, KG4CUY

Last Saturday I was trolling 40m and came upon WJ1B calling CQ. "This is a very familiar call" I thought—but my log search turned up only a contest QSO, without any additional notes. I answered, and fortunately the initial pleasantries were exchanged slowly enough for me to verify my suspicion that "name is Harold" was indeed ARRL Chief Operating Officer Harold Kramer.

When Harold heard my QTH, he immediately recounted the great time the ARRL had in Huntsville. He congratulated the ham community, and Huntsville in general, in hosting a well-run, productive, fun, and friendly hamfest and national convention. When I let slip that I had been on the hamfest committee, he asked me to convey his appreciation to as many area hams, and in particular hamfest volunteers and participants of all sorts, as possible.

Those were very welcome words. Pride in a job well done is a type of fuel for the next year's efforts, when that time comes around. I came up with 17 NADXCers who helped out in significant ways, and I'm sure I forgot a few. That's a big chunk of our membership: HARC, NARA, and other local hams with no affiliation beyond the general ham fraternity turned out in similar numbers.

What would the ticket price have to be if Huntsville Hamfest didn't have all those free manhours — and this year, those of the ARRL as well? Probably a bit more than the \$6 bargain. Who benefited? Certainly every hamfest and GAREC participant, but the larger community as well. Think of all those hotel room-nights!

To the broader ham community, we have shown we have what it takes to host world-class events with world-wide attendance, a distinction which will surely benefit us in years to come. We hope and trust all attendees echo WJ1B's assessment of a "well-run, productive, fun, and friendly hamfest".

So let's pat ourselves on the back for a job well done. A year of community service events, contests, emergency nets and practice sessions, DXpeditions, and operating events (read "field day") will fly by, and we'll again be juggling the VBC south hall layout and worrying over the forum schedule.

Did I mention Harold's one suggestion? Next time, please have a word with the weather man about those 100°+ temperatures.

73, Tom Duncan, KG4CUY

Automatic Gain Control for Receivers

Program by Bob de Pierre, K8KI and Tom Duncan, KG4CUY

If your hamfest schedule was too jam-packed to see this presentation, here's another chance. Bob and Tom trace AGC from the days of AM-to-SSB transition, and show the control system nature of AGC — including some of the bad points — in several receivers.

Get there around 6:15 pm for dinner, business meeting at 7:00, program at 7:30.



The LongPath Staff

Interim Publisher/Editor:

Tom Duncan, KG4CUY

Departments:

Tom Homsley, N4WBS, Short Skip

Chuck Lewis, N4NM, DX Contests

Key Contributors:

Steve Werner, AG4W

Photographer/Consultant:

Jared Cassidy, KQ4VT

At the September NADXC business meeting, we will discuss the successful hamfest/ARRL national convention. Hamfest stories will be appreciated.

As of LongPath publication time, the nominating committee has been unable to arrive at a full slate of candidates for officers and directors for 2008. Perhaps by meeting time this situation will change, otherwise, unless willing candidates are nominated at the meeting, elections will be postponed, and we will discuss how to proceed with unfilled offices.

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

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WANTED

I need a short piece of 2 inch Diameter Boom stock (3 to 4 ft). Also, looking for various pieces of Aluminum Tubing from old / broken / damaged Cushcraft, HyGain or Mosley Antennas.

What have you got that is cluttering your garage?

Any damaged TH3, TH6, or TA33 antennas available?

Contact Tom N4KG@AOL.com

The ARRL Letter

In the upcoming October issue of QST, the ARRL will introduce a new series of receiver tests aimed at leveling the playing field in receiver testing. One new test concerns receiver blocking gain compression and reciprocal mixing. The ARRL Lab describes Blocking Dynamic Range (BDR) as "a condition in which the weak, desired signal is 'blocked' or suppressed" by a strong interfering signal. This is also known as desense or overload. Instead of reporting the BDR as a noise limited measurement, the Lab will now be using narrow-band measurement techniques to "dig out" the desired signal on noise-limited measurements and determine the point of gain reduction. To distinguish from earlier measurements, the name will be changed to "Blocking Gain Compression." A separate reciprocal mixing test will indicate the level of noise increase within the receiver caused by the interfering signal. Together, these two measurements provide more information about how the receiver behaves with a single strong interfering signal. Third order intercept (IP3) will be measured at three levels - the noise floor, -97 dBm (S5) and 0 dBm (S9 + 73 dB - not a typo!). (ARRL)

Solar Cycle 24 Prediction

Dr No (Jerry, N4NO) shared his latest predictions at the last NADXC meeting; his numbers point to a solar minimum early next year [see p. 5—ed.]. Seeking additional scientific guidance, Karnak sat in on Dr. David Hathaway's "Solar Cycle 24 Update" presentation at the Huntsville Hamfest. According to the NASA guru - a member of the panel of experts of solar prediction - the minimum may not occur until early 2008. Conflicting data make it difficult to predict the location and magnitude of the peak of cycle 24. A cohort, NCAR scientist Mausumi Dikpati, predicts a large peak and she has the best models in her simulation and uses David's data. If you missed the Hamfest forum, you can see David's presentation as well as his past predictions at <http://solarscience.msfc.nasa.gov/presentations.shtml>

DXpeditions

Our old friend Ron, ZL1AMO, will be on vacation August 27th through September 16th on Lifuka, Tonga (OC-169). He renewed his license as A35EA for this activation. In addition, St Brandon will be QRV on Sept 7 as 3B7C -<http://www.3b7c.com/>

September Contests

Get those antennas ready. It's contesting season and the CQ Worldwide RTTY DX Contest is the last weekend of this month. Information concerning coming events is provided in the August issue of QST and on the ARRL web site at <http://www.arrl.org/contests/months/sep.html>

Towers

Alabama Tower, aka Cox Antenna, a short drive down I-65 in Cullman (Exit 310) carries Rohn towers and masts - <http://www.cox-antenna.com>

So long 'til next time. . .



de N4WBS

NADXC Video Library

The NADXC Video Library has been formed, seeded with the five DVDs available from K4UEE at the DX Banquet. Titles available are:

- Peter I Island DXpedition 3Y0X—Antarctica 2006
- **XT2DX—The Voodudes 2002 DXpedition to Burkina Faso**
- **Five DXpeditions of the Year—The Untold Story as remembered by Bob Allphin K4UEE**
- VP8THU South Sandwich and VP8GEO South Georgia Islands DXpedition 2002
- K5K Kingman Reef 2000 DXpedition (VHS & DVD)
- HARC 50th Anniversary 1952-2002 (VHS & DVD)
- The ARRL Goes to Washington
- K4BFT Field Day 2004 and 2005
- Seek You by The Ham Band
- Ken Burns' Empire of the Air
- Dr. David Hathaway's 2007 Solar Weather hamfest presentation.

Titles in red are currently checked out, and KG4CUY has the rest. Contact him to borrow a DVD or VHS tape, or better yet, come to the next club meeting, where all available titles will be there for you to borrow.

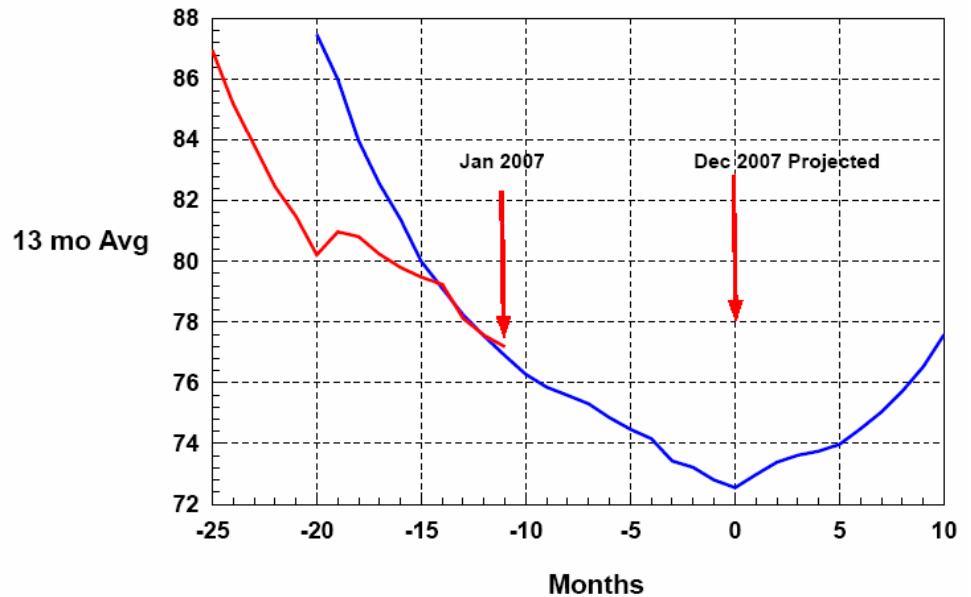
Bottom-of-Cycle-23 Prediction

By Jerry Cross, N4N0

Rex Harrison as Pope Julius II repeatedly shook his fist at Charleton Heston's Michaelangelo asking "When will you make an end?". So we're all shaking our fists at Ol' Sol as we suffer through the high-band agony, feeling that the end should be somewhere in sight.

Jerry Cross offers us hope in the new year, as shown to the right, in terms of SFI vs. time relative to the projected minimum. The indicator we await is the appearance of new sunspots. Watch for them about the time the ball drops in Times Square.

Using Data up to and including July 2007



DX Banquet Results

By the LongPath Staff

With a turnout of 80 (all the VBC would allow) and a fine presentation of the VU7 Lakshadweep DXpedition by K4UEE, the DX Banquet was a success.

When it became apparent we would far exceed the banquet breakeven attendance of 56 paid tickets, it was decided to devote the excess to additional door prizes, and establishing the NADXC DVD lending library.

Recapping the financials:

- 80 meals/76 paid tickets, \$ 2204 income
- \$ 1716 VBC expenses
- \$ 210 speaker expenses
- \$ 278 net going to prizes and DVDs

The banquet was over in plenty of time for certain Wouff Hong ceremony cast members and many attendees to wend their ways to the Embassy Suites.

By the way, photographic art aficionados present at the banquet are awaiting announcement of Bob Allphin's "Antennas at Moonrise" road show.

Unusual QSL Card

Submitted by Tom Russell, N4KG

Is this the K4BFT 40m SSB station relocated 6 months and 5500 miles (short path), or a roadside attraction for the Wehrmacht on its way to Stalingrad? Either way, it's cold and beautiful. The card is in color — blues, greens, and white — but recalcitrant equipment at LongPath headquarters would do only black and white.

Your card could be here next month. Scan it yourself and email it, or take your chances with the LongPath's copying-machine-cum-scanner.





Orion 2 with 600Hz roofing filter added vs Ft-1000mp MK V Field with Inrad roofing and 1.8Khz and 250hz filters added

I bought my new Orion 2 rig at the Huntsville hamfest. Most of my new countries are on CW now and the Orion 2 looked like the ultimate CW rig from what I had read. These are some initial observations.

Orion Plus

- A real meter
- Excellent receive audio at very narrow bandwidth on both SSB 1.8Khz and CW 250Hz
- Spectrum display – not as nice as the Icom Pro but better than nothing on the FT-1000mp
- Color display large and bright
- No key clicks on CW- programmable rise and fall times
- Built in CW and voice memories
- Tune button

- Larger Sub RX Audio and VFO tuning knob
- Panoramic audio- signals move from one ear to the other
- Selectivity more adjustable on sub receiver
- On AFSK you can run the bandwidth down to 500Hz- Even with the DSP down as narrow as it goes on the FT-1000 20 Over 9
- RTTY signals disappear 300Hz sooner on the Orion tuning down in frequency

FT-1000 Plus

- SSB average power output 30 percent more
- Better Amp switching relay -higher rated
- CW tuning meter is a nice feature
- Tuning rate optimized. To much or to little on Orion even with the VFO encoder set to fast
- Sub receiver S-meter better on FT-1000

In doing A/B tests of the receivers I was able to copy a very weak CW signal buried under a strong one on the Orion I could not hear on the FT-1000. In most cases (>90 percent of the time) both receivers did a great job. I am very proficient with the Ft-1000 and am just getting familiar with the Orion. I can see the 600 Hz roofing filter option was a good choice. I bet I add the 1.8Khz and 300Hz filters in the long run. So far I hear more atmospheric noise on the Orion. Most of it can be done away with using the RF gain control. This is used a lot on the Orion and much less on the FT-1000. The use of the multi knob takes some getting use to. I do like it being a much larger knob than the rf power knob on the Ft-1000.

Has any one else come to the same conclusions?

Steve AG4W

[For additional comparative information on these and other rigs, check NCOB's web site www.sherweng.com . ARRL members may download lab reports on both rigs from www.arrl.org/members-only/prodrev/reports.html.—Ed.]