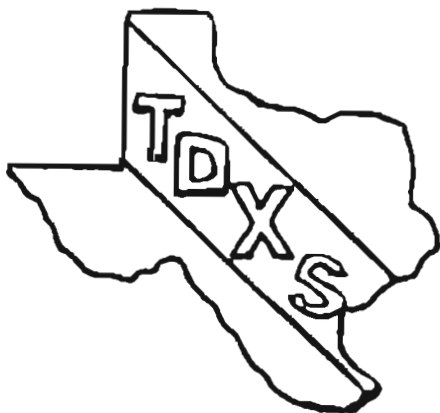


# THE BULL SHEET

OFFICIAL NEWS BULLETIN OF

## THE TEXAS DX SOCIETY

an ARRL affiliated club



VOLUME VIII, NO. 7

July 1983

MEETING NOTICE: The July TDXS Meeting will be Friday, the 15th, at 7:30 P.M., at the Chimney Rock Medical Plaza, located at 6550 Mapleridge, which is near Bellaire General Hospital.

### Armadillo Run Contest

This is it, folks! Our armadillos are about to bust loose and scatter to all corners of our fine republic, I mean state. Everybody has picked partners (even Sagging Ponch is on a CW team - and they are all riding in the same car). Can you believe this - over 30 TDXS members are actively involved in this "somewhat" unique event! Typical TDXS - all the way or not at all. We have even perked up interest from some of the old guard - K5NA, K5ZD and K5SOR - all will be running counties for us or acting as one of our vital control station links.

The world knows we are going out on this adventure. My postman can attest to that just by the volume of mail I receive almost daily. Maybe now that the July issues of CQ, 73 and QST have covered our contest, things will let up a bit for the ol' boy. Besides the magazines, we have also announced our intentions at the Dayton county hunters forum and on-the-air via the CW and SSB nets. Those nets have control operators who are continuing to pass the word.

So, the promise has been made and the world awaits. It is time to "put up" or face a large egg in the face. Thankfully, we have got a great gang dedicated to making this event come off successfully. We feel we have all the contingencies covered including "control of the skies" using our own ACE - K5IY.

Bob will be circling Texas both days of the contest at seven or eight thousand feet so all of our wandering heroes will be within 2M FM ear shot of him nearly all the time (weather permitting). That fact alone gives us road folks a warm puppy feeling 'cause some of us are covering many, many open unpopulated miles.

We anticipate the 15 cars covering the state will put over 10,000 miles behind them before the 267,000 square miles of Texas are under our belts. Not bad group spirit particularly when you consider these guys (plus Holly and Heidi) are picking up their own gas and living expenses.

The teams assigned to cover all 254 counties (or die) are:

K5RC with K5LZO

N5JJ with NA5R

W5SJS with WB5WHR, KG5U

K5GA with KD5SP, KY5A

KZ5M with Holly

NSWW with W5HNS

N5DU with W5JQ

K5MA with K5TU

K5VWW with KV5Q, N5EA

To back these guys up in case of a breakdown of vehicle or radio, we have the Official Roamers. Each will be roaming the state handing out more QSOs in those rare counties, while standing by to jump course and head in the direction of an unfortunate primary station.

Our Official Roamers are:

K5GN with K2TNO  
KN5H with Heidi  
K5ZD with N5RZ

W5ASP with family  
N5AF with KB5FU  
K5SOR with friend

And, of course, the TDXS equivalent to SAC will be offered by the Armadillo Air Force commanded by Crash King, K5IY.

Our control operators who will coordinate rescue efforts, health and welfare messages to Houston, besides their normal duties, are

East Coast - K5NA      West Coast - N6HUP      Houston - W5DOZ & friends

With a wide spread area like this, our heroes will be in a position to communicate information about the skip condition or direction. They also will serve as information points for participants needing information about specific stations and counties to be covered.

All Armadillo Run participants (and others interested in this bizarre affair) should be in attendance at the final planning meeting set for 7:30 P.M. Friday, July 22 at the home of the newest "Wild and Crazy Guy", K5VWW.

73  
Dennis, KZ5M

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Announcements - Paul Jaeger, KY5A, is a newly elected member of TDXS.

- new address and telephone for George Wagner, K5KG, effective August 1, 1983:  
George Wagner, K5KG  
c/o Al-Jubail Petrochemical Company  
P. O. Box 4312  
Houston, Texas 77001  
Telephone: 011-966-3-341-5600

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President's Note

I have received numerous complaints about the number of people smoking during the business meeting. In fact, several people have elected not to attend the meetings because of the high density of smoke in the warm, poorly-circulated areas available to us. May I remind everyone that several years ago a motion was passed prohibiting smoking during the business meeting. This means that the majority of members elect not to inhale anything other than normal air (mostly nitrogen and oxygen).

Please respect the desires of your clubmates; if you must smoke, do so in the hallways and not in the meeting room.

Thanks

Jay, W5JQ

Amateur Radio Teletype (RTTY) has been around for many years, and always has been a very interesting mode. QSO's are usually very relaxed with Rag Chewing the primary objective. Most stations use very low power, 100 watts or less, which seems to be ample, even for DX, which helps a lot with TVI.

Traditionally the frequencies from 080 to 100 in all bands (40 Meters also in spite of the QRM) are used for RTTY. We RTTY'ers sure would appreciate everyone observing this tradition, as with the low power we use a CW signal overpowers the RTTY signal very easily.

Previous to the advent of solid state circuitry, RTTY was limited to one speed, used a very noisy mechanical printer, and the separate manual entry of each character to be transmitted. However nowadays these limitations no longer apply.

Today there are two approaches to implementing a modern RTTY station:

- 1) The Dedicated System.
- 2) A Computer Oriented System.

The Dedicated System is complete within itself, not requiring any other equipment, and serves for this purpose only. It is ready to begin operation immediately when turned on.

The Computer Oriented System, as the name implies, works in conjunction with a computer. It requires a separate Modulator-Demodulator interface unit, and a software program. It also requires the loading of the software program to make the system operational.

Both systems provide for software selection of several operating speeds, both in BAUDOT and ASCII, and for CW operation. Most have split screens, the material being received being in one portion, and the material you are entering in the type-ahead buffer to be transmitted in the other portion.

The type-ahead buffer has made the big difference in RTTY, as it allows the two-fingered hunt and peckers to transmit at the full rated speed, and for error correction as you type.

Also included are several pre-programmed messages, which may be called up and transmitted by a keyboard command. These are very handy, and really speed up the QSO. It is also possible to program them to turn the printer on and off at appropriate times as an automatic log keeping feature.

I have written this in a very general manner primarily to see if there is sufficient interest in the subject. If so, I will be happy to continue, going into much more detail. So let me have your questions, I'll see if I can find an answer.

Lee W5DOZ

## I GUESS YOU NOTICED THE REPEATER MOVED

Even your honorable repeater chairman is encouraged by apparent success of the relocation of the TDXS repeater from the old Transco building to the Summit Tower - West building in the Greenway Plaza area. I am still evaluating the coverage based on mobile reports from some of our club peddlers that frequent the freeways daily, but the early results look promising.

The old repeater site was plagued by untold sources of both natural and manmade noise that masked the sensitivity of our receiver. After consulting with the engineering department at Spectrum, the repeater manufacturer, I found that they had recognized the design problem nearly two years ago, and redesigned the entire receiver. The TDXS bought a new design receiver, a SCR-200 to replace the old SCR-100 we had. It arrived with a bad quadrature detector coil that made the receiver sound and act like it was off frequency. Due to some innovative thinking from Alex, WA5UHT, the broken soil slug in the coil form was repaired and the receiver pressed into service. The results were mixed, but an overall improvement from my viewpoint. Still, the coverage was substantially below what the calculated "radio horizon" would indicate for the antenna height of approximately 325 feet.

Wes, N5WW, offered an antenna mount on KODA's new STL (studio-transmitter link) microwave mount on Summit Tower - West. Wes, Orville (K5VWW), and I measured and inspected the new site and the old antenna and decided there was no way to get the two together. After the details were known and worked out, Wes provided a new Ringo Ranger 2M vertical, approximately 40 feet of 7/8 inch heliax feedline, and the installation assistance for the new site.

The new repeater site is inside the north side of the parapet (a small building on top of the big building). The parapet actually houses some air handling equipment and elevator controls for the building. It is not air conditioned, but is well protected from the weather. The sketch at the right is a top view of the building showing the equipment location and the antenna location. The base of our new repeater antenna is 460 feet above the street, or approximately 135 feet higher than the old location on the Transco building.

See attached diagram

How does it work? So far, pretty well. To the north, the coverage for a 10 watt mobile station with a 5/8 wave antenna has increased nearly 12 miles. K5KG can't complain about the BLACK HOLE on FM-1960 anymore. We can hear K5MA in the trees. K5LZO is DFQ from Magnolia with 25 watts and 11 elements at 35 feet. KB5FU gets coverage 24 hours a day with 10 watts rather than 2-3 hours per day with 100 watts. KD5SP can 10 watt mobile it into Alvin. K5DX gets solid coverage through Highlands with 25 watts rather than spotty coverage with 160 watts. The W5JQ filter is working...have you heard Jay lately? (Rumor has it he can't think of anything to say since he can't complain about the traffic anymore !!) WA5IHF has been heard in Richmond. N5EA can still give us the daily reports about the working girls on Main Street.

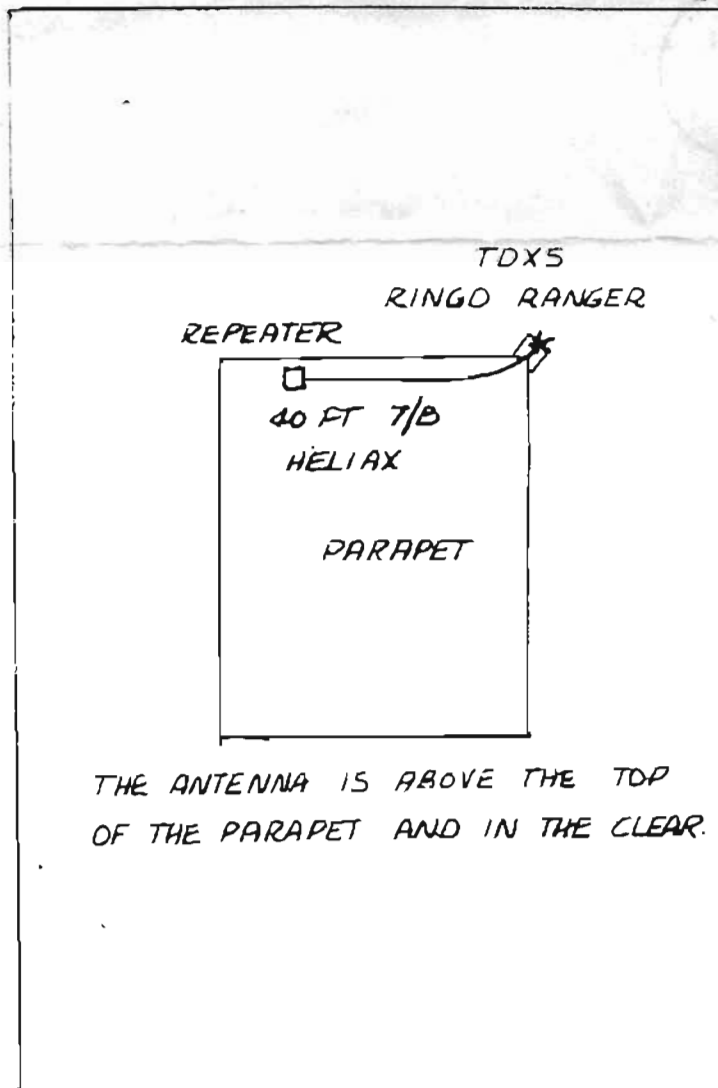
Plans for the future include a more permanent antenna installation. (However the Murphy's Law School of Thought teaches us not to fix what isn't broken!) I also want to implement the planned 220 MHz radio control system for monitoring and control of the repeater. This will save us a couple of hundred dollars per year in phone bills alone. We can discuss this plan at the next club meeting.

At press time, the repeater is temporarily in a forced air cooled rack that NSW has for his STL equipment. We have to move our own rack up there in the very near future. If you have an enclosed double door 19 inch rack cabinet that is at least 18 inches deep, give hon. repeater chairman a call. Otherwise, we will use the same open frame 19 inch relay rack panel that we used at the Transco site.

MUCHAS GRACIAS to the following who have contributed directly to the success of the recent move of KSDX/R. If I left anyone out, my apologies.

NSW    K5VWW    NSDC    WA5UHT    Dallas ARC    KODA

See you in the Armadillo Run. 73 de K5TU . . .



TOP VIEW OF SUMMIT TOWER  
WEST