



THE BULL SHEET

OFFICIAL NEWS BULLETIN OF THE TEXAS DX SOCIETY

an ARRL affiliated club

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MEETING NOTICE: The November TDXS Meeting will be Friday, the 11th, at 7:30 P.M., at the Chimney Rock Medical Plaza, located at 6550 Mapleridge, which is near Bellaire General Hospital.

160 METER BAND AIDS

Fall and winter are just around the corner, and with them come improved conditions on 160 meters, along with less QRN on that band. At times the band is open to various parts of the world. It is not evident to the casual listener due to the lack of amateur signals.

The following is a list of active beacons and navigational aids that transmit "call signs" (not always in accordance with ITU conventions) that may be used as an indication of conditions on 160 meters. Most of these beacons are adjacent to 160 meters and some of them are inside the amateur band. Many of these stations are in the 50 to 500 watt class and their signal levels should approximate those of amateur stations.

The "KA" type of call sign are unknown in origin and neither Allen Cantrell of the Houston office of the FCC or I have been able to identify them. Allen suggests they are probably issued by a U.S. Government agency other than the FCC (????) for research purposes. These signals peak from about 0400 Z to 1200 Z indicating they may originate from the west. The editors of "Lowdown", "SWL" and "SPEDEX" think they may be ocean current research buoys. Since they are of a short duration and having been heard for only a few days or weeks.

Should any one know of any other beacon type signals such as those mentioned above, I would like to add them to my list.

Additionally, second and third harmonics from AM broadcast stations are frequently heard. Of particular interest are those not on an even multiple of 10 KHZ. All us allocated frequencies are spaced 10 KC and much of the rest of the world space their stations at 9KC, therefore, any AM harmonic not on a multiple of 10 KC originates outside the United States and can probably be identified thru the use of "white radio log", or other publications.

160 Meter Band Open Indicators

FREQ	MODE	STATION	QTH	SOURCE
1.613	CW	RAB	RABINAL, GUATAMALA	A B C
1.615	CW	OR	OHURA, NEW ZEALAND	B
1.615	RTTY		PROBABLY EUROPEAN	A B
1.623	CW	PP	TROMBETAS, BRAZIL	C
1.625	CW	PAT	PASTAZA, ECUADOR	C
1.629	CW	FO 47	UNKNOWN	A
1.634	CW	KA81191	UNKNOWN	A
1.634	CW	KA80099	UNKNOWN	A
1.637	CW	W279	UNKNOWN	A
1.637	CW	FBR	UNKNOWN	A
1.637	CW	KA80092	UNKNOWN	A
1.649	CW	KA81196	UNKNOWN	A
1.650	CW	KA80088	UNKNOWN	A
1.650	CW	SOT	REYES, BRAZIL	C
1.660	CW	SNG	SAN IGNACIO DE VALASCO, BOLIVIA	C
1.662	CW	KUB	KUBUNA, PAPULA NEW GUINEA	C
1.665	CW	LAG	LAGO AGRIO, ECUADOR	C
1.668	CW	CCI	CUCUI, BRAZIL	C
1.670	CW	FU	FLATBUSH, NEW ZEALAND	C
1.675	CW	ESM	ESMERALDAS, ECUADOR	B C
1.685	CW	MER	MERCADERES, COLOMBIA	A B
1.689	CW	MH	MOUNT HAGAN, PAPUA NEW GUINEA	C
1.694	USB	FFB	BOULOGNE SUR MER, FRANCE	B
1.701	AM	OXP	DENMARK (MARINE WARNING)	B
1.715	USB	GLV	ANGLESY, ENGLAND	B
1.726	AM	GUD	JERSEY, ENGLAND	B
1.744	CW	PAT	PASTAZA, ECUADOR	B
1.750	AM	LGZ	FAR SUND, NORWAY (MARITIME COASTAL)	B
1.765	CW	KA81200	UNKNOWN	A
1.785	USB	SAG	GOTEBORG, SWEDEN	B
1.831	CW	OSN	OOSTEN DE BELGIUM	B
1.869	USB	GK2	HUMBER, ENGLAND	B
1.939	USB	PCH	SCHEVENINGEN, NETHERLAND	B

(A) - N5AF

(B) - "SWL" & "SPEDEX"

(C) - "LONGWAVE BEACON GUIDE"

Sam - N5AF

TDXS FAIRY TALE

Not long ago, there was a hunter who decided to take a short cut from one section of woods to another by walking down the beach in between. As he was walking along, he

came upon a porpoise which was lying above the water line. He did not think much of this as he walked by until he heard a voice say, "Help me, Please." Well the hunter looked around and saw no one, shook his head and resumed his walking. Suddenly he heard the same voice asking for help again, at which time he said, "Who said that?" At this point, the porpoise said that he had and continued by saying that he was an immortal porpoise and he had had nothing to eat for days and would the hunter please bring him some food. The hunter, while still not believing the whole thing finally agreed to help and asked what the porpoise wanted to eat. The porpoise told him that he really was fond of young seagulls so the hunter set off in search of a seagull nest. After a time he did find one and picked up two baby gulls and then started walking back to where the porpoise was laying. At about this time, a lion broke out of the state wildlife preserve and came charging down the beach at the hunter. The hunter dropped the gulls, grabbed his gun and shot the lion dead just before the lion reached him. He then picked up the gulls, stepped over the lion and resumed his journey. After a few minutes, a game warden stopped him and told him he was under arrest. The hunter said what for, the lion was going to kill him if he had not shot him, at which time the warden said that was not the reason. He was under arrest for carrying young gulls across a state lion for an immortal porpoise.

That's all folks,

Tom - N5EA

GUEST EDITORIAL

I have heard it said that a giraffe is an animal put together by a committee. Even if this is so, it seems to me the DX Society could do with some committees.

In the interest of saving time at our meetings, as well as wear and tear on our ears (we need all the ears we can get for some of the signals we receive) a committee would study and make recommendations on the vital (?) issues of our day. Why should we engage in endless debate when the time could be better spent outside smoking or in deep conversation over a can of suds.

This could free us from the mundane discussions of whose bill do we pay and why don't we get HHC to pay it (If they wanted to have whoever it was, they probably wouldn't hesitate a minute, but if we can get the DXers to pay for it why not) and is he really not going to come if we don't send the money. This same attitude toward other expenses of the convention could keep us busy until well into next year.

Historically, the DX Society has never had much (make that any) money with which to work so this has never been a problem before. Now, thanks to the exhausting efforts of a few, we are in the chips. We owe a real vote of thanks to these few, but I am not sure that they have done us a favor. Now we spend all our time trying to decide how to spend all our money.

Trips to West Virginia, radios to Russia, QSL cards to (?), big-gun dxers to convention, booze and hospitality are probably real good ideas (perhaps the time for some of them has not yet come), but are they really what we are in this mess for? If so, then it seems to me we are in the business of DX and if this is what we want, then let's recognize that and run it like a business.

A business would have a budget adopted at the beginning of its year, setting out its anticipated income and expenses. Allocations would then be made and the money would be there, (unless you are in the oil tool business) for that department to spend as needed. Unforeseen expenses and unanticipated income could be dealt with as necessary, but I think some recommendation from the Board would be in order before it is brought up on the floor.

Therefore, I propose that when the president appoints his Chairman for the coming year that we have a committee in each area that spends money. Perhaps this should be three on the Repeater, DX, contests, and field day committees and seven or more on the convention committee. The first order of business would be for these committees to meet, organize, set its goals for the coming year and decide how to get there and what it will cost. These reports will go to the Board for approval and recommendation to the members. When adopted, all will know what they have to work with for the coming year.

The most necessary committee will be the ones designated to raise the funds we will need to accomplish all the glorious goals we will set out to do. Here is where the hard workers will shine, as they always have. With a set up like this we can get on to the really fun stuff, like dx, contests, and the roundtable discussions that are always held at bay by our zeal to deal. I have always expected to talk dx or rigs or how to ... at dx meetings, now we have left this all behind. Maybe we can't see the fire for the smoke.

Tom - AA5Y

THE TDXS MILLION POINT AWARD

With the contest season closing in fast, its time for all those last minute antenna repairs and station reconfigurations. Its also time to think back to the conception of the TDXS one million point contributor award. The award is intended to increase club member participation in contesting by providing an additional incentive for a high score. Upon submitting a total of at least one million points towards the TDXS club aggregate scores, the member will be eligible for the award.

Although all of the details regarding design, procurement and cost of the award have not yet been worked out, everyone has been accumulating points since Field Day 1982. Below are the top scorers' totals as of October 26, 1983, with a list of the applicable contests from which these scores were tabulated. If you were part of a multi-op effort, the score was divided equally among all participating club members. Of course, special kudos to the multi-op station owners and their wives for putting up with us guest ops.

Good luck in the upcoming contests. C U then.

KN5H

N5JJ	2.351 M	K5RC	910 K	WB0NFY	503 K
K5GA	1.879 M	KG5U	686 K	K5MA	385 K
KN5H	1.871 M	N5DU	639 K	N5EA	370 K
K5GN	1.649 M	W5ASP	592 K	KC5CP	354 K
K25M	1.614 M	KD5SP	570 K		
K5DX	1.444 M	WB5WAR	527 K		
K5L20	1.416 M	KB5FU	526 K		
NA5R	1.272 M	K5KG	522 K		

Contests with club aggregate scores (as of October 26, 1983)

Field Day	6/82
Sprint CW	9/82
Can-Am	9/82
CQ WW DX SSB	10/82
Sweepstakes CW	11/82
Sweepstakes SSB	11/82
CQ WW DX CW	11/82
Sprint CW	2/83
ARRL DX CW	2/83
ARRL DX SSB	3/83

QSY

We are sorry to see Mr. Carman QSY, but here's the address and landline so we can stay in touch:

Mr. Jan Carman - K5MA
63 Colonial Lane
P.O. Box 930
W. Falmouth, Mass. 02574

Home: (617) 540-8194
Work: (617) 548-5800

Jerry Purcell's Armadillo Eggs

Okay, boys and girls. Here it is, at long last. The long promised but never shown recipe you masochists have been clamoring for.

Needed:

1/2 lb. Cheddar Cheese
1/2 lb. Good Sausage (Owens, Jimmy Dean, etc.)
1/8 lb. Monterrey Jack Cheese
1.5 cups Buttermilk Bisquick
1 pkg. Pork Shake & Bake
2 or 3 small cans of Jalepenos (about 20 J's)

Directions:

Remove seeds from Jalepenos
Stuff peppers with finely grated Monterrey Jack
Make a dough with the finely grated Cheddar, bisquick and sausage
Pinch enough dough to wrap each stuffed Jalepeno
Roll in Shake & Bake
Bake at 425 deg. F. for 20 minutes +/- something
Remove from oven, stand back and admire

Credit for the recipe goes to a co-worker in the Battery Shop at the Space Center. Personally I think it was a plan developed by his wife, but the plan backfired because he likes the little timebombs.

73 & Bon Appetit

Dale - KG5U

QSO RATE COUNTER

For the past couple of years I have listened with intense interest to contest operators relating their experiences and techniques used in various contests and have tried to include many of those techniques into my own operating habits. One of the biggest factors in the high scores earned by many of the operators was their continued awareness of their QSO rate (QSOs/Hr) throughout the contest. When their rate dropped they changed something (band, mode, operating technique) to keep the rate up. My own experiences with "rate awareness" have met with very little success. Being too busy keeping up log/dupe sheets, too intent looking for Q's and/or mults, or too tired to take notice of the rate, I have found some appallingly low rates in my past logs. To help resolve this problem area, or, at least, make it easier to keep an eye on the rate, the device described below has been installed in my contest keyer. It is a QSO Rate Counter. It uses 16 common CMOS IC's and 3 seven-segment LEDs, and cost less than twenty-five dollars to build.

The device takes a keystroke input (slaved to the contest message memory button on the keyer) and places a '1' at the input of the first of four quad D-type Serial In, Parallel Out shift registers. Every thirty seconds the data present at the D-inputs of the shift registers is shifted one place and the input is set to '0', to await the next keystroke input. Each keystroke input represents a QSO and may be slaved with whatever button the operator prefers for the QSO Message. It may be done electrically or mechanically. The last (16th) shift register is left unterminated as only 15 shift registers are needed. Thus, a '1' at the input of shift register 1 will take 7.5 minutes to ripple through the shift register string, making the sample rate 30 seconds, and the sample period 7.5 minutes.

Two eight-channel multiplexers scan the shift registers parallel outputs. A '1' output at a shift register is presented as a '1' at the multiplexer output, while a '0' output at the shift register is, of course, a '0' at the multiplexer output. The multiplexer output is NANDed with a pulse train which is eight times the multiplexer scan rate. This provides eight pulses for each active ('1') channel encountered during a scan of the multiplexer/shift registers inputs/outputs. The eight pulses multiplied by the number of active channels gives a product which is the QSO per hour rate. This output is then fed to the counter-display section.

The display counter is a simple 2-chip (MC14553/MC14543), 3-digit counter which drives the 3 seven-segment LEDs. The display count will be valid for all but the first 7.5 minutes of the contest. The maximum QSO rate count displayed is 120. The display will, of course, show the rate per hour in 8 QSO/HR increments. That is, only multiples of 8 will be displayed. The 8 count increment was selected for a couple of reasons. First, the chip count is kept to a reasonable size (16). Higher resolution (5-, 4-, 3-, 2-, 1-count increments) would require a greater shift register length, multiplexer length, requiring more chips and more space and increased complexity. Secondly, the 8 count increment seems to be, on paper, at least, a good compromise between too high a resolution with a high rate of fluctuation, and too low a resolution with great variations in the count occurring too infrequently. Just playing around with the counter has shown the 8-count increment to be a comfortable and easy to handle increment.

While the counter has not had the opportunity to prove itself under fire, it works as it was designed to and interfaced with my keyer remarkable easy. There does exist a potential problem which may or may not be of significance in the use of the counter in a contest situation. It does not involve the counter, but the operator. While operating the contest will the number displayed previously be remembered by the operator to compare with the presently displayed number? If the previous number cannot be recalled by the operator the present number will not tell him if his rate is going up or down. He will then have to await the next 30 second sample period and a change in the count.

I am looking forward to using the QSO Rate Counter in the next contest. Even if it doesn't help my score by any measurable amount, it has been an interesting device to build. Many hours of mind games were played configuring the circuit in a variety of ways, with a variety of different chips, until the present design evolved. I'm not completely finished with the rate counter, though. It hasn't been installed in the keyer a week now, and I am already thinking of a means of letting one LED indicate whether the rate is increasing, decreasing, or steady. I should have the schematic for the rate counter ready for distribution in a couple of weeks, if anyone is interested.

I would like to hear from TDXS members regarding any thoughts they may have about a device such as this. (i.e., it's usefulness and desirability as a contest aid, any suggestions for changes in the sample rate, sample period, or resolution to make it more reflective of the activity in the contest.) The counter will be at the next meeting for the curious.

73 & work me in SS,

Dale - KG5U