



THE BULLSHEET



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The Texas DX Society, P. O. Box 540291, Houston, TX 77254-0291

President	Don Butler, KI3L
Vice President	Wes Spence, AC5K
Secretary	Dave Sarkozi, WB5N
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Bullsheet Editor	Joe Staples, W5ASP
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DX Chairman	Jim Lane, N5DC
Field Day Chairman	Bob Burns, W5SJS
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Repeater Chairman	Brent Levit, NT5D

The Prez Sez - de Don, KI3L/5

The annual TDXS Banquet was a definite success, with an excellent turnout, good company, and good food. The Houstonian was an outstanding choice. Special thanks to Melanie Bradford (Mrs. Bill) for a job well done. The unique centerpieces were a nice touch. (I wonder if the OM will be able to find his special cache of tubes the next time he needs them).

For more good news; we surpassed the goal of our repeater fund drive. As of February 3, a total of \$2152.50 had been received. The donor list of 34 individuals includes three non-members. The new ICOM repeater is in the process of being ordered, and will be installed and operating in the near future. As we have previously mentioned, surplus funds will be set aside and used for repeater expenditures only.

(Here is the list of those who have made a contribution to the fund to purchase a new repeater for the Texas DX Society. An asterisk indicates a \$100 donation; (nm) indicates a "non-member"...ed)

AA5NK, AK5B/KE5TF, *K2TNO, K2UA, *K5EC, *K5GA, K5JS, *K5LLL, K5PFE, *K5XI, KC5CP, *KE5FI, *KE5IV, KG5U, *KI3L, *N5DC/KF5MY, *N5DU, *N5RP, NA5L (nm), *NN5O, *NR5M, W5ASP, W5HNS, W5LLU, *W5SJS, WA9VLI, WB5N, WB5USV, *WB5YJN (nm), WN4KKN, WQ5Y (nm)

The Officers and Board of Directors of TDXS wish to thank all of those who have supported this effort. The new unit has been ordered and should be up and running soon.

Welcome to our two newest TDXS members: John, K5EC and Lon, K5JV. Both survived the extensive background checks and balloting, and can now be declared official TDXSers. I'm sure that Ron, KB5NFN will be pleased to know that his "807" custodial duties will be transferred to one of the new members.

The 1993 dues have been trickling in at a somewhat slow pace. The roster now includes 52 paid-up members, but we are still waiting to hear from several of last year's active crew. Come on guys, let's keep up your regular support of TDXS.

Wes, AC5K announces that the program for the monthly TDXS meeting on Friday, February 12 at 7:30 PM will be a videotape showing of the 1992 VP8SSI operation. The big screen TV equipment at the downtown EOC are excellent for this type of program. I hope to see ya'all there. 73, Don

Announcements

Meeting Notice - The Texas DX Society meets on the second Friday of each month, except when the date is changed by the Board of Directors. This month the meeting will take place on **Friday, February 12, 1993**. The meeting will be held at the **Emergency Operations Center at 330 Rusk**. This facility is located at the corner of Rusk and Bagby on the northeast corner of the Coliseum and Music Hall. There is parking available in the lot next to the entrance. The regular club meeting will begin at 7:30 P.M. Visitors are welcome to attend the meeting and may obtain help in finding the location by checking in on the 147.96/36 MHz repeater.

Program - This month's program will feature a video tape of the 1992 VP8SSI DXpedition to the South Sandwich Islands, "The most awful place in the world." It's a fascinating story and an awesome spectacle. Don't miss it!

CW Sprint Logs - Just received from Trey, WN4KKN/6: I sent out a spiffy letter to everyone who sent a log for the CW Sprint last September, and I was going to post a copy of it to CQ-CONTEST but I have already deleted it! Oh well. This gist of the letter was that I am stepping down as the CW Sprint editor of the NCJ. All future CW Sprint correspondence (logs, letters, team registrations, etc) should be sent to **Larry Tyree, N6TR/7**, who is taking over the job beginning with the February Sprint (less than two weeks from now!).

Here is Tree's info: Larry Tyree, N6TR/7, 15125 SE Bartell Road, Boring, OR 97009; (503) 658-6012 (Home).

One of Tree's goals is to make the log checking more automated, so it would be good to send him a copy of your log on a floppy diskette. He intends to get *all* of the logs online for checking, which is a pretty neat goal. I heartily endorse this idea, so please try to help out in this area. See you on the bands.

Bullsheet Articles - Articles or other newsworthy items are hereby solicited by the editor. Articles should be submitted in the form of either ASCII files or as word processor files. Files may be uploaded to the TDXS area on KB5NFN's Bulletin Board at 713-777-0821, or sent to the Editor. If necessary, text may be sent to via FAX to the editor by prior arrangement. Files or other messages may be sent to the editor via CompuServe or Internet to 71045.2632@compuserve.com. For those with VHF Packet ASCII text can be sent directly to the Editor. Contact W5ASP at 713-974-3455 to arrange for either fax or packet transfers. Publication deadline is the first Friday of the month.

DX Report

de Jim N5DC

Now that the highly successful **AH1A, Howland Island** operation has come and gone, things are kind of slow in the DX world. But, not to worry, things won't remain quiet for long.

First of all, there will be a resounding round of applause for the **Dallas Cowboys!** Cheering is permitted. And my thanks to **Bob, W5KNE** for his kind words about me and my cowboys in the current edition of QRZ DX.

All of you **5-Band DXCC** chasers should note that for the PHONE Award you can now submit cards dating back to 11/15/45, not 1/1/69 as was the case previously. I am not privy to the League's thinking in making change effective for phone only. Don't they know that CW existed then?

A5, Bhutan - I picked up a rumor that Jim Smith has A5, Bhutan in his sights again, but don't know if it is true.

S9, Sao Tome - K4OSL is now S92ST; QSL via K4BAI.

VU7, Andaman & Nicobar - The word is for a March or April operation.

9G, Ghana - Rumors of a possible Dutch operation.

T31, Central Kiribati - Karl, DL1VU is now active from Canton; QSL via DL2MDZ.

ET, Ethiopia - Rudi, DK7PE is active; QSL to: Box 60349, Addis Ababa, Ethiopia

ZL7, Chatham Island - ZL7AA will be active 3/1/93 on 160-2 Meters; QSL via ZL2AL.

TT8, Chad - TT8KX is FD1SIL operating thru March 31st.

OH0, Aland Island - OH0BBF will work ARRL CW on 2/20-21; QSL via OH2BBF.

One final note. If you non-DXers on the low bands can cut us "foaming-at-the-mouth DXers" some slack when a DX station shows up, we promise that the rest of the time you can have "your frequency" all to yourselves. Thanks, 73 and good DX!

DX Advisory Committee

de Jim. N5DC

I am pleased to be the newly appointed ARRL West Gulf Division's representative to the DX Advisory Committee. However, the my DXAC title doesn't mean anything unless I can count on some input from the DXers themselves. I do not look forward to lengthy phone conversations with much spleen venting. But if you have a "gripe" about something in the DX world, let me hear about it either by letter or by leaving a message for me on the TDXS Packet Cluster. I encourage well thought out, constructive suggestions rather than just "raisin' hell" in general about some operation or other.

Each month in this column I will try to give you some insight into what other members of the DXAC, and in turn what their ARRL divisions, are thinking. The rest is up to you guys. Speak Up! I am your voice on the DXAC. Give me some useful things to talk about.

Presently there is some sentiment for deleting Mt. Athos from the DXCC Countries List, since the Monk Apollo seems to be acting like the proverbial south-end of a north bound donkey, but I sense this is not a very strong issue.

I understand that the FCC is leaning toward establishing some sort of a volunteer program for Commercial FCC Licenses similar to our own very successful VE program.

I am pleased to see the 5-Band DXCC phone program date has been rolled back to 1945, but wonder why our CW brethren are not given the same "break".

I am new to the DXAC program, but I will settle in. And again I will need regular input from any and all of you in the West Gulf Division. I want to thank Tom Comstock, N5TC, West Gulf Division Director for the opportunity to represent you. Count on it, I can and will do the job with your help.

Results - 1992 TDXS DX Challenge

de Steve, WA9VLI

Final results of the 1992 Texas DX Society DX Challenge as announced at the Annual Banquet last month were as follows.

Place	Call	Claimed Score	Credited Score
1	W5LLU	63(SSB)	63
2	W9AGH	73	59(**)
3	KC5CP	51	51(*)
4	KI3L/5	51	43(*)
5	AA5NK	56	(* / #)
6	WA9VLI	20	20
7	W5ASP	22	18(*)

Notes:

(*) Contacts before 2/15/92 0000Z deleted.

(**) Contacts with new YU republics ineligible.

(#) No log sheets for 10, 15, 20, 160 received.

Certificates of Merit were presented to the top three scorers. Special kudos go to **John Stewart, W5LLU** for making all SSB contacts, making good use of the WARC bands, and having no deletions from his claimed score. Since the club failed to come up with the requisite 10 log entries with a minimum score of 25 band/countries, the Grand Prize of a \$100 gift certificate from Madison Electronics could not be awarded. However, the TDXS Board of Directors decided to make alternative cash awards to the top three places as follows:

- 1st Place - **W5LLU** - 100,000 Brazilian Cruzados
- 2nd Place - **W9AGH** - 3,000 Italian Lira
- 3rd Place - **KC5CP** - 4 Russian Rubles

These funds can be spent at any time and in any manner at the discretion of the recipient, the only requirement being that the income be duly reported to the IRS. Bill Clinton needs every tax dollar he can get!

Weekly DX and Contest Net

Each Tuesday night at 2100 CST, the Texas DX Society sponsors a **DX and contest net** on 147.96/36 MHz. The net is being handled by **Dale, KG5U**. The purpose of this net is to exchange information of interest to DXers and contesters. The agenda includes general and club announcements, DX information, contest information, QSL routings, propagation forecasts and related topics. Participation is not limited to members of TDXS, but is open to all and everyone is encouraged to join in.

Upcoming Events

- February 12.....Texas DX Society Monthly Meeting
- February 14.....North American Sprint - Phone
- February 20.....ARRL International DX - CW
- February 26.....CQ WW 160 Meter DX - Phone
- February 27.....French REF Contest - Phone
- February 27.....RSGB 7 MHz - CW
- March 06.....ARRL International DX - Phone
- March 12.....Texas DX Society Monthly Meeting

Propagation

de Roy, AD5Q

(The following article is taken from the *Northwest ARS Newsletter* for February 1993..ed)

Throughout the sunspot peak, February has been the month when all-night openings return to 20 meters. With the lower fluxes this year, we may not see the return of these conditions until March. Night path on 20 is important to certain contesters who lack beams on 40 and typically make 90% of all contacts with a tribander (me). I rely on this path to Europe and Russia to run up my QSO totals, while the east coast runs the same path on 40 with their beams. In contests when this path is not open, I loose about 500 contacts and spend the night on low bands pouncing for multipliers.

My benchmark for comparison is the ARRL CW DX contest, which occurs in late February. Through the sunspot peak, 20 has been open through the night each year (except in 1990, when solar conditions were bad). During the CQWW CW test (late November) MUFs are lower. 1989 was the only year that 20 stayed open through the night. We will be lucky if we get all-night 20 meter openings for the ARRL CW this year.

Low band capabilities will increase in importance. DX conditions on 40 are currently excellent, and we can look forward to an extended season on 80 this spring.

Conditions on 10 meters are sharply off this year. 10 is an important rate band during the ARRL, but this year the openings will probably be much shorter. The east coast will have openings to parts of Europe and Russia that will not be accessible by the time the band opens for us. Most of the everyday DX activity has already moved to 15, and code free Novice/Techs will soon be faced with a difficult decision if they wish to continue making DX contacts: practice CW or learn Spanish.

Twenty meter long path conditions have also deteriorated. The westerly long path to Africa is still good, and remains open until about 11:am local time (though you'll have to fight the sixes in the pileups). Through the sunspot peak, winter has been the best season for the Antarctic paths to Europe, Russia, the Middle East and India/4S7.

With the lower MUFs, a daytime path to Europe may be open instead - or both paths at once. Signals can be difficult to copy when propagating over short and long paths simultaneously. When this occurs, it is important to recognize that when the signal coming off the back of your beam is strong enough to cause QRM, you are pointing the wrong way. Turning the beam 180 degrees (at the stronger signal) will usually eliminate this multipath QRM.

Contest Corner

de Chuck, KE5FI

The phone North American Sprint contest will begin at 0000Z Sunday, February 14, i.e. on Saturday evening at 6:00 P.M. local time. It is a four hour contest operated on 20, 40 and 80 meters only. The suggested frequencies are around 14280, 7225 and 3900 KHz. You must send the other station's call, your call, your serial number, your name and your state. Work stations once per band. Multiply the number of contacts by the sum of states, Canadian provinces (there are eight: Maritime, VE2-7 and Yukon/NWT) and North American countries (excluding Canada & US).

Don't forget the QSY rule. If you answer someone he has to QSY after the contact and its your frequency. The next person

answers your CQ or QRZ? and you give him the frequency after the contact. You must move at least 1 KHz to answer another station or 5 Khz to call CQ.

If you are new to this contest, give it a try. It will drive you nuts at first until you get the hang of it. Then you may feel like I do, glad it is not five minutes longer! Full rules in Jan QST & NCJ.

It doesn't seem possible that it is time for the ARRL DX contest again. The CW contest begins on February 20th at 0000Z. W/VEs work all other countries. Count three points per QSO and multiply by the number of countries worked. Count multipliers separately on each band. (And look for GM0ECO, a.k.a. GM0/WSASP, I'll need all the help I can get..ed)

Claimed Scores:

North American QSO Party SSB

VP5V (KE5FI).....	1055 x 202 =	213,110
K5XI.....	627 x 216 =	135,432
W5ASP.....	700 x 161 =	112,700
K5DX.....	575 x 178 =	102,350
K5LLL.....	322 x 142 =	45,724
K5GA.....	253 x 124 =	31,372
N5PJL.....	216 x 107 =	23,112
N5NMX (M/S).....	1526 x 253 =	386,078

CQ WW DX 160 Meter CW

W5ASP.....	360 x 66 =	54,450
KI3L/5.....	106 x 41 =	10,168

North American Sprint CW

K5GN.....	344 x 43 =	14,792
K5LZO.....	290 x 42 =	12,180
K5GA.....	282 x 40 =	11,320
KI3L/5.....	209 x 35 =	7,315
W5ASP.....	198 x 32 =	6,336

SEND IN YOUR LOGS, MARKED "TDXS"

Upcoming Contests:

- Feb. 14 0000 Z N.A. Sprint SSB (Jan. QST or Jan. NCJ)
- Feb. 20 0000 Z ARRL Intn'l DX Contest CW (Dec. QST)
- Feb. 26 2200 Z CQ WW 160 SSB (Nov. CQ)
- Mar. 06 0000 Z ARRL Intn'l DX Contest SSB (Dec. QST)
- Mar. 27 0000 Z CQ WW WPX Contest SSB (Feb. CQ)

Log Due Dates:

- NAQP Phone Feb. 16 (Postmark); Send to John Golomb, KZ2S, 107 Bailey Corner Rd, Wall, NJ 07719
- CQ WW 160 CW Feb. 28 (Postmark); Send to Dave Thompson, K4JRB, 4166 Mill Stone Ct, Norcross, GA 30092
- NA Sprint CW March 8 (Received); Send to Larry Tyree, N6TR/7, 15125 SE Bartell Rd, Boring, OR 97009
- NA Sprint SSB March 15 (Received); Send to Rick Niswander, K7GM, P. O. Box 2857, College Station, TX 77841

1993 RSGB IOTA Contest

de Laurence, G4HTD

The Radio Society of Great Britain has introduced a new contest for this summer, the details of which are below. Please pass on this info to whoever else you can think of. The more activity the better.

The Radio Society of Great Britain invites radio amateurs worldwide to participate in the first Islands on the Air Contest this July. (Continued on next page..ed)

1. **General** - The contest is intended to promote contacts between stations in qualifying IOTA island groups and the rest of the world, to encourage expeditions to IOTA islands, and to enhance the amateur spirit particularly between British Isles stations and those in other countries. Note that the term "UK" in these rules is used to mean G, GI, GM and GW only.

2. **When** - 1200 UTC Saturday 24th July to 1200 UTC Sunday 25th July 1993. UK stations must not use 3.5 and 7 MHz from 1200-1600 UTC and from 0800-1200 UTC.

3. **Entrants** - UK entrants must be RSGB members - refer to the general rules for HF contests published in January 1993 Radio Communication.

4. **Bands and Mode** - 3.5, 7, 14, 21 and 28 MHz, SSB only. In accordance with IARU resolutions, no operation must take place on 3.65-3.7 MHz and 14.3-14.35 MHz.

5. **Sections :**

(a) UK Multiband - UK stations only, single/multioperator

(b) UK LF - UK stations single operator. 3.5 and 7 MHz only in a maximum of 8 hours operation which must be in no more than three sessions, with off periods marked in the log.

(c) UK HF - UK stations single operator. 14, 21 and 28 MHz only, in a maximum of 8 hours operation which must be in no more than three sessions, with off periods marked.

(d) IOTA Island Stations - Stations on an island with an IOTA reference, for example AS-234. This category includes GD, GJ, GU. Entrants are advised to confirm validity by reference to the IOTA directory from the RSGB IOTA committee.

(e) World (listed by continent) - Any station not in sections 5(a) - (d) above. (f) Short Wave Listener (listed by continent) - See section 10. Listings will be according to the number of entries.

6. **Exchange** - Scoring contacts are between stations in different DXCC countries. UK stations may not work each other for points. Exception: a station may be worked in the same country (and UK may work UK) for a new multiplier, with QSO points of zero. Send RS and serial number starting from 001, plus IOTA reference number if applicable. (Note: mainland G/GM/GW = EU005, GI/EI = EU115).

7. **Scoring:**

(a) QSO Points - Each contact with an IOTA island (including UK): 15 points. Other contacts count 5 points.

(b) Multiplier - The multiplier is the total of different IOTA references contacted on each band added together.

(c) Total Score - The score is the total of QSO points on all bands added together, multiplied by the total of multipliers on all bands.

8. **Logs** - UK stations must use a Summary Sheet and RSGB-style log sheets, plus an alphabetical checklist ('dup sheet') and multiplier list for each band. Other entrants may use log sheets in local format, and, for each band: a separate log, a list of multipliers, and an alphabetical checklist; also include a summary sheet for the whole contest. Logs must show: Time, Callsign, RS/serial number/IOTA reference sent, RS/serial number/IOTA reference received, multiplier claimed, and QSO points. Logs on computer disk are welcomed, in accordance with RSGB format. Log deadline (to arrive in England) is 31 August 1993; non-UK entrants should use Air-mail. Send logs to: RSGB IOTA Contest, c/o S. Knowles G3UFY, 77 Bensham Manor Road, Thornton Heath, Surrey, CR7 7AF, England. Checklogs from non-entrants are welcome. Entrants in the UK LF and HF sections must include a checklog of any contest QSOs made on ineligible bands.

9. **Penalties** - Points may be deducted, or entrants disqualified, for violation of the rules or the spirit of the contest (this includes refusal by IOTA island stations to make contacts with their own country when requested). Duplicate contacts

must be marked as such with no points claimed. Unmarked duplicates will be penalised at ten times the claimed points, and excessive duplicates may cause disqualification.

11. **Awards** - Certificates will be awarded to leading stations in each section, and in each continent, according to entry.

Packet Racket

de Ken, KE5IV

It seems another year has too swiftly passed. With all the changes and evolution to the Houston digital system, I recall 1992 as somewhat of a blur.

In May AB5A was the first Houston area PacketCluster to utilize the 19.2 kbps backbone. About the same time in May, MAGBPQ went on-line with the rest of the Houston nodes at 19.2 kbps. In August AB5A, WU3U and K5NV had a 9.6 kbps link up and going from Dickinson, TX to New Orleans, LA. Along came September and KE5IV was finally on-line at 19.2 kbps, when it is working right. What a bullet between AB5A and I! The month of November witnessed K5DX and TDXS moving from 144.930 to 144.970 MHz. With less traffic the thru-put to the users was improved.

Looking back at TexNet; it seems that since the beginning of 1992 there has been both some good news and some bad news. The good news in June was that I found out I would become a TexNet Node. In October the UHF transceiver was changed out at BRAZOS. The bad news was that August was a bad month for TexNet. The Austin Node took a direct lightning hit. Then several wireline Nodes developed problems and it took several months to fund and fix all the causes with cures.

In past columns I have addressed the subject of The W6GO/K6HHD Manager List, and the experiment of having it on the PacketCluster. Jay has now added another means of subscribing to this feature. It is called GOLITE and the subscription rate is \$10 per year. The GOLITE subscriber has access to the DX-BBS like other subscribers, the only difference being that you have to get the information electronically. You do not receive the printed List each month. In the last 15 months the number of subscribers has dropped by half. We all want something for nothing. At the current rate, only the subscribers will have anything.

Jay has also ended the clearing house for all the SYSOPS to exchange ideas and databases. This wasn't by his design either. Because of the timely fashion all SYSOPS have to submit and download data for the Manager List, the information is current and accurate due to the number of PacketClusters involved. If you need Jay's address just simply type SH/QL W6GO on AB5A, K5DX, KC5SC, or KE5IV.

There are two new Nodes on the air intended to speed access to the Cluster for the users. The first is BVDXS:N5HQM-3 in Bryan on 144.990 MHz. This should help the users in that area as well as users visiting TAMU with their portable packet systems. The second is undergoing burn-in here beside me and will have a home at One Houston Center with an alias of TDXS97 and call of K5DX-3. It has a new THE/NET 210DX ROM image designed for use with the PacketCluster.

With some of the problems experienced by the users in northwest Houston, I am going to MAG99 on 144.990 MHz using THE/NET 210DX ROM also until TCAPS fixes the problem with BPQ406A inside the data-engine. The only other choice I have is to move a computer to Magnolia and run the node PC driven like AB5A and myself. I hate to say it, but I am tired of throwing money at it. If you have questions, you know where to find me!

Bits & Bytes

de Ron, KB5NFN

And again, greetings from Austin! As usual, I've been putting this off until the last minute. One of these days, maybe I'll learn. Probably not, but maybe.

Many thanks to **Chuck, KE5FI** for the use of his station for **Novice Roundup**. Hate to say it, but I don't think anyone will do as good as last year. Band conditions on 10 M were especially stinko, with only an hour of an opening on Saturday, and that was it. I'm going to see if I can get in a little more op-time before 0000Z Sunday night, but as it stands right now, I've only 11K points. Last year was almost 77K. Definitely nasty conditions. Can't say "maybe next year" either, as I'm going for the upgrade between now and then. Wonder what we're going to do for an N/T station at Field Day? (grin)

Tip of the day for you computer users! Have you ever sat down at your system, tried to boot off the hard drive, and get the infamous message "*Non-System Disk or Disk error....*"? And then resigned yourself to backing everything up and reformatting? Believe it or not, there is a solution! MickeySoft (aka MicroSoft) is famous for making those undocumented calls in WinDoze, and why should they be any different when it comes to DOS? Write this down "*FDISK /MBR*" That's right MBR. As in Master Boot Record.

What does it do? That command reinstalls a copy of the master boot record onto your hard drive. Nine times out of ten, that command will get your hard drive back booting normally, without problems, without fail. We use it at Dell, and it works. Saves us from having to go through the agony of redoing a whole hard drive. Heh, and you thought I was just up here playing. (grin)

Not much to report on the BBSs. I crashed Cell-Bio yet again in glorious fashion, thank goodness Tuna was able to reboot it for me. I'm looking at plugging the 9600 baud modem back on Pegasus Houston, so that should make some of you high-speed users happy, not to mention my phone bill. That's it for now, See ya'll next month.

International Reply Coupons

de Joe, W5ASP

For those of you who have received IRCs and plan to exchange them for U.S. postage, here are some facts that you should know before you step up to the window at your local U. S. Post Office. (You can pretty bet that the postal employee serving you will not be equally well informed!)

According to Section 392, *International Mail Manual*, Issue 9, Dated 2-3-91, International Reply Coupons purchased in foreign countries and issued after January 1, 1975 are exchangeable, "*...at the rate of 50 cents per coupon, irrespective of the country where it was purchased.*"

Sounds pretty straight forward doesn't it? **NO WAY!** In its infinite wisdom the Postal Service has issued a separate directive which defines the actual redemption prices on IRCs as follows. IRCs dated:

- 01/01/75 to 05/28/78 - \$ 0.18
- 05/29/78 to 12/31/80 - \$ 0.20
- 01/01/81 to 02/16/85 - \$ 0.30
- 02/17/85 to 04/03/88 - \$ 0.37
- 04/04/88 to 02/02/91 - \$ 0.40
- 02/03/91 to Present - \$ 0.50

Okay, so your IRC really isn't worth 50 cents after all. It just means you'll first sort them by date before you turn them in. **WRONG!**

If you've ever tried to read the date stamped on the IRC by the issuing postal authority, you'll have discovered that not all have a date stamp (they are worthless!), and many of those that do are either incomplete or illegible. The net result is that quite a few of those incoming IRCs will be of no use to you. Unless of course you can pawn them off on some unsuspecting ham who doesn't know better, or ship them off overseas in hopes of getting a QSL card.

Also, if you've been told that you can exchange a unused IRC issued in the states with the U. S. selling price stamped on it for 1 cent below the purchase price, i.e. get 94 cents for a 95 cent U. S. issued IRC, ...**NOT SO!** Such an exchange can be made only "*...by the original purchaser*". (But then again, how does your friendly postal person know that you were or were not the "original purchaser"?)

IRCs are a neat idea. They definitely have their uses. Just remember that they are a device of someone's "postal service" and therein lies the rub!

(The day this issue "went-to-press" I ran across a note in the *Southern California DX Club Bulletin* which quotes a USPO memo dated 1/4/93 to the effect that **NONE of the IRCs issued prior to 2/17/85 have any redemption value!** Those issued 2/17/85 and after may be redeemed as above. How'ya like them apples?)

Deed Restrictions & Amateur Antennas

de Sid, K5XI

I. Introduction

Amateur radio operators' efforts to erect antennas capable of effective communications on the HF bands notwithstanding restrictive zoning laws was aided considerably when the FCC issued the now famous PRB-1 declaratory Memorandum Opinion and Order, on September 19, 1985. In PRB-1, the FCC declared a "strong Federal interest" in amateur radio communications, and held that state and local regulations that preclude amateur communications are preempted. While PRB-1 has been helpful to amateurs who must deal with local zoning ordinances, it was of virtually no use to amateurs in Houston. The FCC ruling in PRB-1 did not cover deed restrictions. Houston does not have zoning. Because amateurs here must deal with restrictive covenants in deeds, PRB-1 is virtually useless to us.

Nevertheless, recent developments in the law have now laid the ground work for establishing federal preemption of deed restrictions which preclude amateur radio antennas. I will discuss the current law applicable to deed restrictions, and then outline recent developments in the law. I believe the stage is now set for a test case in Federal court addressing the issue of federal preemption of deed restrictions. Houston, Texas is a likely place for such a case to be brought because of the pervasiveness of deed restrictions in lieu of zoning ordinances here.

II. What Are Deed Restrictions?

Before zoning regulations were used to govern the use of land, restrictive covenants were used to control land use. The common law that we inherited from England allowed a seller of land to include restrictive covenants in the deed when the land was sold. The chancery courts would enforce restrictive covenants with injunctions, if necessary, based upon the theory that the buyer took the land with notice of those restrictions, and agreed to them. Indeed, the seller could bring suit to enforce the restrictive covenants long after the sale had taken place.

Today, deed restrictions are commonly referred to as covenants, conditions and restrictions, or CC&Rs. A land developer

will typically file a list of CC&Rs in the county clerk's office where deeds are recorded as part of the subdivision plat or plan. Anyone who thereafter buys a lot in that subdivision is deemed by the law to have constructive notice of anything that a search of those land records would reveal, including those deed restrictions.

Restrictive covenants are considered to run with the land. They can be enforced against you even if you did not know about them at the time you purchased your house, and even if you did not buy your house from the original developer. Courts normally assume that you voluntarily agreed to them when you bought your house. Of course, where every single subdivision in an area has the same type of restrictions, you may in fact have little choice in the matter.

Normally, the authority to enforce CC&Rs passes from the developer to a homeowners association after the developer has sold all of the lots in the subdivision. If a homeowner installs an antenna or tower that violates the deed restrictions, he or she may be brought to court by the homeowners association. Usually, the CC&Rs will set forth a procedure for requesting permission in advance to construct any such structure. If you can obtain the permission of your homeowners association to construct such an antenna, you are lucky. You can put down this article and go work some DX. If not, read on.

III. What Effect Did PRB-1 Have Upon Deed Restrictions?

The short answer to the question of what effect PRB-1 had on deed restrictions is "none." Actually, it is worse than that. If you are in a lawsuit litigating the question of federal preemption of deed restrictions, you should forget about using PRB-1. You would be better off if PRB-1 did not exist.

In PRB-1, the FCC declared that there is "a strong federal interest in promoting amateur communications." The FCC held that "state and local regulations that operate to preclude amateur communications in their communities are in direct conflict with federal objectives and must be preempted."

However, the FCC specifically excluded deed restrictions from the reach of PRB-1: "We reiterate that our ruling herein does not reach restrictive covenants in private contractual agreements. Such agreements are voluntarily entered into by the buyer or tenant when the agreement is executed and do not usually concern this Commission." PRB-1 (typed opn. at p. 10 n.6).

The FCC stated that "[p]urchasers or lessees are free to choose whether they wish to reside where such restrictions on amateur antennas are in effect or settle elsewhere." PRB-1 (typed opn. at p. 4).

The premise stated by the FCC for excluding deed restrictions is wrong. How many amateur operators "voluntarily" entered into the long list of CC&Rs to which their property is subject? When faced with the alternatives of: (a) living in the country on a farm and commuting two hours to work every day, each way, or (b) "voluntarily" buying a house with deed restrictions in an area where all of the subdivisions have restrictive covenants effectively prohibiting amateur antennas, you do not have much choice.

Moreover, the same logic could be applied to local zoning ordinances. Doesn't a homeowner "voluntarily" subject himself or herself to local zoning regulation when he or she enters into a contractual agreement to purchase a home within the limits of that local jurisdiction? In some areas, the same deed restrictions may apply to every parcel of land in the entire city. One such example is Foster City, California. In some areas of Houston, deed restrictions are similarly so pervasive that, in effect, such restrictions are tantamount to having de facto zoning regulations.

PRB-1 has actually been used against amateurs who attempted to challenge deed restrictions. In *Hotz v. Rich*, Super. Ct. No. 334580, slip op. at 4-5 (Cal. App.--1st App. Dist. March 19, 1992), the California Court of Appeals reversed a lower court decision that had held deed restrictions to be preempted by federal law. The Appeals Court said that because the FCC disavowed in clear and unambiguous terms any intent to preclude private arrangements restricting antenna height in PRB-1, there could be no federal preemption.

IV. What Is The Basis For Federal Preemption Of Deed Restrictions?

The basis for federal preemption of deed restrictions that effectively prohibit amateur radio communications is 47 C.F.R. 97.15(e), not PRB-1.

In 1985, the FCC did limit the scope of its intended preemption to exclude restrictive covenants. However, the FCC later issued the above-mentioned regulation which is not so limited (although it does refer to PRB-1 "for details" regarding preemption of state and local regulations). This regulation, promulgated after the limited declaration of PRB-1, is now the controlling law. It states: "Except as otherwise provided herein, a station antenna structure may be erected at heights and dimensions sufficient to accommodate amateur service communications. [State and local regulation of a station antenna structure must not preclude amateur service communications. Rather, it must reasonably accommodate such communications and must constitute the minimum practicable regulation to accomplish the state or local authority's legitimate purpose. See PRB-1, 101 F.C.C.2d 952 (1985) for details.]"

The operative portion of paragraph (e) is the first sentence. This sentence states a clear, unequivocal and unambiguous federal policy that a station antenna structure may be erected which is sufficient to accommodate amateur radio communications.

The parenthetical reference to PRB-1 "for details" concerns the second and third sentences of this paragraph, also expressed parenthetically, which specifically refer to state and local regulation, i.e., zoning ordinances. PRB-1 does give details concerning the policy that state and local zoning ordinances must reasonably accommodate amateur radio communications and must constitute the minimum practicable regulation to accomplish the state or local authority's legitimate purpose. But the parenthetical reference to PRB-1 does not limit the unambiguous scope of the first sentence; (the first sentence is the only portion of this paragraph not contained in parentheses).

The scope of preemption is therefore not limited to state and local zoning ordinances.

(The remainder of this article will appear in the March issue of the TDXS Bullsbeet...ed)

Murphy's Laws

- The man who can smile when things go wrong has thought of someone he can blame it on.
- Nothing is impossible for the man who doesn't have to do it himself.
- Do not believe in miracles - rely on them.

Antenna Mast Material

de Tom, K5RC

(The article beginning on the following page is a reprint of Tom, K5RC's write up on his new marketing endeavor, high quality antenna masts for amateurs. He has some good information and a source of the "right stuff" ...ed)

ANTENNA MAST MATERIAL

Selection of antenna mast material is every bit as critical to the survival of an antenna system as the tower, guy wires and ground supports. High or erratic winds can cause a mast to bend, if it is not sized properly. A bent mast will most often damage antenna elements and sometimes damage the tower structure. At the very least, a bent mast presents an eccentric load, places erratic stresses on the tower and presents an extremely dangerous repair job. If the antennas weren't damaged by the bending, they may not survive removal from the bent mast.

When designing an antenna system, Hams often make mast material selection almost an after-thought. We often "get away" with water pipe or aluminum mast on small antennas and with surplus pipe or tubing on larger arrays. We appear to "get away" with sub-optimized systems because the manufacturers build in safety margins to allow for variations in the manufacturing processes, just as many people "get away" with driving 100+ MPH on passenger tires. To compound the problem, common wisdom is that tower manufacturers have always under-rated their towers, so you can overload them with reasonable success. In fact, we appear to "get away" with these compromises because the wind and/or ice conditions that will stress towers and antennas to their failure point may not have been reached at your location, YET! I once lived in a house that was in "The Hundred Year Flood Plain." The builder stated that it was safe to build a house there because the odds were that it would flood only once every hundred years. In 1979, it rained 42" in 24 hours! If you want to play the odds, try Las Vegas.

The other ingredient that limits our choices is that good mast material is difficult to find. It isn't a line item in most catalogs. There are several ham distributors selling 2" OD steel, up to 1/4" wall thickness. They are available in only a few different lengths and are probably adequate for most single-antennas installed just above the top of the tower. If you are going to install a large array or stack more than one antenna on a mast, get ready to call most of the surplus steel companies in the phone book, rummage through junk yards, or pay a premium (in advance) for one piece of mast from a steel company.

A BETTER WAY

Productivity Resources now provides a cost effective alternative to "getting away" with inferior masts, placing yourself in a dangerous and liable situation and endless shopping for mast material. In January/February, 1992, The National Contest Journal (NCJ) re-printed an earlier article by Stan Griffiths, W7NI, about selection of mast material. Stan has a follow-up article on the dangers of aluminum mast material in the March/April, 1993, NCJ. Those articles prompted us to write a simple computer program. Given a particular area of the country, wind load of the antenna(s) and spacing along the mast, we can quickly determine the yield strength that will be necessary to safely support your antenna system. We have located a reliable source of American steel tubing, who is working with us to provide extremely high quality mast material at an affordable price. Simply give us a call and we will plug the data in and give you a quote, on the spot.

WHAT YOU GET

Our stock material is 2.00" outside diameter mast, which will fit in all standard tower top sections and mate with most popular antennas. The mast is made from 4130 alloy chromium-molybdenum steel. The wall is 3/8" thick, which makes the inside diameter 1 1/4." The stock is aircraft quality, cold drawn and heat treated to a minimum of 120,000 PSI yield strength. If required, we can further heat treat the material to achieve the safe yield strength that your application requires. Each mast is cut to the length you specify. It is shipped with a certification of compliance to the applicable ASTM standards and with a test report indicating actual physical properties. If you are required to file construction plans with local authorities, this data is invaluable.

Unless specially ordered, there is no finishing process performed to the mast. The outside will appear black and mottled from heat treating. The mast will quickly develop a surface coat of rust. These conditions are normal for this material and do not indicate any degradation of performance (it would take at least 50 years to notice any degradation due to surface rust). Once the mast is in place, appearance should not be an issue. We do not galvanize this material because hot dip zinc galvanizing is very expensive, and provides no additional structural benefit. If you desire galvanizing or painting, those services are available at additional cost.

You may also notice one or two small "slices" missing from the mast and, perhaps, some indentations. These are the areas where samples were taken to perform the physical tests and to determine the hardness of the mast (they really do test each mast!). The mast weighs approximately 6 1/2 pounds per foot.

THE FINE PRINT

Mast orders are accepted prepaid or by credit card. Each mast is cut to order and shipped from the fabricator. Changing your mind after your order has been entered is difficult and expensive for everyone. We ship the masts by motor freight or air freight. Mast is always shipped freight collect (no exceptions). We do this because, in the unlikely event there is any shipping damage, the recipient has to file the damage claims. If the freight is pre-paid, you will find a less sympathetic freight carrier and your claim will not receive the priority that it deserves.

We warrant the mast to be free from defects in workmanship for TEN YEARS. We will replace any mast that fails because of a workmanship defect free of charge.

WE ARE NOT RESPONSIBLE FOR ANY OTHER FAILURE MODES, NOR ARE WE RESPONSIBLE FOR LABOR AND DAMAGE OF ANY KIND. THE DATA WE PROVIDE ON MAST SIZING IS A REFERENCE SERVICE, ONLY, AND SHOULD NOT REPLACE DETAILED ENGINEERING OF YOUR SPECIFIC SYSTEM BY A COMPETENT AND CERTIFIED STRUCTURAL ENGINEER.

There is no other warranty expressed or implied. May the Loudness be with you.

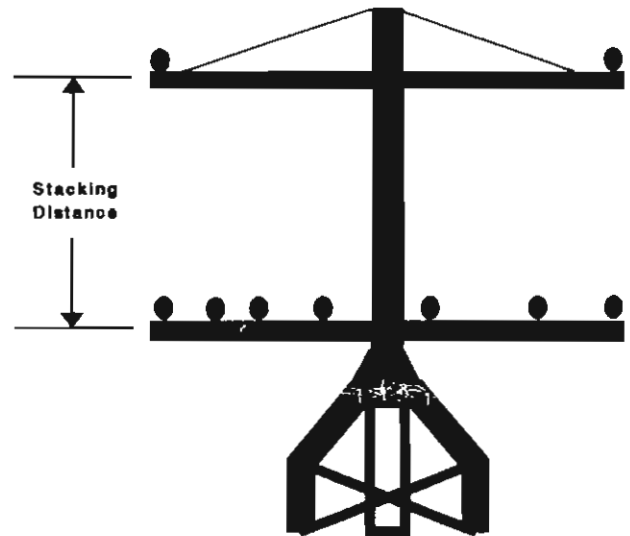
73 and DX,

Tom Taormina, K5RC

RELATIVE COMPARISON OF MAST MATERIALS

To gain a perspective on safely stacking antennas, let's look at a common application comparing Productivity Resources mast with the most commonly available material. This comparison assumes that you have a 9 square foot antenna (a TH7DXX, for instance) mounted 1 foot above the top of the tower and you want to stack another antenna of about 6.5 square feet (a 2 element shorty-forty, for instance) above it. The table below indicates the size of antenna (in square feet of wind surface) that can be mounted at various stacking distances using the Productivity Resources 4130 Chrome-Moly mast compared with the heaviest mast currently advertised in the Amateur Radio publications (2"OD, 1/4" wall, 1041 alloy steel).

STACKING DISTANCE	SAFE ANTENNA SIZE	
	<u>OURS</u>	<u>THEIRS</u>
5'	20.5	11.0
6'	17.5	9.2
7'	15.0	7.9
8'	13.2	6.9
9'	11.7	6.1
10'	10.5	5.4
11'	9.5	4.8
12'	8.7	4.3
13'	8.0	3.9
14'	7.3	3.5
15'	6.7	3.2



As you can see, with the 1041 alloy, you can only safely stack the top antenna 8' above the bottom one. For HF applications, this close spacing is almost certain to degrade the performance of both antennas. With the 4130 mast, you can stack the top antenna at least 15' above the bottom antenna. To compare cost, the 1041 alloy mast to stack at 8' costs about \$250 while the 4130 mast to stack at 15' only costs about \$275! We think you'll agree that the added safety and increased height performance is worth the small difference in price.

Call today for a quote on your application.

Productivity Resources
 Box 813
 Bellville TX 77418-0813
 409-865-9800

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