



THE BULLSHEET



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Texas DX Society

An ARRL Affiliated Club

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The Texas DX Society, P.O. Box 540291, Houston, Texas 77254-0291
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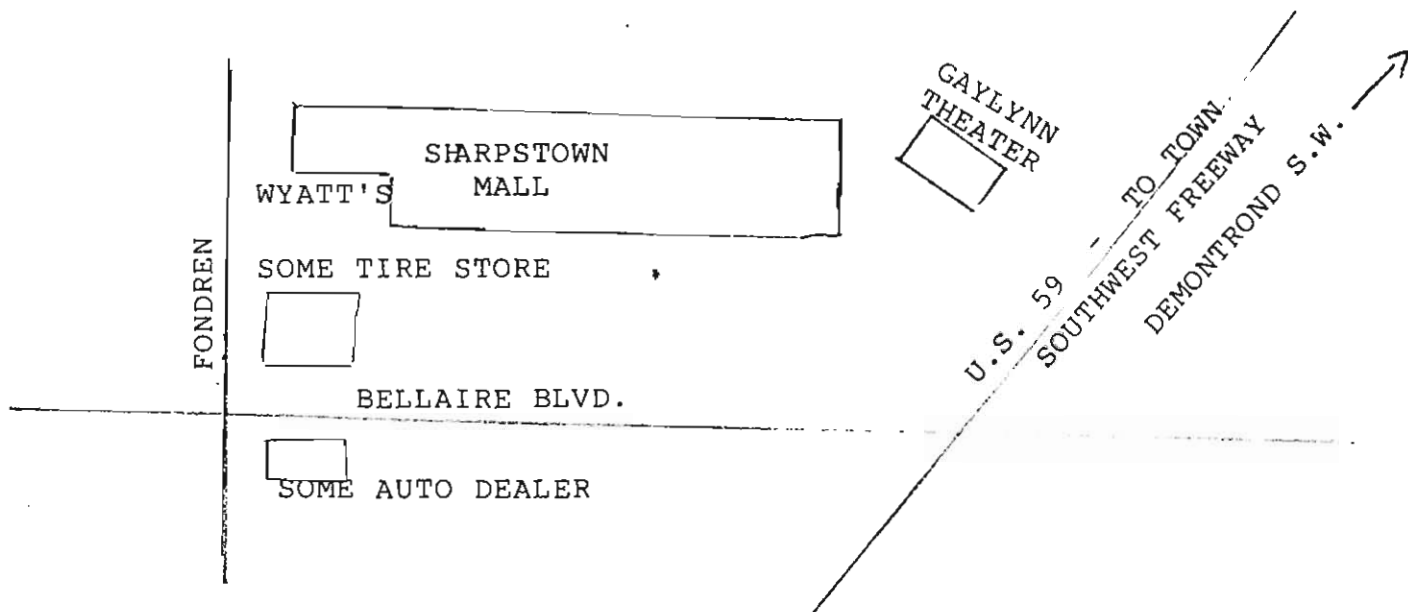
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Treasurer:	KG5U, Dale Martin	Field Day Chairman:	K5GB, Butch Barber
Contest Chairman:	K5GN, Dave McCarty	Conv. Chairman:	W5ASP, Joe Staples

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ANNOUNCEMENTS

MEETING NOTICE - The Texas DX Society meets the second Friday of each month except when changed by the Board of Directors. The March TDXS meeting will be held Friday, March 11th, PLEASE NOTE -- This month we will have a "dinner meeting" at WYATT'S CAFETERIA at Sharpstown just off the Southwest Freeway. Plan to eat about 6:30, and the meeting begins at 7:30. We will have a private banquet room. We hope to have a good crowd, so we can see how the members like the concept. Here is N5DU's back-of-a-napkin map of the meeting place. For all you statisticians, this map should be given a 90% confidence interval.



DAVID BUSICK , N5JJ
SILENT KEY

It didn't take long after David got his license for him to outgrow the confines of the novice bands. At age 11 he had mastered the code and, instead of hearing W5ZNY in the novice band, you were likely to hear him using W5NN or W5UW in the Extra band running a DX pileup at 30 WPM. When I would hear him, I'd call Max and tell him that the kid was at it again! David would call and ask how I knew it was he and tell me that he was going to blow me out of the water in the next Sweepstakes! Well, out of five hams in his family, no one else could send CW the way he could and, had he not run out of time, he probably would have blown us all away in Sweepstakes.

You would expect the youngest son of a Ham Radio family to be interested in the hobby, but David had a passion for it and it became an integral part of his life. By age 14 he had his Extra class license and had been on a DXpedition to VP2LD, FM7WD and FM7AD/FS7. He was also licensed as XE1AN and contested from Mexico City. By the time he was out of high school, he was recognized by the contesting community as one of the up-and-coming super operators.

David had an innate talent for the code and he had a set of "golden ears." He could pick stations out of the noise on 160 meters that most of us couldn't hear. He enjoyed building antennas and was at home on top of a tower or stringing Beverages through the swamps of Hitchcock.

David was a member of the Texas DX Society for nearly 15 years, but he was more an integral part of the club than just a member. The successes of Field Day and Club activities such as the Convention, XE2QQ, and XE2FU were, in large part, due to his efforts and contributions. N5JJ and NA5R got the Club interested in mobile contesting and they invented the Armadillo Run. The impatience of his youth helped push the Club forward. His energy and enthusiasm helped motivate the complacent. His sense of humor and his sarcastic wit were an integral part of the Club's personality. When he and Grady organized the "Rowdies," the Club had little motivation and no treasury. In my opinion, the Rowdies awakened the club to our current philosophy "there isn't anything the TDXS can't do when we set our collective minds to the task."

David contracted cancer about the time of the 1983 Armadillo Run. He remained active in the club and in contesting as long as he had the strength. He lost the battle with his disease on February 21, 1988 at the age of 30. In fitting irony, he became a Silent Key during the 1988 ARRL CW DX Contest.

N5JJ, 73 and DX, de K5RC

HOT FLASH - Your editor now has access to a FAX machine, a Pitney Bowes 8000. It is connected to its own phone line, telephone number 713-790-1275. The identifying name is "Baylor Cell Biology." Please add at the top of any document "Attention Dr. William Schrader" so the paper will be brought to me. This FAX unit is QRV 24 hours a day.

BULLSHEET MAILING LIST - It is the club's desire to provide the Bullsheet free to all amateurs in the area with an interest in DXing and/or contesting. Donations to defray the publication and mailing costs are appreciated. If you would like to receive our newsletter, simply send your name, call, and mailing address to the Texas DX Society, P.O. Box 540291, Houston, Texas, 77254-0291. Visitors at the regular club meeting can request the monthly newsletter by providing their mailing address on the sign-in sheet. Articles or other newsworthy items from club members and other interested amateurs are hereby solicited by your editor.

WEEKLY DX & CONTEST NET- Each Tuesday night at 9:00 p.m. the Club sponsors a net on 147.96/.36. Participation by non-members as well as members is welcomed. The purpose of the net is to facilitate the exchange of DX, contest, and Club information within the amateur community. Your active support of this activity is encouraged.

THE PRESIDENT'S CORNER
(by George DeMontrond, NR5M)

For those of you who may have wondered recently if your pres was losing interest in radio, relax (or perhaps worry). The rodeo went great. Steer prices were way up. The Houston liquor distributors are once again on sound financial footing. And now I can radio (as opposed to rodeo) the rest of the year. (I simply must get the ARRL to change the dates of the DX contests to better fit my activities schedule.)

The February meeting was a success. I heard several good comments on the dinner/meeting format. If you failed to make last month's meeting you'll get a second chance in March. Once again we meet at Wyatt's in Sharpstown Center. I encourage you to come out and join the fun.

Several important changes were voted at last month's meeting. TDXS by-laws now provide for membership to all who hold technician or higher class licenses. It is the club's consensus that we will retain our high standards for prospective members. We still seek active, enthusiastic candidates with proven interest in DXing and/or contesting. A technician class license, however, will no longer bar an otherwise suitable candidate.

In an effort to minimize delay and red tape, the club reduced to four (4) the meeting attendance required within a one year period before the prospective member's name can be taken to the board. As before, a clubmember sponsor is required. All other procedural aspects of the membership process remain the same.

It is my personal desire to see the club grow this year. We need a continuing supply of enthusiastic, hard-working, involved new members to keep the TDXS a first rate club. I hope the procedural changes we have made serve to attract people with the "right stuff" into our fold.

CONTEST CORNER
(by Dave McCarty, K5GN)

First off, thanks to those who participated in the Sprint teams in February. The team scores were down somewhat, but those who got on the air were definitely appreciated.

Second, thanks to those of you who found multipliers in the ARRL DX contest and put them out on 2M. Several members participated in this way, encouraging non-members to help as well. Some of the locals worked new countries and new band-countries by acting on your tips. Others improved their contest scores. NR5M came closer than ever to W3LPL's multiplier total this time out, partially due to the help from 2M.

The packet network scheme has not yet become a reality. It will take some time and trial and error to get it right. It will also take time to get more of the active membership on the air on packet. I hope that this system will solve the QRM problem of 2M FM and will become a useful resource both in and between contests.

March wraps up the crowded part of the spring segment of the contest season with the ARRL DX SSB test. The state QSO parties and other minor contests fill in the gaps between majors from now on.

All of a sudden, its Springtime. Soon 10M will peak before its summer doldrums, 15M will start to have its double openings, 20M will open over the pole at night, 40 will become noisy and 80-160 will be unbearable. It's debatable, but the seasonal improvement on the high bands and the lack of continuous static on the low bands makes March and some of April the best conditions of the year for W5 contesters.

The Long Path - Last month we published a questionnaire on contest preferences to help the club decide on target contests for club score entries. I had hoped to discuss this topic at the February meeting, but was out of town; the topic was omitted for lack of time. We will discuss it at the March meeting. My vote, considering club ability and resources, is to concentrate on FD, SS, September NA sprints, and the CQ WPX contests.

The Short Path - March, April, and May represent the end of the main contest season.

3/5 - 6	ARRL DX SSB
3/12-13	Miscellaneous QSO parties
3/19-20	Bermuda Contest; more QSO parties
3/26-27	CQ WW WPX SSB
4/2 - 3	Easter
4/9-10	NAQP CW; more QSO parties
4/16-17	NAQP SSB; more QSO parties
5/28-29	CQ WW WPX CW

BERMUDA CONTEST - See p. 99 of March '88 CQ. 36 of 48 hours, single op only, off times minimum length three hours, from your residence only. 80-10, W/VE works U.K., VP9, and F.R.G. once per band-mode, QSO's on same band must be at least 30 minutes apart. Exchange RST and State (W), province (VE), county (G), parish (VP9), or DOC number (DL). Score 5 points/QSO times number of different VP9's worked per band. Overall winner goes to VP9 for trophy (free).

NORTH AMERICAN QSO PARTY -- See p. 83 March '88 QST. Sponsored by NCJ. 1800Z-0600Z, 10 hours on for single op, min off time 30 minutes, full time for multi-multi: Exchange name & date/province/country. NA works anyone. Score 1 pt./QSO, multiply by sum of states (SD), VE call areas (VE 1-8, VO1-2, VYI) and other NA countries (DXCC/CQ rules) worked per band. Suggested times are important: 10M @ 1900Z, 2000Z; 160M @ 0430Z, 0530Z.

CQ WW WPX SSB -- The best condx for W5 often occur on this weekend. N5AU holds the USA MULTI-Single record and the W5 M-M record. NTCC holds the club score record. See p. 24 of January '88 CQ. 48 hour test; 30 hour single-op, minimum 60 minutes, 48 hours multi single (one TX, 10 minute rule) or multi-multi. Exchange RST and serial number of QSO in the contest (per band for M-M). No points, just multipliers from USA, two points for N.A. outside U.S.A., three points for other continents. Double QSO points on 40, 80. Triple on 160. Multiplier is total number of different prefixes worked in the contest, regardless of band. Separate club scores for SSB, CW.

Note: A separate trophy for Novice/Tech is offered for this year's SSB contest, obviously 28 MHZ only.

THE SKEW PATH -- Rumors, confirmed and otherwise, of club member scores.

Sprint (September) CW -- TDXS #1 team was 3rd behind Blues Brothers and SCCC #1 -- somebody's error caused W5WMU (K5GA)'s score to be left out of the team score. Scores were good 'MA and 'WMU were just out of the top ten. 'GN was #2 score and #1 Multiplier total. 'LZO was #6 score, #7 QSO total. Team members were 'GN, 'LZO, 'MA, 'TU, 'U, 'H, 'Z5M, 'D, 'TNO, 'WMU.

Sprint (September) SSB -- TDXS #1 Team was #2 behind SOMC. Ten entries: 'LZO, 'R5M, 'U, '1VF, 'D, 'DX, 'VL1, 'N, 'P. Scores again were good. 'LZo was #4 score, #10 QSO total, and #1 Multiplier total.

The NCJ listed records culled from QST for the ARRL DX Competition. TDXS is proud to claim several of the slots:

WORLD	CW	M-M	XE2FU
WORLD	SSB	M-M	XE2FU
USA	CW	M-S	K5RC
USA	CW	20M	K5IY (KZ5M)
W5	CW	AB	K5RC (K5ZD)
W5	PH	10M	K5RC (K5GN)
W5	PH	15M	NA5R (K5GN)
W5	PH	20M	K5GA
W5	PH	40M	N5JJ
W5	PH	M-S	K5GA

Also listed in the NCJ were score rumors from CQ WW CW:

NR5M #2 USA M-M at 7.8M behind
W3LPL at 10.6M.

CQ's March issue contained the results of 1987 CQ WW WPX SSB:

KE5FI	SOAB	#11 U.S., #3 W5
KG5U	SOAB	#13 U.S., #4 W5
(K5ZD/1	SOAB	#2 U.S.)
W05G (K5GA)	40M	#2 U.S.
W5WMU	75M	#3 U.S.
K5NA/2	160M	#2 U.S.
NR5M	M-S	#5 U.S.
(+ KN5H, K5GN, W9AGH, KE5IV, NM5M, NT5D, WB5N)		
WV5K	M-M	#5 U.S., #2 W5
(+K5LZO, N5IVF, N5KFJ, WB5RUS)		

VIA BURRO - Mailing address:

73 MAG, CQ 160 CW, JAN VHF SS All past due.

3/	CQ 160 SSB 76 N. Broadway Hicksville, N.Y. 10	3/	Sprint CW Rusty Epps, W6OAT 651 Handley Trail Redwood City, CA 94062
4/	ARRL DX Competition 225 Main Street Newington, CT 06111	3/	Sprint phone Rick Niswander K7GM 910 W. Claremont Phoenix, AZ. 85013

Hasta La Vista - Get on the air! See you at the meeting.

'73
Dave

THE OTHER FELLOW'S SHACK
(...de W9AGH, K2TNO)

The December '87 BROADCAST ENGINEERING has an interesting article on hybrid combiners. The applications discussed are antenna switches and transmitter combiners. Would you believe 77SX's in parallel? The four-port combiner requires some way of shifting the phase to one input port. This makes the whole approach frequency sensitive. Most new high power TV transmitter installations in the past 10-15 years use hybrid combiners to parallel two transmitters for redundancy thus assuring less lost air-time. See K5RVK, K2TNO, or myself for a copy of the article.

On March 13th at 0250 UTC, Radio RSA from South Africa will present a special program on current satellite and DXpedition activity. Look on 6010, 9580, or 9615 khz.

Rumors have it that the shortwave industry is trying to push international broadcasters to change to H3E mode (single sideband AM). There is a lot of resistance from third world countries using second hand transmitters because of the more extensive modifications required to class C plate modulated transmitters. Folks, if this happens, look for big carriers every 2.5 khz on 40 meters!

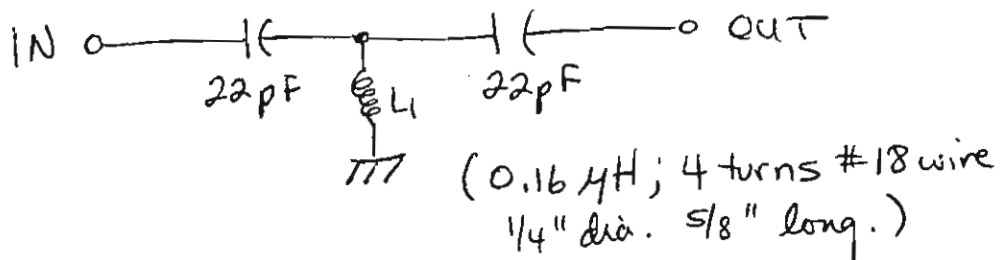
ACADIANA ARA HAMFEST - Will take place in Lafayette, LA March 12-13 at Holiday Inn Central Holidome on highway 167.

ARRL FIELD FORUM (1/88) - reports that ARRL ex-president Herbert Hoover III (W6ZH) operated mobile from inside the Red Cross float at the Rose Bowl Parade. The call was W6KA, and operated 10, 15 and 20M.

DAYTON HAMVENTION - April 29 - May 1 deadline for room reservations is April 2. Mail to: Lodging, Dayton Hamvention, 1880 Kettering Tower, Dayton, OH 45423-1800.

FRANKFORD RADIO CLUB NEWSLETTER (1/88) - Dacron rope (very strong & light) is ideal for holding up dipoles, slopers, etc. K3ND reports sizes 3/32", 3/16" and 5/16" are available in 1000 foot spools for \$30, \$65 and \$100 respectively from: Synthetic Textiles, Ventura CA. Call 805-658-7903 for info (and maybe local dealers/distributors?).

SAME FRC ISSUE - A simple hi-pass filter is described that will keep HF signals out of your 2M rig. Although not up to the attenuation achievable with a strip-line filter, it's a cinch to try in a shielded box. Input and output Z are supposed to be 50 ohms:



Attenuation is about 40-50 dB for signals below 30 MHz, but insertion loss at 148 MHz is only 0.5 dB. (Original author W3RJ).

FRC NEWSLETTER - February 88 - W2VJN reviewed the ICOM 761 HF transceiver. Noise floor, third-order intercept and dynamic range are all very respectable, as with past ICOM radios. He points out the radio has low phase noise.

FRC used two packet-radio set ups for CQWW-CW. If someone had worked just the announced stations on the KB2XZ packet cluster, they would have had over a million points, 445 band-countries and 165 zones!

YCCC Scuttlebutt, February 88 - K1GQ evaluated the ICOM 761 also and states that "the ICOM receiver is indeed noticeably better than the TS-930...The transmitter is cleaner too...AGC is more to my liking.

Bad features: (Upon band change) the radio resets the KHZ component of the frequency to a useless value, roughly 50 KHZ above the band edge...CW offset is fixed at 700 HZ...Sidetone can be lowered by internal adjustment but only down to 550 HZ.

BAD-BAD features: the RF output wave form is delayed, such that weight of the dots is screwed up. You have to increase the keyer weighting to 60% to make the radio send decent code...The amp-keying relay is rated for only 50 VDC. ...No technical description of the computer interface possibilities....In full QSK mode, operating split-frequency (more than 0.3 KHZ) results in degradation of the transmitted signal. The signal developed trash-sounding clicks and even some chirp.

JOHNSON SPACE CENTER ARC NEWSLETTER - (February 88) - Here's a list of 10M beacon stations active as of 12/87:

10 METER BEACONS

Freq	Call	Location/Equipment
* 28.0505	PY2GOB	SAN PAOLO, BRAZIL
* 28.175	VE3TEN	OTTAWA, CANADA
* 28.185	OA4VHF	PERU
28.2	KF4MS	ST. PERTERSBURG, FLA 75W, GROUND PLANE
28.201	LU8ED	ARGENTINA
28.2025	ZS5VHF	NATAL, RSA GROUND PLANE ALT: 1250 FT
28.205	DLOIGI	WEST GERMANY 10W, DIPOLE
28.209	WA1IOB	MARLBORO, MASS.
28.210	3B8MS	MAURITIUS GROUND PLANE
28.210	K4KMZ	ELIZABETHTOWN, KY 20W, VERTICAL
28.2125	ZD9GI	GROGH ISLAND
28.215	GB3RAL	CROWBOROUGH, ENGLAND 12W, DIPOLE
28.2175	WB9VMX	OKLAHOMA CITY, OK 4W, GROUND PLANE
28.220	5B4CY	CYPRUS 26W, GROUND PLANE
28.222	W9UXO	CHICAGO, ILL 10W, GROUND PLANE
28.2225	HG2BHA	HUNGARY
28.2275	EA6AU	BALEARIC ISLAND
28.230	ZL2HMF	MT. CLIMIE, NZ. 50W, VERTICAL
28.231	W7JPI	
28.235	VP9BA	HAMILTON, BERMUDA 10W, GROUND PLANE
28.2375	LA5TEN	OSLO, NORWAY 10W, 5/8 WAVE GROUND PLANE
28.2425	ZS1CTB	RSA 20W, 1/4 WAVE VERTICAL
28.2425	LU4FM	ARGENTINA
28.245	A92C	BAHRAIN NW/SE DIPOLE
28.250	Z21ANB	BULAWAYO, ZIMBABWE 15W, GROUND PLANE
28.2525	WB4JHS	THOMASVILLE, GA
28.255	LU1UG	GRAL PICO, ARGENTINA 5W, GROUND PLANE
28.2575	DK0TEN	ARBEITSGEM, WEST GERMANY 40W
28.260	VK5WI	ADELAIDE, AUSTRALIA 10W, GROUND PLANE
28.262	VK2RSY	SYDNEY, AUSTRALIA 25W, GROUND PLANE
28.264	VK6RWA	PERTH, AUSTRALIA
28.266	VK6RTW	ALBANY, AUSTRALIA
28.270	VK4RTL	TOWNVILLE, AUSTRALIA
28.270	ZS6PW	PRETORIA, RSA 10W, 3 ELEMENT YAGI ON "G" LAND

28.2725 9L1FTN SIERRA LIONE 10W, VERTICAL DIPOLE
28.2775 DFOAAB WEST GERMANY 40W, GROUND PLANE
28.280 VE1MUF ATLANTIC CANADA
28.282 VE2HOT/B
28.284 VP8ADE FALKLAND ISLANDS 8W, VERTICAL BEAM TO "G" LAND
28.286 KA1YE ROCHESTER, N.Y. 2W, VERTICAL DIPOLE
28.287 W8OMV ASHVILLE NORTH CAROLINA
28.290 VS6TEN HONG KONG 4W, GROUND PLANE
28.291 LU2FFV
28.293 ZD8MB ASCENSION ISLAND
28.294 VU2BCN
28.296 W3VD LAUREL, MARYLAND 1.5 W, VERTICAL DIPOLE
28.2975 ZS1LA STILLBAY, RSA 20W, 3 ELEMENT YAGI NW
28.299 PY2AMI SAN PAULO, BRAZIL 10W, VERTICAL DIPOLE
* 28.3255 DF0THD WEST GERMAN
* 28.888 W6IRT CALIFORNIA
* 28.890 WD9GOE FREEBURG, ILL
* 28.992 DL0NF WEST GERMANY
* == NOT SANCTIONED BY I.A.R.U.
Edited by: VE2HOT/W1HDQ Forwarded VIA Wb2HBZ, NN2Z, KA2QHD, USENET

TS930S MOD
(by Bob Perring, N5RP)

Improving the TX to RX response time and the RX to TX attack time.....

On signal unit board.....

Remove capacitor C500 and short together the protruding leads from R-474 and R-476.

This mod was originally performed to better the AMTOR capabilities of the rig, but to my surprise (although logically connected) its greatest benefit was realized when I went to QSK/CW for the first time after implementing the mod. I was very pleased to find an improved attack and response time in the radio when operating QSK. On my scopes, I find no clipping of dit strings at speeds far beyond my comfort range of copy. Receiver recovery is as good as that which is experienced when "keying the rig with the VOX off." Great for working the CFO gang "on the boards." (Those of you who understand the last sentence need no explanation; those who did not, would not benefit from same---ed.)

DX ROUND UP
(by Jim Lane, N5DC)

Boy! Did I get a shock....Page 59 of the March issue of QST has a list of countries not served by the outgoing ARRL QSL Bureau. I will list them in case you missed it. Be sure to check before you send some cards, and at best lose several weeks before they are returned to you, and at worst you lose the cards.

AP5.....Bhutan	V4.....St. Christopher and Nevis
A6.....United Arab Emirates	VP2E.....Anguilla
A7.....Qatar	VR6.....Pitcairn Is
BV.....Taiwan	XT.....Burkina Faso
C9.....Mozambique	XU.....Campuchea
D6.....Comoros	XW.....Laos
ET.....Ethiopia	XX9.....Macao
HZ.....Saudi Arabia	X2.....Burma
J5.....Guinea-Bissau	YA.....Afghanistan
KC4.....US bases in Antarctica	ZA.....Albania (damn! Where do I send the card?-ed.)
KC6.....Belau	ZD7.....St. Helena
KC6.....Micronesia	ZD9.....Tristan da Cunha
KH1.....Baker and Howland Is	ZK2.....Niue
KH3.....Johnson Is	ZK3.....Tokelau
KH5.....Palmyra and Jarvis Is	3C.....Equatorial Guinea
KH7.....Kura Is	3V.....Tunisia
KH9.....Wake Is	3W.....Vietnam
KP1.....Navassa	3X.....Guinea
KP5.....Desecheo	4W.....North Yemen
P5.....North Korea	5A.....Libya
SU.....Egypt	5H.....Tanzania
T2.....Tuvalu	5R.....Madagascar
T3.....Kiribati	5U.....Niger
T5.....Somalia	5X.....Uganda
TJ.....Cameroon	7O.....South Yemen
TL.....Central African Republic	7Q.....Malawi
TN.....Congo	8Q.....Maldives
TT.....Chad	9G.....Ghana
TY.....Benin	9N.....Nepal
TZ.....Mali	9U.....Burundi

So enough said. BE CAREFUL BEFORE YOU SEND CARDS TO THE LEAGUE!

My heartfelt sympathies to the Busicks for their recent loss. We all will miss David.

I had a good visit with a friend recently, who is shipboard operator for one of the U. S. tanker companies. Bill gave me the below listed SITOR frequencies. Please note I have not had the time to verify them:

MOBILE, AL (MOBILEWX) 4350.3; 8705.3; 13081.8 WX Transmissions at 0530Z, 1130Z 1730Z and 2330Z.

TAMPA 8706.8 WX at 1320Z and 2220Z.

CHATHAM MA (covers Cape Cod, etc.) 6502.8; 8713.3; 13079.8; 13088.3
WX Transmissions at 0440Z & 1640z.

HALIFAX 4351.3; WX at 2300Z and 0630Z and 8714.8 WX at 1630Z

PORTSHEAD, UK No WX but traffic at: 4348.8; 6503.3; 6493.3; 8703.8, 8716.3; 13070.3; and 12768.3.

Bill states that all of the above frequencies have traffic in addition to the above mentioned Area Weather reports and forecasts. They are all working duplex and I have the other frequencies if you are interested.

Remember the Communications Act about divulging what you have heard.

As I finished this we are all waiting for Bouvet to show up. My hope is that he will be there long enough for all of us to work him. So till next time see you in the 3Y pileup, hopefully!

PROPAGATION
(by Chuck Dietz, KE5FI)

It appears that we will not have another day with a flux below 100 for the next few years. The general flux levels are expected to continue to rise at an ever increasing rate. The period toward the end of March will probably see most of the days above 120. The geomagnetic levels will also rise, however, as a result of seasonal effects. The noise levels will come back to the low bands and the possibilities of radio black-outs will increase.

I expect the worst days in March to occur between March 9 to 16 and March 21. The best days will generally be after March 16 and especially March 17-18.

As I have pointed out in the past, a bad day during average flux levels of 120 would have been a great day a year or two ago.

Good DX!