

# The DX Bulletin

• America's Oldest Weekly Amateur Radio Publication •

ISSUE 266 DECEMBER 5, 1984

PROPAGATION: Dec 3, High Normal; Dec 4, High/Low Normal; Dec 5, Low Normal; Dec 6, High Normal; Dec 7, 8, Low Normal; Dec 9, 10, High Normal; Dec 11, Low Normal; Dec 12-14, Disturbed; Dec 15-17, Low Normal. TNX N4XX.

AS OF LAST WEEK, FCC has received about seven hundred letters from American amateurs regarding PRB-1 (tower restrictions, see Issue 261); the extended deadline for filing comments is still Dec 24, and ARRL will send an extensive information packet for an SASE with 88 cents postage. Your comments are especially needed if you have ever had tower troubles with local authorities.

MORE CONTEST REPORT...some of the bands were better during the CQ WW CW Contest than we thought from listening on our random wire. Reports from several areas confirm our assessment of 20-10 Meters. 20 was apparently especially poor, but sharper operators south of the Mason-Dixon line found long path Europeans there, around 1400Z! We now have reports of a number of big gun stations working over 100 multipliers on 40 Meters, and DXCC country totals on 80 of 50-60 were also attained. One astute operator observed that during the Sunspot peak of a few years ago, the low bands came to life very early in the Fall, but at this point in the Cycle they aren't really starting to produce until the end of November. This year 80 in particular was very noisy in September and October. And be sure to note in Bandpass the last few weeks lots of 40 Meter long path stations reported 12-1400Z. Finally, remember that the first two weeks of December are often the best of the year for 80 Meter propagation to India, Pakistan, and the Asiatic Russian countries (UI8, etc).

YB5ASO WRITES CONCERNING 160 METERS that his freak opening to the U.S. East Coast on Oct 21 has not been repeated...that opening was from 2234 to 2250Z, skew path. John says he needs for three things to come together...the right sunrise/sunset times at both ends of a path, an actual opening, and drastic reduction of his local QRN source. He says the third week of November is the best for the 22-2300Z window from his noise perspective. Two years ago, YB5ASO had openings in mid-January, with East Coast U.S. stations always hearing him best on their Southwest beverage antennas. In addition to the expected gray-line paths, John has observed an all-dark path which lasts for about three weeks, in October. Note, of course, that all of this applies almost directly to 80 Meters as well as to 160.

From Dec 1 to 31 look for a special event station from Liverpool England, celebrating opening of the "Beatle City Museum." They are signing GB1BCL, GB2BCL, GB4BCL, GB6BCL, and GB8BCL, with special QSLs and awards available from QSL manager G4VKV, c/o Beatle City, PO Box 12, Liverpool, England.

BRITISH SHIP RRS Discovery leaves Gibraltar Dec 7, bound for Port Stanley, Falklands, for a "major scientific expedition" to the Scotia and Weddell Seas in the Antarctic; they will be active as GB4DIS/MM after GW4SBB, GW4JAD, and GW3NRP board the ship Feb 1 at Punta Arenas, Chile. RRS Discovery will land at Grytviken, South Georgia, Mar 7-9, and the amateurs will

try to put a station on land for some operating, time permitting. Sources in England say this is the best we can expect from South Georgia, and that prospects for anything from South Sandwich are virtually non-existent.

THE "LICENSE" for 5U7LD comes from Lagos, Federal Republic of Nigeria (not Niger), and says "This is to certify that the Amateur Radio operations in Niger Republic by Mr. Lucio D'rame, 5U7LD, is hereby certified by me, (5N00BA), as legal in operations with the rules and regulations of the Niger Republic, as I have been informed by an official of that licensing authority that he was licensed by that office. It is within our plan both new and in the coming future to recommend other radio amateurs to other parts of Africa and be able to operate from such countries as it is part of bringing more countries in Africa to be aware of what Amateur Radio is all about."

An American in Niger, with licenses from Senegal and Gambia, was turned down for a 5U7 license back in October; another American there in Niger is now making a try for a license, and if that fails they may try to get the American ambassador to request a club license for the American embassy.

## BRIEF NOTES

KE4VT will be in India Dec 16 to Jan 31, has applied for a VU callsign, and plans to appear on the 14.236 evening net...the Japan DX News sent a copy of their 3Y0AA license, from Norway, for Peter I Island; it is as we have noted before, for Jan 1 to Mar 1 of both 1985 and 1986...One contester says (re our comments in Issue 262) he likes to use unusual prefixes on contest expeditions because it helps casual operators on the other end remember him, and maybe not call ten times on the same band. That makes sense...OE2DYL has a new list of DX Nets Around the World, his fourth edition of same; available for 4 IRCs in Europe, 6 IRCs elsewhere, order from his Callbook address...new ARRL Handbook is out; it is no longer the Radio Amateur's Handbook, but rather The ARRL Handbook for Radio Amateurs. And the photo of Hiram Percy Maxim on page one has been replaced by one of Owen Garriott. Is nothing sacred?...PY2AJK appeared as promised last week, signing PY0FF from Fernando de Noronha; he was scheduled to depart the island Nov 30. QSL to PY2AJK...D44BC and D44BS QSLs go direct ONLY...neither has a manager and there is no incoming QSL bureau on Cape Verde...KC9DJ needs QSL help with FWOXN (9/79) and ET3USA...Hold off on QSLing recent KA2MI and KA2IJ, as there's some route doubt...

## T D X B SUBSCRIPTION R A T E S

50 ISSUES, OVERSEAS AIRMAIL, \$50 U.S.

50 ISSUES, LOWER 48 STATES, SECOND-CLASS MAIL, \$28

50 ISSUES, U.S., CANADA, MEXICO, FIRST-CLASS MAIL, \$35.

THANK YOU FOR ENCOURAGING YOUR FRIENDS TO SUBSCRIBE TO TDXB

The DX Bulletin (ISSN 0279-8077) is published fifty times per year. Subscription rates available upon request. The DX Bulletin is published at Burnap Brook Road, Andover, CT 06232: Second-class postage paid at Andover, CT. POSTMASTER: Send address changes to The DX Bulletin, Andover, CT 06232.



## FIVE YEARS AGO IN THE DX BULLETIN

MELLISH REEF 1984

(DEC 5, 1979): The World Administrative Radio Conference was over, and an ARRL official bulletin carried the first good news, of new amateur bands to be available at 10, 18, and 24 MHz, and of "significant improvements in our UHF status."

We excitedly ran some editorial comment, speculating about things like 8 or even 9-Band DXCC, and hoping that new bands would revive interest among many old timers. We also mentioned that in years of low sunspots 10 MHz was likely to take some of the long-distance traffic load from 20 Meters, reducing congestion. As you know, none of this happened...only the 10 MHz band is open, five years after the WARC, it is only 50 KHz wide, and for CW only. Moreover, ARRL (and others) banned contest activity on 10 MHz and disallowed contacts on that band for DXCC and other awards. The upshot is that five years later 10 MHz goes virtually unused and the other two new HF bands aren't due to be opened for at least several more years.

We also noted that amateur equipment without the new bands would be "outdated," and that new antennas would have to be erected, too. Consider that if all the bands had been opened sooner and populated, the demand for new equipment might have saved some of the American manufacturers who have gone under in the past five years.

50 MHz continued to provide plenty of DX, with VE1ASJ working a pair of ZLs in late November, 1979, and KX6PF worked all up and down the East Coast. VE8BY had a good opening to 49 of the States on Nov 18. OK3TAB reported making 18,000 contacts from Angola during his March-September OK3TAB/D2 operation, the last from that country to date. VE1AI/1 was on occasionally from Sable, KG6SW was getting ready to switch his call to KH0AC at year's end, and G3TSO was navigator on a British aircraft making almost daily flights into Cambodia, but no chances for getting on the air.

SPEAKING OF NEW BANDS, ARRL'S Board of Directors, at their November 1984 meeting (Minute 77) voted that "No contest or awards credits would be permitted (on the 24 MHz band) prior to Board action." There is a move afoot to prevent 24 MHz from becoming a DXers and Contesters "wasteland" as has happened to 10 MHz. It might be a good idea to contact your Director and voice your opinion on the matter.

WAY BACK in the summer of 1980, we compiled and published a list of repeaters and simplex frequencies used by DXers around the country. It is time to do it again, and thanks to K8NA for reminding us. Please drop us a note and let us know your group's gathering frequency, and if it is a repeater whether or not it is PLED. Please note if the group is a formal club, and any other information you think is appropriate. We will publish the list as soon as we have heard from all major metropolitan areas.

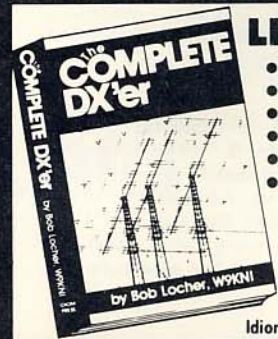
"WE arrived one day later than anticipated and were actually QRV (as VK9MR) by October 26. We worked during the Contest (CQ WW Phone) and for two days after on all bands, a total of five days operating for about 10,000 QSOs. The Low Bands were outstanding, especially 40, but the 80 and 160 logs also show many QSOs. 20 was dreadful...we also had some problems with the yagi on 20 - the phasing line (and its assembly by yours truly) being the culprit; every time the wind blew the SWR would rise to 3! 15 and 10 were good to JA, W, and South Pacific, but only a few Europeans in the 15 Meter log and none at all on 10.

"A word of explanation about our early departure. The boat was anchored only twenty yards or so from the reef in a very sheltered anchorage. This was tremendously helpful from the point of view of loading and unloading the vessel; particularly the heavy stuff like fuel, generators, etc. Unfortunately, the tide was 'running away from us'; every day the high tide seemed to retreat by about 200 mm until on October 29 the boat was sitting in only 1.1 Meters of water at 'high tide.' We explored the options - either the boat had to get out fast and anchor in deep water on the other side of the cay (and about 1 km from it) or we had to up and leave entirely - either way, we had to get the boat out of its then-current position. The alternative was the possibility of being 'marooned' there for what the skipper of the boat said could be up to one month. We all agreed that that risk was completely unacceptable.

"Whilst we all wanted to stay for as long as possible, it simply would have been impossible to get the gear back to the boat in the potential deep water anchorage - negotiating the inflatable through the 'bommies' on the other side of the cay proved extremely hazardous. Hence, we took the sad decision to depart early, but did so knowing that the group did its best and certainly achieved its aim to put Mellish Reef up for the Contest, if nothing else. We all felt sorry that the demand had not been fully satisfied, particularly Europe and South America.

"In retrospect, we should have gone about ten days earlier. I'm sure that demand in the 'Test would not have suffered much (if at all) and we would have had time to discover and rectify antenna problems, etc. Time pressures on us were enormous and the very hot conditions made setting up the station a real chore. Ironically, though, weather conditions would have prevented us from departing Queensland for Mellish much earlier than we actually did!

--- Les Cullen, VK2WU  
"Down Under DXers"



## LEARN THE SECRETS!!

- "Spills the beans about operating"—DX Bulletin
- "A timeless work"—DX Bulletin
- "A first-class treatise"—Ham Radio
- "A solid gold treasure trove—a smash hit"—73
- "Sure to increase competition for DX"—QST
- "Simply the best book of its type ever written. Worth every penny!"—Westlink Report

A complete course for the DX'er,—beginner to Honor Roll. 192 pages of solid DX—no charts, graphs or other fillers. Available now at dealer for \$10.95 or add \$2.00 postage and handling.

Idiom Press Dept. X Box 583 Deerfield, IL 60015



129A 3795 15W 21	9K2BE 14171 14C 23	FG7CH 21274 17W 23	S83H 21289 14E 18	VS6TA 7007 14M 24
3B8CF 3505 01W 23	9K2BE 14171 14W 23	FM7CW 7002 22E 17	SP8YA 3795 14W 19	VU2BK 14065 13E 20
3B8CF 3505 01M 23	9M2CO 3795 12W 17	FM7WD 21335 17W 23	SV0AA 1832 03E 22	VU2CVP 14195 13E 23
3B8CF 7005 02C 20	9Q5MA 21335 18C 16	FR7BX 21043 17E 18	SV1DO 3502 05E 20	(LIST)
3B8CF 7005 02E 22	9Q5MA 21335 18E 20	FR7CR 21032 16C 22	SV1DO 3504 04E 21	VU2GI 14164 14C 23
3B8FK 21020 14E 22	9Q5MA 21335 17W 23	FY7AL 21335 18W 23	SV1DO 7001 22E 21	VU2GI 14226 14W 23
3B9/	9Q5MA 21335 17E 17	GJ2LU 14026 15E 23	SV1RP 7001 00E 18	VU2IOC 14011 14C 22
DK7PE 3505 15W 18	(LIST)	GJ3TXF 7002 00E 23	SV9/	VU2IOC 14031 14C 18
3D2MP 21257 22W 23	9X5WP 21256 19W 23	HA5JI 3794 14W 23	WOPU 3503 02E 29	VU2JNA 14222 14W 22
3D6AA 14190 13W 21	A22ME 14021 21E 21	HB9G 1833 05E 17	SV9/	VU2JNA 14220 14W 23
3D6AK 14031 16E 18	A22ME 14020 22E 21	HC5NAI 7004 00E 18	WOPU 3501 02E 28	VU2JNA 14222 13E 22
3D6AK 21031 16E 18	A22ME 21335 16W 23	HI8AA 14309 03W 23	T2ADE 3799 12C 17	VU2RX 14177 14W 22
3D6AL 21290 17W 23	A24TJ 21300 13C 18	HI8LC 3507 02E 20	T30BY 21290 22W 23	XE3ARV 1824 03E 22
3D6AL 21335 18W 23	A35RS 21288 19W 23	HK0BKX 7009 12C 23	T77C 21027 15E 22	YB5ASO 7007 13E 17
3D6AN 21350 17W 23	A4XJW 14185 14C 22	HK0BKX 7004 12C 17	T77C 7005 23E 20	YN1CC 21030 17C 17
3D6AQ 21319 19E 20	A4XJW 14185 14M 22	HL2TR 3795 14W 22	TG9PO 21254 21W 22	YN1CC 7002 12E 19
3X4EX 3787 04E 20	A4XKB 14180 13C 23	HP3FL 1834 02E 16	TL8CK 21278 14E 18	Z21AO 21335 17W 23
3X4EX 3788 04E 19	A4XYS 14160 14E 22	HU1DX 14204 13E 18	TR8DR 21277 14E 18	Z21AS 14032 19E 18
4K1CEY 14187 04W 23	A71BK 14185 13W 23	HZ1AB 1826 03E 16	TR8IG 3799 05W 22	Z22JS 7009 04E 21
(ANTARCTIC)	A92EB 14176 14W 21	HZ1AB 7004 13C 18	TR8JLD 3795 05E 22	Z24JW 21314 14E 18
4K1GAG 14212 04W 23	A92EB 14181 14C 22	HZ1HZ 14011 13C 22	TR8JLD 7015 22E 20	ZD7CW 21335 17W 23
(S SHETLANDS)	A92EB 14181 14W 22	ISOAEK 7011 00E 23	TR8JYC 14013 22E 21	ZD8TM 7004 03E 16
4X4FQ 3799 05E 19	AH2AZ 14227 16W 23	IS00MH 7005 00E 21	TT8CW 21287 14E 18	ZK1CG 14221 01W 21
5H3BH 21294 17C 22	C30LBM 14204 17E 20	J5WAD 14240 22W 23	TT8CW 21335 18C 16	ZK1RE 14175 05W 23
5H3BH 21294 17W 22	C53FG 14240 22W 23	J73AE 14012 22E 18	TT8CW 7001 22E 20	ZK8TM 7006 04E 19
5H3BH 21294 13E 23	C53FG 14240 22E 21	J88AQ 14180 14W 23	TU2IR 14026 18E 18	ZL1VY 21318 18W 23
5H3BH 7002 22E 27	C56/	JA1XAF 3504 12E 23	UA0UV 3645 14W 23	ZL7OY 3795 08W 20
5H3BH 7002 23E 17	DL7AH 7001 22E 27	JT1AO 3795 14W 19	UA4CGP 7006 12E 19	ZP5XDW 21025 19E 20
5H3BH 7002 01C 23	C6ABC 3796 22E 18	JY5CI 14212 14C 23	UA6HOF 1850 04E 23	ZP5XFI 7005 00E 18
5H3BH 7002 00E 22	CE0AE 21335 17W 23	JY5CI 14214 14W 23	UA9CBO 7007 12E 19	ZS/
5N6/	CE0ZIJ 3799 12W 23	KC4USV 14278 12C 12	UA9COT 7009 12E 20	N4NW 21255 17W 23
KC7UU 7005 02E 22	CE2GLR 7026 04E 21	KC6IN 3795 14W 18	UB5EC 7007 13C 22	ZS/
5N6/	CE3AKK 7015 02E 19	(E CAROLINES)	UB5EC 7008 13M 22	WA2HZR 7004 04E 21
KC7UU 21022 16E 22	CE8ABF 1834 02M 18	KH2/	UH8AAC 7002 12E 20	ZS1QO 7026 03E 21
5N6/	CE9AJ 14023 23C 18	KD7P 7003 14C 24	UH8EAA 3505 12W 22	ZS4PB 1837 03E 22
KC7UU 7006 04E 21	(ANTARCTICA)	KH7/	UH8EAA 7006 13E 20	(SSB)
5N6/	CE9AJ 7012 02C 19	KH6JEB 3799 12E 30	UH8EAA 7017 12E 22	ZS5MY 3502 03E 19
KC7UU 14029 19E 20	CE9AK 7014 04E 18	KX6GO 7007 12E 21	UL7CAD 7004 12E 16	ZS6OH 7005 13M 22
5N8/	(ANTARCTICA)	LX1WH 14152 13E 21	UL7CAD 7004 12E 21	
KC7UU 14023 19C 18	CN8ES 21271 15C 22	LZ1KDP 1828 05E 21	UM8MIZ 7012 00E 23	
5N8FOC 14031 18E 23	CO2JY 3505 03E 20	LZ2AB 3794 14W 22	UN8TAA 3649 14W 23	
5N8FOC 14025 22E 23	CP6IB 7007 03E 21	NH8/	UO5OAL 7017 00E 18	
5N8FOC 21029 14E 23	CT2AK 14029 22E 18	NH6J 3507 14M 24	UP1BZZ 7004 13E 19	
(KC7UU OP)	CT2AK 3505 09C 22	OA4AGR 21031 17E 17	UP1BZZ 7005 14M 22	
5R8AL 21331 18W 23	CT2AK 3506 00E 23	OH3KM 1835 05E 21	UQ1GWW 7011 00E 21	
5T5CS 14025 18E 17	CT2FN 7001 00E 20	OH8SR 7002 12E 20	UQ1GXX 3507 04E 23	
5W1EZ 7001 12E 21	DU2/	OX3RA 7002 21E 18	UWOCW 3644 12E 28	
5X5GK 21253 14E 23	KF6ME 7006 12E 22	OY7ML 7003 00E 19	UZ9AYA 3503 23E 20	
(LIST)	EA6CJ 1835 06E 21	OY7ML 7009 02E 21	UZ9AYA 7009 12C 19	
5X5GK 21287 13E 21	EA8RL 14008 12C 12	P29JH 21290 22W 23	V9ADC 21026 17E 23	
5X5GK 21335 19E 19	EA8RL 3503 03E 24	P29JS 14218 14W 22	VE8SB 14021 19E 23	
6W1AE 14004 23C 22	EA9GH 7002 21E 17	P29JS 21028 00E 24	VK3ABK 7001 20E 26	
6W1AE 14025 22E 17	EA9KF 21032 15C 24	P29PR 7009 13M 22	VK9NL 7006 12C 15	
6W1HF 21323 18W 22	EA9MV 14040 12E 13	PA3CZU 1833 06E 21	VP2VFL 21022 17E 22	
6W2HF 21293 20E 17	EL2CD 14028 19E 20	PYOFF 14236 18W 23	VS6/	
6Y5IC 1838 02E 16	EL2CD 14031 23E 19	PYOFF 3797 01E 29	N4SF 7001 12E 19	
6Y5NR 14196 13W 23	FB8XAD 7008 01E 19	RA3DOX 1832 03E 22	VS6/	
6Y5RC 14195 134W 22	(GONE NOW)	RA9YD 7006 12E 19	N6SF 7001 11E 22	
7X2LS 3799 01E 20	FG/K3VW/FS7	RB5MT 7005 13E 19	VS6DO 3504 12E 28	
9H3DI 7026 03E 21	21028 19C 22	RT5UO 3510 00E 23	VS6DO 7002 12E 21	

PLEASE WRITE OR  
PHONE TO REQUEST  
REPORT FORMS AND  
ENVELOPES; mail  
them to TDXB  
anytime, or phone:

203-742-7124

(24 hours).

Best contributor  
of information  
each month wins a  
free year of TDXB.

JIM SMITH, P29JS, writes that he's active most days starting at 0620Z, when he has a sked with his wife Kirsti (VK9NL), who's still back on Norfolk. Jim says the net on 14,220 has been busy with check-ins such as BY5RA, TT8CW, TR8JLD, TL8TX, ZD7CW, and others, but there's been absolutely no propagation to North America at that time. P29JS has been very active on 40 but is still trying to get an effective antenna up for 80.

Jim reports that a group of Norfolk Islanders paid a visit to their "old stomping ground," Pitcairn recently. There was apparently a large contingent which left VR6 128 years ago...the Norfolk visitors say island residents suffer from poor diet and lack of exercise, and "a few of the menfolk are a bit overweight." The island population is currently about seventy people, and many of them caught infectious diseases from the Norfolk visitors. VR6KY, Kari, is the only really active amateur on Pitcairn these days.



## C A L E N D A R

ISSUE 266

DEADLINE PRB-1 extended to Dec 24; I 261, 264

S.M.O.M. 1A0KM Dec 8/9, maybe again Dec 15/16; I265  
 GUINEA 3X4EX (LA2EX) no reports this week  
 TANZANIA 5H3BH by SM0DJZ, SM0AJU ends this week  
 BEATLE CITY Special operation Dec 1-31; I266  
 OGASAWARA KA2IJ by KD7P Dec 7-14; I264

"TRANSKEI" S8HZR Nov 29-Dec 5  
 S SUDAN TL8GE/ST0 one week a month; 14.236 net; we  
 need reports

MINAMI TOR KA2MI by KD7P Nov 29-Dec 6; I264  
 CONTEST ARRL 10 METER, Dec 8/9

U.A.E. A61AA (G3LCS) there now; need reports;  
 DXNewssheet says he will return to  
 England for a brief vacation Dec 20

GUINEA-BISSAU J5WAD (UB5WAD) on 20 CW and SSB  
 MAYOTTE Need 40 Meter reports on FH4AA

MACQUARIE VKOYL should start any day  
 MALAGASY 5R8AL on 15 SSB and now 40 CW at 01Z  
 S SUDAN ST2SA reported in Europe, 20 SSB  
 CHAD TT8CW no reports again this week  
 KERGUELEN FT8XA maybe sometime in Dec

FERN DE NOR. PYOFF by PY2AJK probably ended Nov 30  
 BOUVET POSSIBLE! DECEMBER! ISSUES 263, 265  
 MARION ISLAND GOOD CHANCE! JANUARY! ISSUES 263, 265  
 CHINA BYs 1PK, 5RA, 4AA active, 20-80M, but no N.  
 American reports for weeks

IRAN EP2s MRD, MMK reported in EU, 20 SSB  
 CAMBODIA XU1SS 20 SSB Only, Tues, Thurs, Sundays,  
 with VS6CT or DU9RG, 1200Z. No N. America  
 reports for many weeks

CANADA Using XL/XN prefixes NOW to Dec 13

HAWAII AH6FG Kalawao County Dec 14-17; I265  
 INDIA Garden City Contest Dec 15/16; I265  
 ANTIGUA KA2DIV/V2A continues, mostly CW  
 WILLIS VK9ZA there now, likes 80/40 SSB, 08-1200Z  
 need reports

## C O N T R I B U T O R S

KA1BU, KA3R, N1CWU, W7HRD, WB8ZRL,  
 KR1G, W4BAA, W1WAI, K4BAI, N4NC, KOCVD,  
 N2KK, K6IR, K1MEM, WD5AAM, KM9J, KV8Q,  
 W4VQ, G3ZAY, K7UU, WB1DQC, OE2DYL,  
 K4JPD, JA1BK, K4AVU, DA2ER, K2OLG,  
 P29JS, N4MM, G4HSF, AB8K, N4KG.

## CW DXCC POLL

A poll was recently taken of 33 of the 38 members of the CW DXCC Honor Roll. In the chart below, "CW Need" is the percentage of those polled needing the country; "TDXB" is the percentage of readers needing that country in the 1984 Survey, for comparison. The poll was taken before the activity from San Felix in Sep/Oct.

Country	CW NEED	TDXB
ZA	100%	83%
XZ	100	78
70	100	78
CEOX	100	73
YA	100	64
XV	94	67
VU/A	82	71
5A	79	55
A6	57	47
4W	52	66
5U	33	38
C9	18	39
S2	15	49
XW	15	53
VP8 S. GA.	12	39
3Y	12	76
YI	9	26
VP8 S. SAND	6	38
XF4	6	20
XU	6	58
ZL8	6	--

WILLIAM N. PEDERSEN  
 ROBERT DRIVE  
 AMHERST NH 03031  
 WICH

FIRST CLASS MAIL

First Class  
 U.S. Postage  
 PAID  
 Andover, CT  
 Permit No. 1

Andover, CT 06232  
 U. S. A.

The DX Bulletin