

# INTERNATIONAL DXING ON THE MEDIUM WAVES FROM THE MIDWEST

Fritz Mellberg

If things are getting a little boring on the tropical bands lately, you might want to tune down to the standard broadcast band for some of the most challenging international DX in the radio spectrum! There are plenty of thrills lurking on the medium wave and some of the rarest DX awaits those willing to wade through the clutter of truck driving music, Larry King and those golden oldies.

I'd like to share a few tips and strategies on international BCB DX for those of you unfamiliar with medium wave DX from the center of the continent. Tropical band DXers are usually "content to listen to the static between stations" as my wife likes to say. Because we are conditioned, by nature perhaps, to actually enjoy static crashes and sideband splash, transferring our ears to the broadcast band will be an easy move. In the process, we will be able to hear Europe, Africa, Latin America and South Pacific stations, even from Iowa or Oklahoma.

## ● GETTING STARTED

If you live near one of the coasts, you probably know about international BCB DX, since it's rather easy to hear foreign MW stations across your local ocean. If you want to qualify for real bragging rights, however, you must move to the midwest. From the very center of North America, a diligent DXer has a theoretical shot at hearing the entire world on medium wave. With miles of land attenuating distant signals and with over 5,000 domestics in the way, the task is difficult but it is possible.

As a moderately fanatical DXer, I have been alternating between the tropics and BCB for about 8 years now. In that time, with a few good seasons in my log books, I have managed to snare 18 countries with my R71A, a homebrew loop and a random wire. Barry Wasyluk, Dave McBride and George McLachlan up in Winnipeg, Manitoba have room for a good antenna farm and have snagged over 48 countries in the same period. Karl Forth is representative of DXers in Chicago and he has heard over 200 stations in 38 countries. Ron Purdue and Bill Marvin in Minnesota, John Bryant in Oklahoma, John Wilkins in Colorado and Mitch Sams in Kansas as well as the members of DX Mid-America are others who have logged similar numbers over the years.

Changing to BCB for an evening is easy. Basic propagation and receiver skills remain quite similar. The peculiarities of BCB propagation, such as sunrise and sunset skip are well documented in articles available from the medium wave clubs. But the first real mental change necessary to BCB DX from the midwest involves readjusting your numbers attitude. Forty eight SWBC countries is kids' stuff. But on medium wave and from the midwest, even 25 countries is an achievement!

## ● THE RECEIVER

Most of you, I assume, have a "modern" Japanese solid state receiver. For most DX, it will do the trick. The key factor in receiver selection for MW DX is selectivity, not sensitivity as you might suspect. Razor sharp selectivity is required to zero in on those stations operating on split frequencies or those operating a single kilohertz away from a domestic. The better receivers such as the major sets by Kenwood, Icom and JRC will do well enough, especially if they have been modified for tropical band DXing. Tube rigs, such as the venerable R390A, the HQ 180 series and the Collins 51J series, with their excellent mechanical or crystal filters and notch filters are excellent MW DXing receivers.

Whereas sensitivity is not that crucial on medium waves, most modern solid state receivers have their medium wave circuits attenuated to prevent local MW broadcasters from interfering on the higher bands. Medium wave DXers usually modify their receivers to enable full sensitivity on medium wave. However, many "switch hitters" log a lot of internationals before they get around to it, so don't worry about receiver modification before you even start.

## ● ANTENNAS

Assuming you have a decent radio with good selectivity, your antenna system is the next consideration. A simple random wire is the basic requirement and MW DXers used nothing else for years. In the late 1960's, the medium wave hobby rediscovered the loop antenna technology of the 1930's and began building souped up models. DX totals escalated. The 4 foot air core loop described in the National Radio Club's Antenna Reference Manual is a standard against which others are often judged. The loop allows you to null out unwanted stations to the sides of your DX target. These loops are often, but not always, coupled to the receiver through a small homebrew RF amplifier.

Air core loops come in all sizes and shapes. A popular version developed by Ralph Sanserino is 2 feet square. Another popular model is the wedge which is shaped like a 2 foot by 5 foot Christmas tree. The larger the surface area of the wire, the greater the gain will be. If space is a major factor, an amplified ferrite rod loop like those sold by Radio West or Palomar are well regarded. They offer almost equal sensitivity, but usually they are not as sharp in their ability to null out unwanted signals.

Although it is sometimes possible to hear the strongest trans-Atlantic (TA) and Trans-Pacific (TP) signals with a loop or short wire, if you are really serious, you will need to put up a Beverage antenna. The Beverage provides more gain and most importantly, more directionality and will provide better loggings throughout the DX season.

The MW trio up in Winnipeg have an old school bus fifty miles outside of town and spend weekends there for international DX People like John Bryant who live out in large cow pastures can run 1200 feet of wire right to their shack. Your situation will vary and if nothing else, DXpeditions are recommended. Plans and theory on Beverages are available from the radio clubs and in articles elsewhere in Proceedings 89.

The latest development in DXing technology for MW uses antenna phasing theory. With a little box packed with a tangle of inductors and potentiometers, the signals from two antennas can be combined with incredible results. It is often possible to null out signals from three directions and focus on your target without interference! Manufactured phasing units are hard to come by and unless you want to struggle with the construction articles available from the clubs, you may have to do without.

## ● REFERENCE MATERIAL

At the top of the MW DXers reference list is the trusty World Radio-Television Handbook. This is the only listing of worldwide MW stations readily available. The next most important is the foreign logging columns in the NRC and IRCA club magazines. IRCA has recently published a listing of all international logs in recent years. (Available for \$5 from the IRCA Goodie Factory) Lastly, the listing with this article will give you an idea what has been audible from the midwest in the last several years. This list includes NRC loggings, a few special reports sent to me and the loggings from a nice publication Pan Am Plus, published by a now defunct (but hopefully resurrectable) club known as DX MidAmerica, led by Milwaukeean John Reigers. (Pan Am Plus is available from John for \$2: 801 Sherman Avenue, South Milwaukee, WI 53172)

## ● DX TIMING

When is the best time to DX? For latins, the best time seems to be from local sunset to midnight, although many stations are reported after midnight when domestic stations sign off. Monday mornings, when some domestics sign off for a few hours, is a traditional time for DX activity. For Africans and Europeans, your local sunset and midnight when dawn enhancement is occurring in Europe are best. Early morning around local sunrise seems to be best for those rare trans-Pacific targets. Sometimes TP loggings occur when the sun is setting at the transmitter site--around 2 AM to 5 AM CST.

The MW DX season is traditionally September through April, but latins are possible throughout the year. New Zealand was also heard in July in Colorado. All this sounds quite familiar to tropical Band DXers. The patten is roughly the same.

The most interesting time to DX on MW is local sunset or local sunrise. At these times the ionosphere is changing in character as the darkne-s path crosses the globe. Little windows pass over the land allowing for brief openings to various areas. At sunset, it is possible to follow sign offs from Eastern to Western stations while listening on one frequency. This time period also yields some suprising Latin American loggings. Detailed studies of sunset skip (SSS) and Sunrise skip (SRS) and helpful DX techniques are found in the NRC booklet "Getting Started in Medium Wave," available from the NRC Publications Center, Box 164, Mannsville, N.Y. 13661.

## ● AURORAS

Latin DXers cherish those special conditions known as Auroras. When sunspot activity is high ionospheric particles block propogation at the north pole, sometimes settling a blanket as far south as Kansas City. This allows weaker stations to the south to emerge from beneath the normally much stronger northerly locals. There is some evidence that propogation from the tropical zone is enhanced at auroral periods also. On nights when there is an aurora in play, you will likely hear Spanish on a third of the BCB frequencies. Listen to WWV for the A index to go over 40. Many of us also use a few index stations such as 750 Sandino in a null of WSB. If we hear Sandino, we know there are openings to the south.

## ● GOING LATIN

We'll start our international foray with Latin America; its the easiest and most tropical band DX skills come into play.

My first hunting technique on any given night is to scan the band for Spanish. All you have to do is eliminate the domestics broadcasting in Spanish. These domestics will invariably identify themselves at the top of the hour according to FCC rules. Ads are also clues.

After years of listening to Latins on the tropicals, we have learned to identify countries by the music the stations are playing. Most of us can tell the difference between Columbian, Mexican, Guatamalan and Cuban music. This helps alot. But foremost in our mind is hearing the station's identifying name. Unlike domestics which identify themselves with call letters, Latin stations are very proud of their name or slogan. Call letter announcements are rare. Another clue will come from network names such as RCN or Caracol for Columbians.

Once and awhile you might run into a North American university station broadcasting ethnic music. Before I knew better, I thought I was onto a big catch from Algeria when I learned it was just a Toronto station broadcasting a program in Arabic. What a letdown!

Once you have made a scan for Spanish and have located a few, you may want to be more thorough and flip into USB and start, say at 530 KHz and scan up the band listening for hets. Or start at 1630 going down in LSB. Make note of the hets on odd frequencies because many internationals operate on these splits (666 Portugal, 1314 Norway or 660.4 Honduras) Follow these throughout the evening and keep tabs on them throughout the season for they indicate likely

candidates when conditions are better. Here is where your selectivity becomes important. If you can hear a weak station on 770.3 (Columbia) when you must contend with country-western music on 770, you are using a real radio. Your loop will help you narrow the field of interference.

Using SSB also allows you to find those stations you might have missed if you merely scanned in the AM mode, for many times, the audio is lost in sideband splash in AM but is audible in SSB.

### ● HOW ABOUT NORWAY OR DAKAR?

When you are scanning for Spanish in SSB, you will often come across hets that sound like they are speaking Norwegian. The European stations (TAs) are set up 9 KHz apart and run from 529 to 1602 KHz. While hets don't speak Norwegian, you are likely to hear a het from the Norwegian on 1314 if conditions are good. It's the best bet for TA reception from the Midwest. Also common is 765 Dakar, Senegal. Conditions are good for long haul high latitude DX when WWV announces an A index below 10 for at least two days in a row. McLachlan, Wayslik and McBride in Winnepeg find that Europe is audible from early fall through late spring around local sunset. Conditions often allow 1314 Norway to emerge also at 0300 GMT or later.

The Manicba Trio also note that for Europeans, IDs are scarce on the hour and most programming is endless music without announcements. Sometimes the audio is so good that you can guarantee an ID only to find the ID buried in the noise at the hour. Such is DX!

Veteran DXers Karl Forth finds that midwinter--December through February seems to be best for TA reception. The traditionally poor reception in January (called the Midwinter Anomaly) notwithstanding, Karl has had luck in the first week in January on a number of occasions. He finds the best time to DX is near midnight. He also observes that he has heard few stations below 1200 but usually has loud signals from such frequencies as 1557 and 1593.

TA reception from the Midwest is tough, but not impossible as the list of 24 countries heard from the Midwest attests.

### ● FIJI ANYONE?

For Midwesterners, TP reception is most exotic of all. New Zealand, Japan, Australia and yes, Fiji have been heard. Like with tropical band DX, early morning is the best time to hear them, although some emerge late in the night.

McLachlan, McBride and Wayslik say that fall and spring near the equinoxes seem best for Australia and New Zealand. From 3 AM until an hour after local dawn are optimal times. Mitch Sams and John Bryant have enjoyed some dandy TP loggings on John's Indonesian Beverage. John Wilkins has also had good TP loggings from Colorado. It's not impossible, it's DX!

### ● GOODBYE

That about wraps up the introductions. For those of you who look to the tropics as your first love, let me offer a suggestion. Tear yourself away from the 60 meter band and enjoy a new phase of the hobby--try some international MW DX!

### ●●●●● THE LOGGING ●

Times, locations and other facts are not listed to save space. What is most important is that the station was heard. Most Latins were heard from local sunset through midnight and September through April are common months for reception. Best Bets are underlined, however these vary depending on your domestic locals. Information not listed, such as call or station name was either not included in the source of information or was unsure and therefore eliminated so as not to be misleading. DXers states are listed in the DXer Directory to save space in the listings.

### ● THE LATINS ●

<u>Anguilla</u>							
1610	The Caribbean Beacon		Common				
<u>Antigua</u>				<u>Columbia, Continued</u>			
1100	ZOK English		MP, BM, JJR	780	HJZG	R Sonarama	2-86 FM
1165	R. Lighthouse	1-86	RP, NW, BW, JB	810	HJCY	Caracol	Common
1580	VOA		TS MP, MK, JJR	820	HJED	Caracol Cali	12-84 FM
<u>Argentina</u>				840		Rare	9-83 JJR, GM, BW
1170	LV4	9-82	BM	870	HJSB	Mar Caribe	84-87 JJR, CAC, PK, FM
<u>Bahamas</u>				890			9-81 PK
1540	ZNS (rare)	12-85	JJR	895	HJPM	R Galeon	12-84 FM
<u>Belize</u>				910	HJDD		10-86 RK
830	R. Belize	1-86 on	Common		HJMY	RCN	10-87 FM
<u>Cayman Islands</u>				960		Sutatenza	9-87 GM, BW, DM, JJR
1205	in English	winter	Common	1000	HJHF	R Nacional	JJR, RG
1555	R Cayman		Common	1010	HJCC	La Tropic Oro	6-88 JB
<u>Columbia</u>					HJOP		8-82 CAC, FM
590	HJCR	Sutatenza	10-85	1020		RCN	12-78 GM, BW, DM
600	HJHJ	R Libertad	83 on	1040	HJAI	Caracol	8-82 JA, JJR, FM
620	HJBP		12-83		HJGX	R Progreso	9-82 MP, BM
640	HJBJ	Rare	1-82	1070	HJAG	Em Atlantico	1-85 JJR, TS, FM
650	HJJB	Rare	2-84	1090			10-85 CAC
700	HJCX	Sutatenza (//5095)	FM, TN, JJR	1100	HJAT	Reloj	11-84 FM, JJR, JA, SP
720	HJAN		1-82		HJCN	Reloj	2-84 RG, JB (88)
750	HJHJ		3-83	1110		Reloj	10-88 GM, BW, DM
760	HJAC	RCN	81-83	1130	HJAC	Em Rio Mar	9-82 CAC
770	HJHK	R Tequemada (770.3)	FM, CR, BW, GM	1160			GM, BW, DM

Columbia, Continued

1170 HJNW Caracol 12-85 JJR, FM  
 1190 HJCT 82 Common  
 1210 HJFR Reloj 11-86 CR  
 1220 HJVF Reloj 10-85 Common  
 1280 HJSO 11-83 RK  
 1310 HJAK 12-86 CR  
 1360 HJTU Reloj 9-82 TS  
 1370 HJBO 10-82 CAC  
 1410 HJOV 11-82 PK, CAC  
 1420 HJAW 11-82 RK  
 1520 HJLQ 11-84 CAC, JJR  
 1550 HJCB R Exitos Common, Rare now  
 1580 HJOZ 11-82 TS, CAC

Costa Rica

530 TICAL R Rumbos 83 On Common  
 670 TIBAS R Monumental 83 FM  
 700 TICN 83 FM  
 730 TIHB Reloj (//4832) FM, CR, PK  
 970 (//6160) 12-86 CR  
 980 TIASF R Cima 11-84 CAC

Cuba

Call letters rarely used and only clue on location is provided by ever changing network designations. Good Luck!

550 CMAA Rebelde 2-86 CR  
 570 CMEA Reloj 10-85 HF, JJR  
 580 CMMF Rebelde 2-86 CR  
 590 CMCA Rebelde 87-89 TN  
 Now Reloj JB, FM, CR  
 600 CMKA Rebelde RG  
 620 CMOA Rebelde JJR  
 630 Rebelde 1-84 FM  
 640 CMBB Progreso 85-87 HF, JH, JB  
 660 Progreso 11-87 JH  
 670 CMBC Rebelde 87-88 FM, JH, RG, JB  
 690 CMEC Rebelde Now Progreso Common  
 710 Rebelde 85-88 Common  
 730 Liberacion JJR  
 740 Progreso 3-86 NW, FM  
 760 CMBD Reloj 11-87 Common  
 790 Reloj 12-85 BM, JB(88)  
 820 CMBV R Luidad 2-82 JJR  
 830 R Taino(English) Common  
 860 CMBM 82 on CAC  
 880 Progreso 86 on Common  
 900 Progreso 11-84 FM  
 920 Reloj 2-84 RG  
 940 Reloj BM, SP  
 990 CMAL 10-82 JJR  
 1000 CMAO R Guama 9-82 FM  
 1010 R Guama 3-86 NW  
 1020 R Guama to 88 JJR, TN, JB  
 1040 R Taino(English) Common  
 1050 CMLL R Victoria 10-82 CAC  
 1080 CMCU 10-85 CAC, JJR  
 1090 R Guama 2-82 JJR  
 1120 CMCW Cadena Habana 2-86 FM  
 1140 CMBW Cadena Habana 8-88 JB  
 1160 CMCV R Havana(English) Common  
 1180 CMOD Reloj 11-82 PK  
 1270 Reloj 9-82 JL  
 1520 CMJV R Baragua 12-83 JJR

Dominica

595 (\*4 a.m) 2-82 HS

Dominican Republic

790 HYL LV del Tropica PK  
 830 HIJB 1-81 JJR(rare)  
 1010 HIJB R Commercial 82 WM  
 1180 11-82 PK  
 1574.2 R Amancer 89 JB

Ecuador

640 HCXY Quito Radio 2-82 JJR (MM at SRS)  
 892 R Superior WM (Pre SRS)  
 905 R Espectaculo 11-82 JJR  
 915 HCRO3 10-82 WM  
 925 HCVL2 11-82 WM  
 995 HCEW2 Frecuencia Mil 1-80 KF, JJR  
 1295 HCNS1 R Popular 10-82 WM

El Salvador

540 YSHV 1-83 JA  
 655 YSS Common  
 720 YSR 83 on FM  
 765 YSKL R Universidad JJR, BM  
 770 YSKL 2-86 BM, CR

Grenada

535 R Grenada Common  
 990 83 JA, JJR

Guadaloupe

640 10-82 JA (Rare)

Guatemala

640 TGW LV Guatemala 85 FM  
 670 TGRT Fabulosa 83 FM  
 700 TGHR Mundial 83 FM  
 730 TGN R Cultural 1-82 FM, HS  
 1090 TCZ R Cadena 2-82 JJR  
 1180 TGT R Sonan 9-82 BM  
 1613 11-86 HS, BM, RG, PK

Haiti

1030 4VEF 1-87 NW  
 1080 HVRO R Nacional 82-86 HS, CR  
 1170 4VRS R Soliel 11-85 FM (SSS)

Honduras

600 R Centro, R Libertad 3-83 FM  
 610 HRLP R America 11-84 CR, BM, FM  
 650 HRVW LV Centro Am. 2-86 CAC, JJR, FM  
 670 HRN5 LV Honduras 12-82 FM  
 750 HRTV R Trujillo 1-86 RP  
 880 HRH R Honduras 4-83 FM  
 890 HRH (ex HRGLL) 83-84 RG, FM  
 1110 HRPL Progreso 3-83 BM  
 1353 HRME R Patio WM

Jamaica

580 RJR R Jamaica 83 on KF, RK, JJR  
 700 12-88 GM, DM, BW, FM

Mexico

540 XEWA LV Latina America BH, JJR, FM, JB  
 570 XEBJB "BJB" 1-85 FM, JB  
 580 XEMU Rancherita Del Aire JW, CR, RG, FM  
 XEFI R Mexicana 9-87 BH, FM, JB  
 590 XEPH Rare 9-82 JJR  
 610 XEBX BM, CR, JB  
 630 XEFB 11-87 BH, FM, JB  
 650 XETNT R Dinamita 9-84 FM  
 660 XERPM Tropico d Oro/Infantil 82 on FM  
 670 XETOR R Ranchito 9-84 FM  
 690 XETRA Mighty 690 (English) 7-87 JW  
 710 XEDP R Cuahutemoc 10-83 FM, JB  
 730 XEX R Festival Common  
 760 XENY 1-88 JW  
 XEABC R Internacional 2-83 FM  
 790 XERPC R Ranchito 82-87 JW, FM  
 XERC R Exitos 2-86 FM  
 800 XEROK R Canon Common  
 810 XERSV R Alegria 11-87 JW  
 XEFW Rare 1-83 BM  
 820 XEYX La Gigante 10-86 JW  
 830 XEVQ La Fiera Musical 11-87 JW

Mexico, Continued

850 XEM R Exitos 9-84 RG, JB  
 XETQ 8-82 MP  
 XEZR Canal 85 12-82 FM  
 860 XEMO R 86 (Rare) -81 TN, JJR  
 XEUN R Universidad 83 on TN, JJR, FM  
 XEZOL R ZOL(Top 40) FM  
 XENLR R Recuerdo 10-83 FM  
 880 XEPNK Canal 88 11-84 FM  
 890 XEYQ R Fesnillo 11-87 JW  
 900 XEW LaLatina America Common  
 940 XEQ La Q 11-87 BH, FM  
 950 XEGM R Todo Common  
 XEYJ R 95 3-83 FM  
 960 XEK 11-87 BH, JB, FM  
 970 XEJ R Mexicana Common  
 980 XEER off 8-82 FM  
 XENR 3-83 FM  
 990 XET La T de Monterrey Common  
 1000 XEFV R Rancherita 4-83 FM  
 1010 XEKD La Nortena 5-85 FM  
 XEHL La Poderosa HL 1-86 NW, CAC, FM  
 XEVK R Felicidad 2-83 FM  
 1030 XEQR R Centro RG, JJR, FM, JB  
 1050 XEG La Ranchera Common  
 1060 XEEP R Educacion Common  
 1070 XEOB Canal 1080(sic.) 7-87 JW  
 1090 XEPRS TN  
 1110 XERED R Rojo Common  
 1130 XEHN 8-87 JW  
 1140 XEMR La Nueva MR 11-87 BH, JB  
 1170 XERB La Onda Musical 11-84 FM  
 1190 XEPZ R Nortena 10-87 FM  
 1220 XEB R Mexico 2-86 CR, FM, JB  
 1260 XEOG R Rancerito 8-87 JW  
 1300 XEP Radio 13 4-83 FM  
 1320 XECMQ R Sensacion 11-82 CAC  
 1420 XEF La Romantica 8-87 JW  
 1560 XEJPV R Fama 2-83 FM  
 1570 XERF R Amistad Common  
 1580 XEDM La Grande DeSonora 9-82 PK  
 1590 XEACH 9-82 FM  
 1600 XEAE R Variedades 11-82 FM

Netherlands Antilles

800 PJB (English) Common

Nicaragua

540 HTA540 JJR, RG  
 555 HTA 19th de Julio 83-88 FM  
 620 HTA620 2-83 MK  
 720 HTA720 Catolica FM  
 750 HTA750 Sandino Common  
 780 HTA? LV Nicaragua(off) FM  
 840 HTA840 9-82 CAC(Rare)

Panama

650 HOS22 R Mia 2-82 JJR  
 740 HON26 R Crystal 82 PK  
 770 HOL47 R Nacional 2-82 JJR, PK, CAC  
 840 HOL80 82-84 TN, MP, RG,  
 860 R Reforma 80 on KF  
 890 PK, JL, MP  
 1197 Ondas Tropical 2-78 GM, BW, DM

Puerto Rico

580 WKAQ R Reloj Common  
 630 WQBS Salsa 63 summer RK, ETH

St Kitts

825 R Paradise Common  
 895 R Nevis 3-89 JB  
 1265 R Paradise Common

St Lucia

840 R Caraibes 5-89 JB

Trinidad and Tobago

610 R Trinidad JB  
 730 83 RK

Turcs and Caicos

1570 Atlantic Beacon(English) Common

Virgin Islands

970 12-85 JA

Venezuela

540 YVOV R Perija 11-83 CAC  
 550 YVKE R Mundial 9-82 CAC  
 570 YVMZ R Rumbos 9-82 JJR  
 580 YVMJ LV de la Fe 11-84 CAC  
 670 YVLL R Rumbos 9-82 CAC  
 710 YVKY R Caracas 9-82 TN  
 720 YVQL R Vision Oriente 3-87 CR, JJR  
 740 R Maracaibo JJR, CAC, TS, TN  
 750 YVKS R Caracas JJR  
 910 YVRQ 10-82 CAC  
 940 YVNW R Punto Fijo BM, MP  
 1000 YVOA R Munial CAC JJR  
 1020 YVMX Rare 9-82 CAC, JJR  
 YVRS YVRS R Mundial Margarita summer 82 MP, BM  
 1080 R Barcelona 10-85 CAC  
 1090 12-82 JJR  
 1150 YVMM (rare) 9-82 JJR  
 1200 YVOZ R Tempo 82 TN, MP, PK, CAC  
 1210 YVQZ R Anzoatequi(rare) 9-82 TN

Last Minute Info Dept.

Brazil

1180 R Globo heard by Karl Forth, but not recently  
 1280 It has been reported that Frank Merrill of McComb, Ill heard this during 1988.

●TRANS ATLANTIC LOGGINGS●

531 Algeria 83 on CAC  
 567 Ireland 12-87 KR  
 666 Portugal 12-86 RP, JB, MS  
 684 Spain 11-86 RP  
 747 Holland 10-87 GM, DM, BW  
 756 Germany 10-87 GM, DM, BW  
 765 Senegal Common  
 774 Spain(//684) 11-85 RA, RP  
 846 Italy 2-87 RP  
 864 France 10-87 GM, DM, BW  
 882 United Kingdom 10-87 GM, DM, BW  
 891 Algeria 83-87 PK, JA  
 963 Finland(// 9560) 12-87 KR  
 1017 Germany 10-87 GM, DM, BW  
 1035 Portugal 85-89 Common  
 1062 Denmark 10-87 GM, DM, BW  
 1107 Egypt 10-87 GM, DM, BW  
 1125 Belgium 10-87 GM, DM, BW  
 1134 Yugoslavia 10-87 GM, DM, BW, JB  
 Spain 2- 87 RP  
 1143 USSR 10-87 GM, DM, BW  
 1179 Sweden 10-87 GM, DM, BW  
 1197 Germany(VOA) 10-87 GM, DM, BW  
 1206 Poland 10-87 GM, DM, BW  
 France 10-87 GM, DM, BW  
 1215 United Kingdom 10-87 GM, DM, BW, JB  
 1269 Germany 10-87 GM, DM, BW  
 1314 Norway 86 on Common  
 1323 E Germany 10-87 GM, DM, BW  
 1341 Hungary 10-87 GM, DM, BW  
 1377 France 87 JB

Trans Atlantic Logs, Continued

1395	Albania	86 on	GM, DM, BW
1467	Monaco	85-87	GM, DM, BW, JB, MS, NW
1404	Guinea	85 on	GM, DM, BW
1467	Monaco	4-87	JB
1476	Austria	10-87	GM, DM, BW
1485	Spain	10-87	GM, DM, BW
1494	USSR	3 -86	NW
1503	Poland	12-87	JB
1512	Belgium	86	NW
1593	Germany	1-87	PK

●TRANS PACIFIC LOGGINGS●

594	JOAK	Japan	4-87	JB
650	KORL	Hawaii		GM, DM, BW
702		Australia		GM, DM, BW
747	JOIB	Japan	85-88	WH, JB, MS
756		New Zealand	6-86	WH, GM, DM, BW, WM
774	JOUB	Japan	85-88	RA, JB, MS
		Fiji	1-86	WM, GM, DM, BW
800	1YZ	New Zealand		JB
828	JOBB	Japan	11-85	RA, JB
873		Australia	10-87	GM, DM, BW
1008		New Zealand	2-87	GM, DM, BW
1017		Australia	10-87	GM, DM, BW
1026		New Zealand	2-86	WM
1035		New Zealand(// 1008,1026)		WM
1575		Australia	10-87	GM, DM, BW
1620	RPH	Australia	1-88	JB
1629		Australia		GM, DM, BW, JB

Many Thanks to All who provided logs and information for this article!

●DXers REPORTING IN THIS LIST

Logs listed here are drawn from National Radio Club's DX News over the last few years, from DX MidAmerica's Pan Am Plus and from lists submitted in personal correspondence.

JA	Jim Albrecht	Milwaukee, Wi
CAC	Craig Cook	Milwaukee, Wi
RG	Rob Gerardi	Benton, Ill.
JL	John Lentz	Hales Corners, Wi
MK	Mike Knitter	Cambridge, Wi
PK	Paul Kowalski	St Francis, Wi
RK	Robert Kramer	Chicago, Ill
BM	Bob Mielcarek	Milwaukee, Wi
WM	Bill Marvin	Waseca, Min.
SP	Sheryl Paszkiewicz	Manitowoc, Wi.
JJR	John Rieger	South Milwaukee, Wi
CR	Christos Rigas	Chicago, Ill
NW	Niel Wolfish	Winnipeg, Manitoba
TN	Tim Noonan	Milwaukee, Wi
FM	Fritz Mellberg,	Hawarden, Ia
MS	Mitch Sams	Topeka Kansas
JB	John Bryant	Stillwater, Ok
HF	Harold Frodge	Midland, Mich
KF	Karl Forth	Chicago, Ill
GM	George McLachlan	Winnipeg, Man
BW	Barry Wasyluk	Winnipeg, Man
DM	Dave McBride	Winnipeg, Man
TS	Tom Steele	Milwaukee, Wi
HS	Herb Scarpelli	Milwaukee, Wi
MP	Mike Pering	Kenosha, Wi
ETH	Earl Higgins	Riverside, Ill
WH	Wayne Heinan	Aurora, Colo
RA	Richard Allen	Billings, Ok
RP	Ron Purdue	Byron, Min
KR	Ken Romstadt	Ottawa Lake, Mich
BH	John Herman	Vinita Ok