



**April 2004 Volume 50 No. 1** 

\* Return of Mailbag

♣ Primer on PC audio

♣ *Introducing the MW550P* 

♣ Datong FL3 modifications

♣ 50<sup>th</sup> Anniversary Year



Hon. President*	Bernard Brown, 130 Ashland Road West, Sutton-in-Ashfield, Notts. NG17 2HS				
Treasurer/	Clive Rooms, 59 Moat Lane, Luton LU3 1UU	(all general club enquiries)			
Secretary*	<b>1</b> 01582-598989 (after 1800 hours)	treasurer@mwcircle.org			
MWN General	Steve Whitt, Landsvale, High Catton, Yorkshire	YO41 1EH			
Editor*	<b>☎</b> 01759-377311 editor@mwcircle.org	(editorial & stop press news)			
Membership Sec.	Paul Crankshaw, 3 North Neuk, Troon, Ayrshire	KA10 6TT			
•	■ 01292-316008 membership@mwcircle.or	rg (all changes of name or address)			
MWN Despatch	Peter Wells, 9 Hadlow Way, Lancing, Sussex BN	N15 9DE			
•	<b>☎</b> 01903 851517 despatch@mwcircle.org	(printing/ despatch enquiries)			
External	George Brown, 6 Glassel Park Road, Longniddry				
Representative	<b>☎</b> 01875-852317	(inter club liaison, advertising, publicity)			
Reprints Manager	Clive Rooms reprints@mwcircle.org	(all orders for club publications & reprints)			
MWN Contributing I	Editors (* = MWC Offic	cer; all addresses are UK unless indicated)			
DX Loggings	Martin Hall, Glackin, 199 Clashmore, Lochinver, Lai	<u> </u>			
	<b>2</b> 01571-855360	dxlogs@mwcircle.org			
Mailbag	Herman Boel, Roklijf 10, B-9300 Aalst, Vlaanderen (	(Belgium)			
	<b>≅</b> +32-53-711 244	mailbag@mwcircle.org			
Features	VACANCY	features@mwcircle.org			
Home Front	John Williams, 100 Gravel Lane, Hemel Hempstead,				
	<b>1</b> 01442-408567	homefront@mwcircle.org			
Eurolog	John Williams, 100 Gravel Lane, Hemel Hempstead,	Herts HP1 1SB			
World News	VACANCY				
D 77.111. D 1	<b>☎</b> 0XXXXXXX	world-news@mwcircle.org			
Beacons/Utility Desk	VACANCY				
Central American	© 01XXX	utility@mwcircle.org			
Desk	Tore Larsson, Frejagatan 14A, SE-521 43 Falköping, +-46-515-13702 fax: 00-46-515-723519	ca-news@mwcircle.org			
S. American Desk	Tore B Vik, Post Box 88, NO-1851 Mysen, Norway	ca-news@mwchcle.org			
5. American Desk	₹ +-47-69891192	sa-news@mwcircle.org			
N. American Desk	Barry Davies, 20 Ryehill Park, Smithfield, Carlisle C.				
Verifications	Clive Rooms, 59 Moat Lane, Luton LU3 1UU	verifications@mwcircle.org			
KEEP IN TOUCH	Internet: MWC Web site	http://www.mwcircle.org			
		ervice for members; e-mail webmaster to join			
Webmaster	Rémy Friess	webmaster@mwcircle.org			
		", comusion o minoriolog			

## **STOP PRESS:**

This month we welcome a good crowd of new members to the Circle: Harry A Schools, Philadelphia PA; Ivan Newton, Werrington, Peterborough Cambs; Bernt-Ivan Holmberg, Moklinta, Sweden; Michael Beu, Austin, TX; Ehard Goddijn, Radio Netherlands; Andrew Robins, Kalamazoo, MI; WRTH; Jyrki Hytonen, Kannus, Finland; Henk Poortvliet, Zeist, Netherlands; Jarmo Patala, Hyvinkaa, Finland. And I'm also really please to welcome to former members back: Ray Moore, N Ft Myers, FL and Hans Pammer, Loosdorf, Austria

Stop Press Deadlines:	2 <sup>nd</sup> May for May/June 2004	27 <sup>th</sup> June for July/A	ugust 2004	
Cover illustration: Vidor CN429 Lady Margaret valve portable receiver made in 1954				
Medium Wave News is	published 10 times a year by the Me	edium Wave Circle	© 2004	

## **EDITORIAL**

with Steve Whitt

It's extremely gratifying to see a sizable bunch of new members this month. Welcome to the Circle, guys. I hope you make the most of your membership of the Circle.

Thank you also to those of you who have chosen to continue supporting the Circle by renewing your membership. I hope many of you used the membership form as an opportunity to give feedback on how we are doing. No doubt Clive Rooms is busy analysing comments and I'll publish his report in due course.

### Editorial Vacancies – good news & bad news

First the good news. This month Mailbag returns after quite an absence because Herman Boel has volunteered to help edit your letters, e-mails & other communications. Please help Herman make a success of the column by sharing your comments, thoughts & ideas with him (and the rest of us!).

Sadly the bad news is that this month there is no Utility Column since we have no volunteer willing to act as editor. Additionally the World News column in this issue of MWN will be the last unless a volunteer comes forward to produce the column. This is one of the longest running columns in MWN so it is a particular shame to face the possibility that the column will no longer appear.

## IF YOU CAN HELP PLEASE DON'T HESITATE WAITING FOR SOMEONE ELSE TO COME FORWARD. PLEASE CONTACT THE EDITOR DIRECTLY.

## Fifty years young

Medium Wave News was first published in December 1954, which means that this year is an important milestone for the Circle. During the next 8 months in the run up to the anniversary I hope we will have some interesting contributions to MWN. I have selected cover illustrations for this volume of MWN that reflect important aspects of 1954 as they relate to broadcasting. Later in the year I will reprint the very first edition of MWN, but in the mean time we would like to hear your reflections on 50 years of the Circle. Articles will be welcome as will letters to Mailbag. What do you think? Were you there at the beginning? Please let everyone know!

This month's cover is a picture of a battery powered portable valve radio. Quite an innovation but it had little impact upon the inevitable demise of valve technology. 1954 was a significant year of technological transition.

## Thank you

Nick Hall Patch writes; "On another matter, noticed in the February MWN that you ran my R75 review. There was a small omission, and that was crediting the original publication, IRCA's DX Monitor. That really is important, as you might gather by looking at the last phrase of this sentence from IRCA's boilerplate: "Unless otherwise noted, permission is granted to publish, broadcast, or otherwise reproduce non-copyrighted material appearing in DX Monitor provided credit is given to the IRCA and the original contributor." I am entirely happy to correct this oversight, Nick, since it is always my policy to credit everything we use in MWN. Sometimes I get material where the originator can no longer be identified, but in this instance that was not the case. In this case the omission was entirely down to me.

Until next time 73s. Steve

# **IONOSPHERIC REPORT**

from U.S. Dept. of Commerce, NOAA, Space Environment Center

## Daily Geomagnetic Data

,	Middle Latitude Fredericksburg	High Latitude	Estimated
Data		College A K-indices	Planetary Ap K-indices
Date 2004 02 29	A K-indices 17 2 2 2 5 4 2 3 3	A K-indices 39 1 2 2 7 6 5 3 3	Ap K-indices 21 2 3 3 5 5 4 3 3
2004 02 29	12 2 2 3 2 3 3 3 3	35 2 2 4 5 6 6 3 3	18 3 2 4 3 4 4 3 4
2004 03 01	14 4 3 3 1 3 2 3 3	40 4 3 6 4 6 6 2 2	17 4 3 4 3 4 3 3 3
2004 03 02	8 1 2 1 3 3 2 2 2	33 2 2 1 7 6 3 2 1	15 3 2 2 5 4 3 4 2
2004 03 03	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	6 1 1 1 4 2 1 1 0	7 2 2 1 3 2 3 2 2
2004 03 04	4 2 1 2 1 1 0 1 2	4 1 1 2 3 0 0 0 1	8 2 1 2 2 0 2 3 2
2004 03 05	3 1 2 1 0 1 1 1 0	1 0 1 0 1 0 0 0 0	5 2 2 1 2 2 2 2 1
2004 03 00	3 0 0 2 1 1 1 1 1	2 0 0 2 1 0 1 1 1	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
2004 03 07	2 1 1 2 1 0 1 0 0	3 1 0 3 2 0 0 0 0	6 1 1 2 2 2 3 1 2
2004 03 08	11 0 1 2 2 3 3 3 4	42 0 0 1 3 6 6 6 6	21 1 2 3 3 4 4 4 5
2004 03 09	36 5 6 5 3 4 2 3 5	47 4 5 7 4 6 4 3 3	40 5 6 6 4 5 3 3 4
2004 03 10	17 4 3 3 2 3 3 4 3	61 5 3 6 6 6 6 6 4	26 4 4 4 3 4 4 5 3
2004 03 11	19 5 4 4 2 2 3 2 3	36 3 4 6 5 5 5 3 2	23 5 5 4 3 3 4 2 3
2001 03 12	10 2 2 4 2 3 2 2 1	40 3 2 5 4 6 5 3 2	15 3 1 4 3 4 4 2 2
2001 03 13	12 3 2 3 3 3 2 3 2	40 3 2 5 7 5 4 4 2	16 3 3 4 4 4 3 3 2
2004 03 15	11 4 3 1 2 3 1 2 2	19 3 2 2 4 5 4 3 2	13 4 3 2 3 3 3 3 2
2004 03 16	6 2 1 0 2 2 2 2 2	11 3 2 1 4 2 3 1 2	8 3 2 1 3 2 3 2 2
2004 03 17	5 2 2 0 0 1 3 1 1	5 1 2 1 3 1 1 1 0	6 1 2 1 2 2 3 2 1
2004 03 18	8 3 3 1 2 2 2 1 2	14 2 3 4 3 4 2 2 2	10 3 3 3 3 3 2 2 2
2004 03 19	5 2 3 1 1 1 0 1 2	5 2 2 0 3 2 1 1 1	6 2 3 0 2 2 2 2 2
2004 03 20	7 2 3 1 1 2 2 2 2	11 2 3 2 2 3 4 1 1	9 3 3 1 2 2 3 2 2
2004 03 21	9 3 3 2 2 2 2 2 2	22 3 2 2 6 4 4 2 1	13 3 3 3 4 3 2 3 2
2004 03 22	8 2 2 3 1 2 2 2 2	11 2 3 3 3 2 2 3 2	11 3 3 3 2 2 3 3 3
2004 03 23	5 3 1 2 1 1 1 1 1	4 3 1 1 2 0 0 1 0	8 3 3 2 2 2 2 3 1
2004 03 24	1 0 1 0 0 1 0 0 1	1 1 1 0 0 0 0 0 0	4 1 1 1 2 2 2 1 0
2004 03 25	3 0 0 0 0 1 2 2 2	4 1 0 0 0 1 3 2 1	8 1 1 1 2 2 3 2 2
2004 03 26	10 2 1 2 1 3 3 3 3	24 0 1 1 1 6 6 3 2	11 1 0 2 1 3 3 3 3
2004 03 27	12 2 2 2 2 3 3 2 4	27 2 2 2 5 4 6 3 4	14 3 1 2 3 3 4 3 4
2004 03 28	-1 -1-1-1-1-1-1	-1 -1-1-1-1-1-1	-1 3 5 3-1-1-1-1

## Space Weather Outlook Table (based on 27 day forecast)

ידידי	Date	_	10.7cm Flux	Ap Index	Max. K
				_	_
2004			105	15	3
2004			100	12	3
2004	Mar	30	100	10	3
2004	Mar	31	95	8	3
2004	Apr	01	100	5	2
2004	Apr	02	100	5	2
2004	Apr	03	100	5	2
2004	Apr	04	100	5	2
2004	Apr	05	95	15	3
2004	Apr	06	95	25	5
2004	Apr	07	90	25	5
2004	Apr	80	90	20	4
2004	Apr	09	90	20	4
2004	Apr	10	90	12	3
2004	Apr	11	95	10	3
2004	Apr	12	100	8	3
2004	Apr	13	105	8	3
2004	Apr	14	110	5	2
2004	Apr	15	115	5	2
2004	Apr	16	115	5	2
2004	Apr	17	115	12	3
2004	Apr	18	120	10	3
2004			120	10	3
	_				

## **MAILBAG**

with Herman Boel

Welcome all to the brand new mailbag.

It was a shame to see such a column disappear for such a long time as it is the only place which really brings members together and where a variety of topics can be discussed.

We start off our first edition with a question from **John Williams**: "A couple of years ago I purchased a Sony MZ-G750 recording mini disc walkman. The intention was to record DX . However when I use the mini disc to record - I get interference for 1 to 2 seconds every 20 seconds or so. The interference is sufficient to blot out the signal. I have tried using battery only in the MD player and moving the player as far as possible from the receiver. This interference is the same on my Sony ICF2001D and AOR 7030. there is no problem taping FM programmes. Does any other member have similar problems with mini disc machines?"

Talking of technology, **Steve Whitt** poses the question; "Is there no limit to modern radio design?" and he includes a photo of a floating bath-time radio. Any thing more unusual?





The next item deals with our beloved long and medium wave band. Our favourite passtime on these bands may be DXing, surely there are specific programmes you love listening to. This can either be a newscast, but also a music show, documentary programme, sports show, etc. What about sharing this with the other members? Tell us what your favourite show is, on what station and frequeny it is broadcast and at what time. This is obviously not restricted to English language programmes as our members come from all over the world and speak/understand many languages.

We can then compile a nice list which can be a nice addition to our DXing activities. The list could also be used to promote medium wave listening as a whole – is there not more to these bands than cracks and noises?

So far the first edition of the 'new' mailbag. Feel free to send and share your questions, comments, opinions, thoughts, etc. on our hobby.

73, Herman

## INTRODUCING THE MW550P

with various contributors

#### Introduction



The Palstar MW550P is a tuner, preselector and amplifier primarily designed with the medium wave DXer in mind. It can be used with any communications receiver. The range of the tuner section is specified from 500 kHz to 1800 kHz (but tunes up to approximately 2800 kHz). A 6 to 1 vernier allows precise adjustment. The tuner and amp provides 4 to 12 dB of gain. The bandwidth is adjust to an incredibly narrow 2 to 6 kHz with input coupling control and narrow-wide

switching. Click here to view operating directions.

The preamp features a high level dual JFET amp with a bandwidth of 150 kHz to 40 MHz. A complete bypass switch is provided. The rear panel features an SO239 input for a standard 50 ohm coaxial feedline or a terminal for longwire/Beverage antenna. Output is an SO239 jack. An earth ground is required for proper operation. Size: 8.25x4.25x9 inches 6 lbs. An AC wall power supply providing 12 VDC is provided.

"It's always exciting to learn about new products dedicated to AM broadcast DXing", writes Bruce Conti. "The Palstar R30 communications receiver has become a favorite among medium wave DXers, especially when outfitted with a Collins narrow filter, rated by many as providing the most bang for the buck among mid-priced receivers. Now Palstar has introduced a new antenna tuner



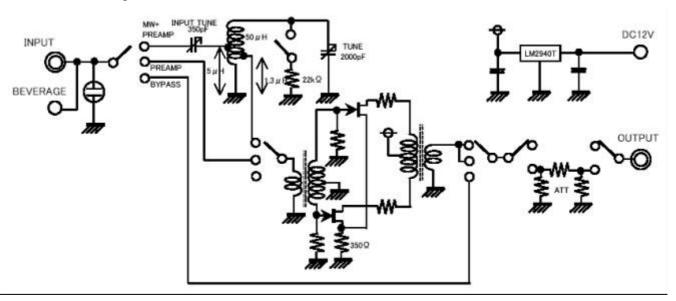
specifically designed for medium wave reception. The Palstar MW550P Medium wave Tuner features high-Q tuning 518 - 1750 kHz and a low noise preamp. According to published data, the 3 dB bandwidth is adjustable to a narrow 2 kHz, important for separating DX signals from adjacent frequency interference. This might be just the tool for DXers in urban areas where strong local AM signals may interfere with DXing, or when a long wire antenna overloads a receiver and produces shortwave spurs. The MW550P will even handle input from a Beverage antenna, a good indication of bullet-proof signal handling capability.

\$275 via on-line ordering at Palstar's website www.palstar.com. It is also distributed in the USA by Universal Radio.

## **Specifications**

- Will match any antenna (e.g. random wire, beverage etc.) to 50 ohms across the broadcast band
- Selectivity can be varied by adjusting the antenna coupling. A 4 kHz bandwidth is achievable

- Low noise broadband preamp, 50 ohm in and out and covers the shortwave bands up to 30MHz
- Frequency range: 510 kHz to 2.5 MHz
- Switchable low noise preamp to 30 MHz
- Vernier tuning



#### Reviews

**KV5V** writes; "I've used the 550P mainly for 160m DXing and contesting. The preamp had to provide enough gain to bring Beverage signals up to normal levels and not cave in with strong signals in contests. The IP3 is very high, so I've been able to copy noise floor signals in the presence of -10 dBm BC signals. I've measured 50 dB rejection of carriers 15 kHz away from a desired signal. The high-tech solid-state switching and JFET preamp aren't fazed by large amounts of RF.

An interesting bonus: The filter will peak signals it's tuned to, but there's also a sharp 50 dB notch about 30 kHz above the peak frequency. I've used this in the BC band to remove strong local stations that caused de-sensing.

This is a well-made, nice-looking piece of gear that's a great addition to the shack. The big vernier dial is a pleasure to use. Look inside and you see large, low-loss parts custom-made by Palstar. A super performer for Top Band work

**NA6DF** writes, "This filter is built like a TANK! It has a very selective preselector, as low as 3-6kHz bandwidth on MW, and rock-stable. I used it for a "front-end" on an off-air AM broadcast monitor at a radio station to resolve some overload interference, and was truly impressed. Now I want one for the hamshack as well!

**Les Rayburn, N1LF** writes, "I'm the proud owner of a MW550P preselector! A lot of its abilities depend on your antenna, and local conditions. For instance, if you run a longwire, beverage, or BOG antenna and have a lot of local stations nearby...you'll love it! It has razor sharp selectivity, and can really help eliminate intermod and splatter from adjacent channels.

The thing is also built like a tank, has a very low noise pre-amp built in for beverages, EWE's or other antennas that provide weaker signals.

They're hard to find used cause most folks who own them won't part with them!

## PRIMER ON PC AUDIO

by High Criteria

abridged from www.highcriteria.com

### Introduction to PC Based Audio

Today, almost every PC comes equipped with a sound card and associated speakers. The speakers and sound card, in conjunction with the computer operating system, facilitate the playing of audio sounds (music, speech, bird calls, or any other noises) so the sounds can be heard by the end user.

The sounds created by the speakers are actually waves of compressed air. The human ear is capable of discerning these waves, provided that their frequency resides within the audible spectrum. By their nature, these sound waves are continuous. Each wave has a discrete value of pressure associated with it and each of these possible values generates a different sound.

Before a computer can deal with sounds, the sounds must be converted to a series of ones and zeroes. This is a process called digitalization. To understand how digitalization works, let us imagine a microphone plugged into a computer sound card. The membrane on the microphone moves back and forth according to the current air pressure. The microphone circuitry transforms this movement into a continuous and real-valued electric signal. The sound card in turn has a circuitry called an Analogue-to-Digital converter or ADC. The ADC can convert this electric signal to a sequence of ones and zeroes. This conversion is done by taking periodic measurements of the electrical signal and converting it to an integer value. The frequency at which the measurements are taken is called a sample rate and the size of the integer (in bits) is called a sample size. The result of each measurement is called a sample.

The more samples per second, the greater the accuracy that will be achieved in reproducing the sounds, when they are re-played. The sample rate is measured in the number of thousands of samples per second and are expressed as a specific thousand of samples per cycle (second). A sample rate of 44.1 kHz is used for most CDs, 48kHz - for DVD. Some proposed future audio devices can go as high as 96kHz. A sample rate of 8.0 kHz would yield less than one fifth the samples of the CD quality recording and would be more suitable for dictation type applications than for recording music. Of course, a high sample rate means more data must be saved and the file size and disk space requirements increase accordingly.

The sample size indicates the size of the scale that will be used for each sample measurement and will usually either be 8 bits or 16 bits. A scale between 0 to 255 may be represented in 8 bits. A scale between 0 and 65,535 may be represented with 16 bits. So a 16 bit, sample size, provides much greater granularity and can represent the correct pressure much more accurately than an 8 bit sample size. Again, CD quality recordings are done with a sample size of 16 bits and recording such as dictation are done with a sample size of 8 bits. Some newer audio devices are capable of working with the sample rate of 24 bits.

The last fundamental characteristic of the digital sound is a number of channels. To reflect the spatial properties of sound it must be measured in more then one place simultaneously. For example two microphones are generally needed to get stereo sound. Each independent measurement point produces one channel. In the vast majority of the cases, the number of channels is either one (mono sound) or two (stereo sound). New systems may utilize up to 6 channels (Dolby 5.1).

To summarize, each digital sound has three fundamental characteristics: the sample rate, the sample size and the number of channels.

### Compression

Even in today's world of high speed Internet connections and 80Gb hard drives, audio files cannot be regarded as tiny or small. Competing compression methods have been developed to address various requirements, compressed music and compressed speech being two obvious examples. Each compression method will have its own advantages and disadvantages. The most often compared of these pros and cons will likely be the size of the resulting file weighed against the quality of the reproduced sound. Since the quality of the reproduced sound is most often a very personal judgment, users must always keep in mind the fact that their own experience with the various compression methods should be the most useful guide in assessing which compression method to employ.

Compression methods can broadly be categorized as either lossless or lossy. With lossless compression, the sounds are reproduced exactly as they were originally heard. Because reproduction is exact, lossless compression methods cannot compress a file to the same degree that a lossy method can achieve. In a Windows environment, the majority of compression methods use lossy techniques.

Lossy compression techniques actually eliminate some portion of the digital data stream that represents the sounds. The amount and type of data removed is dependent upon the purpose for which the compression method was developed. For example, a particular compression method may have been developed to allow for the playing of popular music. Such a method would attempt to reproduce the music with a great deal of quality. It may try to only remove the portions of the sounds that are near or beyond the hearing thresholds of most individuals. Using this approach, only a small difference in quality can be detected by most people.

A different compression method may be designed to record spoken words. With this type of compression, a much larger quantity of the sound spectrum may be discarded, because it is irrelevant to the purpose of recording speech. In this scenario, a much greater level of compression can often be achieved.

In addition to the sample rate, the sample size and the number of channels, the compressed sound has the characteristic called a bit rate. The bit rate tells how many bits per unit of time are needed to store the sound. It's usually measured in Kbps (kilobit per second). For uncompressed sound, the bit rate is always the product of the sample rate, times the sample size times the number of channels. For compressed sound it's lower than the above product and the difference can be viewed as a degree of compression.

## Storing the Sound

Digital sound may be stored in many forms. Just to name a few:

- An audio file on a computer's hard-drive
- An audio CD
- A mini-disk
- A digital-audio tape

In the case of PC based digital audio, saving to a computer's hard-drive is the most important format. The source for PC audio will almost always be an audio file, of which there are numerous types and formats. Many software programs have been developed to play these audio files. The remainder of this page provides users with a basic understanding of some of the audio file formats and some of the associated audio software.

#### Introduction to Audio Files

Audio files that are recognized and played on a PC come in many different formats. Different file formats are usually associated with different file extensions. For example, just as an MS Word file might be named filename.doc (with the .doc extension), one format of audio file is a way file and might be named filename.way. Other audio file formats include mp3 files (filename.mp3), Ogg Vorbis files (filename.ogg), Real Audio files (filename.ra) and many more. All of these formats are digital representations of the original sounds. At some point, the sound in these files has been converted from a continuous "analogue" signal, that may have come from a microphone, record player or other similar device, to a digital format. This conversion is done by circuitry usually found on the sound card within a PC. This circuitry is called an analogue to digital converter (ADC). Similar circuitry is also used to convert the sounds back, from digital to analogue, and is called a digital to analogue converter (DAC). The DAC circuit is used to convert a digital file so it may be played back through the speakers on a PC.

As previously discussed, most digital audio files will share several attributes that describe the properties of the recorded sound. These properties include Sample Rate, Sample Size, Number of Channels, Bit Rate and the compression technique used.

#### **WAV Files**

WAV files are the most common standard for recording audio in a Windows environment. However, with the demand for various forms of audio increasing exponentially, many competing formats are available. Commonly, WAV files may be identified by their .wav extension. Within the WAV format, quite a number of different compression methods may be used. A number of these compression methods are available as a standard part of the Windows operating system.

### Compression CODECs

In a Windows operating system environment, methods of audio compression can be implemented in special programs called CODECs. There are a number of CODECs that come as a standard part of the various Windows operating systems. CODEC compression programs commonly come in files with an .acm extension. For example, tssoft32.acm is the CODEC file for a compression algorithm called DSP Group Truespeech.

If a CODEC is installed properly, Windows will facilitate the use of the CODEC by any audio program running on the PC. The programs may use the CODEC to encode (record) or decode (play) audio files. The compression method that was used to compress an audio file can be identified with information stored within the audio file. Saving this information allows the correct CODEC to be selected later, when the file is decoded for playback.

A number of the CODECs that come as a standard part of the Windows operating system are included for compatibility reasons. Their inclusion allows for interoperability between the Windows environment and other specialized audio systems. Additionally, a number of more general purpose CODECs are included. A subjective overview of these general purpose CODECs is provided below. Users should remember that these explanations are provided on an "as is" basis. If there is any doubt, the user should review the available compression methods and make their own judgments about the one best suited for their application.

Comparison Chart of WAV File Formats\*

Format	Attributes	MB per	Application
		Hour	
DSP Truespeech	8.0kHz,1 bit, mono	4	Dictation.
L&H SBC	16kbit/s 8.0kHz,16 bit, mono	9	High quality dictation or phone calls.
MS ADPCM	8.0kHz,4 bit, mono	14	Talk Radio and meetings.

MP3	11.5kHz, 16kBit/s mono	4.5	Low quality Internet music.
PCM	44.1kHz,16 bit, stereo	600	High quality recordings.

### **DSP Group Truespeech**

The DSP Group Truespeech CODEC was written by DSP Group of Santa Clara California. This compression method was written specifically to address the requirement of recording human speech. This method removes a considerable portion of the potential sound spectrum. However, the removed data has little impact on a listener's ability to understand what was said. The algorithm "rounds off" many of the highs and lows associated with the tones found in the original spoken words. Listeners may no longer detect some of the emotions that may have been inferred by these tones, but the actual words will remain quite clear and discernable.

This CODEC is an excellent choice for recording dictation. The CODEC supports a Sample Rate of 8.0 kHz with a Sample Size of 8 bits and mono recording. One hour of Truespeech recording can fit into about 4.5Mb of disk space. We suggest the use of Truespeech for dictation type applications where the speaker's emotions are irrelevant.

### Lernout & Hauspie

There are several Lernout & Hauspie CODECs included with Windows. All of these CODECs have a small sample rate and were written specifically to address the requirement of recording human speech.

The CODECs have a Sample Rate of 8.0 kHz with a Sample Size of 16 bits. All of the CODECs are mono. The extra size of the Sample Size provides additional tone to these recordings, but will also increases the file size. A file recorded with the Lernout & Hauspie SBC 16kbit/s CODEC will require less than 9Mb of disk space for a one hour recording. We suggest the use of a Lernout and Hauspie CODEC for recording applications that require a level of quality beyond that provided by Truespeech. Recording telephone conversations would be a good example of a use for this CODEC.

#### Microsoft ADPCM

The Microsoft ADPCM CODEC provides a middle ground for audio recording. This CODEC retains much of the audio spectrum, while at the same time, providing a good level of compression. The algorithm will reproduce most of the tones that were present in the original spoken words. We suggest the Microsoft ADPCM CODEC for high quality telephone recording or for recordings of meetings or conversations where capturing the emotions behind the words is also important. This CODEC is ideal for talk show Internet broadcasts.

The Microsoft ADPCM CODEC offers Sample Rates from 8.0 kHz to 44.1 kHz. All Sample Sizes are 8 bits and the sounds may be captured in either mono or stereo.

#### **PCM**

PCM is a completely uncompressed sound format. Because it is uncompressed, there is no loss of quality due to the deletion of data. The most widely distributed PCM CODEC has sample rates from 8.0kHz up to 48.0 kHz, a Sample Size of both 8 and 16 bits and support for both mono and stereo. This format is best used when the size of the file is not an issue. This would be the case if the file was to be quickly moved to CD.

## MPEG Layer – 3 (MP3 Files)

Standard PC audio files can consume large amounts of disk space. In an attempt to reduce the amount of space required to contain these files, various audio file compression algorithms have been developed. One such algorithm, called MPEG Layer - 3, or mp3, was developed specifically

for the compression of music files. Standard programming code used by Windows to compress or decompress an audio file is called a CODEC, short for COmpression and DECompression program. Codecs generally have an .acm file extension. There are also a number of programs, called DLLs, that can perform compression or decompression or both.

Users should be aware that the Fraunhofer Institute, developers of the mp3 algorithm, have challenged the rights of third parties to develop and freely distribute mp3 code. Before downloading or using third party software, users should review copyright laws within their jurisdictions to determine whether use contravenes local copyright laws.

#### Windows MP3 Codecs

On some versions of Windows, Microsoft provides an MPEG Layer - 3 CODEC to create files compressed into mp3 format. Codecs are special Windows programs that perform COmpression and DECompression of audio files. They usually have an .acm file extension. This CODEC supports sample rates from 8.0 kHz to 24.0 kHz with a Sample Size of 16 and in both mono and stereo. This CODEC is applicable to low quality music recordings.

The creator of the mp3 format, The Fraunhofer Institute, has written three codecs that may be installed into Windows:

l3codecx.acm This is a decoder only and will only play an mp3 file. It will not allow you to record an mp3 file. See all the details regarding downloading, functions, license agreement and installation at http://soundamerica.com/codec.htm

l3codeca.acm (advanced). This is included as a standard feature in some versions of Windows. It will appear as "MPEG Layer - 3" in the Total Recorder format selection menu. It's also a part of Microsoft NetShow. It allows MP3 encoding up to 56kbit/s. This is sufficient for radio quality sound but is not sufficient for CD quality sound. You will find this codec and installation instructions, on the Internet if you do a search on l3codeca.acm on any popular web search engine.

l3codecp.acm (professional) is Commercial software. Visit the Fraunhofer Institute Website at http://www.fraunhofer.de/ for details on how you can purchase this product. This codec encodes at all bitrates and produces very high quality results, but is quite expensive.

Many software packages are available to encode a wave file to an MP3 file. One such package is the free version of MusicMatch Jukebox (http://www.musicmatch.com/), which allows up to 128kb per second encoding.

#### WMA Files

Windows Media Audio (WMA) files are generated by Windows Media Player. You may download Windows Media Player 9 from Microsoft at this web page:

http://www.microsoft.com/windows/windowsmedia/download/default.asp

## **Ogg Vorbis Files**

Ogg Vorbis is a completely open, patent-free, professional audio encoding and streaming technology with all the benefits of Open Source. It is roughly equivalent to mp3, in its ability to compress audio files, but the compression algorithm is patent-free.

#### Audio CDs

The audio found on CDs played in home and car stereos is not in a file format that is recognized by Windows. Windows Explorer will see .cda files on this type of CD. These .cda files are not audio files and you cannot copy the audio portions of this type of CD with Windows Explorer. These types of CDs are sometimes called CDA CDs or CD Audio CDs or Red Book Audio CDs (the original specification was published in a red book).

Users wanting to create their own CDA CDs must have a CD burner to write the CDs, software to control the CD burner and a source for the audio they want to place onto the CD. Usually, the software to control the CD burner comes packaged with the burner. The audio source is usually a way file found on the PC's hard drive.

When writing to a CD, the software program that controls the burner will ask the user if they want a music CD or a data CD. If the user chooses a music CD, then the software will convert the source file/files to CDA format and the resulting CD may be played in a home or car stereo. If the user specifies that they want a data CD, then the program will not convert the file/files, but will instead copy them as a wav file or mp3 file or whatever file type was specified to be copied. The data type of CD cannot generally be played on a standard home stereo system (one exception to this is if an mp3 file is copied to CD and played on a player that supports the mp3 format).

#### Transfer of Audio from LPs and Cassettes to CDs

The transfer of recordings from tapes, records or other media, to CD is a two step process. The first step is to get the recording to a PC file in a format the PC understands. The second step is to copy the PC file to a CD. You will also need a cable with audio plugs at both ends. This cable will go from the headphone/earphone jack of your stereo or cassette player to the microphone or line-in jack of your computer's sound card. You should be able to get such a cable for a few dollars from Radio Shack or other similar store. Make sure you get plugs that fit the jacks at both ends!

Once you have the cable, use Total Recorder or Dictation Buddy to record from the stereo/cassette player to the PC. If you have Total Recorder go to "Recording Source and Parameters" and change the setting from "Software" to "Sound Board". You will then be able to record whatever is played into the microphone or line-in jack from the output of the stereo/cassette player. WAV files are the industry standard for PC based audio recordings.

If you don't already have a CD burner, then you must get one. There are all sorts of burners on the market from many manufacturers. It would be best to source this from your local computer supplier. You will get software with the burner that will allow you to copy the .wav files over to the CD. The important issue in this step is to decide the CD's format. The burner software will ask if you want a "data" format CD or a "music" format CD. If you specify data, then you will get a .wav file on the CD that can only be played by a PC. If, you specify "music", then the .wav file will be converted to a format that can be played by a standard home/car CD player. This will be a CDA or CD Audio CD. See the section above on Audio CDs for more information about this type of CD.

Generally, when a "music" CDA CD is created, the software that comes with the burner will create separate "tracks" for each .wav file that is copied onto the CD. So, if you want to your home stereo to recognize the different songs on a CD as separate tracks, each of the songs must be separated into different wav files, before they are copied to the CD.

Note, almost all commercial recordings are protected by copyright. In the past, most jurisdictions have allowed a user to make a small number of copies of copyrighted material, provided that the copies are created solely for use by the original purchaser. If you have any questions about the legality of creating a copy, we suggest you contact an authority on the copyright regulations in your jurisdiction.

High Criteria is the software house that produces Total Recorder a highly recommended tool for anyone interested in using their PC to record and process audio.

## DATONG FL3 MODIFICATION

by John Faulkner

#### Introduction

I bought the Datong FL3 audio filter several years ago after trying one at Lowe Electronics. Its auto-notch filter removes heterodynes and additional tweaking removes other hets if required. All in all it's a much respected filter and has superb filtering capabilities.



Figure 1: the Datong FL3

The only real snag I have found with the FL3 is the sharp cut off of lower frequencies once the filtering is activated. Audio frequencies from around 200 Hz are attenuated, thus giving a more "tinny" sound and this has the effect of reducing the clarity of bassy vocals and the ability to hear an ID in the noise level.

Vocal frequencies don't actually go down this far though the rich bass resonances you can hear in frequencies around 100 Hz really do seem to add clarity to a weak signal, which contains vocals. The effect is to enable weak vocals to cut through the noise with greater ease. So I set out to try and find out how to lower the cut-off point.

#### Research

Sadly Datong never made any schematics available for public use, so this hampered the search for information. I did however discover that Heathkit did an audio filter which is an almost identical copy of the FL3, called the HD 1418 and you may be interested to know that a schematic is available of this from http://hamradiomanuals.com/

I posted messages on user groups on the internet and quickly learnt that many other DXers also wanted to improve the bass response of their FL3's. I was also sent a scan of an article written in an old copy of SWM which detailed the necessary mod. All that is involved is the replacement of four capacitors located to the rear of the unit.

## Changes

The screen grabs below (apologies for the low resolution) show you the capacitors you need to replace. It is with regret that I only made the scan after I changed the components!





Figure 2  $\rightarrow$ 

Figure  $3 \rightarrow$ 

Fig 1 is the front view of the FL3. Fig 2 shows the appearance of one of the four polystyrene layer filters which need to be replaced. Fig 3 shows the appearance of one of the polyester layer type I used as replacements. Fig 4 shows the location of the four filters (after replacement).

You will need to change four polystyrene axial capacitors – I've numbered 1, 2, 3 & 4 (actual appearance of one in fig 2). For replacement, try Maplin WW25C  $0.0033\mu F$  Polyester Layer  $\pm 5\%$  £0.19. Any type would do if 5% (suffix "J").



If the precise value is not available, use the next higher value (or the one after at the most) – this will have the effect of further lowering the cut-off frequency.

#### ← Figure 4

Alternatively you could add 2200pF in parallel with the existing 1000pF, e.g. the polystyrene axial type from Maplin, RG53H 2200pF 5% £0.79. or polyester

WW24B 2200pF 5% £0.19. These are all in the current

Maplin catalogue, but check availability in your local store. Sadly, Maplin always seem to be reducing their more specialist component stocks lately.

For my own modification I replaced the Polystyrene axial capacitors with Panasonic polyester film 3.3nF, Farnell stock no. 653-202 FWIW. Do not use ceramic types, as commonly-available ceramics of this value do not have sufficient stability or tolerance.

I hope this appears satisfactorily in B&W. Members who receive the e-zine will of course see the whole thing in glorious technicolour!!

Many thanks to Julian Hardstone, John Crabtree, Alan Gale and Tracey Gardner for their assistance on this project, without whom, etc..

## NORTH AMERICAN NEWS

with Barry Davies

20 Ryehill Park, Smithfield, Carlisle CA6 6BH e-mail: na-news@mwcircle.org

Welcome to another round up of what's been happening on the North America AM dial. My grateful thanks to the organisations which provide the news. Thanks this month to: - NRC, IRCA, 100000watts.com, NERW and DX-midAMerica.com

640	CFMJ	Richmond Hill ON. This Talk station for guys now broadcasts the "All Comedy
040	CINI	Radio" network overnight and at weekends. This is the same network used by the elusive 1640 KFNY Enid OK!
910	WABI	Bangor ME. This "Memory Station" has put away its nostalgia records and flipped
		to a soft pops format. (DX-midAMerica.com)
1190	WLIB	New York City NY. This popular Caribbean music station plans to switch to a talk
		format. The switch is due on the 31/03/04. The talk network is called "Air
		America" and aimed at the black community. (Art Blair)
1520	KGDD	Oregon City OR. New call letters here. (ex KZNY) Format will still be nostalgia!
1540	WDCD	Albany NY. This station replaces nostalgia's WPTR. The new 1540 format is
		contemporary Christian music.
1570	WVTL	Amsterdam NY. New call letters here. This was country music station WBUG.
		The format is now talk. The station's slogan follows the new call letters. "the
		<u>V</u> alley's <u>T</u> alk <u>L</u> eader."
1570	WVOJ	Fernandina Beach FL. The new owners have switched to a SS tropical format with
		the slogan "La Nueva X."
1620	WHLY	South Bend IN. These call letters return to the channel (ex WDND) along with the
		Radio Hollywood nostalgia music format.
1620	KBLI	Blackfoot ID. A format flip from SS to EE talk // 690 KZNR // 1260 KZNI. (Larry
		Godwin)
	KDIA	Vallejo CA. This religious station has applied for 10,000watts <b>fulltime.</b>
1640	K <u>FNY</u>	Enid OK. Calls altered to fit their comedy format from the "All-Comedy
		Network."
1700	KVNS	Brownsville TX. New call letters here (ex KQXX) and format flips from oldies to news/talk.

Arizona's 50,000 watt news talk station in the dock! Yes 1100 KFNX Cave Creek AZ has a 50,000 watt transmitter permit. However, it is for daytime operation only. Over night the permit is for only 1,000 watts. Someone at the station has been forgetting to power down at sunset! Regretfully your OM has not been able to take advantage of this "oversight." The station did not have much luck either and was fined \$4,000 by the FCC.











That just about clears my "In Tray" for another month and another winter season. I am sure there will be lots of changes on the North American AM dial before next fall. You can read all about it right here in the MWC's **North American News**. As usual, my best wishes to all our members all around The Circle from the historic city of Carlisle.

Barry

## CENTRAL AMERICAN NEWS

with Tore Larsson

### Anguilla

List of radio stations here and nearby islands: <a href="http://news.ai/ref/axaradio2004.html">http://news.ai/ref/axaradio2004.html</a>
(Bob Green's Anguilla News via Rod Thompson, WTFDA-AM via DXLD)

#### Costa Rica

Preparations are coming to an end, and shortly a new Radio María will be born in San José, this prosperous and peaceful capital. Indeed, Radios Maria are spreading across Latin America in unprecedented growth. Shortly, Radio Maria Costa Rica, Radio María República Dominicana, and Radio María Venezuela will be coming on the air. In mid-February, Radio María Colombia held a workshop for the principal staff members of the stations in the three countries.

Catholic Radio Update

### **Dominican Republic**

910 HILB R 91, Bonao, now 5 kW

Les Rayburn, NRC-AM

#### Haiti

"As Cap-Haïtien is in the hands of the rebel forces, Christian radio still operating on a schedule of 8 hours, cut from 9 hours, using diesel powered transmitter. Rebel forces are not interfering with Christian non political programming. Second transmitter site has be occupied by squatters" Assume the station mentioned is 4VEH. Local radio in South Florida.

Robert Wilkner, Florida via HCDX

A couple of new addressess from CRU - now valid?

1170 4VRS R Soleil, address BP 538, Port-au-Prince

1230 4VAV R La Voix de l'Avé-Maria, Cap Haïtien, e-mail: radiovoixavemaria@hotmail.com

Catholic Radio Update

#### Honduras

910 HRNM R Comunidad 910 AM, Ocotepeque. E-mail: <u>radiocomunidad910@yahoo.es</u>
Schedule: 1100-0300. Tel +504 653 3994. Catholic Radio Update

#### México

780<br/>920XESS<br/>XELTLa Tropical 7-80, Ensenada, ex 1450. Supposed to be running 20/10 kWTim Hall<br/>Guadalajara. Radio María México address: Av. Cruz del Sur 3195, P3, Lomas de Victória,<br/>44580 Tlaquepaque, Jalisco. E-mail: <a href="mailto:director.mex@radiomaria.org">director.mex@radiomaria.org</a> or<br/>administracion.mex@radiomaria.orgCatholic Radio Update

#### Panamá

HO.. Ecos de Pedasí, Pedasí is a new station. Currently broadcasting on 1160 kHz but will move to 1150 kHz soon. The transmitter power is 5 kW. The concessionaire of this frequency is Estéreo Bahia, S.A., P O Box 6-3091 El Dorado, Panamá, Panamá.

Henrik Klemetz Numan Vasquez, WRTH

#### **Puerto Rico**

- 910 WPRP Ponce, granted lower day and night power levels from a new site. Will be U1 4.2/4.2 kW
- WLEO Ponce, granted a decrease in power level from a new location, that of WDEP-1490 which has a CP to move to the same 319' tower. Will built, be U1 0.2/0.2 kW
- WDEP Ponce, granted power decrease to become U1 3.6/0.79 kW from a new site it will be sharing with WLEO-1170. NRC DX-News # 17, 2.2.2004

## **WORLD NEWS**

[Europe, Asia, Africa] with Tim Bucknall

33 Churchill Close, Congleton, CW12 4QU e-mail:world-news@mwcircle.org ☎ 01260 274775

URGENT!!! WE STILL NEED A VOLUNTEER TO EDIT THIS COLUMN. IF NO-ONE OFFERS TO TAKE OVER AS UTILITY EDITOR, THIS WILL BE THE FINAL APPEARANCE OF THIS COLUMN IN MWN.

#### Albania

From 1 March 2004, **China Radio International** (CRI) began broadcasting in English two hours a day on 1395kHz for Eastern European listeners The programmes will be: 0700-0755 RealTime Beijing, 0755-0800 Learn Chinese Now, 0800-0830 News and Reports, 0830-0855 Daily CRI feature programmes, 0855-0900 Learn Chinese Now. CRI wants reception reports on this broadcast by E-mail to <a href="mailto:crieng@cri.com.cn">crieng@cri.com.cn</a>. (Media Network 25 Feb)

China Radio International began test broadcasts in Czech on the 1st of March on 1458 kHz via Albania at 2230-2330 UTC. Regular operations began from 5 March 04. (*Karel Honzik*)

On 3<sup>rd</sup> March 2004, the CRI schedule on 1458kHz was: 0728 UTC English Sport news, 1730 English Headline news, 1731 English programme, 1755 A few words in Bulgarian language?, 1800 in German.. Radio China... Unsere UKW Sendung..(that means- Our FM Programme in Beijing) ..Beijing. Nachrichten (news), 1802 Programme in Italian language, 1804 German programme (after 2 or 3 minutes it was again in Italian and after another few minutes back to German).

I was listening up to 18:40 UTC. Always the same: a few minutes in German, then a few minutes Italian..and so on. (This must be an error.) The German programme from Radio China International on 5970 kHz was different from the German programm on 1458 kHz, at the same time. CRI broadcast daily 18:00- 19:00 UTC in German on 5970 kHz. (Paul Gager, Vienna)

#### Australia

Radio 2 are establishing an X Band network throughout Australia. Many stations are planned & most capital cities are already on air. (*Tim Gaynor/DXLD*)

### Belaium

There are some changes to the RTBF's MW service: The transmitter on 1125 kHz (in Houdeng) now no longer carries Radio 21, but the new station 'Vivacité', which replaces the old 'Fréquence Wallonie'. The other two frequencies, 1233 and 1305 kHz, maintain Radio 21 but this will change too. In a few weeks' time, Radio 21 will be split into two radio stations: Classic 21, which will carry older pop and rock music, and Pure FM, a new youth station. The latter will be carried on 1233 and 1305 kHz.

(Herman Boel 7/3/04)

### Cyprus

Radio Monte Carlo - Moyen Orient (RMC-MO) officially confirmed that the transmitter in Cape Greco on 1233kHz is operated with 600kW (which is half of the installed 1200kW), both during the transmissions of RMC-MO and during relays of TWR.

(Bernd Trutenau-LTU)

#### Estonia

Tartuskoye Semeynoye Radio is the Russian channel of the Estonian religious broadcasting company Tartu Pereraadio. Add:: Annemõisa 8, EE-50708 Tartu, Estonia. Email: am1035@bk.ru, Web: www.pereraadio.ee/ru. 24h in Russian on Tartu 1035kHz 50kW ND. *Bernd Trutenau* 

#### France

A station that calls itself **MC 1** is to start broadcasting in the next days on 1467 kHz from the Col de la Madonne transmitter, which belongs to MCR, a subsidiary of TdF. (*Rémy Friess*)

Launched officially on March 1, **Radio Nouveaux Talents** (RNT) on 1575 kHz has become the first of a new batch of French commercial MW stations to make it on the air. Cyril Grouin in France reports to DXing.info that the station is broadcasting from Meudon, southwest of Paris, with 5 kW of power, operated by Télédiffusion de France (TDF). As the station name suggests, it airs music by new talents along with magazine-type programming. Grouin says that other stations have faced various kinds of delays.

**Ciel AM** (981 kHz) is waiting for the antenna to be constructed Southeast of Paris. Superloustic (999kHz) appears to have financial problems, and the plans for RLT Radio Livres Télérama (1062 kHz) are unclear. La Radio de la Mer (1080 kHz) is having problems with the antenna in Western France, where the transmitter location is still not fixed. The station was originally authorized to broadcast in four locations (Western France, Paris, Montpellier and Corsica), but officially only Paris and Montpellier have been confirmed. Loisirs AM - originally called La Radio du Temps Libre – planned to begin broadcasts in March on 1314 kHz. (DXing.info, March 1, 2004)

**TESTS:** Classical and pop music loop tape with brief test announcement noted on 1062kHz at 0530 UTC on the 9th of March. French announcement mentioned TDF experimental MW programme and the frequency. Needed to null out stronger Denmark; also some interference from co-channel Italy. Presumably test in preparation for launch of Radio Livres Telerama from the Meudon, Paris site.

(Alan Pennington)

David Duckworth in Salisbury reports continuous music tests audible Tuesday evening on 999 kHz, presumably from the new Paris station Superloustic which launches on 21st March. Transmitter is Villebon 5kW (BDXC-UK)

Monitoring of 702 kHz shows the relay of RAI Radio 2 via the transmitter of Radio Monte Carlo is currently off the air. (*Valianti Palmira*)

#### Finland

For the Åland 603 project Roy Sandgren has bought the 1539 kHz Arutz Sheva transmitter that is 25kW, but of course he can run it 2.5 kW. I do not believe too much that he will be on the air for a longer time as financing is a big problem. I have personal contact with him and I have known him for more than 25 years since we both entered Radio Syd in Öresund! (Bengt Ericson)

#### Germany

WDR2/VeRa Bonn (5kW) 774kHz was off air from 16.02.-05.03. and will be off again 12.04.-03.05.2004. (A-DX)

#### Lithuania?

At 1600UT on 24/2 I heard Radio Orfey on 1557kHz but I can't find this listed, At 1600 there was a single long tone then an ID & Russian Programming. Anyone know if this is an unlisted relay via Lithuania? (Steve Whitt)

#### Lithuania

Radio Baltic Waves (\*) and Radio Baltic Waves International (\*\*) will provide the following MW relays from 28 March:

Vilnius 612 kHz 100 kW ND (\*)

## 0300-0500 RFE/RL Belarusian 1500-2100 RFE/RL Belarusian 2100-2130 R. Polonia Belarusian

Sitkunai 1557 kHz 150 kW ND (\*\*)

1800-2000 CRI Russian 2000-2030 CRI Polish 2030-2100 CRI English 2100-2200 CRI Chinese

All times are A04 UTC. Note: the UTC times for the China Radio International (CRI) schedule are the same as in the B03 season, since CRI is \*not\* moving the transmissions one hour earlier in UTC when Daylight Saving Time in Europe starts on 28 March. Further relays are due to be added during the next weeks, news follow.

(Bernd Trutenau-LTU)

#### Lebanon

The 990kHz tx is still there but switched off because of Cyprus.

873kHz Voice of Lebanon is not in use any more, 837kHz R Lebanon (Arabic service) has a 1000kW tx at Hamat but I understand that they have gone back to using the old tx (10kW?) at Amchit. This is probably only temporary. I believe this is the only active MW channel from Lebanon now.

(Jack Fitzsimmons)

### Mongolia

1350, 1000-2000 WYFR via Dalanzadgad near Chinese border 150 kW; see WRTH, page 288! (Wolfgang Büschel / Bernd Trutenau, Feb 27, BC-DX)

#### Netherlands

675 kHz: Arrow Classic Rock is now Arrow Rock Radio.

(Mikael Lange)

At 1200UTC on the 9th of March a transmission from Radio Atlantis, the Netherlands: music and jingles "Radio Atlantis" were audible on 1602kHz

(Max van Arnhem)

As the June 1st deadline looms for holders of broadcasting licences in the Netherlands to get their stations on the air if they haven't already done so, Dutch company Quality Radio says it has plenty of formats in mind. Director Ruud Poeze has told media site radio.nl that one will be a station playing traditional Dutch music. He also wants to start a "jammin' oldies" station playing music from the 60's and 70's. Quality Radio believes these two formats will work on mediumwave, for which it holds six licences.

Poeze says he is in talks with various potential business partners. He believes advertisers focus to much on the under 35's, when more than half the population are 35 and older. That's the sector that Quality Radio is concentrating on.

In the future, Quality Radio would also like to start an adult alternative and a talk station, and if possible a station playing jazz and swing from the 30's and 40's. Poeze says that he doesn't plan to lease any more frequencies to other broadcasters, like the deal for 1395 kHz with Radio10 Gold. He says this was an exceptional case because Radio 10 Gold was the big loser in the 2003 frequency allocations. The biggest problem is finding sites for the transmitters, says Poeze. (Andy Sennitt, http://medianetwork.blogspot.com/)

#### Russia

The Ministry of Press Radio and Television of the Russian Federation announced on 25th February that World Radio Network (WRN), the London-based international broadcaster, has been granted a licence to operate an AM station on 738 kHz in Moscow.

The station will commence operation in the coming months and will carry a schedule of largely speech-based programming in Russian from international broadcasters and local producers that has not before been heard in the Moscow market.

WRN already runs a satellite and internet based radio service named "WRN Russkij" that comprises programming from many global broadcasters and which already has relay agreements with local stations in other Russian cities and the CIS.

Karl Miosga, WRN's Managing Director said: "This is a proud achievement for World Radio Network. We are delighted to have been awarded a licence to operate on 738 kHz in Moscow. WRN will offer listeners in this important market place a greater range of international and local programming". The official government announcement in Russian can be viewed at http://www.mptr.ru/fkk\_konkurs/contests/id/704379.html WRN will announce detailed plans for the station's programming and a launch date in the coming months. (Andy Sennitt)

### Syria

Here is my report about the MW frequencies of both networks coming from Syria:

**Program One** ( **Radio Syria**) Idhaat aljamhouria Alarabia alsourya min Dimashq , IS starts @ 03.15 UTC , around 03.25 UTC the program starts with the national anthem of Syria , followed by the list of frequencies as follows :

567 kHz to the southern Syria and Palestine

666 kHz to the southern Syria

1485 kHz to the central Syria

747 kHz to the central, Northern and coastal of Syria

783 kHz to the coastal Syria, Lebanon, Jordan, Palestine and Egypt

918 kHz to Eastern and Northern Syria 997 kHz to Damascus

936 kHz to central Syria

828 kHz to Eastern Syria, followed by the Holy Quran.

according to the announced list I can see no mention of 612 kHz mentioned in WRTH 2004 . I will keep tuning in maybe it was forgotten but they will announce it some day later on. I checked the list of the frequency and here in Cairo I can confirm 783, 666, 936 kHz.

**Program 2** ( **V O the People**) Sout Al sha'ab min Dimashq, sign on @ 04.00 UTC with the national anthem as well, followed by the following frequency list:

873 kHz to Damascus 1071 kHz coastal Syria

954 kHz to Eastern Syria 1125 kHz to Eastern, Northern Syria

1314 kHz to Northern Syria

594 kHz to Northern Syria (needs double checking), followed by the holy Quran as well.

I checked these frequencies mentioned and can confirm, 783, 1071 (with QRM from greater Cairo radio on the same freq.), 1125, and 1314. (*Tarek Zeidan*)

#### Ukraine

VoR's Sodruzhestvo service (1278 kHz via Petrivka) is off-air, the Russian side reports that it no longer uses this transmitter. Ukrainian communication authorities sharply increased MW rental fee, therefore Russia is not sure about future use of other facilities in that country either. (open\_dx)

Thanks a lot to Tim Bucknall for producing World News. Sadly he has decided that he cannot continue and for that reason we need a new column editor for World News. Can you help?

## THE HOME FRONT

[British & Irish News] with John Williams

#### **BBC News**

### Letter from America's Alistair Cooke retires

2 March, 2004

Alistair Cooke, one of the world's greatest broadcasters, has decided to retire from Radio 4's Letter from America, on doctor's advice, at the age of 95.

Mr Cooke began the first of his 2,869 letters in 1946, making the regular radio spot the world's longest continuously running programme. Over the 58 years, Alistair Cooke has written his letter every Thursday on his typewriter in the flat overlooking Central Park in New York. The letters have a worldwide audience as they broadcast on BBC World Service as well as domestic radio."I have had much enjoyment in doing these talks and hope that some of it has passed over to the listeners, to all of whom I now say thank you for your loyalty and goodbye," said Cooke as he signed off.



In honour of the enormous contribution Alistair Cooke has made to the BBC for the past 58 years, Radio 4 and the World Service will be broadcasting a selection from the archives over the next few months in 'A Celebration Of Alistair Cooke's Letter From America'. (www.newsnow.co.uk)

#### **UK Commercial Radio News**

#### TWG commences Legal Action against RAJAR

16 March, 2004

The Wireless Group (TWG) has commenced High Court proceedings against RAJAR, claiming damages of more than £66 million in lost revenues and seeking an order that RAJAR's refusal to introduce electronic measurement immediately is unlawful.



TWG claims the RAJAR tests of electronic measurement were fatally flawed. The company may also take legal action against RAJAR's shareholders - the BBC and the Commercial Radio Companies Association(CRCA). The inaccuracy of RAJAR's diary system results in talkSPORT losing revenues of approximately £1.5 million per month, compared to what it would earn if an

accurate audience measurement system such as the technology-driven audience measurement watch system were being used.

If damages were claimed from August 2000, when TWG first requested that RAJAR introduce electronic measurement, then they would amount, before tax, to more than £66 million together with interest up to judgement which is expected to be in March next year. In addition, the estimated total legal costs of both sides for a court case could be £1.5 million. Kelvin MacKenzie, Chairman and Chief Executive of The Wireless Group, said: "Incredibly, I have spent more than three years of my life trying to persuade the radio industry that the diary, pencil and short-term memory should be replaced by a technology that measures radio audiences more accurately. My opponents have tried desperately to kick the issue into the long grass because they are making a hell of a lot of money out of this fraudulent system."

Today signals the end of my attempt to seek straightforward change through negotiation and the beginning of the final stage in which I will make my case to a judge while they make theirs. In our Particulars of Claim, we reveal quite shocking revelations that the public was not involved in crucial RAJAR tests of the new technology. In fact, RAJAR came out against the software by simply carrying out tests among themselves, involving, among others, the former Managing Director and it was on this basis that RAJAR said "No" to change. Knowing what I now know

about how RAJAR's tests were conducted and upon what basis the board's decision was made, I look forward to the result of the trial with 100% confidence."

**RAJAR Refutes TWG Claims as Ludicrous.** Following commencement of legal proceedings from the Wireless Group, RAJAR has issued a statement saying that it is confident that the claim that the RAJAR tests of electronic measurement are "fatally flawed" is without merit and, indeed, that it focuses on one small area of testing.

The statement from RAJAR said, "RAJAR has made it evidently clear that its decision that it was not yet right to adopt meters without further testing was taken after exhaustive tests in the studio and the field. It has also made it clear that there were considerable costs and non-disclosure agreements attached to these tests. The decision not to adopt electronic measurement without further testing was taken by the members and the advisors of the RAJAR Board". (<a href="www.ukradio.com">www.ukradio.com</a>)

### Radio Caroline 40 years old

21 March, 2004

Forty years ago next week, a group of young men embarked on an illicit adventure. People such as Tony Blackburn, a doctor's son who went to Millfield, CN Henty-Dodd, better known as Simon Dee, and a future Tory MP, Roger Gale.



They set up their radio equipment on a ship anchored four miles off the Essex coast, in inter- national waters. It was called Radio Caroline. Caroline was the first of Britain's offshore pirate radio stations in ships and abandoned wartime forts. They unleashed a tidal wave of all-day pop on an unsuspecting but welcoming nation — the young bit of it, anyway — and paved the way for the creation of Radio 1.

The first record ever played on Caroline, on March 29, 1964, was the Rolling Stones' Not Fade Away, which turned out to be an appropriate choice: over the past 40 years, the signal of the pirates has faded in and out, changed colour and direction, but never faded away. Radio Caroline began at Easter because its founder, Ronan O'Rahilly, was following a family tradition of resistance to authority and monopoly. His grandfather, who was one of the leaders of the Easter rebellion, was shot by the English in Dublin in 1916.

There has always been a dark underbelly to pirate radio. The owner of Radio City, based on a fort on Shivering Sands, off Whitstable, was shot dead in a business row in 1966, precipitating a murder trial and the acceleration of the bill that eventually drove the pirates off the air. Radio Caroline (and Johnnie Walker, now on Radio 2) was the only one to defy the law, and stayed on air, on and off, until 1990. It still exists, being now a satellite station that goes out on Sky and the internet.

The anniversary is being marked next month – from 9 April - by a week-long tribute on BBC Essex, whose three medium-wave frequencies (729, 765 and 1530 kHz) will be called "Pirate BBC Essex" for the occasion. (*Paul Donovan Sunday Times*)

#### **RSL & LPAM News**

Details of the home games for football clubs' broadcasting are:

Football Club	Station	April fixtures	May fixtures
Crystal Palace	Palace Radio 1278 kHz	3 Walsall	1 Millwall
		12 Bradford	
		17 Preston	
Blackburn	Radio Rovers 1404 kHz	10 Leeds	1 Man Utd
		17 Leicester	15 Birmingham
Manchester Utd	Manchester Utd Radio 1413 kHz	3 Charlton	8 Chelsea
		12 Leicester	

		24 Liverpool	
Rushden FC	Diamonds Radio 1503 kHz	10 Barnsley	8 Port Vale
		24 Hartlepool	
Barnsley	Oakwell 1575 kHz	3 Plymouth	1 Bristol City
		12 QPR	-
		17 Brentford	

**Halesowen College Radio (HCR) 1386 kHz** has been broadcasting at low power since last September. The station broadcasts 11.00 –1500 hours Monday, Wednesday, Thursday and Friday during term time. Later this year the broadcast schedule and transmitter power, which is currently estimated to be less than 0.25 W erp, will be increased. (*Dave Kenny BDXC-UK*)

**Radio Rockingham 1602 kHz.** Motor racing commentary for the season at Rockingham Motor Speedway Northampton. On air from 2 May to 3 October, 2004. The contact point is: Diane Smith Telephone: 01869 336200; Email :enquiries@event-tech.biz . Normally meetings are held each weekend and on Bank holiday Mondays.

It is presumed that a number of other 'race tracks' will also be broadcasting their race meetings during the period from Easter to October. In previous years the following locations have broadcast:-

Donnington Park, Castle Donnington Leics;

Thruxton Circuit, Andover Hants SP11 8PN;

Knockhill Racing Circuit, Dunfermline Fife KY12 9TF;

Oulton Park, Taporley Cheshire;

Silverstone Race Circuit, Towcester Northants NN12 8TN;

Croft Circuit, Croft on Tees North Yorkshire DL2 2PN;

Snetterton Circuit, Norwich Norfolk NR16 2JU;

Brands Hatch, Fawkham Longfield Kent DA3 8NG

All these stations have previously broadcast on 1602 kHz with the exception of Radio Brands on 1269 kHz

WHAM! Radio 1449 kHz- Blaenavon South Wales. Celebration of Blaenavon's World Heritage



status .On air from 3 to 30 May 2004. Contact: Alan Fossey Telephone: 0773 2257025; Address Tormedia 87 Broad Street BLAENAVON NP4 9NE. e-mail alan.fossey@fsmail.net . The station is on air 24 hours a day

#### Irish News

Details of the address and telephone number for **Solas AM**:- Solas Raidio Teoranta, Ltd., The Liturgical Centre, Whitecross, Newtownpark Ave., Stillorgan, County Dublin. Tel.: (01) 087 288-7445, or 256-1416, fax 283-5130. E-mail: croninjd@indigo.ie .The frequency is not yet known.

#### RTE revamp on medium wave.

RTE is making a number of changes in how it broadcasts its radio services. Radio 1 will cease broadcasting on medium wave for three to five months from July while engineering work takes place on the transmitter in Tullamore. Radio Managing director Adrian Moynes said that 22pc of listeners accessed the station on this frequency.

This transmitter may be replaced in the next two to three years, allowing the station to use emerging technologies. The State broadcaster said that it would no longer broadcast 2FM on medium wave. This service had cost up to Euro 500,000 a year but only 4pc of the station's audience listen on this frequency.

RTE plans to shut the music station's medium wave service completely in April, while medium wave broadcasts of 2FM in Dublin ceased in January. The 55-acre site of the Athlone medium wave transmitter, which has been used for such services since 1932, may be sold off in part, while plans for a regional production unit and museum are being considered. Mr Moynes also said the station was researching developments in digital radio and was awaiting a regulatory framework for the medium. (http://www.unison.ie)

### Long Wave News

## RTE commences on 252 kHz

17 March, 2004

This statement from RTE: "RTÉ is pleased to announce an extension of their radio services, with effect from March 17, 2004, St. Patrick's Day. From then, RTÉ Radio 1 will be available throughout the island of Ireland, in Britain and parts of Europe on Long Wave 252. Following tests on LW 252 last September, RTÉ Radio received valuable feedback and considerable encouragement regarding the service from listeners throughout Ireland, the UK and further afield. Detailed observations on signal strength were posted and comments on the proposed service were very positive.

RTÉ RADIO 1 also on LW 252

The launch of RTÉ Radio 1 on Long Wave 252 kHz is an exciting opportunity for radio listeners in all of Ireland, who will now be able to hear Radio 1 on one single, strong frequency. This is also an opportunity to provide a better service to those listening in the UK and parts of Europe where the same output on LW252 will also be heard. This service is of particular benefit to car listeners to maintain the quality of station reception as they move through different transmission areas.

RTÉ Radio 1 is Ireland's most listened to radio station. It has been on air since 1926. Programming on LW 252 will include RTÉ Radio 1's sport and religious choices, currently available on MW in Ireland. While recognising that its core remit is to domestic audiences, RTÉ has always maintained and funded overseas distribution with the purpose of bringing our content to a wider community of listeners. RTÉ provides a uniquely Irish voice and viewpoint, both on issues relating directly to Ireland and on events around the globe. RTÉ seeks also to reflect Ireland's increasing diversity, its place in the wider world and to serve as a progressive force in reflecting and shaping the cultural life of the nation. RTÉ is excited about this initiative and hopes listeners everywhere will continue to enjoy RTÉ Radio 1 and experience a piece of Ireland wherever they are." The service will be provided indefinitely and is not being launched as a commercial venture. (www.rte.ie)

It appears that RTÉ plans to offer some alternative programming on its recently-launched longwave service that normally carries the same programmes as RTÉ Radio One mediumwave. On its Web site, RTÉ announces that from Friday 14 May a group of celebrities will be challenged to man, produce and present a national radio station: RTÉ Charity 252 Radio for People In Need. Each evening, Gerry Ryan will present an hour-long television programme based around the activities of the wannabe radio presenters."We are hugely excited about this new format," said Philip Kampff, Executive Producer, RTÉ People In Need. Gay Byrne and Ryan Tubridy will host the traditional Telethon night on Friday 21 May. (Via Andy Sennitt)

Has RTE 252 been heard in the US yet? The answer is yes, this from longwaveradiolistening@yahoogroups.com "I'm listening to it NOW!.. using a Sangean AST-818 on 252 kHz and random long-wire located in East Texas, local time 2030 CST or 0030 GMT. Reception is sporadic with fading to background to 'Good' signal several times p/minute. Program content is piano music with commentary." (Name of Dxer not stated – Mike Terry BDXC-UK)

#### **Concerns over long wave mast for IOM**

The Island's Radio Mast Concern group is calling for a full public inquiry to be launched into the siting of a mast for a new long-wave radio station. Isle of Man International Broadcasting PLC hopes to launch a Ramsey based station within the next 12 months and will site its mast four kilometres off the coast of Cranstal in Bride. However, John Watson, Chairman of the concern

group set-up after IMIB announced its plans, says further action has to be taken to prevent the transmitter being sited in Ramsey Bay.(www.manxradio.com/)

## **EUROLOG**

with John Williams

kHz	Station, location; details heard etc	SIO	UTC	Date	Who
576	R.Christo Botev, Vidin; local pop mx, splash ex Bologna 567	322	2005	7/3	SV
612	RTV Fed.Bosne i Hercegovine 1,ID,nx, no "Power 612"	444	0655	19/2	OH
675	Arrow Rock Radio, Holland; new name for Arrow Classic Rock, rock	333	2105	7/3	SV
	mx, ID, QRM from Arabic stn.				
702	R.Slovensko 1 (pres.); dominant among others, RAI Radio 2 relay via Montecarlo off since 1/3	333	2000	7/3	SV
819	RAI Trieste 1; local px "Giornale Radio del Friuli Venezia Giulia", wx, at 1415 joining Radio 1	454	1400	10/3	SV
828	R.Christo Botev, Schumen; //576	333	2005	7/3	SV
846	R North Cardonagh Co Donegal; OM top 30 Country; ad for Ballymena	ı F	2309	11/3	JW
936	RAI Venezia 2; at 1330 opting out of Radio 2 network programmes for "L'Ora del Friuli Venezia Giulia" special broadcast for Italians in Slovenia and Croatia (formerly on 1368 kHz now off the air for electrosmog)	454	1335	17/3	SV
981	Radio Star Country Co Monaghan; YL "Get your business on Radio	G	2305	10/3	JW
1134	Star phone 038 66343773" Voice of Croatia, Zadar; at 1530 in Italian, ID as "Radio Pola" with news, weather and music, followed by EE at 1600 "The Voice of Croatia all over the world on satellite, internet and shortwave", news and current events	454	1530	19/3	SV
1233	RTBF Radio 21 (pres.); FF, rock and techno music, many jingles	333	2205	17/3	SV
1368	RAI Radio 3, Milan; music by Burt Bacharach, now audible in Bologna with Venezia 1368 kHz off air		1505	19/3	SV
1404	Radio 106, Reggio Emilia area; active again with folk music and ID "Radio 106 la tua radio"	454	1500	19/3	SV
1458	China Radio International, Albania relay; new transmission in Italian at 1800/1900	544	1800	7/3	SV
1467	MC1, Montecarlo (pres.); no positive ID heard, soft rock, fading away around 0600	252	0535	15/3	SV
1521	Cadena SER; SS news	454	0635	17/3	SV
1530	Romania; nx, wx, dominant over Vatican Radio!	433	2000	8/3	SV
1557	R.Osijek; tk, dominant over France Info Nice	444	0635	17/3	SV

Many thanks to the following reporters:

JW John Williams Hemel Hempstead AOR7030 + 40m long wire, Sony ICF2001D Sooper Loop SV Stefano Valianti; Bologna, Italy; Sony ICF-SW 35 and Sony ICF-SW40; telescopic aerials There is a new web site if you require the word document to send me logs; it is as follows:

http://www.members.mwcircle.org.

The deadline for the next issue is 28 April, 2004.

73's **John** 

# **DX LOGGINGS**

?⊠ Glackin, 199 Clashmore, Lochinver, Lairg, Sutherland IV27 4JQ, Scotland with Martin Hall e-mail: dxlogs@mwcircle.org???☎ 01571-855360

kHz	Callsign	Station, location; details heard etc	SIO	UTC	Date	Who
252		RTA Tipaza, Algeria; ID "Alger Chaîne 3 Radiodifusion	Exc	0906	13/3	SW
		Algierienne				
279		Turkmen R; clear signal // 5015 many refs to Turkmen & Watan	Exc	0004	20/3	SW
555	ZIZ		Enke	0649	4/3	mah
555 560	CHVO	Basseterre, St Kitts (presumed); calypso mx Spaniards Bay NL; C&W mx, // 590 kHz VOCM	Fpks 1-2	0538	27/2	BV
570	CMDC	R Reloj, Santa Clara; rolling SS nx, ID, TC, ticks, pips, "RR" ir		0550	9/3	mah
		Morse code (also G 0756 1/3)				man
580	WKAQ	San Juan PR; SS promos, anns, ID "Escucha WUKQ"	W/F	0634	10/3	mah
590	VOCM	St John's NL; advs, ann, many IDs, heard many days	2-3	0540	25/2	BV
590	VOCM	St John's NL; YL with Weather sponsored by Tetley Tea	W	2351	25/2	JW
590	VOCM	St John's NL; nx	333	0330	5/3	DX183
590	VOCM	St John's NL; EE, adv	232	0505	21/3	chm
610	WIOD	Miami FL; "News Radio 6-10 WIOD - depend on it" (also W/F 0804 1/3)	F/G	0639	2/3	mah
620	CKCM	Grand Falls NL; // VOCM ID	F	2315	25/2	JW
620	CKCM	Grand Falls NL; // VOCM	333	0430	21/3	chm
630		RTT Tunis, Tunisia; Arabic songs // 12005 kHz	G	1805	5/3	CW
640	CBN	St John's NL; CBC programme	1-2	0540	25/2	BV
640	CBN	St John's NL; CBC Overnight news reports	G	0648	27/2	BD
640	CBN	St John's NL; EE, CBC px	322	0250	21/3	chm
650	CKGA	Gander NL; // 590 VOCM	232	0330	5/3	DX183
650	НЈКН	Antena 2, SF de Bogotá; LA mx, ID " internacional Antena	F/G	0746	4/3	mah
		Dos Colombia"				
660	WAFN	New York NY; ID "Sports Radio 66"	F	2331	25/2	JW
660	<b>YVNA</b>	Ondas de los Médanos, Coro; LA mx, jingles "Tu AM	F/G	0622	3/3	mah
		Popular", ID "Ondas de los Médanos, su Radio Popular				
		mandando!" at 0634 - tnx to Jan-Erik Osterholm for help on				
		this one. <b>UK FIRST</b>				
680	KBRW	Barrow AK; Christian/religious talks through the Bible	222	1650	23/3	Rha
680	WRKO	Boston MA; several IDs noted on noisy channel	vW	0800	1/3	mah
680	WAPA	San Juan PR; SS tele-tlk, "Guapa Radio" jingles, anns, ID "	F/G	0827	3/3	mah
		La Guapa transmitiendo desde San Juan" etc and TC at				
		0832 (a personal first); normally a difficult channel, this one				
600		was dominating the splatter	11.7/E	0700	2 (2	
690		Caribbean Beacon, The Valley, Anguilla (presumed); preaching, // 1610 kHz	W/F	0709	2/3	mah
700	LV3	R Cordóba (presumed); Argentinian songs, mentions of La Plata	W/F/G	0738	16/3	mah
710	WOR	New York NY; "This is Troy Young (?) you are listening to WOR", then into phone-in	F	0718	26/2	JW
710	WOR	New York NY; EE, ID, adv	322	0435	21/3	chm
710	CKVO	Clarenville NL; // 590	W	2314	25/2	JW
710	CKVO	Clarenville NL; // 590 VOCM	333	0330		DX183
, 10			555	3330	515	

kHz	Callsign	Station, location; details heard etc	SIO	UTC	Date	Who
710	CM	R Rebelde (4 sites listed); SS, salsa-mx, // 1180 and 5025 kHz	1-2	0540	25/2	BV
710	CM	R Rebelde (4 sites listed); SS anns, mx // 1180	W/F	0801	1/3	mah
720	CHTN	Charlottetown PE; "Good Time Oldies 7-20 CHTN"	F	0655	9/3	mah
740	CHCM	Marystown NL; EE, pop-mx, // 590 (VOCM) and 560 kHz	1-2	0618	23/2	BV
740	CHCM	Marystown NL; pop country	F	0723	27/2	BD
740	WIAC	San Juan PR; SS anns, ads, LA mx etc TC, ID / list of network stations at 0800	F/G	0751	2/3	mah
740	ZYH446	R Sociedade da Bahia, Salvador; PP songs, nice ID "ZYH446 AM 740 Rádio Sociedade a rádio da Bahia", rlgs	W/F	0606	12/3	mah
740	YVNC	CBN Maracaibo (presumed); SS anns, "Usted escucha RNV Informativo", " La Radio del Información", and "Esta es la información del momento en RNV noticias" - then faded to be replaced by LA mx station. Tnx to Jan-Erik Osterholm for listening to the clip and suggesting the station.	F	0830	4/3	mah
750	ZYH709	Jovem Pan, Brasília; PP anns, clear "Jovem Pan" ID, Brazilian mx	F	0730	16/3	mah
760	WJR	Detroit MI; ID "This is the great voice of the Great Lakes, News Talk 7-60 WJR"	W/F	0822	9/3	mah
780	CFDR	Dartmouth NS; C&W mx	1-2	0549	25/2	BV
780	CFDR	Dartmouth NS; OM talk religion "God saved me because"	G	2336	25/2	JW
780	CFDR	Dartmouth NS; talk then religion	W	0052	26/2	CW
780	YVMN	R Coro; LA mx, TCs, finally caught an ID at 0705 "Radio Coro 7-80"	F	0638	3/3	mah
790	WAXY	South Miami FL (pres); brief peak with references to a business located in Miami Beach	s F	0650	1/3	SW
790	WAXY	South Miami FL; rabbi with tlk, then ID "You're listening to Waxy 7-90, for all of south Florida"	F/G	0904	3/3	mah
819		ERTU Batra, Egypt;	F	1905	5/3	$\mathbf{C}\mathbf{W}$
819		ERTU Batra, Egypt; music programme // 12050; dominant	G	2319	15/3	SW
820		R Paradise, Nevis; gospel	343	0335	5/3	DX183
820		TBN/R Paradise, Charlestown, Nevis; EE, rlgs programme	1-2	0535	6/3	BV
820		TBN/R Paradise, Charlestown, Nevis; preacher, ID "This is the Trinity Broadcasting", often hrd here	F	0700	9/3	mah
820		TBN Charlestown, Nevis (pres); English preacher	Fpk	0010	13/3	SW
830	CM	R Reloj, Holguín; SS rolling nx, "Radio Reloj", ticks, pips, "RR"	W	0651	3/3	mah
840	UNID	SS, TC "dos minutos", muffled ID "Transmite", international news - probably Doblevé	F	0706	3/3	mah
850	WFTL	West Palm Beach FL; equal/under/over WEEI from about 0644 with talk px; propagation came good near the toth when WEEI faded and WFTL came up for a nice ID at 0658 "You're listening to Joey Reynolds Show on 8-5-0 WFTL West Palm Beach, Fort Lauderdale, Miami", local ad, legal ID at toth and then nx (a personal first); Reloj in the background. (also W 0932 3/3, W 0600, 23/3)		0700	1/3	mah
850	WEEI	Boston MA; (tent), EE, anns, no ID noticed	1-2	0550	26/2	BV
850	WEEI	Boston MA; sports talk	232	0340		DX183
850	WEEI	Boston MA; ads, ID "Sports Radio 8-50 WEEI Boston", xf presumed WFTL	W/F	0528	24/3	mah

kHz	Callsign	Station, location; details heard etc	SIO	UTC	Date	Who
850	CM	R Reloj, Nueva Gerona; no audio but "RR" in Morse code hrd in background to WEEI	W	0533	24/3	mah
870	WQBS	San Juan PR; promos " por QBS 8-70 La Gran Cadena", full ID "Esta es WQBS 870 kHz San Juan, Ponce y, todos La	F/G	0839	3/3	mah
000	WCDC	Gran Cadena", salsa	222	0615	1 /2	.1
880	WCBS	New York NY; EE, nx	232 E	0615	1/3	chm
880	YVYM	R Venezuela, Puerto Ordaz; LA song, TC, "Radio Venezuela 8-80" ID (also F 0716 2/3)		0715	11/3	mah
889.96	HJPM	R Galeón, Santa Marta; dour LA songs, tx check IDs OM "Radio Galeón" & YL with "Transmite Radio Galeón" UK FIRST	W	0657	2/3	BD
889.98	НЈРМ	R Galeón, Santa Marta; LA songs, xd SS talker; ID "En Santa Marta, paratransmite Radio Galeón, la emisora Radio Galeón". Thanks to Barry Davies for the tip in the first place and Jan-Erik Osterholm for checking my audio clip.	F	0703	3/3	mah
900	CKDH	Amherst NS; wx, "light rock 9 hundred CKDH - today's hits and the best music from the 70s, 80s and 90s" (not often heard here)	Fpk	0702	9/3	mah
920	CJCH	Halifax NS; EE, oldies, ID, strong around sunrise	2-3	0605	23/2	BV
920	CJCH	Halifax NS; "From Halifax this is AM 9-20 CJCH - yesterday's favourites"	W/F	0650	18/3	mah
920	CJCH	Halifax NS; EE, nx	333	0500	21/3	chm
920	YVQX	R Nueva Esparta, Porlamar; LA songs, ID "Nueva Esparta 9-20 AM tres, diez y seis minutos", promo	F	0716	11/3	mah
927		Kol Israel, Haifa; Hebrew, phone-in	233	2330	13/3	BV
930	CFBC	Saint John NB; "Playing on a radio near you – it's good time oldies CFBC"	G	2306	25/2	JW
930	CFBC	Saint John NB; ID	F	2328	25/2	CW
930	CFBC	Saint John NB; "Good Time Oldies 93 CFBC"	W/F	0807	9/3	mah
930	CFBC	Saint John NB; "Greatest hits of all time from Good Time Oldies 93 CFBC"	G	0132	21/3	SW
930	CFBC	Saint John NB; "93 CFBC" ID	343	0130	22/3	chm
930	CFBC	Saint John NB; playing good time oldies (also F 0156 3/3)	G	0258	23/3	BD
930	CJYQ	St John's NL; usual R Newfoundland ID, ann.	1-2	2215	24/2	BV
930	CJYQ	St John's NL; Irish music	W	2338	25/2	JW
930	CJYQ	St John's NL; promo	343	0345		DX183
930	CJYQ	St John's NL; "Our music, our heritage, Radio Newfoundland"	F	0744	18/3	mah
930	CJYQ	St John's NL; R Newfoundland	333	0440	21/3	chm
930	CJYQ	St John's NL; Radio Newfoundland wx	F	0304	23/3	BD
930	ZYJ923	R Liberdade de Sergipe, Aracaju; PP preacher (+232 0415 19/2)	232	0235	10/3	DX183
950	CM	R Reloj, (2 possible sites); SS rolling news, ticks, ID "Radio Reloj", TC etc (also W 0930 3/3)	W/F	0853	4/3	mah
950	YVKG	R Popular, Caracas; frequent TCs, LA mx, ID " es la madrugada Popular"	F/G	0654	3/3	mah
960	YV	R Venezuela, Acarigua; SS songs, "Radio Venezuela" ID (also F/G 0733 2/3, F 0809 3/3)	F/G	0721	11/3	mah
970	WZAN	Portland ME; John and Jeff Show, ads, ID "9-70 WZAN"	W/F	0742	9/3	mah
970	CBZ	Fredericton NB; CBC anns, "Here is the CBC News"	W/F	0700	24/3	mah

kHz	Callsign	Station, location; details heard etc	SIO	UTC	Date	Who
970	YVLR	R Continente, Maracay; LA mx, SS anns " sintonía del grup		0734	2/3	mah
		de las ondas Continente"				
980	HJES	RCN Cali; SS nx, info	232	0350		DX183
980	HJES	RCN Cali; "RCN - La Radio de Colombia" (also F/G 0811 29/2)	F/G	0547	12/3	mah
980	ZYH707	RN, Brasilia; PP info (also 242 0315 19/2)	333	0230	10/3	DX183
990	HJDB	RCN Medellín; promos/ID "RCN, nuestra radio, La Radio de Colombia", dominant over Euros for a short while	W	0739	29/2	mah
1000	CKBW	Bridgewater NS; EE, OLD (so not yet moved to FM - mah)	333	0605	1/3	chm
1000	HJAQ	RCN Cartagena; SS tlk, ID "RCN nuestra radio, La Radio de Colombia", mx, more IDs	W/F	0717	1/3	mah
1010	WINS	New York NY; ID "WINS newstime 6.18"	F	2318	25/2	JW
1010	WINS	New York NY; EE, advs, weather, ID, news	1-2	0558	26/2	BV
1010	WINS	New York NY; talk (also F 2359 25/2)	F	0550	29/2	CW
1010	WINS	New York NY; Rolling NX	G	0710	6/3	BD
1010	WINS	New York NY; EE, "10-10 Wins weather forecast"	343	0510	21/3	chm
1010	CFRB	Toronto ON; "News Talk 10-10 CFRB", xd presumed WINS	W/F	0737	9/3	mah
1010	HJCN	R Reloj, SF de Bogotá; LA mx, ID "Esta es Radio Reloj"	Fpks	0800	4/3	mah
1010	ZYH448	R Bahia, Salvador; PP, Brazilian pops	333	0245		DX183
1020	WRHB	<b>Kendall FL</b> ; KDKA faded at 0807, leaving African-accented FF tlk (similar to that of 980 WHSR on 23/2); less heavily accented FF anns at 0814, ID "Radio Carnivale" (x2) and a few words of English " right here in Miami, it's your turn to do"		0807	27/2	mah
		more FF anns, in which further mentions of "Radio Carnivale" and "Miami"; then into Afro-Caribbean-style music at 0818, gone by 0837 <b>UK FIRST</b>				
1020	YVMX	R Continente, Maracaibo; SS songs, "Radio Continente" IDs (also F/G 0652 2/3, F 0804 3/3)	F	0723	11/3	mah
1030	WBZ	Boston MA; OM/YL news reports	W	2321	25/2	JW
1030	WBZ	Boston MA; EE, news	222	0300	21/3	chm
1030	WBZ	Boston MA; ID/promo " station is WBZ News Radio 10-30" (also F/G 0750 27/2, Fpks 0803 29/2)	F/G	0536	24/3	mah
1030	UNID	piano mx, SS anns, xf WBZ	<b>Fpks</b>	0757	29/2	mah
1040	<b>ZYK537</b>	R Capital, São Paulo; PP tlk	232	0420	19/2	DX183
1050	WEPN	New York NY; sports commentary	F/G	0202	7/3	BD
1050	WEPN	New York NY; promo " only on 10-50 ESPN Radio"	W/F	0725	9/3	mah
1050	XEQOO	R Pirata, Cancún; mix of light SS and EE songs, ID " en Radio Pirata" (also F/Gpk 0844 3/3)	F/Gpks	0643	4/3	mah
1070	CBA	Moncton NB; weather for Moncton – minus 6 degrees	F	2304	25/2	JW
1070	CBA	Moncton NB; EE, mx // 1400 CBG	433	0445	21/3	chm
1080	WTIC	Hartford CT; talk show format	F	0707	6/3	BD
1080	WTIC	Hartford CT; phone-in talks over American football	W/F	0715	23/3	Rha
1100	ZYK694	R Globo, São Paulo; PP nx	232	0400	19/2	DX183
1100	HJCN	<b>SF de Bogotá</b> ; SS anns, tlk, ID at 0800 "Radio Mil Cien AM desde Bogotá, Colombia" and "Esta es la RRM, Rede	W/F	0753	3/3	mah
		Radiodifusion Música ahora desde Bogotá, Colombia" (seemed slightly off-channel); I believe last reported in the UK in 1980				
1110	WBT	Charlotte NC; ads, ID "News Talk 11-10 WBT, Charlotte's news, weather and traffic station", then C2C	F/Gpk	0635	24/3	mah

kHz	Callsign	Station, location; details heard etc	SIO	UTC	Date	Who
1130	WBBR	New York NY; ads and OM with "Bloomberg radio"	F	2348	25/2	JW
1130	WBBR	New York NY; EE, news, business-news, stock exchange	2-3	0605	26/2	BV
1130	WBBR	New York NY; talk, Bloomberg-forecast, Bloomberg 11-30	G	0600	28/2	JVN
1130	WBBR	New York NY; EE, Bloomberg	333	0525	1/3	chm
1130	ZYJ460	RN, Rio de Janeiro; PP, // 980	222	0405	19/2	DX183
1130	YVRL	R Ideal, Maiquetía; light SS songs, ID " Radio Ideal, 1,130 AM" (also F 0708 5/3, F/G 0729 11/3)	F/G	0810	13/3	mah
1140	CBI	Sydney NS; EE, many IDs as CBC, // 640 kHz	1	0610	26/2	BV
1150	CHGM	Gaspé QC; tuned in to FF ID " AM CHNC 61 New Carlisle CHGM 11-50 Gaspé"	W/F	0745	29/2	mah
1180	WHAM	Rochester NY (presumed); OM with phone-in	W	0717	26/2	JW
1180	CMBA	R Rebelde, Vila María; salsa-mx // 710 and 5025 kHz		0545	25/2	BV
1180	CMBA	R Rebelde, Vila María; Cuban music and good clear ID // 5025		0710	27/2	SW
1180	CMBA	R Rebelde, Vila María; SS latino-pop		0355		DX183
1180	ZYJ463	R Viva Rio, Rio de Janeiro; EE and PP jazzy style songs, many IDs "Rádio Viva Rio" - no sign of Cuba (another personal first)	W/Fpks	0723	12/3	mah
1190	WLIB	New York NY; urban-mx with heavy rhythms	1-2	0615	26/2	BV
1190	WLIB	New York NY; Caribbean mx, IDs (still there, W at 0920)	Fpks	0740	27/2	mah
1190	WLIB	New York NY; "This is Caribbean hits and more 11-90 WLIB"	F/G	0609	24/3	mah
1190	LR9	R América, Buenos Aires; SS anns, then "Panorama de la mañana de Radio América", TC (presumed earlier with classical music programme F/G around 0728)	W	0802	12/3	mah
1200	YVOZ	R Tiempo, Caracas; light music and songs, SS ID "Serenata mucho anos, acompandándoles por Radio Tiempo" - tnx to Jan-Erik Osterholm for checking my audio clip.	F/Gpks	0804	4/3	mah
1210	VOAR	Mount Pearl NL; EE, rlgs px	322	0450	21/3	chm
1250	WEAE	Pittsburgh PA; ESPN sport-talk & ID "WEAE Pittsburgh's ESPN Radio 12-50"		0738	23/3	Rha
1250	WKBR	<b>Manchester NH</b> ; country & western mx prog in between announcements weak under WEAE Pittsburgh		0740	23/3	Rha
1250	HJHS	R Reloj, Cúcuta; SS ID noted - again, tnx to Jan-Erik Osterholm for checking my audio clip.	Fpk	0728	4/3	mah
1250	YVPZ	R Puerto Ordaz; SS, ID "Latina" and culture infos		0500	12/3	Rha
1250	YVPZ	R Puerto Ordaz; varied styles of LA mx, "Latina" ID, TC (also Fpks 0715 4/3)		0807	12/3	mah
1260	WMKI	Boston MA; Radio Disney promos		0728	9/3	mah
1270	WTSN	Dover NH; ID "AM 12-70 WTSN Dover", ABC News, under/over CJCB (also vWpk 0800 27/2, W 0606 24/3)		0900	9/3	mah
1270	CJCB	Sydney NS; country mx, ID "The most country, the greatest variety, 12-70 CJCB", dom over R Reloj (also Wpks 0709 27/2)	1	0657	29/2	mah
1270	CMJG	R Reloj, Camagüey; SS rolling nx & ticking clock		0655	27/2	BD
1270	CM	R Reloj, Camagüey; usual SS rolling news, IDs, ticks, pips, Morse code "RR"	•	0701	27/2	mah
1270	TGCQ	Radio Exclusiva Guatemala City; SS MOR discos romanticos & jingle ID "Radio Exclusiva Guatemala. Guatemala bonjour" UK FIRST	F	0705	27/2	BD
1280	WCMN	Arecibo PR; SS promos, ID "Esta es WUNO San Juan, NotiUno 6-30" (also W 0747 29/2, F/G 0824 2/3)	W/F	0735	11/3	mah
1290	YVLF	R Puerto Cabello; SS, salsa	343	0400	5/3	DX183
1290	YVLF	R Puerto Cabello; SS, talk - discurso latinamericana	W	0452	12/3	Rha

kHz	Callsign	Station, location; details heard etc	SIO	UTC	Date	Who
1290	YVLF	R Puerto Cabello; ads, ID, TC	W/F	0647	17/3	mah
1300	WERE	Cleveland OH; ID jingle "WERE 1300 on dial", then Cleveland news-talk - Cleveland's number one station	W	0803	23/3	Rha
1320	CKEC	New Glasgow NS; country music song programme	W/F	0447	12/3	Rha
	CKEC	New Glasgow NS; CW	333	0455	21/3	chm
1320	YVWP	R Apolo, Turmero; SS info, jingle	333	0440	5/3	DX183
1323		BBC Zygi, Cyprus; BBC WS // 648 kHz	F	1936	5/3	CW
1329.96	UNID	SS anns "Radio Principal, Noti Chinque (??) Montana 58 programas con todas las familias", promos, "Radio Principal a cinco de la tarde, la hora de la calidad" . Rlgs px, I think, after 0900 (will seek further help with the clip on this one)	W/F	0857	29/2	mah
1350		ERTU Quseir, Egypt; AA, local mx, // 12050.53 kHz	343	2345	13/3	BV
1350	LS6	RBA, Buenos Aires; rlgs px, ID "Radio Buenos Aires AM 1,350 - 24 horas", xf PP rlgs station	Fpks	0702	10/3	mah
1350	ZYH520	R Cristal, Salvador; PP speech	222	0250	10/3	DX183
1350	ZYH520	R Cristal, Salvador; 2 OMs talking in PP	252	2335	21/3	HP
1350	HCVP2	Teleradio, Guayaquil; LA songs, "Teleradio 13-50" IDs, hrd to past 0800 (also F/G 0827 2/3, F/G 0700 4/3)	F/G	0739	17/3	mah
1370	WDEA	Ellsworth ME; CBS News, ads, promo " on AM 13-70 WDEA"	W/Fpk	0606	24/3	mah
1380	CB138	R Corporación, Santiago; SS anns, ID " en Radio Corporación" (still W/F at 0758)	W/F	0700	16/3	mah
1385.9		R Rurale, Labé, Guinea; VV talk about Ramadan, Labé mention	444	2210	13/3	HP
1390	YVZA	R Fé y Alegría, Caracas; LA mx, ID as " transmite Radio Fé y Alegría 13-90" (also F 0757 13/3)	vW	0815	12/3	mah
1400	CBG	Gander NL; EE, mx // 1070-CBA	322	0445	21/3	chm
1410	WPOP	Hartford CT; sports talk	322	0345	10/3	DX183
1410	XEBS	R Sinfonola, México (tentative); SS tlk, anns, possibly mentioning " servicio XEBS", ads, faded	W/F	0807	17/3	mah
1410	ZYK691	R América, São Paulo; PP, slow Brazilian songs	222	0335	10/3	DX183
1410	UNID	Classic mx, SS talk	wW	0620	28/2	JVN
1420	CKDY	Digby NS; "AVR weather"	W/F	0730	9/3	mah
1420	YVNZ	R Marabina, Maracaibo; SS songs, "Radio Marabina 14-20"	W/F	0741	13/3	mah
1422		Radio Koran, Alger, Algeria; Quran - song programme in AA	W/F	0440	12/3	Rha
1430	WENE	Endicott NY; Fox Sports Radio, "Sports Radio 14-30 The Team" IDs, full legal ID at toth	F	0700	27/2	mah
1430	WENE	Endicott ME; "Sports Radio 14-30" "visit 1430theteam.com today"	F	0025	8/3	SW
1440	WJAE	Westbrook ME; "The Big Jab with Papa Joe"	F	2342	25/2	JW
1440	WJAE	Westbrook ME; sports "The Big Jab 24 hours a day" Sports Saturday; also noted relaying WWZN from 1510kHz including local Boston adverts at 0025 8/3	G	2305	6/3	SW
1440	WJAE	Westbrook ME; sports from SNR & "Big Jab" slogan ID	W/F	0155	9/3	BD
1440	WJAE	Westbrook ME; "Sports Radio WJAB" etc, under/over Luxie	W/Fpks		9/3	mah
1450	WKXW	Atlantic City NJ; ID at toh. "WKXW 1450 Atlantic City" and references to wkxw.com.	W	0100	24/2	JF
1460	WDDY	Albany NY; EE Disney R // WQEW-1560	222	0555	1/3	chm

1470   WWNN   Pompano Beach FL; good dawn peak; local adverts at 0530 and G   0558; phone talk show; stevekingshow,com; legal ID dropped into talk show at 0604; faded out by 0615 (also G 0600 15/3)   1/3 chm   0558; phone talk show; stevekingshow,com; legal ID dropped into talk show at 0604; faded out by 0615 (also G 0600 15/3)   1/3 chm   1/470   WLAM   Lewiston ME; EE, news   322   0530   1/3 chm   1/470   WLAM   Lewiston ME; EE, news   322   0530   1/3 chm   1/470   WLAM   Lewiston ME; ED; news   1/470   WLAM   Lewiston ME; ED; with Vibración   1/470   WLAM   Lewiston ME; ID; wMTW radio", newstalk (+ W/F 0433 12/3) W/F   0438   23/3 Rha   1/470   WLAM   Lewiston ME; ID; wMTW radio", newstalk (+ W/F 0433 12/3) W/F   0438   23/3 Rha   1/470   WLAM   Lewiston ME; ID; wMTW radio", newstalk (+ W/F 0433 12/3) W/F   0438   23/3 Rha   1/470   WLAM   Lewiston ME; ID; wMTW radio", newstalk (+ W/F 0433 12/3) W/F   0438   23/3 Rha   1/470   WLAM   Lewiston ME; ID; wMTW radio", newstalk (+ W/F 0433 12/3) W/F   0438   23/3 Rha   1/470   WLAM   Lewiston ME; ABC NX and spots (also W 0359 21/3)   W   0302   25/3 BD   1/470   WLAM   Lewiston ME; ABC NX and spots (also W 0359 21/3)   W   0302   25/3 BD   1/470   0AU48   CPN; Lim; SS speech   May   CPN; Lim; SS speech   May   Ma	kHz	Callsign	Station, location; details heard etc	SIO	UTC	Date	Who
1470   WLAM   Lewiston ME; EE, news   322   0530   1/3 chm   1470   WLAM   Lewiston ME; EE, news   322   0530   1/3 chm   1470   WLAM   Lewiston ME; EE, news   322   0530   1/3 chm   1470   WLAM   Lewiston ME; EE, news   322   0530   1/3 chm   1470   WLAM   Lewiston ME; EE, news   820   1/3 chm   1470   WLAM   Lewiston ME; IE rown   1/4 revenue signal in March mixing with Vibración   820	1470	WWNN		G	0600	21/3	SW
1470   WLAM   Lewiston ME; EE, news   322   0530   1/3   chm   1470   WLAM   Lewiston ME; promotion for the "Newsradio WMTW   G   0043   8/3   SW   Recognition Programme"; a frequent signal in March mixing with Vibración   WLAM   Lewiston ME; WMTW IDs, nx   W/F   0817   9/3   mah   1470   WLAM   Lewiston ME; ID "WMTW radio", newstalk (+ W/F 0433 12/3) W/F   0438   23/3   Rha   1470   WLAM   Lewiston ME; ID "WMTW radio", newstalk (+ W/F 0433 12/3) W/F   0438   23/3   Rha   1470   WLAM   Lewiston ME; ABC NX and spots (also W 0359 21/3)   W   0302   25/3   BD   1470   XEA1   Roformula, Mexico; City; call letters ID and Radio Formula W/F   0358   R/3   BD   1470   OAU4B   CPN, Lima; SS speech   343   0340   19/2   DXIS3   1470   OAU4B   CPN, Lima; SS peech   SP, promotions & nx   G   0700   28/2   BD   1470   OAU4B   CPN, Lima; SS PX promotions & nx   G   0700   28/2   BD   1470   VVSY   R Latina, Valencia; SS, many ann., clear ID as Latina   1-2   03/0   23/2   BV   1470   VVSY   R Vibración, Carúpano; SS, salsa   343   0330   19/2   DXIS3   1470   VVSY   R Vibración, Carúpano; ID & Latina music; AM & FM   G   0103   9/3   SW   1470   VVSY   R Vibración, Carúpano; SS melancholy discos romanticos, IDs   G   0405   10/3   BD   1470   VVSY   R Vibración, Carúpano; SS melancholy discos romanticos, IDs   G   0405   10/3   BD   1470   VVSY   R Vibración, Carúpano; CLA mx, "En Vibración tres y cincuenta   W/F   0750   13/3   mah   1470   VVSY   R Vibración, Carúpano; CLA mx, "En Vibración tres y cincuenta   W/F   0751   16/3   mah   1470   VVSY   R Vibración, Carúpano; CLA mx, "En Vibración tres y cincuenta   W/F   0453   25/2   Rha   1499.60   0454   Radio Santa Rosa Lima; SS Chora singing   F   0704   3/3   mah   1499.60   0454   Radio Santa Rosa Lima; SS Chora singing   F   0704   3/3   mah   1499.60   0454   Radio Santa Rosa Lima; SS Chora singing   F   0704   3/3   mah   1499.60   0454   8/2   0456   0456   0456   0456   0456   0456   0456   0456   0456   0456   0456   0456   0456   0456   0456   0456   0456   045							
Lewiston ME; promotion for the "Newsradio WMTW   Recogition Programme"; a frequent signal in March mixing with Vibración   WIF   W	1470	WLAM	Lewish ME; WMTW ID	G	0033	26/2	CW
Recogition Programme"; a frequent signal in March mixing with Vibración   1470   WLAM   Lewiston ME; WMTW IDs, nx   W.F   0817   9/3   mah   1470   WLAM   Lewiston ME; D"WMTW radio", newstalk (+ W.F 0433 12/3) W   0302   25/3   BD   1470   WLAM   Lewiston ME; ABC NX and spots (also W 0359 21/3)   W   0302   25/3   BD   1470   XEAI   Radio Formula, Mexico City; call letters ID and Radio Formula WF   0358   8/3   BD   1470   XEAI   R Formula, Mexico City; call letters ID and Radio Formula WF   0368   8/3   BD   1470   OAU4B   CPN, Lima; SS speech   343   0340   19/2 DXI83   1470   OAU4B   CPN, Lima; SS PX promotions & nx   G   0700   28/2   BD   1470   OAU4B   CPN, Lima; SS PX promotions & nx   G   0700   28/2   BD   1470   OAU4B   CPN, Lima; SS PX promotions & nx   G   0700   28/2   BD   1470   VYSY   R Adio, Carúpano; SS, many ann., clear ID as Latina   1-2   0303   23/2   BV   1470   VYSY   R Vibración, Carúpano; ID & Latin music; AM & FM   G   0103   9/3   SW   1470   VYSY   R Vibración, Carúpano; ID & Latin music; AM & FM   G   0103   9/3   SW   1470   VYSY   R Vibración, Carúpano; SS melancholy discos romanticos, IDs   G   0405   0405   BD   1470   VYSY   R Vibración, Carúpano; SS melancholy discos romanticos, IDs   G   0405   04	1470	WLAM	Lewiston ME; EE, news	322	0530	1/3	chm
WLAM	1470	WLAM	Lewiston ME; promotion for the "Newsradio WMTW	G	0043	8/3	SW
1470   WLAM   Lewiston ME; ID "WMTW radio", newstalk (+ W/F 0433 12/3) W/F   0438   23/3   Rha 1470   WLAM   Lewiston ME; ABC NX and spots (also W 0359 21/3)   W   0302   25/3   BD			with Vibración				
1470   WLAM   Lewiston ME; ABC NX and spots (also W 0359 21/3)   W   0302   25/3   BD     1470   XEAI   Radio Formula, Mexico City; call letters ID and Radio Formula WF   0358   8/3   BD     1470   XEAI   R Formula, Mexico; SS, anuncios and Mexican soft pop-songs   W   0850   23/3   Rha     1470   OAU4B   CPN, Lima; SS speech   343   0340   09/2   DX183     1470   OAU4B   CPN, Lima; SS PX promotions & nx   G   0700   28/2   BD     1470   VAUB   CPN, Lima; SS PX promotions & nx   G   0630   9/3   SW     1470   YVJW   R Latina, Valencia; SS, many ann., clear ID as Latina   1-2   0630   23/2   BV     1470   YVSY   R Vibración, Carúpano; SS, salsa   343   0330   19/2   DX183     1470   YVSY   R Vibración, Carúpano; BL Atinin music; AM & FM   G   0103   9/3   SW     1470   YVSY   R Vibración, Carúpano; SS melancholy discos romanticos, IDS   G   0103   9/3   SW     1470   YVSY   R Vibración, Carúpano; SS melancholy discos romanticos, IDS   G   0405   10/3   BD     1470   YVSY   R Vibración, Carúpano; SS melancholy discos romanticos, IDS   G   0405   10/3   mah     1470   YVSY   R Vibración, Carúpano; CA mx, "En Vibración tres y cincuenta   WF   0750   13/3   mah     1470   YVSY   R Vibración, Carúpano; "Unión Radio Noticias"   F   0736   11/3   mah     1470   YVSY   R Vibración Carúpano; "Unión Radio Noticias"   one of the last   WF   0751   16/3   mah     1470   YVSY   R Vibración Carúpano; "Unión Radio Noticias"   one of the last   WF   0751   16/3   mah     1499.96   DSA11   Radio Santa Rosa Lima; SS ID "Tropical 14-80"   F/G   0740   3/3   mah     1499.96   DSA11   Radio Santa Rosa Lima; SS Choral singing   F   0704   28/2   BD     1500   WTOP   Washington DC; rolling news, ads   W   2323   25/2   JW     1500   WTOP   Washington DC; rolling news, ads   W   2323   25/2   JW     1500   WTOP   Washington DC; rolling news, ads   RIB Sarasay, Bushehr, Iran; // www.irib.ir/live.ch.ram   G   2305   1/3   chm     1510   WWZN   Boston MA; sport coverage   242   0458   11/3   HP     1510   WWZN   Boston MA; sport coverag	1470	WLAM	Lewiston ME; WMTW IDs, nx	W/F	0817	9/3	mah
1470	1470	WLAM	Lewiston ME; ID "WMTW radio", newstalk (+ W/F 0433 12/3)	W/F	0438	23/3	Rha
1470   XEAI   R Formula, Mexico; SS, anuncios and Mexican soft pop-songs   vW   0850   23/3   Rha   1470   OAU4B   CPN, Lima; SS speech   CPN Radio, Lima; SS PX promotions & nx   G   0700   28/2   BD   1470   OAU4B   CPN, Lima; SS PX promotions & nx   G   0700   28/2   BD   1470   OAU4B   CPN, Lima; SS PX promotions & nx   G   0630   9/3   SW   1470   VVJW   R Latina, Valencia; SS, many ann., clear ID as Latina   1-2   0630   9/3   SW   1470   VVJW   R Latina, Valencia; SS, many ann., clear ID as Latina   1-2   0630   9/3   SW   1470   VVSY   R Vibración, Carúpano; SS, salsa   343   0330   19/2   DX183   1470   VVSY   R Vibración, Carúpano; ID & Latin music; AM & FM   G   0103   9/3   SW   Frequencies, "Grupo Unión Radio"; frequently heard with repetitive format of male announcer with simple ID & TC   1470   VVSY   R Vibración, Carúpano; SS melancholy discos romanticos, IDS   G   0405   10/3   BD   1470   VVSY   R Vibración, Carúpano; Unión Radio Noticias"   F   0736   11/3   mah   1470   VVSY   R Vibración, Carúpano; "Unión Radio Noticias"   F   0750   13/3   mah   1470   VVSY   R Vibración, Carúpano; "Unión Radio Noticias", one of the last W/F   0751   16/3   mah   16/3   05/4	1470	WLAM	Lewiston ME; ABC NX and spots (also W 0359 21/3)	W	0302	25/3	BD
1470	1470	XEAI	· · · · · · · · · · · · · · · · · · ·	W/F	0358	8/3	BD
1470	1470	XEAI	R Formula, Mexico; SS, anuncios and Mexican soft pop-songs	vW	0850		
1470   NAU4B   CPN, Lima; several "CPN Radio" IDs in programme promo   G   0630   23/2   SW   1470   YVSW   R Latina, Valencia; SS, many ann., clear ID as Latina   1-2   0630   23/2   BV   1470   YVSY   R Vibración, Carúpano; SS, salsa   343   0330   19/2 D×183   1470   YVSY   R Vibración, Carúpano; ID & Latin music; AM & FM   G   0103   9/3   SW   1470   YVSY   R Vibración, Carúpano; ID & Latin music; AM & FM   G   0103   9/3   SW   1470   YVSY   R Vibración, Carúpano; SS melancholy discos romanticos, IDs   G   0405   10/3   BD   1470   YVSY   R Vibración, Carúpano; SS melancholy discos romanticos, IDs   G   0405   11/3   mah   1470   YVSY   R Vibración, Carúpano; LA mx, "En Vibración tres y cincuenta W/F   0750   13/3   mah   1470   YVSY   R Vibración, Carúpano; "Unión Radio Noticias"   F   0736   11/3   mah   1470   YVSY   R Vibración, Carúpano; "Unión Radio Noticias", one of the last W/F   0751   16/3   mah   1470   YVSY   Radio Vibración Carúpano; discos romanticos & ID   W   0308   24/3   BD   1480   WMDD   Fajardo PR; tropical mx, SS ID "Tropical 14-80"   F/G   0740   3/3   mah   1499.96   OBX41   Radio Santa Rosa Lima; SS Choral singing   F   0704   28/2   BD   1500   WTOP   Washington DC; rolling news talk   W/F   0453   25/2   Rha   1500   WTOP   Washington DC; rolling news, ads   W   2323   25/2   JW   1500   WTOP   Washington DC; EE, news   322   0535   1/3   chm   1500   YVRZ   R Dos Mfl, Cumaná; SS, música romántica   333   0415   10/3   DX IS3   1500   YVRZ   R Dos Mfl, Cumaná; ID "En Dos Mfl"   W/F   0453   23/3   SM   1510   WWZN   Boston MA; sports talk and ID "15-10 The Zone"   W   2325   7/3   JW   1510   WWZN   Boston MA; sports talk and ID "15-10 The Zone"   W   2325   7/3   JW   1510   WWZN   Boston MA; sports talk and ID "15-10 The Zone"   W   2325   7/3   JW   1510   WWZN   Boston MA; sports talk and ID "15-10 The Zone"   W   2325   7/3   JW   1510   WWZN   Boston MA; sports talk and ID "15-10 The Zone"   W   2325   7/3   JW   1510   WWZN   Boston MA; sport coverage   WWZN   Bos	1470	OAU4B	CPN, Lima; SS speech	343	0340	19/2	DX183
1470         YVJW         R Latina, Valencia; SS, many ann., clear ID as Latina         1-2         0630         23/2         BV           1470         YVSY         R Vibración, Carúpano; SS, salsa         343         0330         19/2         ▷XIS3           1470         YVSY         R Vibración, Carúpano; ID & Latin music; AM & FM requencies, "Grupo Unión Radio"; frequently heard with repetitive format of male announcer with simple ID & TC         00405         10/3         BD           1470         YVSY         R Vibración, Carúpano; "Unión Radio Noticias"         F         0750         11/3         mah           1470         YVSY         R Vibración, Carúpano; "Unión Radio Noticias", one of the last W/F         0751         16/3         mah           1470         YVSY         R Vibración, Carúpano; "Unión Radio Noticias", one of the last W/F         0751         16/3         mah           1470         YVSY         R Adio Vibración Carúpano; discos romanticos & ID         W         0308         24/3         BD           1470         YVSY         Radio Vibración Carúpano; discos romanticos & ID         W         0308         24/3         BD           1480         WMDD         Fajardo PR; tropical mx, SS ID "Tropical 14-80"         F/G         0704         28/2         BD           1500         WTO	1470	OAU4B	CPN Radio, Lima; SS PX promotions & nx	G	0700	28/2	BD
1470   YVSY   R Vibración, Carúpano; SS, salsa   343   0330   19/2   DX183   1470   YVSY   R Vibración, Carúpano; ID & Latin music; AM & FM   G   0103   9/3   SW   frequencies, "Grupo Unión Radio"; frequently heard with repetitive format of male announcer with simple ID & TC   1470   YVSY   R Vibración, Carúpano; SS melancholy discos romanticos, IDs   G   0405   10/3   BD   1470   YVSY   R Vibración, Carúpano; SS melancholy discos romanticos, IDs   G   0405   11/3   mah   1470   YVSY   R Vibración, Carúpano; LA mx, "En Vibración tres y cincuenta W/F   0750   13/3   mah   1470   YVSY   R Vibración, Carúpano; LA mx, "En Vibración tres y cincuenta W/F   0751   16/3   mah   1470   YVSY   R Vibración, Carúpano; "Unión Radio Noticias", one of the last W/F   0751   16/3   mah   1470   YVSY   Radio Vibración Carúpano; discos romanticos & ID   W   0308   24/3   BD   1480   WMDD   Fajardo PR; tropical mx, SS ID "Tropical 14-80"   F/G   0740   3/3   mah   1499.96   OBX41   Radio Santa Rosa Lima; SS Choral singing   F   0704   28/2   BD   1500   WTOP   Washington DC; rolling news talk   W/F   0453   25/2   Rha   1500   WTOP   Washington DC; rolling news, ads   W   2323   25/2   JW   1500   WTOP   Washington DC; EE, news   322   0535   1/3   chm   1500   YVRZ   R Dos Mfl, Cumaná; SS, música romántica   333   0415   10/3   DX183   1500   YVRZ   R Dos Mfl, Cumaná; ID "En Dos Mfl"   W/F   0643   17/3   mah   1500   WZN   Boston MA; sports talk and ID "15-10 The Zone"   W   2325   7/3   JW   1510   WWZN   Boston MA; sports talk and ID "15-10 The Zone"   W   2325   7/3   JW   1510   WWZN   Boston MA; sports talk and ID "15-10 The Zone"   W   2325   7/3   JW   1510   WWZN   Boston MA; country sport-talk "bowl" of Boston & world of   vS   0450   23/3   Rha   1510   WWZN   Boston MA; country sport-talk "bowl" of Boston & world of   vS   0450   23/3   Rha   1510   WZN   Boston MA; country sport-talk "bowl" of Boston & world of   vS   0450   23/3   Rha   1510   WZN   Boston MA; country sport-talk "bowl" of Boston & world of   v	1470	OAU4B	CPN, Lima; several "CPN Radio" IDs in programme promo	G	0630	9/3	SW
1470   YVSY   R Vibración, Carúpano; ID & Latin music; AM & FM   frequencies, "Grupo Unión Radio"; frequently heard with repetitive format of male announcer with simple ID & TC     1470   YVSY   R Vibración, Carúpano; SS melancholy discos romanticos, IDs   G   0405   10/3   BD     1470   YVSY   R Vibración, Carúpano; "Unión Radio Noticias"   F   0736   11/3   mah     1470   YVSY   R Vibración, Carúpano; "Unión Radio Noticias"   F   0750   13/3   mah     1470   YVSY   R Vibración, Carúpano; "Unión Radio Noticias", one of the last W/F   0751   16/3   mah     1470   YVSY   R Vibración, Carúpano; "Unión Radio Noticias", one of the last W/F   0751   16/3   mah     1470   YVSY   Radio Vibración Carúpano; discos romanticos & ID   W   0308   24/3   BD     1480   WMDD   Fajardo PR; tropical mx, SS ID "Tropical 14-80"   F/G   0740   3/3   mah     1499.96   OBX41   Radio Santa Rosa Lima; SS Choral singing   F   0704   28/2   BD     1500   WTOP   Washington DC; rolling news talk   W/F   0453   25/2   Rha     1500   WTOP   Washington DC; rolling news, ads   W   2323   25/2   JW     1500   WTOP   Washington DC; EE, news   322   0535   1/3   chm     1500   YVRZ   R Dos Mfl, Cumaná; SS, música romántica   333   0415   10/3   DX183     1500   YVRZ   R Dos Mfl, Cumaná; ID "En Dos Mfl"   W/F   0643   17/3   mah     1500   WWZN   Boston MA; EE, sports   Soston MA; mess /music behind   W/F   0643   17/3   Mh     1510   WWZN   Boston MA; goort coverage   242   0458   11/3   SW     1510   WWZN   Boston MA; sports talk and ID "15-10 The Zone"   W   2325   7/3   JW     1510   WWZN   Boston MA; country sport-talk "bowl" of Boston & world of   vS   0450   23/3   Rha     1510   WWZN   Boston MA; country sport-talk "bowl" of Boston & world of   vS   0450   23/3   Rha     1510   WWZN   Boston MA; country sport-talk "bowl" of Boston & world of   vS   0450   23/3   Rha     1510   WWZN   Boston MA; country sport-talk "bowl" of Boston & world of   vS   0450   23/3   Rha     1510   WWZN   Boston MA; sports talk and ID "15-10 The Zone"   W	1470	YVJW	R Latina, Valencia; SS, many ann., clear ID as Latina	1-2	0630	23/2	BV
Frequencies, "Grupo Unión Radio"; frequently heard with repetitive format of male announcer with simple ID & TC	1470	YVSY	R Vibración, Carúpano; SS, salsa	343	0330	19/2	DX183
repetitive format of male announcer with simple ID & TC     1470	1470	YVSY	•	G	0103	9/3	SW
1470         YVSY         R Vibración, Carúpano; "Unión Radio Noticias"         F         0736         11/3         mah           1470         YVSY         R Vibración, Carúpano; LA mx, "En Vibración tres y cincuenta W/F         0750         13/3         mah           1470         YVSY         R Vibración, Carúpano; "Unión Radio Noticias", one of the last W/F         0751         16/3         mah           1470         YVSY         Radio Vibración Carúpano; discos romanticos & ID         W         0308         24/3         BD           1480         WMDD         Fajardo PR; tropical mx, SS ID "Tropical 14-80"         F/G         0740         3/3         mah           1499.96         OBX41         Radio Santa Rosa Lima; SS Choral singing         F         0704         28/2         BD           1500         WTOP         Washington DC; rolling news talk         W/F         0453         25/2         Rha           1500         WTOP         Washington DC; rolling news, ads         W         2323         25/2         JW           1500         WTOP         Washington DC; rolling news, ads         W         2322         0535         1/3         chm           1500         YVRZ         R Dos Mfl, Cumaná; SS, música romántica         333         0415         1							
1470   YVSY   R Vibración, Carúpano; LA mx, "En Vibración tres y cincuenta W/F   0750   13/3   mah minutos" (also W/F 0751 16/3)   1470   YVSY   R Vibración, Carúpano; "Unión Radio Noticias", one of the last W/F   0751   16/3   mah to go after 0801	1470	YVSY	R Vibración, Carúpano; SS melancholy discos romanticos, IDs	G	0405	10/3	BD
minutos" (also W/F 0751 16/3)           1470         YVSY         R Vibración, Carúpano; "Unión Radio Noticias", one of the last W/F to go after 0801         0751         16/3         mah to go after 0801           1470         YVSY         Radio Vibración Carúpano; discos romanticos & IID         W         0308         24/3         BD           1480         WMDD         Fajardo PR; tropical mx, SS ID "Tropical 14-80"         F/G         0740         3/3         mah           1499.96         OBX41         Radio Santa Rosa Lima; SS Choral singing         F         0704         28/2         BD           1500         WTOP         Washington DC; rolling news talk         W/F         0453         25/2         JW           1500         WTOP         Washington DC; rolling news, ads         W         2323         25/2         JW           1500         WTOP         Washington DC; EE, news         322         0535         1/3         chn           1500         YVRZ         R Dos Mfl, Cumaná; SS, música romántica         333         0415         10/3         JW           1500         YVRZ         R Dos Mfl, Cumaná; ID "En Dos Mfl"         W/F         0643         17/3         mah           1500         UNID         Two stations mixing; ads, n	1470	YVSY	R Vibración, Carúpano; "Unión Radio Noticias"	F	0736	11/3	mah
to go after 0801           1470         YVSY         Radio Vibración Carúpano; discos romanticos & ID         W         0308         24/3         BD           1480         WMDD         Fajardo PR; tropical mx, SS ID "Tropical 14-80"         F/G         0740         3/3         mah           1499.96         OBX41         Radio Santa Rosa Lima; SS Choral singing         F         0704         28/2         BD           1500         WTOP         Washington DC; rolling news talk         W/F         0453         25/2         Rha           1500         WTOP         Washington DC; rolling news, ads         W         2323         25/2         JW           1500         WTOP         Washington DC; rolling news, ads         W         2323         25/2         JW           1500         WTOP         Washington DC; rolling news, ads         W         2323         25/2         JW           1500         WTOP         Washington DC; rolling news, ads         W         2323         25/2         JW           1500         WTRZ         R Dos Mfl, Cumaná; SS, música romántica         332         0515         10/3         chm           1500         VVRZ         R Dos Mfl, Cumaná; ID "En Dos Mfl"         W/F         0643	1470	YVSY	<u> </u>	W/F	0750	13/3	mah
1480         WMDD         Fajardo PR; tropical mx, SS ID "Tropical 14-80"         F/G         0740         3/3         mah           1499.96 OBX41         Radio Santa Rosa Lima; SS Choral singing         F         0704         28/2         BD           1500         WTOP         Washington DC; rolling news talk         W/F         0453         25/2         Rha           1500         WTOP         Washington DC; rolling news, ads         W         2323         25/2         JW           1500         WTOP         Washington DC; EE, news         322         0535         1/3         chm           1500         YVRZ         R Dos Míl, Cumaná; SS, música romántica         333         0415         10/3         DX183           1500         YVRZ         R Dos Míl, Cumaná; ID "En Dos Míl"         W/F         0643         17/3         mah           1500         UNID         Two stations mixing; ads, news /music behind         W         0600         11/3         JW           1510.02         WWZN         Boston MA; EE, sports         333         0550         1/3         chm           1510         WWZN         Boston MA; sport talk and ID "15-10 The Zone"         W         2325         7/3         JW           1510	1470	YVSY	· · · · · · · · · · · · · · · · · · ·	W/F	0751	16/3	mah
1499.96 OBX41         Radio Santa Rosa Lima; SS Choral singing         F         0704         28/2         BD           1500         WTOP         Washington DC; rolling news talk         W/F         0453         25/2         Rha           1500         WTOP         Washington DC; rolling news, ads         W         2323         25/2         JW           1500         WTOP         Washington DC; EE, news         322         0535         1/3         chm           1500         YVRZ         R Dos Mfl, Cumaná; SS, música romántica         333         0415         10/3         DX183           1500         YVRZ         R Dos Mfl, Cumaná; ID "En Dos Mfl"         W/F         0643         17/3         mah           1500         UNID         Two stations mixing; ads, news /music behind         W         0600         11/3         JW           1510.02         WWZN         Boston MA; EE, sports         333         0550         1/3         chm           1510         WWZN         Boston MA; sports talk and ID "15-10 The Zone"         W         2325         7/3         JW           1510         WWZN         Boston MA; sport coverage         242         0458         11/3         HP           1510         WWZN	1470	YVSY	<u>-</u>	W	0308	24/3	BD
1500         WTOP         Washington DC; rolling news talk         W/F         0453         25/2         Rha           1500         WTOP         Washington DC; rolling news, ads         W         2323         25/2         JW           1500         WTOP         Washington DC; EE, news         322         0535         1/3         chm           1500         YVRZ         R Dos Míl, Cumaná; SS, música romántica         333         0415         10/3         DX183           1500         YVRZ         R Dos Míl, Cumaná; ID "En Dos Míl"         W/F         0643         17/3         mah           1500         UNID         Two stations mixing; ads, news /music behind         W         0600         11/3         JW           1503         IRIB Sarasay, Bushehr, Iran; // www.irib.ir/live.ch1.ram         G         2305         19/3         SW           1510.02         WWZN         Boston MA; EE, sports         333         0550         1/3         chm           1510         WWZN         Boston MA; sports talk and ID "15-10 The Zone"         W         2325         7/3         JW           1510         WWZN         Boston MA; sport coverage         242         0458         11/3         HP           1510         WWZN <td>1480</td> <td>WMDD</td> <td></td> <td>F/G</td> <td>0740</td> <td>3/3</td> <td>mah</td>	1480	WMDD		F/G	0740	3/3	mah
1500         WTOP         Washington DC; rolling news, ads         W         2323         25/2         JW           1500         WTOP         Washington DC; EE, news         322         0535         1/3         chm           1500         YVRZ         R Dos Míl, Cumaná; SS, música romántica         333         0415         10/3         DX183           1500         YVRZ         R Dos Míl, Cumaná; ID "En Dos Míl"         W/F         0643         17/3         mah           1500         UNID         Two stations mixing; ads, news /music behind         W         0600         11/3         JW           1503         IRIB Sarasay, Bushehr, Iran; // www.irib.ir/live.ch1.ram         G         2305         19/3         SW           1510.02         WWZN         Boston MA; EE, sports         333         0550         1/3         chm           1510         WWZN         Boston MA; sports talk and ID "15-10 The Zone"         W         2325         7/3         JW           1510         WWZN         Boston MA; // 1440 relay via WJAB         F         0025         8/3         SW           1510         WWZN         Boston MA; country sport-talk "bowl" of Boston & world of sport advertising spots "WWZN Boston the sport Zone 15-10 (also G 0445 25/2, vG 0500 17/3)         0034	1499.96	OBX41	Radio Santa Rosa Lima; SS Choral singing	F	0704	28/2	BD
1500       WTOP       Washington DC; EE, news       322       0535       1/3       chm         1500       YVRZ       R Dos Míl, Cumaná; SS, música romántica       333       0415       10/3       DX183         1500       YVRZ       R Dos Míl, Cumaná; ID "En Dos Míl"       W/F       0643       17/3       mah         1500       UNID       Two stations mixing; ads, news /music behind       W       0600       11/3       JW         1503       IRIB Sarasay, Bushehr, Iran; // www.irib.ir/live.ch1.ram       G       2305       19/3       SW         1510.02       WWZN       Boston MA; EE, sports       333       0550       1/3       chm         1510       WWZN       Boston MA; sports talk and ID "15-10 The Zone"       W       2325       7/3       JW         1510       WWZN       Boston MA; sport coverage       P       0025       8/3       SW         1510       WWZN       Boston MA; country sport-talk "bowl" of Boston & world of sport advertising spots "WWZN Boston the sport Zone 15-10 (also G 0445 25/2, vG 0500 17/3)       vS       0450       23/3       Rha         1510       WLAC       Nashville TN; EE, talk, ID       322       0550       1/3       chm         1510       WLAC       Nashville TN	1500	WTOP	Washington DC; rolling news talk	W/F	0453	25/2	Rha
1500       YVRZ       R Dos Míl, Cumaná; SS, música romántica       333       0415       10/3 DX183         1500       YVRZ       R Dos Míl, Cumaná; ID "En Dos Míl"       W/F       0643       17/3 mah         1500       UNID       Two stations mixing; ads, news /music behind       W       0600       11/3 JW         1503       IRIB Sarasay, Bushehr, Iran; // www.irib.ir/live.ch1.ram       G       2305       19/3 SW         1510.02 WWZN       Boston MA; EE, sports       333       0550       1/3 chm         1510       WWZN       Boston MA; sports talk and ID "15-10 The Zone"       W       2325       7/3 JW         1510       WWZN       Boston MA; // 1440 relay via WJAB       F       0025       8/3 SW         1510       WWZN       Boston MA; sport coverage       242       0458       11/3 HP         1510       WWZN       Boston MA; country sport-talk "bowl" of Boston & world of sport advertising spots "WWZN Boston the sport Zone 15-10 (also G 0445 25/2, vG 0500 17/3)       vS       0450       23/3 Rha         1510       WWZN       Boston MA; sport (also W 2343 5/3)       0034       24/3 CW         1510       WLAC       Nashville TN; EE, talk, ID       322       0550       1/3 chm         1510       WLAC       Nashville TN; O	1500	WTOP	Washington DC; rolling news, ads	W	2323	25/2	JW
1500       YVRZ       R Dos Míl, Cumaná; ID "En Dos Míl"       W/F       0643       17/3       mah         1500       UNID       Two stations mixing; ads, news /music behind       W       0600       11/3       JW         1503       IRIB Sarasay, Bushehr, Iran; // www.irib.ir/live.ch1.ram       G       2305       19/3       SW         1510.02       WWZN       Boston MA; EE, sports       333       0550       1/3       chm         1510       WWZN       Boston MA; sports talk and ID "15-10 The Zone"       W       2325       7/3       JW         1510       WWZN       Boston MA; sport coverage       F       0025       8/3       SW         1510       WWZN       Boston MA; sport coverage       242       0458       11/3       HP         1510       WWZN       Boston MA; country sport-talk "bowl" of Boston & world of sport advertising spots "WWZN Boston the sport Zone 15-10 (also G 0445 25/2, vG 0500 17/3)       vS       0450       23/3       Rha         1510       WWZN       Boston MA; sport (also W 2343 5/3)       0034       24/3       CW         1510       WLAC       Nashville TN; EE, talk, ID       322       0550       1/3       chm         1510       WLAC       Nashville TN; CM ID "Newsradio 1510 W							
1500       UNID       Two stations mixing; ads, news /music behind       W       0600       11/3       JW         1503       IRIB Sarasay, Bushehr, Iran; // www.irib.ir/live.ch1.ram       G       2305       19/3       SW         1510.02 WWZN       Boston MA; EE, sports       333       0550       1/3       chm         1510       WWZN       Boston MA; sports talk and ID "15-10 The Zone"       W       2325       7/3       JW         1510       WWZN       Boston MA; // 1440 relay via WJAB       F       0025       8/3       SW         1510       WWZN       Boston MA; sport coverage       242       0458       11/3       HP         1510       WWZN       Boston MA; country sport-talk "bowl" of Boston & world of sport advertising spots "WWZN Boston the sport Zone 15-10 (also G 0445 25/2, vG 0500 17/3)       vS       0450       23/3       Rha         1510       WWZN       Boston MA; sport (also W 2343 5/3)       0034       24/3       CW         1510       WLAC       Nashville TN; EE, talk, ID       322       0550       1/3       chm         1510       WLAC       Nashville TN; OM ID "Newsradio 1510 W-L-A-C", adv       333       0506       10/3       HP		YVRZ		333	0415	10/3	DX183
1503       IRIB Sarasay, Bushehr, Iran; // www.irib.ir/live.ch1.ram       G       2305       19/3       SW         1510.02 WWZN       Boston MA; EE, sports       333       0550       1/3       chm         1510       WWZN       Boston MA; sports talk and ID "15-10 The Zone"       W       2325       7/3       JW         1510       WWZN       Boston MA; // 1440 relay via WJAB       F       0025       8/3       SW         1510       WWZN       Boston MA; sport coverage       242       0458       11/3       HP         1510       WWZN       Boston MA; country sport-talk "bowl" of Boston & world of sport advertising spots "WWZN Boston the sport Zone 15-10 (also G 0445 25/2, vG 0500 17/3)       vS       0450       23/3       Rha         1510       WWZN       Boston MA; sport (also W 2343 5/3)       0034       24/3       CW         1510       WLAC       Nashville TN; EE, talk, ID       322       0550       1/3       chm         1510       WLAC       Nashville TN; OM ID "Newsradio 1510 W-L-A-C", adv       333       0506       10/3       HP							
1510.02 WWZN       Boston MA; EE, sports       333       0550       1/3       chm         1510       WWZN       Boston MA; sports talk and ID "15-10 The Zone"       W       2325       7/3       JW         1510       WWZN       Boston MA; // 1440 relay via WJAB       F       0025       8/3       SW         1510       WWZN       Boston MA; sport coverage       242       0458       11/3       HP         1510       WWZN       Boston MA; country sport-talk "bowl" of Boston & world of sport advertising spots "WWZN Boston the sport Zone 15-10 (also G 0445 25/2, vG 0500 17/3)       vS       0450       23/3       Rha         1510       WWZN       Boston MA; sport (also W 2343 5/3)       0034       24/3       CW         1510       WLAC       Nashville TN; EE, talk, ID       322       0550       1/3       chm         1510       WLAC       Nashville TN; OM ID "Newsradio 1510 W-L-A-C", adv       333       0506       10/3       HP		UNID	<b>9</b>			11/3	JW
1510       WWZN       Boston MA; sports talk and ID "15-10 The Zone"       W       2325       7/3       JW         1510       WWZN       Boston MA; // 1440 relay via WJAB       F       0025       8/3       SW         1510       WWZN       Boston MA; sport coverage       242       0458       11/3       HP         1510       WWZN       Boston MA; country sport-talk "bowl" of Boston & world of sport advertising spots "WWZN Boston the sport Zone 15-10 (also G 0445 25/2, vG 0500 17/3)       vS       0450       23/3       Rha         1510       WWZN       Boston MA; sport (also W 2343 5/3)       0034       24/3       CW         1510       WLAC       Nashville TN; EE, talk, ID       322       0550       1/3       chm         1510       WLAC       Nashville TN; OM ID "Newsradio 1510 W-L-A-C", adv       333       0506       10/3       HP			· · · · · · · · · · · · · · · · · · ·				
1510       WWZN       Boston MA; // 1440 relay via WJAB       F       0025       8/3       SW         1510       WWZN       Boston MA; sport coverage       242       0458       11/3       HP         1510       WWZN       Boston MA; country sport-talk "bowl" of Boston & world of sport advertising spots "WWZN Boston the sport Zone 15-10 (also G 0445 25/2, vG 0500 17/3)       vS       0450       23/3       Rha         1510       WWZN       Boston MA; sport (also W 2343 5/3)       0034       24/3       CW         1510       WLAC       Nashville TN; EE, talk, ID       322       0550       1/3       chm         1510       WLAC       Nashville TN; OM ID "Newsradio 1510 W-L-A-C", adv       333       0506       10/3       HP		WWZN	, , <u>I</u>				
1510       WWZN       Boston MA; sport coverage       242       0458       11/3       HP         1510       WWZN       Boston MA; country sport-talk "bowl" of Boston & world of sport advertising spots "WWZN Boston the sport Zone 15-10 (also G 0445 25/2, vG 0500 17/3)       vS       0450       23/3       Rha         1510       WWZN       Boston MA; sport (also W 2343 5/3)       0034       24/3       CW         1510       WLAC       Nashville TN; EE, talk, ID       322       0550       1/3       chm         1510       WLAC       Nashville TN; OM ID "Newsradio 1510 W-L-A-C", adv       333       0506       10/3       HP			÷				
1510       WWZN       Boston MA; country sport-talk "bowl" of Boston & world of sport advertising spots "WWZN Boston the sport Zone 15-10 (also G 0445 25/2, vG 0500 17/3)       vS       0450       23/3       Rha         1510       WWZN       Boston MA; sport (also W 2343 5/3)       0034       24/3       CW         1510       WLAC       Nashville TN; EE, talk, ID       322       0550       1/3       chm         1510       WLAC       Nashville TN; OM ID "Newsradio 1510 W-L-A-C", adv       333       0506       10/3       HP			· · · · · · · · · · · · · · · · · · ·				
sport advertising spots "WWZN Boston the sport Zone 15-10 (also G 0445 25/2, vG 0500 17/3)  1510 WWZN Boston MA; sport (also W 2343 5/3)  1510 WLAC Nashville TN; EE, talk, ID  1510 WLAC Nashville TN; OM ID "Newsradio 1510 W-L-A-C", adv  322 0550 1/3 chm  1510 WLAC Nashville TN; OM ID "Newsradio 1510 W-L-A-C", adv  333 0506 10/3 HP							HP
1510       WWZN       Boston MA; sport (also W 2343 5/3)       0034       24/3       CW         1510       WLAC       Nashville TN; EE, talk, ID       322       0550       1/3       chm         1510       WLAC       Nashville TN; OM ID "Newsradio 1510 W-L-A-C", adv       333       0506       10/3       HP	1510	WWZN	sport advertising spots "WWZN Boston the sport Zone 15-10	vS	0450	23/3	Rha
1510       WLAC       Nashville TN; EE, talk, ID       322       0550       1/3       chm         1510       WLAC       Nashville TN; OM ID "Newsradio 1510 W-L-A-C", adv       333       0506       10/3       HP	1510	WWZN			0034	24/3	CW
1510 WLAC Nashville TN; OM ID "Newsradio 1510 W-L-A-C", adv 333 0506 10/3 HP				322			
· · · · · · · · · · · · · · · · · · ·							

kHz	Callsign	Station, location; details heard etc	SIO	UTC	Date	Who
1520	WWKB	Buffalo NY; oldies format with OM DJ. Two records heard	W	2328	7/3	JW
. =		"Cheri" and "The Lion Sleeps tonight"				
1520	WWKB	Buffalo NY; ID "welcome home to Buffalo's KB Radio 15-20"	W	0500	23/3	Rha
1501		than CBS news-reports		1025	C 12	CW
1521		BSKSA Duba, Saudi Arabia; talk // 9870	E	1835	6/3	CW
1521		CRI Urumqi, China; Chinese & Russian ID & Int Sig at 1900; dominant and // 9365 sign-on at 1900UT; // 9795 at 1820UT (no audio delay between 1521 & 9795; both listed Urumqi)	F	1900	7/3	SW
1540	WDCD	Albany NY; contemporary Christian songs and promo's	W/F	0740	18/3	BD
1540	WDCD	Albany NY; promo under ERT & R Elche	vW	0632	23/3	Rha
1540	ZNS1	Nassau; "AM 15-40, the National Voice of the Bahamas, you're		0032	29/2	mah
1340	21151	listening to Music 'til Dawn ZNS Radio Network" etc, TCs, chat, studio tlk, light songs (also F 0845 24/3)	170	0714	2)12	man
1548		R Sawa, Kuwait; music, ID	F	1739	4/3	SW
1550	CBE	Ottawa ON; CBC News	W/F	0800	27/2	mah
1550		R Nacional Saharaui, Algeria; AA tlks, // 7460 kHz	F	0737	11/3	mah
1550		R Nacional Saharaui, Algeria; traditional songs, ID // 7460	333	2320	21/03	HP
1560	WQEW	New York NY; EE, Disney R	333	0555	1/3	chm
1560	WQEW	New York NY; R Disney Pop	232	0455	11/03	HP
1566		IRIB Bandar Abbas; Farsi, anns, talk, // 1503 kHz (Bushehr)	1-2	2340	13/3	BV
1566		AIR, Nagpur, India; song w sitar & tablar, 2330 AIR ID	333	2325	21/03	HP
1570	CKMW	Winkler MB (presumed); with country-music no ID		0505	17/3	Rha
1570	TGVE	R VEA, Guatemala; light mx, SS ID "Esta es Voz Evangélica de América, transmite en Guatemala"	W/Fpk	0546	24/3	mah
1590	WPSL	Port Saint Lucie FL; CBS News & WPSL px promotion	F	0705	1/3	BD
1590	WPSL	Port Saint Lucie FL; presumed Cuba dominant on the channel,	Fpk	0707	17/3	mah
		but WPSL came on top for a nice clear ID (the best I've had yet) "This is WPSL Port Saint Lucie the talk of the treasure coast"				
1590	WPSL	Port Saint Lucie FL; CBS news, then promos, " right here on WPSL", xd LA station	Wpk	0705	18/3	mah
1590	WRXB	Saint Pete Beach FL; long melancholy soul tracks & OM with "This is a classic song from downtown Saint Pete WRXB."	F	0605	19/3	BD
1590	WSMN	Nashua NH; "Tiger 15-90 WSMN Nashua" and CBS News	W/F	0500	16/3	BD
1590	WSMN	Nashua NH; ESPN promos, ID "Tiger 15-90 WSMN" noted in the mix	W	0800	23/3	mah
1590	WAKR	Akron OH; Nostalgia mx, ID & ABC News	F	0600	25/3	BD
1590	WARV	Warwick RI; "WARV - Life Changing Radio", promo, xf Cuba	W	0804	24/3	mah
1590	CMBQ	R Progreso, Manzanillo; audible from around 0730, romantic songs, anns, nice ID at 0830 "Transmite Radio Progreso, Cadena Nacional, La Onda del Alegría, desde La Habana Cuba" (last reported on this channel in 1996) - generally	W/Fpks	0830	5/3	mah
		dominant over US stations and there to around 0900				
1590	CMBQ	Radio Progreso Manzanillo; ID "Radio Progreso cadena nacional" & studio talk	F	0601	20/3	BD
1590	CMBQ	R Progreso, Manzanillo; programme of light songs and SS reports, IDs, dominant for a while over several others	W/F	0759	23/3	mah
		La Bonita AM, Mexico City; Mexican style discos romanticos	W/F	0710	1/3	BD
1590.05	XEVOZ	La Bonita AM, Mexico City; programme promo and Spots	W	0606	25/3	BD

kHz	Callsign	Station, location; details heard etc	SIO	UTC	Date	Who
1590	HJIP	Nuevo Continente Envigado; "Transmite Nuevo Continente 1590 amplitud modulada" & SS nostalgia songs	G	0600	17/3	BD
1590	CX159	R Real, Colonia; light SS songs, anns, TC, IDs "Radio Real de Colonia Uruguay" - hrd to past 0705 (also W/Fpks 0712 16/3)	F/Gpks	0639	12/3	mah
1590	OCX6S	Radio Mundo Cerro, Colorado; back to back campesinos songs with accordion accompaniment & OM with ID "Radio Mundo, Mundo en Cerro Colorado." UK FIRST	W	0559	13/3	BD
1593		VOA Kuwait; OM with 'VOA Now' programme	F	2300	10/3	JW
1600	WKWF	Key West FL; promo " on WKWF Sports Radio 16 hundred",		0806	24/3	mah
		Sporting News Radio, xf Disney (also W 0740 23/3)				
1600	WMNE	Riviera Beach FL; "R Disney AM", commercials (time approx)		0500	25/2	Rha
1600	WMNE	Riviera Beach FL; "Radio Disney AM 16 hundred" xf sports	W/Fpks		29/2	mah
1600	WMNE	Riviera Beach FL; EE Disney R // WQEW-1560	322	0555	1/3	chm
1600	WMNE	Riviera Beach FL (pres); Radio Disney ID	Fpk	0638	4/3	SW
1600	WLUZ	Bayamón PR; SS, música romántica	333	0315		DX183
1610		Caribbean Beacon, The Valley, Anguilla; usual US gospel show	W	0635	2/3	BD
1610		Caribbean Beacon, Anguilla (pres); preacher monologue // 6090	P	0150	10/3	SW
1610		Caribbean Beacon, Anguilla; preacher, Dr Gene Scott promos	F/G	0752	16/3	mah
1610		Caribbean Beacon, Anguilla; EE, rlgs programme, pop-mx	2-3	0500	24/3	BV
1620	WTAW	College Station TX (pres); with Coast 2 Coast AM // 1640	F	0640	4/3	SW
1620	WDHP	Frederiksted, USVI; ID "You are listening to WDHP 16-20 AM 'the reef' from the United States Virgin Isles"	IG	0559	24/2	JW
1620	WDHP	Frederiksted, USVI; BBC-WS Classical mx, YL ann	F	0604	29/2	CW
1620	WDHP	Frederiksted, USVI; man talks, ID loop (also 343 0520 5/3)	242	0530	4/3	HP
1620	WDHP	Frederiksted, USVI (pres); non-stop classical country-mx, around the world dyke with 16-20 AM stereo on your radio	G	0510	9/3	JVN
1620	WDHP	Frederiksted, USVI (pres); Soca music programme	Exc	0150	10/3	SW
1620	WDHP	Frederiksted, USVI; with a Caribbean music programme	vG	0450	19/3	Rha
1620	WDHP	Frederiksted, USVI; Caribbean mx sounds (also vG 0450 19/3)		0515	23/3	Rha
1630	WRDW	Augusta GA; ID "News 16-30 WRDW Augusta"	W	0600	24/3	mah
1630	KJCC	Iowa City IA; pop mx programme, ID "KJCC-1630 pop/rock"	W/F	0456	19/3	Rha
1630	KCJJ	Iowa City IA; ID noted in background to WRDW	W	0600	24/3	mah
1640	WTNI	Biloxi MS; ID "Newstalk Radio 16-40" then ABC news &	W/F	0500	25/2	Rha
		Coast to Coast infos (my first reception of WTNI)				
1640	WTNI	Biloxi MS (pres); talk	W	0520	1/3	JVN
1640	WTNI	Biloxi MS (pres); carrying Coast to Coast AM	F	0640	4/3	SW
1640	WTNI	Biloxi MS; end of talk programme "I'm Jim Bohannon on Westwood One" ads then OM with ID "South Mississippi's choice for talk, news and sport 16-40 WTNI Biloxi, Southport,	Ex	0559	16/3	JW
		South Dakota (etc)" then into ABC news				
1640	WTNI	Biloxi MI; ID "WTNI newsradio 16-40" then ABC news-talk	W/F	0500	19/3	Rha
1640	WTNI	Biloxi MS; ID " on Talk Radio 16-40 WTNI"	F/G	0558	24/3	mah
1640	WTNI	Biloxi MS; ID "Talk Radio 16-40 WTNI" & spots	W	0358	25/3	BD
1640	WKSH	Sussex WI (presumed); Radio Disney mixing with presumed WTNI	vW/W	0801	9/3	mah
1640	WKSH	Sussex WI; R Disney pop music programme under WTNI	W	0500	19/3	Rha
1650	WHKT	Portsmouth VA (pres); R Disney	F	0647	1/3	SW
1650	WHKT	Portsmouth VA; Radio Disney ID	G	0620	8/3	CW

kHz	Callsign	Station, location; details heard etc	SIO	UTC	Date	Who
1650	WHKT	Portsmouth VA; ID "Radio Disney. The music you want to	W	0459	19/3	JW
		hear" pops (also W 0659 26/2)				
1650	WHKT	Portsmouth VA; with R Disney pop-charts	W	0508	19/3	Rha
1650	KWHN	Fort Smith AR (presumed); OM with definite "News talk 16-50		0559	19/3	JW
		" then a total of 6 mins talk (on overnight tape recording. No	t			
		many 'K' stations heard in Hemel Hempstead!)				
1660	WCNZ	Marco Island FL; ID and tlk	333	0500		DX183
1660	WCNZ	Marco Island FL; News Radio 16-60	F	0651	26/2	JW
1660	WCNZ	Marco Island FL; OM talk ads Rolling news	W	0500	10/3	JW
1660	WCNZ	Marco Island FL; news rpt on newsradio-16-60 & talk	F	0511	19/3	Rha
1660	WCNZ	Marco Island FL; EE, newsradio	333	0425	21/3	chm
1660	WCNZ	Marco Island FL; "News Radio 16-60 WCNZ Marco Island", promo	, F	0559	24/3	mah
1660	WWRU	Jersey City NJ; SS, salsa	222	0505	19/2	DX183
1660	WWRU	Jersey City NJ; OM with ID "This is Multicultural Radio	Ex	0600	10/3	JW
		Broadcasting WWRU Jersey City, New York 16-60AM WWRU. The following programme is presented by Sharif?"				
		then into Korean? Programme				
1660	WWRU	Jersey City NJ; ID "1-6-6-0 AM", SS px	242	0500	11/3	HP
1660	WFNA	Charlotte NC (presumed); "Sporting News Radio", dominant	W/F	0807	29/2	mah
		over the others				
1670	WMWR	Dry Branch GA; tlk	242	0510	19/2	DX183
1670	WMWR	Dry Branch GA; ID "WMWR 16-70" first news talk and then	W/F	0515	19/2	Rha
		sports talk from Fox network				
1670	WMWR	Dry Branch GA; "On Fox Sports" and "Steve Brick? on Fox Sports Radio"	G	0648	26/2	JW
1670	W/MW/D	Dry Branch GA; EE, many IDs "Talk Radio 16-70 Sports"	1-2	0606	27/2	BV
1670		Dry Branch GA; WMWR "middle GA" px promotion	G	0645	1/3	BD
1680		Winter Garden FL; SS Latin rhythms & no racket	G	0643	28/2	BD
1680		Winter Garden FL; Mexican mx	W	0551	29/2	CW
1680	WLAA	Winter Garden FL; Mexican style music	F	0604	29/2	JW
1680	WLAA	Winter Garden FL; Latin mx	333	0527	04/03	HP
1680	WTTM	Princeton NJ; OM with ID "WTTM Princeton New Jersey"	F	0559	29/2	JW
1000	** 1 11/1	then into Ethnic music	1	0337	2712	3 11
1680	WTTM	Princeton NJ; Indian mx and talk	G	0034	24/3	CW
1690	WPTX	Lexington Park MD; "News talk 16-90 AM"	W	0559	26/2	JW
1690	WPTX	Lexington Park MD; rolling news	W	0405	24/3	BD
1700	WJCC	Miami Springs FL; SS talk, and into mx prog (+ G 0700 29/2)	G	0650	26/2	JW
1700	WJCC	Miami Springs FL; SS talk and several 'Gol' shouting	G	0700	29/2	JW
1700.01		Miami Springs FL; SS, rel px	242	0540	1/3	chm
1700	WJCC	Miami Springs FL; soft rock SS records OM with ID 'WJCC'	W	0601	15/3	JW
1700	KQXX	Brownsville TX; OM "The Oldies show – it's rock n roll" under WJCC	W	0648	29/2	JW
1700	KQXX	Brownsville TX; "Oldies Radio 105.5" ID with oldie-mx/songs	F	0520	19/3	Rha
1700	UNID	EE talk, ads and then news (ABC?)	W	0600	13/3	JW
1700		LE will, and and mon now (Tibe.)	* *	5500	13/3	3 11

Many thanks to the following reporters:

Christoph Mayer; Jena, Germany; AR7030; 4.4 m<sup>2</sup> tuned indoor loop. chm

BD Barry Davies, Carlisle, Cumbria. AOR AR 7030, 100m longwire.

Bjarke Vestesen; Odense, Denmark; Ten-Tec RX340; Backsloop W & SW, EWE W & E BV

- CW Cyril Willis, Kings Lynn. Lowe HF 125, Wellbrook ALA 1530.
- DX183 Wilhelm Herbst, Fjerritslev, Denmark. Lowe HF150, SEM QRM Eliminator, 21 beverages between 75 and 510 metres.
- HP Hans Pammer, Loosdorf, Austria, AOR 7030Plus, 180-m beverage on ground at 20°.
- JF John Faulkner, Beeley Moor, Derbyshire. AOR AR7030 (1.8 kHz filter mod), 1287 metre (0.8 mile) beverage to NW (terminated).
- JVN John Vinther Nielsen, Herning, Denmark. NRD 535, Palstar MW550p tuner / Preselector / Amplifier ALA 1530, KAZ 4x16m SW, KAZ 8x36m NW.
- JW John Williams Hemel Hempstead. AOR 7030 and 40m long wire.
- mah Martin Hall, Clashmore, Sutherland. NRD-545, beverages: 513m at 240°, unterminated; 506m at 290°, terminated; 472m (588m after 9 Feb) at 315°, terminated; 362m at 360°, unterminated.
- Rha Ronald Hagensen, Ottersberg, Germany. AOR 7O3Oplus, two longwires 22m direction 315°, 28m direction 28O/29O° and a new beverage-antenna 143m direction 345°.
- SW Steve Whitt, High Catton near York. AOR7030+ and HF225 Europa with dual loop K9AY.

#### **MADEIRA LOGGINGS - from Ben Korbeeck**

I was on a short vacation in Madeira (beautiful Island!) and did some DX from my balcony on the 5th floor - close to the Atlantic Ocean. Amazingly I did hear more in 12 days then in the whole winter at home. 29 TA stations logged! I used a small collapsible tuneable loop (25x25 cm) made from flat computer cable followed by a 2 transistor amplifier in a soapbox. Everything was mounted on the railing of the balcony. No Euro QRM at all! I had huge mountains (1200 meter) in my back (north-east); which blocked reception of Spain (Europe) for a great deal. I only managed to receive the big shots (Madrid 585 kHz) in the evening. Brazil was dominant from 21.30 UTC (= LT in Madeira) until 08.15 in the morning.

I used my SONY SW55 connected to the loop (SW55 has an aerial socket). As Madeira has an 'English' history I thought it would be interesting to know for you in GB when planning a holiday! My exact location was in the south-west of the Island (Paúl do Mar).

Freq	Transmitter	ITU	Date	UTC	Details	SIO
576	R. Nac. 1, Mesas de Galas, Las Palmas	CNR	24/2	17:55	SS px, disc. abt Igreja Catolica	233
585	RN 1, Majadahonda, Madrid	E	24/2	19:30	SS talk, male	333
603	RDP Madeira, Pico de Arieiro	MDR	24/2	19:25	pop mx // 531	333
621	R. Nac. 1, Mesas de Galas, Las Palmas	CNR	24/2	17:57	px // 576	555
684	RN 1, Dos Hermanos, Sevilla	E	24/2	19:40	px // 585	444
720	RNE 5, Sta. Cruz de la Palma	CNR	24/2	18:00	Noticias - abt earth shock in Morocco	444
740	R Sociedade da Bahia, Salvador	В	24/2	07:15	ID, PP announcer, sobre Carnaval (also 222 0358 26/2)	322
747	RNE 5, Mesas de Gala, Las Palmas	CNR	24/2	18:05	px noticias // 720	233
760	Radio Uirapurú, Fortaleza	В	29/2	22:00	ID, rel. Px in PP, mx, soft female voice.	333
765	R. Dif. Tel. Senegal, Dakar	SEN	24/2	22:00	FF news (my French is poor)	222
780	CFDR, Dartmouth, NS (pres)	CAN	28/2	04:25	C&W mx (only one with this mx)	322
783	R.Mauritanië	MTN	22/2	19:45	Vernacular // 4845	444
790	Unid	USA	27/2	04:50	unid, but sure USA - WAXY	222
800	TWR, Bonaire	ATN	27/2	03:35	Rel. Px in E, minister talks abt 'normen en waarden' ID at 03.55, POB 388 Bonaire, 98.5 FM Bonaire, close down	333
837	Cope Las Palmas, Tafira	CNR	24/2	18:06	ID 'Cadena Cope, la información' - radioi desportivo	444
850	WFTL, West Palm Beach, FL	USA	27/2	04:00	ID, news and adverts, 56 deg. In Miami, 'Fox news life from New York'	333
860	CBN, Rio de Janeiro	В	29/2	00:46	news in PP	222
870	WWL, New Orleans LA (pres)	USA	27/2	04:43	political disc. abt war (Vietnam etc.)	222
882	Cope Tenerife, La Laguna	CNR	24/2	18:10	px // 837	444

Freq	Transmitter	ITU	Date	UTC	Details	SIO
940	R LBV Mundial, Rio de Janeiro	В	29/2	00:50	Rel. Talk, pp	222
1008	Onda Cero Radio Las Palmas, Arucas,	CNR	24/2	18:12	Discussion abt film (esta rollando peliculá etc.)	555
1040	R Capital, São Paulo (pres)	В	26/2	04:05	(only one B station on this fx) - PP	222
	1 /				praying	
1100	Radio Globo, São Paulo	В	26/2	04:15	ID, px sobre Carnaval // 1220 kHz	333
1179	SER, Radio Club Tenerife	CNR	24/2	18:15	ID 'Radio Club' reportage abt carnaval	222
1200	R Cultura, São Paulo (pres)	В	29/2	02:56	PP mx continuous - no reception on // fx 9615 and 17815	222
1220	Radio Globo, Rio de Janeiro	В	24/2	00:07	04.00 local time, sobre parade de Carnaval, lively report, every day audible from 21.30 onwards (UTC) (also 232 21.20 24/2, 444 04.20 26/2)	333
1269	Radio Ecca Las Palmas, Las Palmas	CNR	24/2	19:10	SS discussion 'escola por radio' - lectura textos - spaanse les?	444
1290	Radio Porto Cabello, PC	VEN	1/3	01:57	SS mx, musica 'Potugal em Venezuela'- presumed (the only VEN station)	333
1350	Radio Cristal, Salvador	В	26/2	03:35	Rel. px para jovens, sobre sociedade de solidaridade, educação das crianças	333
1380	YVNG, Ondas del Mar	VEN	27/2	03:12	ID 'Ondas del Mar - información' nx in SS (2 stations mixing), local time 23.11	333
1386	R. Guinea, Conakry	GUI	25/2	20:15	several times heard 'Conakry' - VV OM	433
1395	R. 10 gold, Trintelhaven	HOL	29/2	01:06	ID, pop mx, 'de grootste hits etc.' - 'Good morning starshine'	322
1400	Harbour Light of the Windwards, Carriacou	GRD	27/2	02:38	Rel. Songs, ID at 02.43 in E, www.harbourlight.org	333
1460	Radio Clube, Parintins	В	25/2	06:30	ID 'Radio Clube Parintins, Amazonas' close down - 5 kw! (near Manaus)	222
1470	YVSY, Radio Vibración	VEN	1/3	01:45	ID, lively SS mx. (finally an ID on this fx full of stations!)	333
1480	WMDD, Fajardo	PTR	29/2	01:50	ID 'Puerto Rico' - SS sports report, 4-0	333
1500	WTOP, Washington, DC	USA	1/3	03:03	ID, 'WTOP newstime' news	222
1510	WWZN, Boston, MA	USA	27/2	04:13	presumed, talk radio, phone discussions.	322
1530	VOA, São Tomé, Pinheiro	STP	26/2	03:28	Extended ID, mixing with Funchal, MDR, 30 km away! Equally strong!	222
1540	ZNS1, Nassau	BAH	29/2	01:17	Sport tournament, ID 'the national voice' - cricket match? Later nice Caribbean mx (English)	333
1540	WPTR, Albany, NY	USA	1/3	03:09	ID, mx 'adult standards' Nat King Cole	222
1610	Caribbean Beacon, Anguilla	AIA	29/2	01:31	rel. Preaching in E - presumed (almost 100% sure)	333
1620	WDHP, Frederiksted, USVI	USA	27/2	02:58	ID 'WDHP', at 02.57, then C&W mx	233
1660	WGIT, Canóvanas, PR	USA	29/2	01:30	SS mx and tlk, I heard 'Canóvanas'	333

3<sup>rd</sup> March was one of the best morning openings to Venezuela/Colombia/Caribbean I've experienced in a long time - totally dominating the North Americans on many channels - mah. **Hans** writes: "Nice to be back in the circle after a one year break. Since February 2003 I've used a beverage on the ground, and in general I'm very pleased with it. A second beverage on ground will be erected next week. It will run towards 190 degrees and a length of 150-m should be possible. Maybe Angola on 1503 kHz will come in :-)". Let's hope it brings in some good DX - mah.

The **deadline** for the May/June DX Loggings is **Monday 26<sup>th</sup> April**, so please let me have your logs by then, preferably using the pro-forma on the members-only website. 73's Martin

## VERIFICATIONS SECTION

with Clive Rooms

Station	kHz	A	В	$\mathbf{C}$	who	Station		kHz	A	В	C	who
Australia						Bulgaria						
6RN Perth	612	cd	no	54	VS	Varna R		518	lt		35	MvA
6RN Perth	129	6 cd	no	54	VS							
						Czech Rep						
Sweden						C Prerov	<u>7</u>	319	lt		30	LR
R Dellen <u>1</u>	160	2 cd	no	202	HW	CF Caslav	<u>7</u>	345.5	lt		30	LR
Delsbo R <u>1</u>	160	2 cd	no	202	HW							
R Ljusdal <u>1</u>	160	2 cd	no	202	HW	<b>Egypt</b>						
-						Serapeum R		518	lt		60	MvA
<u>UK</u>						_						
BFBS Gurkha Svce 2	113	4 e		6	HW	<u>France</u>						
Anker R	138	6 lt	no	192	HW	LN Lannion	6,8	345	lt		10	LR
Anker R	138	6 lt		99	LR	DA Deaux	9	402	lt		5	LR
Carillon R	138	6 lt	sae	226	mah							
Jam 1575	157	5 lt			HW	Germany						
						ABU Altenberg	<u>10</u>	330	lt		9	LR
<u>USA</u>												
WSB Atlanta GA 3	750	) lt	no	153	VS	<u>Greece</u>						
WSKO Providence RI14	790	Е	No	14	SW	Kerkyra R	<u>6</u>	518	cd		90	MvA
WENE Endicott NY 4	143	0 cd	\$1	48	JW							
WFNA Charlotte NC	166	0 lt	rp	26	BD	<u>Malta</u>						
KTBK Sherman TX 6	170	0 lt	ms	11	mah	9HD Malta R	<u>11</u>	518	cd	2	15	SW
US Virgin Is						<u>Sweden</u>						
WDHP Christiansted 5	162	0 e	no	162	VS	SS Skovde	<u>12</u>	390	lt		62	LR
						<u>Ukraine</u>						
<b>BEACONS &amp; UTES</b>						Odessa R		518	lt		28	MvA
<u>Bahrain</u>												
A9M Bahrain R	518	3 lt	2	18	SW	<u>USA</u>						
						NMG Miami	<u>13</u>	518	lt	ms	20	SW
						NMA New Orleans	<u>13</u>	518	lt	ms	20	SW

A= what was received; B= what return postage was sent; C= days to get a reply

#### **Notes:**

- 1 Kalmarvej 31, 85730 Sundsvall. V/s Rolf Larsson.
- 2 Hartmut sent an email report and soundfile to shorncliffe@bfbs.com V/s Dhruba Gautam.
- First report received from South Africa. Also sent Vince T-shirt, key rings, fridge magnet!
- 4 Clear Channel Radio, 320 North Jensen Road, Vestal, NY 13850.
- Vince originally sent a letter to the station which they said they never received. So a follow up via email was sent to <a href="wwwi@islands.vi">wwri@islands.vi</a>
- 6 All these needed one or more follow-ups.
- 7 NARFA Ministry of Defence, 160 01 Prague 6. <u>narfa@army.cz</u>

- 8 Direction de L'Aviation Civile Ouest, District Aeronautique Bretagne, Aerodrome de Lannion, Av. P.Marzin 22300 Lannion. V/s Bernard le Faucheur, Director.
- 9 Aerodrome Ales-Deux, 30630 Vezenobres. V/s Christophe Chatellier.
- Flugplatz Altenburg-Nobitz GmbH, D-04603 Nobitz. V/s Nicole Grahl.
- As Steve could not find a snail mail address for the station, he sent his report to Frank Micallef 9H1BM, but Frank has now retired from 9HD. Steve received an email from the station and a personal letter and QSL card from Frank. Their email is maltaradio@maltacom.com Steve recommends reports go direct to 9HD.
- 12 Skovde Kommun, Flygplajen, S-549 91 Skovde. V/s Anders Ahlebrand
- 13 QSL Manager OS3 Christopher M Morrow, US Coast Guard CAMSLANT, 4720 Douglas A Munro Road, Chesapeake, VA 23322-4399.
- Verie received with out writing to the station! Duffy Egan saw SW's tentative log in MWN 49/10 and e-mailed him to confirm reception; an unsolicited QSL! Duffy Egan is a DXer too.

## Verification Signers

KTBK-Donna Willard, Office Manager
WSB-Ryan King, Radio Engineering
Anker R-Chris Ward, Technical Manager
CF Caslav & C Prerov-Jundrich Svarc
WSKO – Duffy Egan Chief Engineer
WFNA-Jennifer Bell
WDHP-Beverly C Meyers, Operations Man.
Jam 1575-Jonathan Revell
Bahrain R-Sayed Hussain

#### Contributors

It's many thanks to the following who made this column possible:

LR-Lionel Roithmeir, BD-Barry Davies, SW-Steve Whitt,

MvA-Max van Arnhem, mah-Martin Hall, VS-Vince Stevens in South Africa,

HW-Hartmut Wolff, JW-Jeff Weston.

Here are a few recent verification signers:

720 CHTN Faye Saunders

940 CINW Catherine Lacasse <a href="mailto:promotion@info690.com">promotion@info690.com</a>

990 CKGM Denis Dio, Director of Engineering

1000 WMVP John Hurni, Chief Engineer

1140 WQII Miguel Reymundi mareymundi@yahoo.com

1220 WHK Dave Johnson, Chief Engineer

1230 WESX Bill Cooksey

1230 WSBB Brian Tolby, Owner

1240 WMMB Larry T Brewer, Program Manager

1290 WWFS Wayne R Miller wrm@jmpradio.com

1300 WERE Alan J Kazlauckas, Engineer akazlaukas@radio-one.com

1300 WOOD Don Missad, Chief Engineer

1360 WKAT Ken Martin, Music Director

1390 WNIO James S Hartzler, Director of Engineering

1470 WMBD Wayne R Miller, Chief Engineer

1570 VEA Guatemala Lic. J. Leopoldo Valdez R.

1670 WTDY Roy Simmons, Engineer

That's it for another Verification Section. I'll be back as and when I have some more verification details from you, the members. Until then, 73s – Clive.