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STOP PRESS:

This month we'd like to extend a warm Circle welcome to the following new members:. Mark Caulton, Pontefract; Sergei Polschikov, Moscow, Russia; Dmitry Mezin, Kazan, Russia; Robert Walker, Fenton, MI; Stephen Powell, Central, SC; Stuart Gibb, Midlothian. Scotland.

WELCOME TO THE CIRCLE!!

Stop Press Deadlines:	26 th August for September 2008	28 th September for Octo	ber 2008
Cover illustration: "The	How and Why of Radio Apparatus" b	y Secor published in 1920	
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EDITORIAL

with Steve Whitt

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Over last few weeks high latitude DX in the Northern Hemisphere has deteriorated but there have still been openings across the Atlantic in mid June. However good trans-equatorial DX has been rather lacking until late June when good DX from Australasia was reported by John Bryant in Washington, USA.

EMWG Anniversary Contest Results

Ranking and winners, number of correct answers and their prizes:

- 1. Uwe Volk Germany (19 correct): wins 1 subscription to Radio User Magazine (value € 59)
- 2. Wolfgang Büschel Germany (18): wins £30 worth of MWC CDs (value: € 38)
- 3. Jari Savolainen Finland (18): wins 1 Monitoring Monthly electronic subscription (value: € 38)
- 4. Bjorn Fransson Sweden (17): wins 1 Monitoring Monthly electronic subscription (value: € 38)
- 5. Mike Barraclough UK (17): wins 1 WRTH 2008
- 6. Bryan Clark New Zealand (16): wins 1 WRTH 2008
- 7. Tony Rogers UK (16): wins 1 WRTH 2008
- 8. Dan Goldfarb UK (16) wins £20 worth of MWC CDs
- 9. Martin Elbe Germany (15) wins 1 year's digital membership of the Benelux DX Club
- 10. Guido Schotmans Belgium (15): "Radiohören auf Lange- und Mittelwelle" from Siebel/VTH
- 11. Birgit Denker Germany (15): 1 Fybush calendar & 1 Fybush pen
- 12. Paul Reinersch Germany (15): 1 RMRC QSL Calendar
- 13. Martin A Hall UK (14): 1 RMRC QSL Calendar
- 14. Ben Korbeeck Netherlands (14): 1 RMRC QSL Calendar
- 15. Siegbert Gerhard Germany (14): 1 RMRC QSL Calendar
- 16. Max Van Arnhem Netherlands (14): 1 RMRC QSL Calendar
- 17. Sergei Polschikov Russia (14): 1 year's electronic membership of the Medium Wave Circle
- 18. Juha Solasaari Finland (14): 1 special microphone radio tuned to 1368 kHz
- 19. Thomas Voelkner Germany (13): 1 NASWA T-Shirt
- 20. Dmitry Mezin Russia (13): 1 year's electronic membership of the Medium Wave Circle

Thanks to Herman for organising this contest and to all the participants for taking part. Congatulations to the winners. A special thank you is deserved by the various donors and sponsors of the prizes. A full list of participants is included on the website <u>http://www.emwg-contest.org</u>

EMWG news

Herman Boel informs us that he's making some fundamental changes to the EMWG. "Whoever purchases the PDF version will be requested to give the coordinates of his location. An additional column will then inform you of the distance between your location and every station in the list, next to a column with the station's geographic coordinates." Full info here: <u>http://www.emwg.info</u>

Thank you

Following my request for feature articles I'm pleased to say we've received three articles on MW antennas by John Bryant, Andrew Brade and Gary deBock. Unfortunately I can only find room for two of them this month because every other regular column has expanded in size! We've even had to carry over Clive's Verifications column (sorry about that).

73s *Steve*

IONOSPHERIC REPORT

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

Daily Geomagnetic Data

	Middle Latitude	High Latitude	Estimated
Date	Fredericksburg - A K-indices		Planetary Ap K-indices
2008 05 04	A K-indices 6 0 2 2 2 2 2 2 2	A K-indices 9 1 2 3 4 2 1 1 2	Ap K-indices 8 1 2 3 3 1 2 2 2
2008 05 04 2008 05 05	8 2 2 3 0 2 2 3 2	12 3 2 3 1 3 4 2 2	11 2 2 3 0 2 3 3 2
2008 05 05	9 4 2 3 2 1 1 1 1	8 2 2 3 4 2 0 0 1	10 4 3 3 2 1 1 1 1
2008 05 00	5 2 1 0 0 1 2 3 2	3 3 1 1 0 0 0 1 1	4 2 1 0 0 1 2 2 2
2008 05 08	3 1 1 2 1 1 0 1 0	4 2 1 2 2 1 0 1 0	4 2 1 2 2 1 0 1 1
2008 05 09	3 1 1 1 1 1 0 1 1	1 1 0 1 1 0 0 0	3 1 1 1 1 1 0 1
2008 05 10	4 1 2 1 1 1 0 1 2	4 1 1 2 2 0 0 1 2	5 1 2 1 1 1 1 1 2
2008 05 11	3 1 1 1 1 1 0 2 0	2 1 1 0 1 0 0 1 0	3 2 1 0 0 1 1 2 1
2008 05 12	3 1 0 1 1 0 1 1 2	2 1 1 0 1 0 0 1 1	4 1 0 1 0 1 1 1 2
2008 05 13	3 2 2 0 0 1 1 1 0	2 1 2 0 0 1 1 1 0	4 2 2 0 0 1 2 1 1
2008 05 14	1 0 1 0 0 1 1 0 0	1 0 1 0 0 0 0 1 0	3 1 1 0 0 1 0 1 1
2008 05 15	2 0 1 0 1 1 1 1 1	2 0 2 0 1 0 0 1 1	4 0 1 1 0 1 1 1 2
2008 05 16	3 1 0 0 1 1 2 1 1	4 2 1 0 1 3 1 1 1	4 2 1 1 1 2 1 1 1
2008 05 17	1 1 0 0 1 1 0 0 0	0 1 0 0 0 0 0 0 0	2 1 0 0 0 1 1 0 1
2008 05 18	2 0 1 0 1 2 0 1 0	2 1 1 0 1 1 0 0 0	3 1 1 0 1 2 1 0 1
2008 05 19	5 2 1 2 2 2 1 1 1	12 3 1 2 4 4 2 1 1	8 3 2 1 3 2 2 1 1
2008 05 20	7 1 2 3 0 2 2 2 2	11 2 4 2 2 4 2 1 1	10 2 2 3 1 2 3 2 3
2008 05 21	9 3 3 2 2 2 2 2 2	19 3 5 3 5 2 3 1 1	13 3 4 3 3 2 2 1 3
2008 05 22	7 2 1 1 1 2 2 3 2	8 3 3 1 1 2 2 2 2	9 3 2 1 1 2 3 3 3
2008 05 23	7 2 2 0 1 2 2 3 2	12 2 1 0 3 5 2 2 2	10 2 2 0 1 3 2 3 3
2008 05 24	4 2 0 1 1 2 1 1 2	15 3 1 3 4 5 2 0 1	7 3 1 1 2 2 2 1 2
2008 05 25 2008 05 26	7 3 2 2 1 2 1 1 2 3 1 1 1 1 1 0 1 1	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	6 3 3 2 1 1 1 1 1 4 1 1 1 2 1 0 1 1
2008 05 26 2008 05 27	2 0 1 1 0 0 1 1 2	3 0 1 1 1 2 1 0 1	3 1 0 1 0 0 1 1 2
2008 05 27	10 3 2 3 2 3 2 1 2	21 3 2 3 3 6 4 1 1	12 3 2 3 2 3 3 2 3
2008 05 20	7 3 2 2 1 2 1 2 2	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	9 3 3 2 1 2 2 2 2
2008 05 29	7 3 1 0 1 2 3 2 2	18 2 1 0 0 5 5 4 2	11 4 1 0 1 2 3 4 2
2008 05 31	8 1 2 3 2 2 2 2 2	19 2 2 3 5 5 3 2 1	8 1 2 2 2 3 2 2 2
2008 06 01	6 1 2 1 1 2 2 2 2	14 3 2 2 4 4 3 2 1	8 2 2 1 1 2 3 2 3
2008 06 02	4 1 1 1 1 1 2 1 1	5 2 2 1 1 2 2 1 0	5 2 2 1 1 1 2 1 2
2008 06 03	3 1 1 1 0 1 1 1 2	4 1 2 0 2 2 1 1 1	4 1 2 1 1 1 1 1 2
2008 06 04	2 1 1 1 0 1 1 0 1	3 2 2 1 0 1 0 0 1	4 2 1 1 0 1 1 0 2
2008 06 05	3 1 0 0 1 1 1 1 1	3 1 0 0 3 1 0 0 0	2 1 0 0 1 0 1 1 1
2008 06 06	7 1 2 2 2 1 1 2 3	6 1 2 2 2 1 1 2 2	8 1 2 2 2 1 2 2 3
2008 06 07	10 2 2 3 3 2 2 3 2	16 1 1 3 4 5 3 2 2	12 2 2 3 3 2 3 3 3
2008 06 08	5 2 2 2 0 2 2 1 1	8 3 2 2 1 3 2 1 1	7 3 2 2 1 2 2 1 2
2008 06 09	2 1 0 0 1 0 0 2 1	2 1 1 0 0 1 0 1 1	5 2 1 0 1 1 1 2 1
2008 06 10	1 0 0 0 0 1 1 0 0	1 1 0 0 0 1 0 0 0	4 1 0 0 0 1 2 1 1
2008 06 11	3 1 1 1 1 1 1 0 1	1 1 0 1 0 0 0 0 0	4 1 1 1 1 1 2 1 1
2008 06 12 2008 06 13	2 0 0 0 1 1 1 1 1 1 0 0 0 0 1 1 1 0	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	3 1 0 0 1 1 1 1 1 3 1 0 0 0 0 1 1 1
2008 06 13	16 1 0 1 0 2 3 5 5	1 0 0 0 0 0 1 1 0 8 0 0 1 0 1 3 3 4	16 0 1 0 0 1 3 5 5
2008 06 15	14 4 4 3 2 2 2 2 3	29 4 4 6 4 5 3 2 2	20 4 5 4 3 3 2 3 3
2008 06 16	10 3 2 2 2 2 2 3 3	23 3 2 2 6 4 3 3 3	13 3 2 2 3 2 3 4 4
2008 06 17	8 3 2 2 2 2 2 2 2 2	17 3 4 4 4 3 2 2 2	9 3 2 3 2 2 2 2 2 2
2008 06 18	8 3 3 2 2 2 1 1 1	18 3 5 3 4 4 1 1 1	9 3 3 2 2 2 1 0 2
2008 06 19	5 2 1 0 1 2 1 2 2	6 1 1 0 1 3 3 2 1	6 2 1 1 1 2 1 2 3
2008 06 20	8 3 3 2 2 1 1 2 2	15 3 4 4 4 3 1 1 1	11 3 4 3 2 1 2 2 3
2008 06 21	4 1 1 1 1 1 2 1 2	5 2 1 1 3 0 1 1 1	5 2 1 1 1 1 1 2
2008 06 22	2 1 0 0 1 1 0 1 1	1 2 1 0 0 0 0 0 0	4 1 1 0 0 1 1 1 2
2008 06 23	2 1 2 0 0 0 0 1 0	4 1 1 1 3 2 0 0 0	3 1 2 0 0 1 1 0 1
2008 06 24	3 0 0 0 0 0 1 2 3	2 1 1 0 0 0 1 1 2	4 1 1 0 0 0 1 2 3
2008 06 25	10 3 3 3 1 1 2 2 3	10 2 3 3 2 1 2 3 2	12 4 3 3 1 1 2 3 3
2008 06 26	17 4 4 2 4 4 2 2 2	23 3 3 3 6 5 1 2 1	16 4 4 2 4 3 2 3 2
2008 06 27	7 3 2 1 2 2 2 2 1	16 3 2 2 5 4 3 1 2	8 3 2 2 2 2 2 2 2 2
2008 06 28	6 1 2 1 1 1 1 3 2	6 1 2 1 2 2 3 1 1	7 2 2 1 2 1 2 3 2

Short term Forecast

UTC	Radio Flux	Planetary	Largest
Date	10.7 cm	A Index	
2008 Jun 25	65	8	- 3
2008 Jun 26	65	8	3
2008 Jun 27	65	8	3
2008 Jun 28	65	5	2
2008 Jun 29	65	5	2
2008 Jun 30	65	5	2
2008 Jul 01	65	5	2
2008 Jul 02	65	5	2
2008 Jul 03	65	8	3
2008 Jul 04	65	10	3
2008 Jul 05	65	8	3
2008 Jul 06	65	5	2
2008 Jul 07	65	5	2
2008 Jul 08	65	5	2
2008 Jul 09	65	5	2
2008 Jul 10	65	5	2
2008 Jul 11	65	10	3
2008 Jul 12	65	15	4
2008 Jul 13	65	15	4
2008 Jul 14	65	10	3
2008 Jul 15	65	10	3
2008 Jul 16	65	8	3
2008 Jul 17	65	10	3
2008 Jul 18	65	5	2
2008 Jul 19	65	5	2
2008 Jul 20	65	5	2
2008 Jul 21	65	5	2

MAILBAG

with Herman Boel

Papeveld 3, B-9320 Erembodegem (Aalst), Vlaanderen (Belgium) e-mail: mailbag@mwcircle.org 2 +32-476-524258

Richard Allans from Billings, OK, USA joined the Circle earlier this year and sent us this interesting article:

"I live in the center of the United States and have on occasions received European medium wave stations here. The French long wave station on 162 kHz has long been a regular here when conditions are right.

A bit of an introduction. I have been what I call a "lazy" medium wave DXer for nearly 50 years. My first trans-Atlantic DX reception was while stationed in East Anglia in the late 1960's. I only returned to the hobby after a 15-year hiatus during which my time was consumed with caring with an aging parent and work. Now I'm retired and have too much time on my hands.

My primary receivers are a Yaesu FRG-7700 and Winradio G313e. Unfortunately I'm very deficient in the area of aerials. The G313 is connected to a 21-meter long wire pointing to the southwest, while the FRG-7700 is used with an old Space Magnet antenna. Also, I have a collection old European and Soviet (Telefunken, Nordmende, Grundig and VEF) receivers that I occasionally fire up. Recently I've been playing with what are known here as UltraLight Radios (Sony SRF-39FR, -59, -M35 and -M37V). It's surprising how sensitive these inexpensive pocket-size receivers are."

Thanks for that report, Richard.

73 - Herman -

PHASED ARRAY TESTS

Andrew Brade examines the Wellbrook Phased Array

I've experimented with various aerials over the years – EWEs, longwires, a T2FD and a beverage. Of these the beverage has clearly performed better than all the others. Local geography means that I have been able to run a beverage for 300m only in one direction, at about 210°, pointing towards Rio de Janeiro from here in Yorkshire. It performs well in the summer, but I have to revert to the EWE in the winter for North America.

I've found that the beverage gives a very directional and consistently stronger signal than the EWEs.

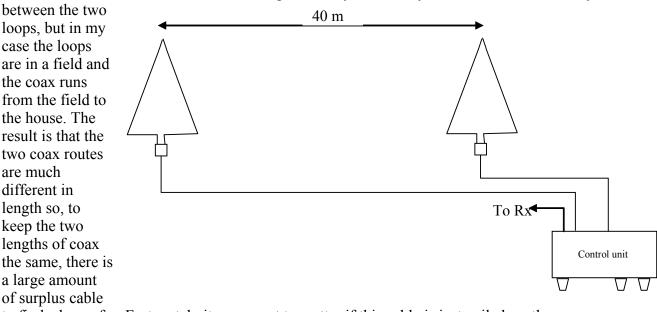
Located in East Yorkshire means QRM is a problem from nearby continental stations from the east. It also means that transatlantic signals have to compete with practically all the transmitters in the north of England! For example BBC Radio York on 1260, Gold Barnsley on 1305, BBC Leeds on 774, Magic Leeds on 828 and Pulse Gold on 1170 are lie between me and transatlantic signals. Besides these, Radio Humberside on 1485 from the east spoils both 1480 and 1490.

I was keen to improve my aerials, but with what? I wanted something that would give beverage type directionality but without the land use. I heard from Martin Hall about development work on a new phased array from Wellbrook Communications. Having experienced the directional performance of Steve Whitt's K9AY, I decided to contact Wellbrook.

After a little discussion Andy Ikin of Wellbrook agreed to sell me a pre-production model. The kit comprises a control unit to be sited near to the receiver and one or two pairs of modules to be sited "in the field".

Design

The antenna array comprises a pair of large loop antennas and an indoor phasing control unit. Each antenna comprises a large delta-shaped loop, and the loops forming the array pair are oriented in exactly the same plane but are separated by 40m. The pair of loops is oriented in the direction you wish to listen. Each antenna loop is connected locally to a Wellbrook ALA 100 head unit, fitted with a BNC socket. Each head unit is wired separately to the indoor phasing unit using RG 58 C coaxial cables fitted with BNC plugs. One of the requirements of the design of the array is that the two coaxial cables must be of the same length. Clearly this is easy if the receiver is mid-way



to find a home for. Fortunately it seems not to matter if this cable is just coiled neatly.



Figure 1: One of the masts showing the four guy ropes and the antenna loop at the very top of the mast.

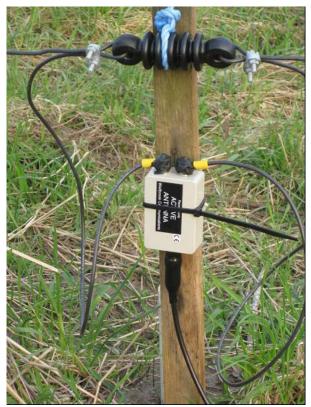


Figure 2: Connections to the Wellbrook ALA 100 head unit



Figure 3 Detail of the plastic piping section at the top of the mast. The wire attached to the upper fixing is the antenna loop

The phasing unit can accommodate two such pairs of loops. The two pairs of loops can be oriented at 90° to one another, but they don't have to be. The system will work just as well with one pair of loops only, or two pairs of loops at angles other than 90° .

The ALA 100 head unit is active, which is to say that it contains a high-gain broadband amplifier supplied using 12Vdc fed along the coaxial connection.

Construction

Each loop is 7m high and the base of the loop triangle is also 7m. To achieve the 7m loop height, I used a 6m length of 1.5" x 10SWG aluminium tubing with an additional 1.4m of plastic (ABS) tubing (Fig 1). The masts were guyed using 6mm polypropylene rope. The local blacksmith made the stays from 40mm equal angle. At the foot of the mast, I sunk a short length of the same plastic tubing into the ground just to locate the bottom of the mast.

The loop itself was made from 1.6mm² insulated copper wire. Each end of the loop wire is connected to a terminal post on a Wellbrook ALA 100 active loop antenna head unit (Fig 2). The head units have a BNC socket for connection to the feeder cable.

The loop is supported at its corners by dog-bone type polypropylene insulators, and to keep its shape I used wire rope clamps at each insulator (see Fig 4). These clamps avoid the need to knot the aerial wire and also facilitate adjustments if you find that the loop isn't quite in the right shape. The height of the bottom of the loop above ground is 500mm.



Figure 4: Photograph of loop support showing insulator and cable clamp.

Control Unit

The control unit is housed in a grey powder-coated metal box, $6^{3}/4^{22}$ wide, $4^{3}/4^{22}$ deep and 2" high, provided with 12V dc from a plug transformer. It has three controls – direction (a rotary switch) and phase and balance potentiometers.

To the rear of the control unit are four BNC sockets for the antenna coax cables and a further BNC connection to the receiver.



Figure 5; The Phased Array Control Unit.

Teething Troubles

After erecting the masts, cabling up and firing up the unit for the first time I was pleased to see the red LED glowing brightly on the front panel and healthy audio coming through the headphones. I began on 1485 BBC Radio Humberside with a view to trying to get an NW/SE null. I adjusted the phase and balance controls, but no combination of positions changed the received audio one bit! Humberside was there at constant strength.

I tried disconnecting each loop in turn. There seemed to be no difference in the audio.

In desperation I e-mailed Andy Ikin. He suggested that the loops might be in phase rather than in anti-phase, and the solution was to simply go to one of the head units and swap over the two loop connections. This done, it worked fine!

I've had a couple of other problems – I've blown the 500mA fuse in the control unit whilst making the head unit connections, so now if I intend to do any work outside I switch off the power supply first.

I've also suffered with the coax being eaten, probably by a rabbit. The solution suggested by Andy was to run the cable in polythene tube, which I have yet to do.

Using the Array

I found that using the array is very simple. The selector switch usually remains fixed (NW in the winter, SW in the summer). The Phase control is seldom moved from its mid-position, but the balance control is the one that requires a little adjustment to get the best from the nulling. With particularly weak signals it is sometimes necessary to adjust the phase, then the balance, then repeat the process to get the best results. It's surprising how the null is very sensitive to even the tiniest adjustment of the balance control.

Performance

I have been able to compare the Wellbrook array with a EWE (pointing in approximately the same direction, i.e. towards North America), and also to my 305m beverage.

The Wellbrook loops are aligned at 310° and 235°, the EWE at 290° and the beverage is at 220°. In terms of direction from here, the table below gives an idea of the target directions:

Aerial	Direction	UK	Overseas
Wellbrook SW	235°	Liverpool	Belém, Santiago
Wellbrook NE	55°	Bridlington	Helsinki, NE China
Wellbrook SE	130°	Norwich	Greece, Egypt, Ethiopia
Wellbrook NW	310°	Edinburgh	Winnipeg, Los Angeles
EWE	290°	Carlisle, Ayr	Toronto, Oklahoma, Mexico
Beverage 305m	220°	Sheffield, Crewe, Aberystwyth	Rio de Janeiro.

The NW and SE pairs were proven to good effect when comparing signals on 774kHz from BBC Radio Leeds (255°) and BBC Radio Kent (160°); also on 855kHz from BBC Lancashire, Preston (270°) and BBC Norfolk (135°). Each of these stations can be completely nulled. The local BBC station, BBC Radio Humberside on 1485 (110°) dominates that frequency but with careful adjustment of the null, BBC Radio Merseyside (235°) can be heard quite clearly on the NW selection.

Using the SW and NE pairs, the Scarborough relay of BBC R.York dominates 1260kHz in the NE direction but can be completely eliminated allowing reception of Gold Wrexham. By comparison with the beverage also receives Wrexham, but with a noticeably stronger signal from Scarborough "on the back".

Performance in transatlantic reception was also compared. The signal strengths between the EWE and the NW direction were very similar, but the nulling of European signals adds significantly to the audibility of North American stations. For example, in winter around dawn on the EWE, Luxembourg dominates 1440kHz to the elimination of all else. With the array, it was possible for the first time to hear WJAE and WHKZ. These stations are, of course, also quite audible during the small hours when Luxembourg is now off.

In the SW direction, the beverage provides comparable reception to the array. Generally the beverage is able to light up at least one more bar on the S-meter of the AOR, but there is only slight difference in audio strength. On the rare occasions this summer that a few South American stations have been audible, there are subtle differences in the performance of the two antennas, with, for example, CPN Lima being better heard on the array than the beverage, but this may be due to the difference in orientation. Similarly the beverage does better with the stations from Argentina, Uruguay and Brazil.

Conclusion

If you have space for a beverage farm, then properly terminated and maintained beverages are likely to give you better signal strength in the desired direction than the Wellbrook array. For most of us this is not possible. The array requires not nearly so much land as the beverages and performs nearly as well, with the added advantage of very deep nulls being obtainable for signals arriving from the rear. The front to back ratio of the array was superior to that of the beverage. For me, living to the east of the UK and listening to North America, QRM from UK stations west of me is still a problem, but that from European stations to the east is reduced.

More testing is required to evaluate the loops' performance with regard to signals arriving broadside, and this will be the subject of a future article.

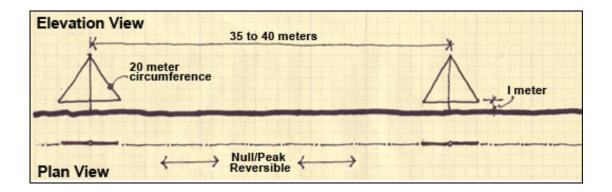
Thanks to Andy Ikin at Wellbrook for developing and supplying me with the equipment, and for his support in its commissioning.

An In-Use Look at a Beta Prototype of the Upcoming Wellbrook Phased Array

By John Bryant, Summer 2008

I became acquainted with Andy Ikin, the guru of Wellbrook Communications five or six years ago when I purchased one of the first of Wellbrooks extraordinary K9AY antennas to reach North America. I soon wrote a rather glowing in-use review of the Wellbrook K9AY and have corresponded with Andy sporadically ever since. Eighteen months ago, I was very complimented when Andy asked me to join several other MW DXers in the Beta test of a new *broadband* Wellbrook Phased Array. Recently, Andy has decided to make the new two to four element Wellbrook Phased Array commercially available on a "build to order" basis and I am finally able to report on what has become an unexpectedly lengthy odyssey in development of what will likely be a break-through antenna for medium wave DXing.

For initial Beta testing, Andy provided a two-loop end fire phased array, essentially half of the upcoming two-to- four-loop commercial version. Six months ago, Andy provided me with a pre-production unit of the full array. In the commercial version, *each pair* of loops (with the shared control box) is a complete phased array with a totally reversible pattern. The sketch below shows the arrangement of a 2-loop Array.



As you can see, the two twenty meter circumference loops were positioned exactly 40 meters apart. Please note that the requirement for the 40 meter separation is fairly rigid as is the need to have the loops exactly in the same plane. Although in the commercial version, Andy will provide a bit of adjustability with the spacing (maybe to 35 meters?) the broadband delay line nature of this design makes both of these requirements rather rigid. There is complete flexibility of the positioning of the two arrays in relation to each other, however. (Refer to the Appendix to this article.)

I asked Andy to explain to me the difference between his design approach and the kind of phasing of two antenna elements, popularized by the work of Mark Connelly and others, which many of us use today. He provided me with this answer.

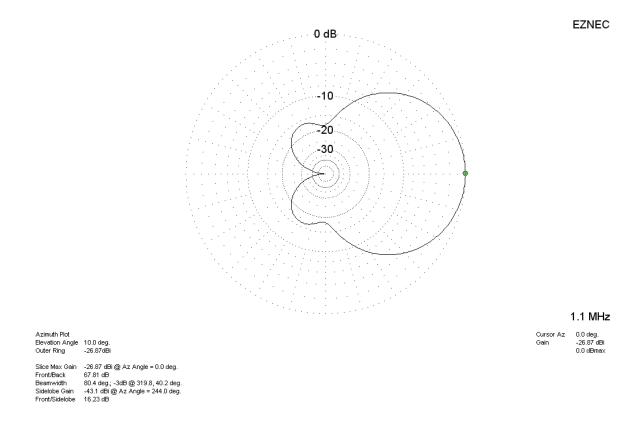
The phasing of two antennas has long been used by DXers to enhance reception; primarily this is done to null an interfering station. The basic operation is to apply a 180 degree phase difference with equal amplitude on the station to be nulled. Whilst this can be very effective, most such phasing schemes will only work over a very narrow frequency band. This is because the antennas and phase shift network changes with changes in frequency. Also incorrect feeder termination may cause frequency-related phase and amplitude fluctuations.

A *broadband* phased array requires a completely different approach to the phasing scheme described above.

First, the broadband phasing system has to provide the correct resistive termination to the antenna feeders, must use constant gain antennas and, ideally, should have minimum of controls, with negligible interaction. More importantly, the phasing scheme must not vary frequency i.e. the array front to back ratio should be relatively constant over the MW band.

The Wellbrook Phased Array implements the above criteria, by using "phase matched" loop antennas i.e. the antenna/amplifier propagation delay is matched to within a few nano seconds across the MW Band. The antenna feeders have the correct resistive termination. Combing the antennas in anti-phase plus a nominal time delay line equal to approx. 80% of the spacing of the elements and this maintains the correct antenna phase difference. Null steering up to over 50dB is achieved by making the delay-line continuously variable and "fine adjusting" the antenna amplitude balance. We also found it to be quite important that the phasing Control Unit be isolated from any receiver impedance mismatch.

I also asked well known MW DXer Neil Kazaross to model *one pair* of the Wellbrook Array using EZNEC software. Neil kindly provided a number of studies. Neil's basic EZNEC response diagrams are reproduced below. The horizontal model is sliced for 10 degree arrival angle

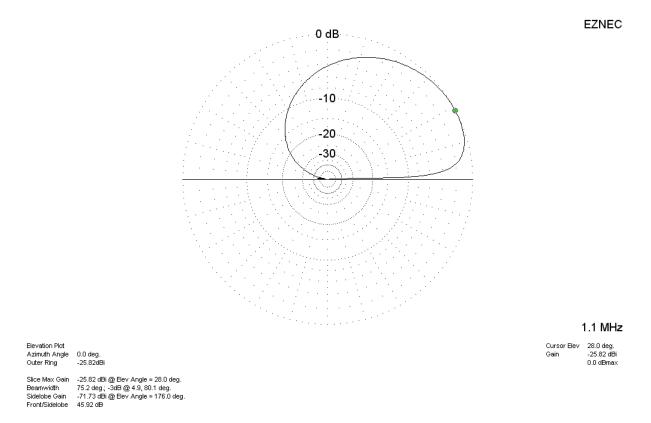


When I saw this, I was reminded of the response pattern of a perfectly terminated one wavelength Beverage. They aren't identical patterns, but they are quite similar. So, using the commercial unit, set up with a full complement of four loops and arranged classically with the two pairs at 90 degrees to each other would essentially be like rotating this horizontal diagram through 360 degrees in four steps. My initial Beta unit, with only two loops and the commercial unit operating with only two loops

Medium Wave News 54/03

should give a response pattern like flipping the horizontal diagram shown above back and forth, left to right.

Neil also pointed out that the combination of two loops in this fashion reduces the response (as compared to a single loop) to high arrival angle signals. This is a good thing, since nearby interfering signals are high arrival angle and much of long distance reception comes in at very low angles.



OKLAHOMA TESTS: SPRING 2007

Part of my Beta testing was measuring null depths or front-to-back ratios in real world situations. My winter home in Oklahoma is a perfect location for that type testing because the state was settled so recently (early 1900s) that most roads, highways and towns are on a 90 degree orthogonal grid. Hence, I have a multitude of MW stations exactly to my north, south, east and west. Thus, it was relatively easy to set up the array for measurement. I used my WinRadio G313e which can average signal strength over several seconds and which can be set to very narrow bandwidth to eliminate much of strength variation due to modulation. This article is not intended as a full report on those tests, but I should state that the Array had deeper nulls than I've ever been able to achieve before.

Further, I should comment on the testing of null depths in the real world. Even in an orthogonal world like Oklahoma, it is very difficult to measure the maximum null depth achievable by an antenna. First, the time of day is critical: only around solar noon, to ensure a groundwave-only steady arrival angle; secondly the station to be nulled needs to be quite strong, but probably not too strong. If the theoretical maximum null is, say, 40 dB, testing it on a station that is only 30 dB above the noise (5 S-units) shows nothing about the *maximum* possible null: you null the 30 dB signal down to the noise floor and that is all you can do. Thirdly, the stations tested need to be fairly closely clustered, geographically at the true backside of the antenna and, of course, the test stations need to be spread across the dial, so that variation of the null by frequency can be addressed. Finally, to achieve the maximum null, the test stations signal MUST NOT be covering a co-channel station beneath it; the energy from that second or third co-channel signal will "fill in" the null giving a too shallow null depth indication. With this latter concern, it becomes somewhat obvious that testing for maximum nulls, even in the daytime, is very difficult even in the sparsely populated RF environment of the

American West; in dense RF environments such as the North American East Coast or in Europe, achieving the theoretical null depths in the field must be close to impossible.

In the Oklahoma testing, the nulls on most signals with no audible co-channel station were in the 35 dB range, but on strong signals, right down the bore of the Array, some F/B ratios were right at 45 dB. Extra-ordinary! I should add that I did several similar tests at Grayland, Washington and could – consistently – achieve 48 dB nulls on one of the Portland stations. My guess is that the ultimate nulling ability of this array, *under ideal conditions*, is about 50 dB. The fact that the two-loop array was totally reversible also proved rather handy, even though my main interests in the Spring of 2007 were only southward from Oklahoma (Mexico.)

In Oklahoma, I also tried to emulate using the array under DX conditions in the evening. In two evenings, I was able to look at the performance on each of the 117 or so 10 kHz. channels on the MW band. I considered the antenna a success on a channel if there was *a DXable difference* between the two positions of the 'Beam Reverse' switch on that channel..... So, the two different stations did not have to be totally separated from each other (although they mostly were, say 75% of the time). As long as I was satisfied that I could definitely ID two different stations, one at each of the switch positions, I declared it a success. In reality, this allowed me to count a handful of situations where I could hear the same station at both switch positions: one way, it was "studio quality" the other direction, I could still hear it, but a second station was now clearly dominant. On an amazing percentage of stations there were two different, totally clear stations. Just amazing. There was a second condition that I also considered effective: when there was a dominant station in one direction and simply nothing in audio in the other. I considered the antenna *not* to be effective if my ear could hear no real DXable difference in the two settings.

The first evening, I went through the 117 or so channels from 530 to 1700 in about an hour. There were 15 channels where my ear could find no difference between the two settings. About half of these were graveyard channels with 100 or more small stations on them and they were just a mess, which ever direction I turned the switch.... just a "furball." That was certainly not attributable to the antenna, but it still wasn't a *DXable difference*. That first night, there were an additional dozen channels where there was a clearly dominant station in one direction and no audio whatsoever in the other. An example of that would be 1200 kHz., with WOAI in San Antonio on the south end of the array and NOTHING off the north. WOAI has been the super-power dominant, clear channel station on that frequency since the late 1920s. Since it is in the center of the continent, 700 km or so to my south, there is very little else in the US or Canada on that frequency. Whatever is there is on the fringes of the continent and directional away from WOAI (and me!) So, there were 12 channels like that.... that the antenna produced an excellent null, but it was not DXable. Still, I counted that dozen in the successful column.... meaning hat the antenna made a DXable difference on almost 90 percent of the channels in one night. FABULOUS!

The second night, I went back and invested a full hour in the 15 channels that had been classed "failures" the previous night. With some tweaking on my part and changed propagation conditions, I could make out a DXable difference on 11 of those 15. Five furballs had gone away in the intervening 24 hours, with DXable stations on both ends. The only furball that just could not be resolved was 1490 kHz., the most crowded channel in the Americas. In the second instance, one station, 50 kW KOKC (formerly KOMA) in Oklahoma City on 1520 kHz., just would not null effectively. I could knock 10 or 20 db off of a 60 dB signal, but it just wouldn't die on either night. Since it is about 100 km. directly to my south, it should have been nullable. Who knows..... there are always a few mysteries with phasers, it seems. The final two signals that were not nullable (5 to 10 dB) were 740-KRMG, Tulsa and 1170-KFAQ, Tulsa. Both are 50 kW, long-time clear channels with excellent antennas and ground systems. Most importantly, they were exactly 90 degrees off the side of the array.... ya just can't beat the laws of physics entirely, I guess.

So, the 15 channels where the antenna was not DXably effective the first night was reduced to four. I've really experienced such effective performance out of any antenna, not even the Wellbrook K9AY. Most of all, nulling of stations to the side, 50 and more degrees off the centerline of the array was very impressive. With the array erected due North-South, I was able to test nulling to the side EFFECTIVELY: to my ENE, WHAS, Louisville, KY and WLW, Cincinnati, OH, to my WNW, KOA, Denver and to my SE, WWL Orleans. All but Cincinnati were in the mid-800kHz. on the dial. *Very impressive lateral nulling*, since these are each persistent pests on my night-time dial.

My last test in Oklahoma was comparison testing the two-loop array against what my current favorite unidirectional antenna: a broadside phased array of two BIG EWEs, about 28' x 60', both pointed south, nulling to the north themselves and separated by about 350 feet. These units were phased against each other using a fairly new Misek-Lankford phasing box. The Misek design takes a conventional L-C approach to phasing and is both very effective and easy to operate. I had planned this to be my ultimate antenna for Mexico and I figured that it would be about as good as I could ever get. Of course, the real estate necessary for that array (about 80' x 400') is not available to many DXers at their home QTHs;that much acreage isn't that easy to obtain even at a campsite. Further, the two EWEs take four 30' masts and a great deal of coax. Still, when I fire it up, I hear a whole lot of Spanish on the dial and not too much else, when the phaser was set correctly.

Well, before I ended testing of the Wellbrook Array, I wanted to compare DXing performance of the two arrays. I was able to do so for only two evenings. Nevertheless, the results were quite clear: they were mostly indistinguishable, one from the other, as far as what I could hear to my south. There is a mild RF amp in the Misek phaser and the Wellbrook ALA-100s loop elements are amplified, so the Smeter readings were quite similar. More importantly, when I simply listened, they were usually identical. However, there were four or five instances where a station to the south was audible on both antenna arrays fairly equally, but.... from a qualitative point of view, one was preferable to the other. In each instance, the array that "heard the signal better" was the Wellbrook Phased Array. So: the Wellbrook required less wire, less coax, only two masts and much less expensive/shorter masts, at that. The again, the instant reversibility of the Wellbrook Array was a real boon. Finally, the broadbanded nature of the Wellbrook was ever so much more productive and easier to operate that the more narrowly focused Misek unit. The best that I can tell, the Wellbrook delivers well more than half its ultimate nulling capacity right across the band in a "set and forget" mode. Once in a great while (10 to 20 percent?) it is possible to improve the null with a bit of careful tweaking, but usually this is unnecessary.... Completely at odds with a conventional phaser that requires practically constant retuning as one moves across the dial.

That completed the Oklahoma portion of the Beta testing. The Wellbrook Phased Array had passed with flying colors and I knew that I'd never again be using my phased array of over-sized EWEs at the home place. The Wellbrook was smaller, easier to operate and far more effective.

PACIFIC NORTHWEST TESTS: SUMMER & FALL 2007

My second task, along with Guy Atkins of suburban Seattle was testing the Array in the Pacific Northwest in two venues: at our home locations which are each surrounded by 50 kW transmitters and at the well known DXpedition site, Grayland, Washington on the open Pacific shore. In each location, we DX Trans-Pacific medium wave signals that are available the latter half of the night and peak at local dawn.

BACKGROUND: GRAYLAND

We have been DXing at Grayland for 18 years, using long "Beverage" antennas. The relationship of the motel unit that we use to the Pacific shore governs the length of Beverages. There is about 600 feet of open lawn and then 100 feet of dunes and high grass that separate the unit from the high tide mark and the open Pacific. The lawn grows on compacted beach sand; the water table varies between 1 foot beneath the surface in the winter and about 8 or 10 feet down in the summer and fall. *The motel is due*

east of the beach and the shore line runs very nearly north-south. Our standard set-up of Beverages is a 700 foot long due West Beverage running to the high tide line (points the central Pacific and at Western Australia) and a 800 to 900 foot long Northwest Beverage pointing more or less at East Asia. Grayland is on the southern portion of the Washington coast with the closest AM transmitters about 20 miles away (two low powered stations.) The some of the closest powerful stations are in Portland, Oregon, to our southeast, about 200 km. away. The other pest stations are directly down the coast in San Francisco, 800 km or so or in Seattle/Vancouver/Victoria to the NNE. Seattle is only 125 km. away while Vancouver is double that.

In DXing Trans-Pacific signals from Grayland, what is wanted in antennas is a decent amount of gain, *as much signal to noise ratio as possible* and, if possible, maximum rejection of unwanted signals over 180 degrees of azimuth from straight North to straight South. Since our Beverages are considerably less than one wavelength, across most of the MW band, one would think that they would not be very directional. However, there is almost always a *significant* directional difference between what we hear on the W and the NW Bevs at the same time. There are differences in signal-to-noise on the two antennas almost all of the time (listening to the same station, with much better S/N ratio for Japanese signals and often more gain, for instance, on the NW Beverage.)

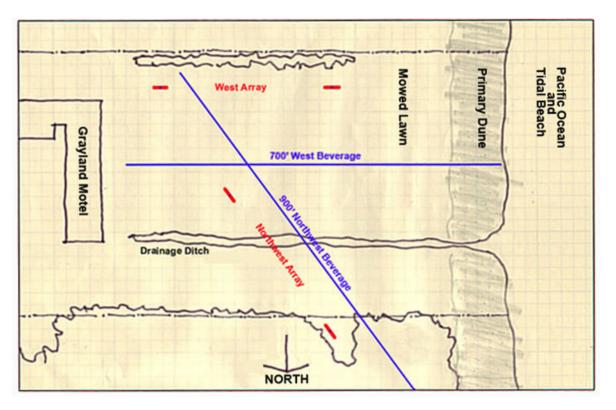
We have always looked for "better" antennas to use at Grayland. It is almost impossible to properly terminate the Beverages in the sand and they are a real pain to set up and take down for just two or three mornings of DXing. Over the years, we have experimented with virtually the full suite of antenna possibilities, always carefully A/Bing them against the Beverages. I have been terribly disappointed several times, having found antennas that worked as well as short Beverages in Oklahoma, only to find that they did not do so in the sand at Grayland. What was happening, I finally concluded, was the difference responses of the antennas to the 100% sand ground at Grayland and the almost perfectly conducting greasy iron oxide-rich red clay of central Oklahoma (one of the finest ground planes in the world.) Anyway, I was particularly excited by the giant EWE (20'x60') or even two giant EWEs, phased, that in Oklahoma kept up with and even surpassed 700 foot short Beverages. The EWE, perfectly grounded and working over such a great ground plane, is a real star in Oklahoma. The performance of it and it's cousins the Flag, Pennant and even K9AY were all a disappointment in the pure sand environment of Grayland. For a while, I was also very excited about a special built 3' x 1" tuned/amplified ferrite rod antenna which did "almost as well" as a Beverage in Oklahoma... It fell on its face at Grayland. Of course, not only were the grounded loops working better in Oklahoma than on the sandy beach, but the Beverage was working more poorly over the greasy conductive clay of Oklahoma; it performed AT ITS BEST in the sand of Grayland. We even tried the much vaunted 1 meter square, multi-turn air core loop of a generation ago; it was non-competitive on the beach.

DXing Performance: Grayland, Mid-September 2007

Attending: Guy Atkins and John Bryant

DXing comparisons were made for four consecutive mornings using the Australian and Japanese stations that were available each morning for about two hours during the very early morning and dawn periods. The Australian MW AM signals varied in strength from providing just threshold audio to a few signals running almost S-9. There were 29 different Australian stations received and 6 stations from New Zealand. About half of the stations were received on multiple mornings, making somewhere around 70 total test receptions. The distance to these stations averaged about 11,000 kilometers or 7500 miles. There were 22 Japanese stations used, with many of them received on multiple mornings, making around 40 total receptions; as with the Aussies, these varied in strength from threshold audio to very strong signals. The distances involved to the Japanese stations were about 7,500 km or 4,500 miles. During the vast majority of the testing, *there were virtually no differences of signal strength or signal-to-noise ratio noted between the signals present on the appropriate Beverage and its adjacent Array.* Both judgments were non-numeric... simply based on the sound qualities of each signal and the amount the carrier rose above the surrounding noise on the

spectrum scope of the WinRadio G313e.



There were a few performance differences between the Wellbrook Arrays and the short Grayland Beverages, though these affected only a few receptions. The major difference was the vastly superior Front-to-Back ratio of the Wellbrook Array. I estimate that the true F/B ratio of the Array was somewhere around 50 dB. Due to the difficulty of achieving a good ground for terminating the Beverage, its F/B ratio was somewhere between zero and 10 dB. Since we were DXing Australian and Japanese stations on the 9 kHz. spacing and our regional American stations were on the 10 kHz. separation pattern, F/B ratio was not a major issue at Grayland, except, potentially, for shedding the much awaited digital hash QRM.

We made one test of the usefulness of the F/B abilities of the Wellbrook that is worth relating: 670, KBOI in Boise, Idaho has been a regional pest at Grayland for years. It is 50 kW, 24 hours and about 450 miles/700 km to the Southeast of Grayland (120 degrees azimuth.) Near dawn one morning, I tuned to 670 and pointed the due E-W Array eastward. Sure enough, there was KBOI at full throttle. I flipped the switch to West and I soon IDed the station on that side of the switch, **all by itself:** KPUA, 10 kW in Hilo, Hawaii, 2700 miles away, at 240 degrees of azimuth, and running 10 kW. It was a truly amazing demonstration of F/B ratio and width of both front lobe and null, since each station was 30 degrees south of the centerline of the array. I'm sorry that I didn't have time to pursue other Hawaiians to further demonstrate this great capability.

Given urban noise, the increase of digital modes on MW and the heavy co-channel interference that most of us suffer, I would imagine that the superb F/B ratio of the Array will be one of its most useful attributes for most DXing situations and one of the primary reasons that the Wellbrook Array will likely become a DXers' favorite.

Another difference between the two antenna types was the fact that the forward lobe of the Array was *somewhat wider* than that of the short Grayland Beverages. This width difference was found by comparing DX stations from Australia and Japan both on the NW antennas and those pointing West. For instance, there was only a little difference between the signal strength of an Aussie on the W and the NW Array while there was a much greater difference in the strength and S/N ratio between that same Aussie signal on the West and NW Beverages. This comparison was made many times using

Medium Wave News 54/03

both Australian and Japanese signals. Clearly the forward lobe of the Array is wider than that of a short Beverage. This width of lobe could be a real advantage to the Array in some circumstances and a disadvantage in others.... The Azimuth for the Aussies was 240 to 250 degrees (West antennas at 270) and the Japanese was at 300 (antennas at 317.)

DXing Performance: Queen Charlotte Islands, Mid-September

Attending: Guy Atkins, Walt Salmaniw, Chuck Hutton, Bruce Portzer and John Bryant The DXpedition trip to the Queen Charlottes was a real joy, both for DXing and to rub shoulders with the wonderful Haida indigenous culture. However, the Wellbrook's record of performance on the Charlottes was mixed and really quite confusing. The Wellbrooks only operated properly about half the time. This was no real fault of the antennas, just the confusion of five DXers operating 6 or 7 Beverages and then trying to share two very adjustable Wellbrooks. When they were operated properly, I found that they equaled the Beverages much of the time. Three of the seven mornings, I found myself using the Wellbrook as the antenna of choice, but the choice was very close. Until after Chuck and Bruce left, no one but me used the Wellbrooks very much. Whether this was from frustration (the earlier mis-connections) or the pressure of too much DX coming in on antennas that were tried and true (the Beverages) or whether they unexplainably saw differing result, I just don't know.

There seemed to be one important and surprising difference between the Array and the Beverages at QCI, that several of us, including me, saw: the Wellbrook did not do well at all at the extreme beginning of sunset DX and end of dawn DX. In the years that many of us have DXed directly from the beach on either side of North America, we have noticed DX starting to come in much earlier before sunset than it does just inland (in the case of East Coast North Americans DXing Europe) or staying in much later after sunrise as West Coasters DX Asia or DU at dawn from the Pacific beaches. The prevailing theory to account for this thirty to ninety minute extension of the DX opening is that extremely low angle DX is refracted from the edge of darkness far beyond the shore and reaches DXers at the shore, but does not penetrate inland. Some of us visualize it as very weak quasi-ground wave. Who knows if this is the proper explanation? In any case, there is this extension of the DX window that seems to occur only at the beach itself.

At the QCI DXpedition, we were fortunate enough to hear over forty European stations in the early evenings, as well as hundreds of Asian stations in the early mornings, so we were able to experience both the evening and morning beach-related extensions of the DX window. Well, what we noticed there was that the Beverages received this early and late extension much sooner than the Wellbrooks. Several of us noted this difference over several DX sessions. After thinking a while, that lag or delay actually seemed to make sense to us. Although two phased delta loops (the Wellbrook) do have better low angle response than a single delta, they still are probably less sensitive to extreme low arrival angle signals than are Beverages.... So, it might "make sense" that we would detect those early signals first on the Bevs at sunset and last on the Bevs at dawn.

DXing Performance: Grayland, Late October 2007 Attending: John Bryant

The main purposes of my second fall trip to Grayland was to reconfirm our earlier finding that the Wellbrooks did as well as the vaunted Grayland Beverages and to reconfirm the early loss of signal by the Wellbrooks after dawn, noted for the first time in the Queen Charlottes.

I spent about ten hours spread over two mornings carefully A/Bing the Wellbrooks against the two Beverages. The two Beverages were both our standard BOGs, with the westerly one 700 feet long and the Northwesterly one at 900 feet. The two Wellbrook arrays paralleled the Beverages but were separated by 40 to 60 feet. Happily, a few Australians were in for each morning, so there were test targets for the Westerly antennas. The Northwesterly group had plenty of low strength targets from Japan, the Koreas and China.

Despite the fact that I can measure the relative strengths of signals numerically (to the dB) with the WinRadio 313e, such measurements were not useful in these tests. In general, the Beverages moved the S-meter further to the right than did either beta Wellbrook. Further, one of the two Wellbrook Beta-generation controllers has about 8 dB more (useless) gain than the other. All of the comparisons were made strictly on the quality of the received signal. This was particularly easy with weak, almost threshold signals and a good antenna switch: easy to determine which antenna allowed you to comprehend the most words, or easy to identify which antenna eliminated the most splatter or IBOC hash and allowed that particular weak signal DX through. Essentially, I shut my eyes and switched the antennas back and forth. It was quite easy and, I believe, both accurate and relevant.

In that kind of comparison test, the Wellbrook Array was the favored antenna about five out of ten times. About three or, more likely, four out of ten times, I could distinguish absolutely no difference in the two antennas being compared. That leaves somewhere about 1 or 2 in ten tries where the Beverages were slightly better.

I should add that in the instances where the Wellbrook was superior, it was attributable to one of two things, both associated (I believe) with front-to-back ratio. On the 9 kiloHertz channels where the DX was close-in to an American channel, the superior F/B of the Wellbrook often delivered more signal and less splatter. There were other instances on the more open frequencies where the Wellbrook simply delivered a signal with less hiss and band noise, despite the generally quiet RF environment of Grayland.

The small minority of signals where the Beverage outperformed the Array are also worth discussing. In about half of these relatively few instances, there was just no evident reason, but performance of the Bevs was just a little better. For the other half of those few instances, though, it appeared that the (probably) slightly narrower front lobe of the Beverage was responsible for the improved performance. For instance, KPUG-1170 in Bellingham, WA is NNE of Grayland about 200 km. That channel is also an active one on the 9 kHz channel scheme. On Friday morning, I heard VOA-1170 Philippines doing battle with KPUG.

The next morning it was KBS-1170 from South Korea that was running both over and under regional power KPUG. KPUG was about 45 degrees to the right of dead center of the NW antennas. The DX signal was more prominent on the Beverage in both cases... The slightly narrower Beverage front lobe shed a bit more of the KPUG signal and "let the DX through." So, for this location here, the narrower Beverage view of the world did prove to be an advantage.... about 5 or 10 percent of the time. The rest of the time, the Array was equal or better than the Beverage!

What about this deafness in the extended pre-sunset or post-dawn that we noted at the Queen Charlotte DXpedition? Let me tell you, I was prepared to stay up all morning to quantify the performance of each antenna to the bitter end. I was shocked to find that the deafness noted at QCI just DID NOT EXIST at Grayland. In fact, *the Arrays continued to outperform the Beverages right through until the bitter end, 90 minutes after sun-up!*

Here are my results from both Friday and Saturday morning. Sun-up was at 1445. The "greater than" symbol indicates that the first antenna performed better than the second.

FREQ	STATION	FRIDAY	SATURDAY
594	Japan	Array>Bev	Array>Bev
738	China	Array>Bev	Array>=Bev
774	Japan	Array=Bev	Array=Bev
954	Japan	Array>Bev	Array>>>Bev
972	Korea	Array>>>Bev	Array>>>Bev

1287	Japan	Array=Bev	Faded Out
1566	Korea	Array=Bev	Array <bev< td=""></bev<>
		Quit@1615UT	Quit@1530UTC

I've given quite a bit of thought to what happened at QCI in those pre-sunset and post dawn minutes, but I'm still mystified. The theory of the differing arrival angles just "made so much sense!" There are only two physical differences between the situation at Grayland and that at QCI: First, QCI is pretty much right at the edge of the auroral absorption zone. Secondly, our location at QCI was on a north-facing beach, where here at Grayland, we and the beach face due west... so, the azimuth of the arrival of the signal, relative to the beach, was somewhat different, though both approached over the ocean and hit the shore at between 30 and 45 degrees, I think. What, if anything, either of these two facts have to do with what we observed in the Queen Charlottes, I don't know. Someone definitely needs to do some more testing of the Wellbrook vs. a good Beverage at Walt Salmaniw's site in the Queen Charlottes. The Wellbrook Array was outstanding during and long after dawn at Grayland, most probably in the early September trials and very certainly those in late October.

The results of the second Grayland trip simply reconfirmed the findings of the first trip. The Wellbrook Array took up far less real estate and performed as well or better than the Beverages. Where the superiority of the Wellbrook Phased Array was VERY apparent was on the channels where the 9 and 10 kHz spacing coincide: 540, 630, 720, 810, etc. In most instances, the far superior F/B ratio of the Array was very useful. Also, most of the IBOC noise apparent on the Beverages simply disappeared on the Array. I'll not be putting up Beverages again at Grayland.

DXing Performance: Orcas Island, WA, Mid-August to Mid-November 2007

The first question to be addressed on Orcas Island was whether there were any problems with the Wellbrook Array operating in an intense RF environment. Orcas Island sits at the top of Puget Sound, on the Canada/US border, halfway between Vancouver and Victoria, BC. Greater Vancouver contains eight 50 kW, three 25 kW and one 10 kW MW transmitters, all about 20 miles of open sea from my antennas. Victoria sports two 10 kW. stations that really seem more powerful than 10 kW. In a full season, I did not notice any problems with overloading, etc. when using the lightly amplified Wellbrook.... It behaved exactly as it should. Other DXers in even more intense environments may find differing results, but it darn sure worked well for me!

During the Fall Season, 2007 in the Pacific NW, I also compared the Wellbrook Phased Array to my "ultimate" home antenna: two giant EWEs (70' x 100' x 70') on Orcas Island. One of these EWEs points at 310 degrees toward the East Asian Coast and the other points at 260 degrees, toward Australia. I installed the 2-loop Wellbrook Phased Array in parallel with the 310 degree Asian Giant EWE, but northwest of it, so there was no real chance of interaction between the two.

My A/B comparisons were between the NW EWE and the NW array. My general impression over the season was that the Array slightly outperformed the single giant EWE on weak Asian signals that were out in the open. Adequate grounding of the EWEs is very important to their performance, as is the reflective quality of the near field ground. Both are somewhat problematic on my solid rock mountainside site, so I converted the NW EWE to a Conti Super Loop which operates independently from ground. The change from EWE configuration to Super Loop may have produced a slight improvement of back-side rejection on the lower portion of the band.

In comparing the two antennas over about a week of DXing Asian stations, the Array continued to be ever so slightly better than the Super Loop on single Asian signals out in the open. Where the difference in the two antennas was striking was on 9 kHz channels that were co-channel or only one kHz. off of regional 10 kHz. channels. Here the significantly superior F/B ratio of the Array meant that there was usually really no comparison. The DX was always significantly better on the Array. The

same was true, of course, for most co-channel situations or when needing to shed backside IBOC noise.

During the International MW phase of the testing, I did try phasing the two giant EWEs together using a Misek/Lankford phaser and comparing the result to that from the Array. In that situation, there was almost no difference that my ear could detect between the two systems, almost all of the time. There were a few test situations where one system out performed the other, but not many. The major difference – and very important to me – was that the broadband design of the Wellbrook Array required little to no retuning right across the dial, where the two phased loops, using conventional phasing, required almost constant readjustment as one tried to hop around the band.

Being very internationally-oriented and having access to beach-side DXing, I have not done domestic MW DXing since early 1960, the last of my early stint in the MWDX hobby. However, it seems to me that the Wellbrook Phased Array is particularly well-suited for domestic, co-channel DXing, especially in its full blown four-loop configuration. Since the initial Beta test unit was limited to a two-loop array, I decided to try to DX Alaskans to my Northwest for a couple of weeks to test the antennas. Most Northwestern DXers have noted that Alaskans are particularly difficult to log from western Washington, especially given the relatively short distances involved. This may be attributable to the proximity of the auroral belt, or it might have to do with the fact that almost all frequencies that have Alaskans on them also sport one or more stations in Washington, Oregon or California. Over the years, I'd logged and QSLed 7 Alaskan Stations from Orcas, stations located primarily in Anchorage or in the southern Alaskan Panhandle which extends down toward NW Washington.

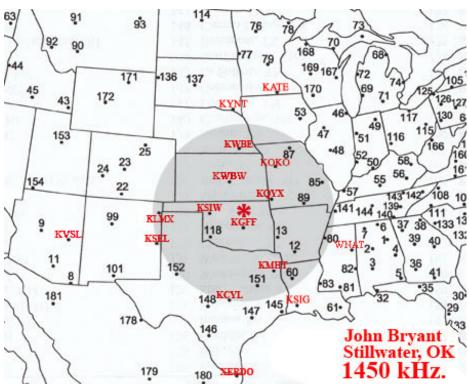
In just over a week of DXing, under good conditions, I added nine new Alaskans to my logbook. Over half of these were in far western Alaska: Sand Point, Dillingham, Bethel, McGrath, and both stations in Nome. In most cases, I compared the reception on the Wellbrook Array against NW giant EWE and against the two EWEs phased together. I would not have received *any* of those nine new Alaskan stations using the NW giant EWE by itself! On a station-by-station basis, I would have received most, but not all, of the new Alaskans using the two giant EWEs and the Misek-Lankford phaser. HOWEVER, the broadband design of the Wellbrook allowed me to bounce around the dial, checking for all needed Alaskans in about the time that I could laboriously phase the pest stations on one channel with the EWEs.

I'll not be taking down my two giant EWE/Super Loops. They cost too much and were far too difficult to erect in the tops of carefully selected 90 foot Douglas fir trees; its always nice to have a second antenna to try in tough situations. However, I'll be using the Wellbrook Phased Array here on Orcas, as my primary antenna, for the foreseeable future.

THE FOUR-LOOP ARRAY: Winter-Spring 2008

In late November 2007, just as we returned to Oklahoma, I received a pre-production control unit and an additional two ALA-100 head units so that I could test the full four-loop version of the antenna. Since I expected to have little time for live DXing during our stay in Oklahoma, I decided to join the Graveyard DX Community and test the array nightly over the next 6 months. Modern Graveyard DXing, as practiced in North America, focuses on the six "Local" or Graveyard MW Channels in North America (1230, 1240, 1340, 1400, 1450 and 1490) with the goal being to hear and record as many of the hundreds of "local" stations as possible. The general technique used by most "Gravediggers" is using hourly timed recordings made at the top-of-the-hour throughout each night. These recordings are then reviewed very carefully to attempt to tease out station identification from within the muck or "gumbo" created by so many 1 kW. non-directional stations broadcasting simultaneously on a single frequency. Most GY specialists use directional antennas (EWEs, loops, etc.) or phasing to try to enhance part of the gumbo, while suppressing non-wanted stations.

It seemed to me that difficult environment was perfect to use to assess the pattern shape, front-to-back ratio and general null stability aspects of the Wellbrook Array. The 1450 kHz. map below, based on the NRC Night Time Pattern Book (highly recommended), is an indication of the RF environment and my success during the 6-month trial. Please note that there are 16 stations on 1450 within the 600 km/385 mile "Easily Heard" zone (in gray above) and 76 stations on 1450 kHz. within a circle of 1200 km/750 miles that should have been possible, were they the only station on that channel.



Since there was not a simultaneous effort in parallel using a "normal" antenna, there is really no way to say definitively, just how many more stations the Wellbrook Array allowed me to hear during the six month test. My semiinformed gut feeling is that the Wellbrook Array doubled or tripled my station count over the test period. My listening pattern was to follow the "one-week per channel" sequence used by the GY internet group and, within the week assigned to, say, 1450 kHz., spend two days looking North, followed by two days

looking West, then South with the least interesting direction being only given a one day look during that cycle. Over the six months, then, each frequency received one month or about 350 TOH recordings.

While there is no way to say just how many stations I gained by using the Wellbrook, I did learn a number of things applicable to assessing this antenna. First and most importantly, in about 2000 recorded top-of-the-hours over the six months and the logging of over 120 separate stations on the six Graveyard frequencies, I did NOT ONCE hear a DX station off the back 180 degrees of the array, even as a sub-dominant. That finding is quite amazing to me, especially since I set the Phase and Balance controls once per week, and did not always remember to do that! In Graveyard DXing, the only short-coming (if it is such) of the Wellbrook Array is the breadth of the front lobe. DXing on the Graveyard channel, with a gazillion local 1 kW stations ringed around the horizon, sometimes the dominant station on a particular recording was almost 90 degrees off the pattern center. Having a narrower pattern would be better, but being given up to 4 choices of different 180 degree front lobes is really quite wonderful in itself. Interestingly, I'm sure that some of the energy from the backside was adding to the muck that often exists on these over-crowded channels.... but never did the backside punch through, no matter the propagation... not once. That is simply fabulous.

FINAL ASSESSMENT

The Wellbrook Phased Array is not a magic antenna nor is it likely to be the best antenna for every imaginable situation found in MW DXing. However, in my judgment, it is a real step forward and is, I fervently hope, the first of a new generation of phased array antennas designed for MW DXing. I particularly look forward to using the full four-loop version of the array for active, real-time domestic (co-channel) DXing, especially from the center of the Continent. There, the ability to rotate the near-equivalent of a one-wavelength Beverage through a full 360 degrees ought to be truly awesome.

While those of us operating a four-loop array might wish for a narrower front lobe, the current design seems an excellent choice for most DXers. The wide front lobe will enable DXers to initially cover virtually the entire horizon with a 2-loop set, while still taking advantage of the superb F/B ratio and the very deep and *stearable* rear null. My guess is that most Wellbrook customers will start out with a two-loop version and add the third and fourth loop only after several seasons.

Strong Points:

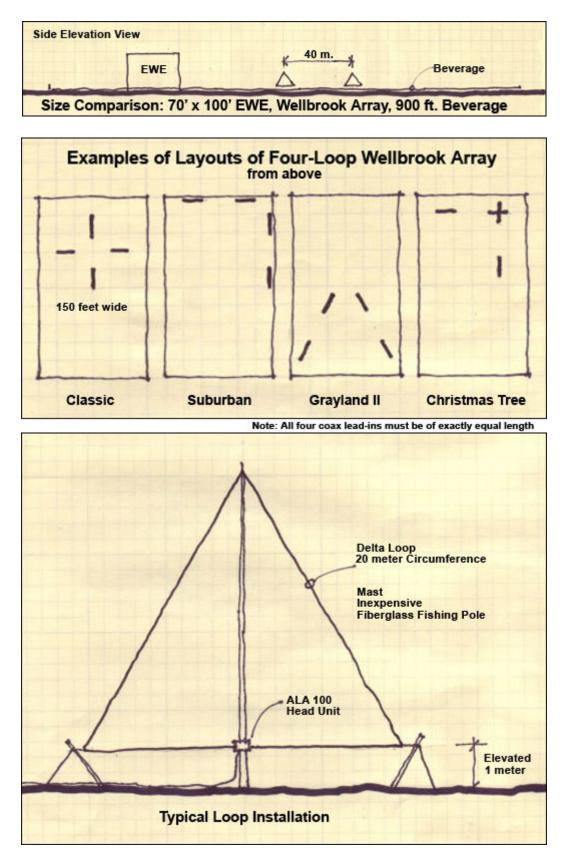
- More than adequate sensitivity
- Excellent F/B ratio with no requirement for grounding
- Broadband Design: almost a set-and-forget design for DXing the full band without adjustment. This broadband capability may be particularly important for the growing number of DXers using recording SDRs to "scoop up" wide swaths of the band for future careful review
- Relative small antenna size and low visual impact when compared to other MW antennas with similar capability
- Ability to reverse the pattern 180 degrees with the flip of a switch. This was handier in real world DXing than I ever imagined.
- Very broad front lobe and rear null (may also be a weakness, according to the situation.)
- Flexible layout of each pair of the four-loop version
- Commercially available on a "made to order" basis. Although very ingenious members of the hobby can probably replicate most, if not all of the capabilities of the Wellbrook Phased Array, those of us lacking time or possibly the skills to do so will now have ready access to this type of antenna.

Weak Points:

- Rigid spacing requirement between the two Delta loops in each pair (35-40 meters.) This is inherent in the broadband design of the array, but may be difficult or impossible for some DXers to achieve in the direction desired.
- Very broad front lobe (may also be a strength, according to the situation.)
- Some DXers may prefer a fine tuning control or vernier knob on the Balance control.
- Cost. Given the weakening dollar and the very high cost of goods and services in Wellbrook's home economy (Britain), I fear that this antenna will be quite costly. I do believe that the basic unit will sell as a control box and two ALA100 loop heads, then easily upgradeable to four loops at a later date. That may help. The design requirement that mandates all coax lead-ins be of equal length can be a bit expensive, as well.

A final comment on the relative effectiveness of Beverages and the Wellbrook Phased Array: I'm still convinced that the Beverage is, potentially, "the better antenna." At Grayland we are quite restricted in the lengths and directions that we can run Beverages. We are also faced with an almost impossible task to properly terminate (ground) the far end of the Beverages. The land is pure sea sand and, for most of the times that we are there, the water table is fairly low. Also, there is not room to use a 1/4 wavelength wire termination. I'm personally convinced that it is nearly impossible to get a good F/B ratio with a Beverage at Grayland or similar sandy beach sites. However, if we could erect near-perfect Beverages in the 2000 to 2500 foot range at Grayland *and properly terminate them*, I remain convinced that they would outperform any other antenna, period. Until that perfect seaside Beverage site comes along, with a magical method of grounding at the far end, I'm gonna remember that a Wellbrook two-loop array is only 150 feet long and requires no grounding at all.

APPENDIX



NORTH AMERICAN NEWS

with Barry Davies

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

Welcome to another round up of what's been happening on the North American AM dial. May I express my gratitude to the organisations which make this resume possible? Thanks this month to:-AMlogbook.com, IRCA, ABDX. NERW, KOJE, DX-midAMerica and Indianaradio.net









- 880 CHQT Edmonton AB. The station drops the oldies format and is now all news with the slogan "News 8-80."
 800 CKDU A last NS This life and the static last static last
- 900 CKDH Amherst NS. This lite rock station has applied to move to 101.7 FM
- **920 WDMC** Melbourne FL. New call is not WTIR, apologies. Format still Catholic religious teaching
- 920 CJCH Halifax NS. This oldies station is has left 920 and is now on 101.3 FM only!
- 940 CINW Montreal QC. Drops news talk and switches to oldies. The station slogan is "AM 9-40 Montreal's Greatest Hits. The station still runs AM Coast to Coast from Midnight Eastern. Their new website is @ http://940hits. com. (Thomas Anderson)
- **980 CKRU** Peterborough ON. This oldies station has got the OK to move to FM but not to 96.7 FM which is taken already!
- **1200 WCHB** Taylor MI. Format flips from talk to black gospel.
- **1380 KRKO** Everett WA. This ESPN sports station should be 50kW by year end. (SW)
- 1420 CKPT Peterborough ON. The station has moved to FM. (Steve Whitt)
- 1600 WLAA Winter Garden FL. New calls ex WOKB. Now Regional Mexican ex gospel.
- **1620 WPNT** South Bend IN. New calls ex WWLV. Format flips from love songs to all news centred on CNN Headline News. The new slogan is "Real News, real fast 16-20."
- **1650 KYHN** Fort Smith AR. (ex 1650 KWHN) This news talk station is **off air**. The transmitter was destroyed in a recent flood. There are no immediate plans to reinstate the 1650 operation!
- **1680 WOKB** Winter Garden FL. New calls ex WLAA. Format flips from Spanish to Gospel Music. ID now runs "WOKB Winter Garden Orlando and WKIQ Eustis Leesburg." Station slogan "The all new smooth sounds of gospel on 16-80 AM."

Here is a general round up of what's been happening on the North American AM dial courtesy of our colleagues at the **International Radio Club of America**.

Broadcasting information for April

Editor: Robert Wien - 575 N Roadrunner Pkwy, A 2103 - Las Cruces, NM 88011-2025 E-mail: wienbob@aol.com phone: 575-532-5005 Ham calls: KG6RJW

PUBLIC LISTINGS COURTESY OF THERADIOJOURNAL.COM AND 100000WATTS.COM:

790/1510: KGA 1510 Spokane WA and KJRB 790 Spokane WA swap formats Monday 4/7, as KGA becomes sports "The Fan 1510" and KJRB flips to news-talk.

920/1300: WMEL 920 Melbourne FL flips from talk to Catholic religion; the talk			
format moves up the dial to WTIR 1300 Cocoa FL, which will pick up the			
WMEL calls as well.			
1190: KFXR Dallas TX flips from classic country "Cowboy 1190" to all-news			
"CNN 1190."			
1240: KSAC Sacramento CA flips from progressive talk to black gospel "Rejoice			
1240."			
1310: KTCK Dallas TX is at reduced power after a storm blew down 3 of its 4			
towers.			
1400/1590: KKZZ 1590 Ventura CA and KUNX 1400 Santa Paula CA swap (back)			
calls and formats, with 1590 becoming KUNX "Radio Formula" Spanish			
news-talk and 1400 becoming KKZZ with talk.			
1450/1550: WVAB 1550 Virginia Beach VA and WBVA 1450 Bayshore VA have gone			
silent after a vandal toppled their shared tower.			

Broadcasting information for May

		CALL	LETTER CHANG
FREQ	OLD CA	LL CITY	NEW CALL
820	new	Wilton, MN	WBKK
850	WNTJ	Johnstown, PA	WKGE
880	WCQV	Moneta, VA	WSLK
950	KSWD	Seward, AK	KSEW
970	WZQK	Brandon, MS	WJFN
1050	WRFS	Alexander City, AL	WBNM
1120	new	Smithville, GA	WUCN
1120	new	Little Falls, NY	WKAJ
1260	WTBZ	Grafton, WV	WVUS
1300	WTIR	Cocoa Beach, FL	WMEL
1350	KGHF	Pueblo, CO	KDZA
1430	new	Wasilla, AK	KMBQ
1450	new	Milford, PA	WQCD
1490	WPRR	Johnstown, PA	WNTJ

CALL LETTER CHANGES

FORMAT CHANGES

FREQ	CALL	CITY	OLD INFO	NEW INFO
700	WEEL	Dothan, AL	silent	black gospel
760	WCIS	Morganton, NC	silent	southern gospel
830	KLAA	Orange, CA	talk	sports
880	WSLK	Moneta, VA	southern gospel	oldies
900	KPYN	Atlanta, TX	contemporary Xtian	talk
960	KOVO	Provo, UT	sports	regional Mexican
980	WTIX	Winston-Salem, NC	black gospel	sports
990	WRFM	Muncie, IN	silent	religious teaching
1050	WRFS	Alexander City, AL	religious teaching	silent
1060	WKYO	Caro, MI	classic country	oldies
1060	WGSB	Mebane, NC	regional Mexican f	ormat not available
1090	WCZZ	Greenwood, SC	black gospel	sports
1100	WZFN	Dilworth, MN	country	silent

1140 KLTK South West City, MO silent regional Mexican 1150 KCCT Corpus Christi, TX regional Mexican talk 1180 WZQZ Trion, GA talk classic country 1200 new Bon Air, VA format not available new 1230 WFAY Fayetteville, NC regional Mexican sports 1230 WOLH Florence, SC regional Mexican silent 1240 KWAK Stuttgart, AR sports silent 1250 WHNY McComb, MS talk silent 1260 WHYM Lake City, SC regional Mexican silent 1260 WVUS Grafton, WV CHR adult contemporary 1270 WKBF Rock Island, IL regional Mexican Spanish religion 1290 KALM Thayer, MO news/talk southern gospel 1350 WNNG Warner Robins, GA adult standards talk 1360 KBYO Tallulah, LA black gospel silent 1380 WPYR Baton Rouge, LA talk silent 1380 WTOB Winston-Salem, NC regional Mexican tropical 1400 WBTH Williamson, WV oldies talk 1440 WGLD Red Lion, PA silent sports 1450 KLYW Lockwood, MT silent news/talk 1450 WQNT Charleston, SC news sports 1480 WRLM Irondale, AL Spanish silent 1480 WVSG Neon, KY southern gospel silent 1490 WSYL Sylvania, GA classic rock oldies 1490 KXLQ Indianola, IA Spanish silent 1490 WPRR Johnstown, PA sports news/talk 1500 WGEN Geneseo, IL news/talk silent 1510 WRRD Waukesha, WI sports Spanish sports 1520 WDMN Rossford, OH format not available news/talk/sports 1550 KDCC Dodge City, KS Spanish news 1550 WMSK Morganfield, KY classic country country 1670 KNRO Redding, CA sports Americana

FACILITY AND PARAMETER APPLICATIONS

540	WGOP	Pocomoke City, MD	500/243 ND to 1000/1000 DA-2
540	WXNH	Jaffrey, NH	250/330 DA-2 to 220/430 DA-2
550	WASG	Atmore, AL	10000/143 ND to 2500/19 ND
630	WDGY	Hudson, WI	1000/2500 DA-2 to 2500/2500 DA-2
648	WVUV	Leone, AS	10000/10000 ND to 5000/5000 ND
670	KBTB	Las Vegas, NV	10000/600 DA-2 to 30000/600 DA-2
670	KIRN	Simi Valley, CA	5000/3000 DA-1 to 20000/3000 DA-2
680	WRGC	Sylva, NC	1000/250 DA-N to 5000/210 DA-N
700	WDMV	Walkersville, MD	5000 DA-D to 50000 DA-D
720	WVOA	Dewitt, NY	2500/390 DA-N to 10000/390 DA-2
770	new	Nassau Village-Ratlif	f, FL 50000/410 DA-2 to 50000/500 DA-2
800	KINY	Juneau, AK	10000/7800 ND to 10000/7600 ND
830	KOTC	Kennett, MO	10000 ND-D to 10000 ND
830	WFGM	Sandy Springs, GA	50000/2400 DA-2 to 50000/450 DA-2
860	KMVP	Phoenix, AZ	1000/1000 DA-N to 940/1000 DA-N
860	WAMI	Opp, AL	1000/47 ND to 250 ND

920 WURA Quantico, VA 970 KHVN Ft. Worth, TX 990 WRFM Muncie, IN 1010 WOLB Baltimore, MD 1020 KCKN Roswell, NM 1050 KTCT San Mateo, CA 1050 WDVM Eau Claire, WI 1050 WFED Silver Spring, MD 1060 WILB Canton, OH 1080 WHOO Kissimmee, FL 1150 KIMM Rapid City, SD 1160 WCXI Fenton, MI 1180 KYES Baxter, MN 1190 WSDE Cobleskill, NY 1210 KEBR Rocklin, CA 1210 KGYN Guymon, OK 1210 WDGR Dahlonega, GA 1230 KYPA Los Angeles, CA 1250 KCST Florence, OR 1270 WTJZ Newport News, VA 1290 WCHK Canton, GA 1320 KSDT Hemet, CA 1330 KXLJ Juneau, AK 1350 KTIK Nampa, ID 1360 WWWJ Galax, VA 1370 KHNY Big Horn, WY 1380 WGYV Greenville, AL 1390 WBLL Bellefontaine, OH 1430 WEEF Highland Park, IL 1440 WNYG Babylon, NY 1460 WPON Walled Lake, MI 1480 KLVL Pasadena, TX 1480 WSPY Geneva, IL 1500 KIEV Culver City, CA 1510 Spokane, WA KGA 1510 KSPA Ontario, CA 1520 Savannah, GA new 1540 KGBC Galveston, TX 1540 WGRK Greensburg, KY 1560 KLTI Macon, MO 1570 WBGX Harvey, IL 1570 WZQZ Clarksville, TN 1590 WGBW Two Rivers, WI 1600 WAAM Ann Arbor, MI 1600 WMCW Harvard, IL

2000/970 DA-2 to 7000/970 DA-2 1000/270 ND to 400/215 ND 250/1 DA-2 to 350 DA-D 250/30 ND to 1000/30 ND 50000/50000 DA-2 to 50000 DA-D 50000/10000 DA-2 to 50000/50000 DA-2 1000/500 DA-1 to 860/430 ND 3500/44 ND to 10000/44 ND 5000 DA-D to 15000 DA-D 19000/190 DA-2 to 27000/2000 DA-3 5000/500 DA-N to 5000/400 DA-N 1000/1000 DA-1 to 15000/1000 DA-2 35000/5000 DA-N to 50000/5000 DA-3 1000 ND-D to 1000/20 ND 5000/500 DA-D to 5000/1500 DA-2 10000/10000 DA-N to 50000/10000 10000 ND-D to 10000 ND 1000/1000 ND to 1000/1000 DA-2 1000/68 to 900/37 1500/900 DA-N to 15000/1800 DA-2 5000/500 DA-2 to 10000 ND-D 500/300 DA-2 to 230/285 DA-2 10000/3100 ND to 10000/3000 ND 5000/600 DA-N to 25000/600 DA-N 5000/31 ND to 2200/1400 DA-3 10000/250 DA-N to 10000/430 DA-N 1000/89 ND to 250 DA-2 500/81 ND to 960/22 ND 1000/29 DA-2 to 1000/250 DA-2 1000/38 ND to 1000/189 DA-N 1000/760 DA-2 to 670/175 DA-2 3000/500 DA-2 to 5000 DA-D 1000/500 DA-2 to 400/300 DA-2 50000/4300 DA-2 to 49000/5000 DA-2 50000/50000 DA-2 to 15000 DA-2 10000/1000 DA-2 to 50000/6000 DA-3 50000/700 DA-2 to 50000/780 DA-3 2500/250 DA-2 to 5000/80 ND 1000 ND-D to 3500 ND 1000 ND to 1500/44 DA-2 1000/500 DA-2 to 1100/500 DA-2 2500/10 ND to 2000 ND-D 1000/33 ND to 10000/200 DA-2 5000/5000 DA-2 to 15000/15000 DA-2 500/18 ND to 35000 DA-D

FACILITY AND PARAMETER GRANTS

540	WWCS	Canonsburg, PA	5000/500 DA-2 to 3800 DA-D
620	KJOL	Grand Junction, CO	5000/79 ND to 5000/320 DA-N
630	WJNO	San Juan, PR	5000/5000 DA-1 to 5000/5000 DA-2

640 WMEN 660 KGDP Orcutt, CA 770 WEW St. Louis, MO 770 WWCN North Myers, FL 780 KCEG Pueblo, CO 790 KWSW Eureka, CA 790 WRMS Beardstown, IL 800 KPDQ Portland, OR 810 WYRE Annapolis, MD 860 WFMO Fairmont, NC 880 WMDB Nashville, TN 890 KLFF Arroyo Grande, CA 900 KTIS Minneapolis, MN 910 WAVL Apollo, PA 910 WFDF 930 WHLM Bloomsburg, PA 930 WSFZ Jackson, MS 940 KICE Bend, OR 940 WHIT South Haven, MI 960 KOVO Provo, UT 980 KKMS Richfield, MN 980 WHAW Weston, WV 990 KATD Pittsburg, CA 990 WLEE Richmond, VA 1000 WWOF Walhalla, SC 1040 WZNA Moca, PR 1050 WJOK Kaukauna, WI 1080 KGVY Green Valley, AZ 1080 WALD Walterboro, SC 1080 WOAP Owosso, MI 1090 KEXS Excelsior Springs, MO 1000 ND-D to 3000 DA-D 1090 KUCU Farmington, NM 1110 WOMN Franklinton, LA 1120 KJSA Mineral Wells, TX 1120 WTWZ Clinton, MS 1130 KRUD Honolulu, HI 1130 KTMR Edna, TX 1140 WRMQ Orlando, FL 1150 KCKY Coolidge, AZ 1150 WDEL Wilmington, DE WJBO Baton Rouge, LA 1150 1160 WJFT Tryon, NC 1170 WPLX Germantown, TN 1170 WWTR Bridgewater Township, NJ 243 ND-D to 600 ND-D 1190 KRFT De Soto, MO 1190 WJES Saluda, SC 1200 WRTO Chicago, IL 1230 KXO El Centro, CA 1230 WESX Salem, MA 1250 KBSZ Wickenburg, AZ

Royal Palm Beach, FL 7500/460 DA-2 to 50000/25000 DA-2 10000/1000 DA-2 to 8000/6000 DA-2 1000 ND-D to 10000/200 DA-2 10000/1000 DA-2 to 10000/630 DA-2 3000/760 DA-2 to 1400/490 DA-2 5000/112 ND to 5000/750 DA-N 500/59 DA-2 to 500/55 DA-2 1000/500 ND to 600 DA-N 250 ND-D to 240 DA-D 1000/12 to 50000/740 DA-2 2500 DA-D to 2500/2 ND 5000/5000 DA-N to 12000/12000 DA-2 25000/300 DA-2 to 50000/500 DA-2 5000/69 DA-2 to 6700/700 DA-2 Farmington Hills, MI 50000/19000 DA-2 to 50000/25000 DA-2 1000/18 ND to 2000/18 ND 5000/5000 DA-N to 3800/3100 DA-N 10000/60 DA-2 to 10000/95 DA-2 1000/5 DA-2 to 300 DA-D 5000/1000 DA-N to 50000/940 5000/5000 DA-1 to 3500/3500 DA-2 1000/50 ND to 25000/49 ND 5000/5000 DA-2 to 10000/5000 DA-2 1000/13 ND to 4000/2000 DA-2 1000 ND-D to 5000 ND 5000/245 DA-D to 9000/245 DA-2 1000/500 DA-1 to 5000/1000 DA-2 1000 ND-D to 1400 ND-D 2500 ND-D to 9000 ND 1000 ND-D to 50000 DA-D 1500/250 DA-2 to 10000/250 DA-2 1000 ND-D to 50000/250 DA-3 250 ND-D to 20000 DA-D 7500 ND-D to 10000 ND 500/500 ND to 330/330 ND 10000 DA-D to 25000 DA-2 5000 ND-D to 4600/245 ND 5000/1000 DA-2 to 5000/190 DA-2 5000/5000 DA-2 to 10000/5000 DA-2 5000/5000 DA-1 to 15000/5000 DA-2 10000/500 DA-N to 25000/500 DA-N 1000 ND-D to 5000/26 DA-3 10000/22 DA-2 to 10000/6500 DA-2 350 ND-D to 10000/4 ND 10000/1000 DA-2 to 20000/4500 DA-2 1000/1000 ND to 830/1000 ND 1000/1000 ND to 450/450 ND 350/100 ND to 320/50 ND

1250 KZDC San Antonio, TX 1260 KIMB Kimball, NE 1270 KTFI Twin Falls, ID Charlevoix, MI 1270 WMKT 1270 WQKR Portland, TN 1270 WXGO Madison, IN 1280 WWPG Tuscaloosa, AL 1290 KKAR Omaha, NE 1290 WOWZ Appomattox, VA 1310 WCCW Traverse City, MI 1310 WJUS Marion, AL 1360 WPTT McKeesport, PA 1370 KGEN Sanger, CA 1370 WGHC Clayton, GA 1380 KOSS Lancaster, CA 1380 KRCM Beaumont, TX 1380 WFNW Naugatuck, CT 1390 WISK Americus, GA 1390 WLCM Charlotte, MI 1400 KHCB Galveston, TX 1410 WEGO Concord, NC Elgin, IL 1410 WRMN 1420 WATB Decatur, GA 1430 WBLR Batesburg, SC 1430 WHAN Ashland, VA 1440 WJJL Niagara Falls, NY WWKU 1440 Glasgow, KY 1450 KOBO Yuba City, CA 1450 KQYX Joplin, MO 1450 KWES Ruidoso, NM 1460 KHOJ St. Charles, MO 1460 WJTI Racine, WI 1460 WNPL Golden Gate, FL 1470 KFMZ Brookfield, MO Huntington, WV 1470 WEMM 1480 WKGC 1480 WRLM Irondale, AL 1490 KGBA Calexico, CA 1510 WBSG Lajas, PR WXOZ 1510 Highland, IL 1520 WEXY Wilton Manors, FL 1520 WKVQ Eatonton, GA 1520 WRSL Stanford, KY 1530 WMBE Chilton, WI 1530 WRPZ Poplarville, MS 1550 KKJY Albuquerque, NM 1550 KWBC Navasota, TX 1560 KGOW Bellaire, TX 1560 KKAA Aberdeen, SD 1560 WRSJ Bayamon, PR

1000/1000 DA-N to 2000 DA-2 1000/112 ND to 50000/110 DA-D 5000/1000 ND to 10000 ND-D 27000/5000 DA-N to 50000 ND-D 1000 DA-D to 500/29 DA-2 1000/58 DA-2 to 330 DA-D 5000/500 DA-N to 7000/25 ND 5000/5000 DA-N to 50000/5000 DA-2 6000/17 ND to 10000/17 ND 15000/7500 DA-2 to 50000/7500 DA-2 5000/34 ND to 1100/16 ND 5000/1000 DA-N to 7000 DA-D 710/72 ND to 3800/102 DA-D 250 ND-D to 5000 ND 1000/20 DA-D to 1000/11 DA-2 1000/127 DA-1 to 250/69 ND 5000/500 DA-2 to 3500/350 DA-2 1000 ND-D to 950/25 ND 5000/70 DA-1 to 5000/4500 DA-2 1000/1000 ND to 1000/1000 DA-2 1000/182 ND to 1000/68 ND 1000/500 DA-N to 1000/1300 DA-N 10000/51 DA-2 to 50000/160 DA-D 5000/142 ND to 4500/140 ND 1000/31 ND to 50000 DA-D 1000/55 ND to 5000/190 DA-2 425/30 ND to 1000/1000 ND 500/1000 ND to 160/500 ND 1000/1000 ND to 940/940 ND 1000/940 ND to 1000/860 ND 5000/85 DA-D to 5000/350 DA-2 500/62 ND to 350/49 ND 850/340 DA-2 to 7000/2000 DA-2 500/20 DA-1 to 5000/50 DA-2 5000/72 ND to 22000/9 ND Panama City Beach, FL 500/87 ND to 5000/34 ND 5000 ND-D to 5000/28 ND 1000/1000 ND to 500/500 ND 1000/1000 DA-1 to 1000/1000 DA-2 1000 DA-D to 5000 DA-D 3500/250 DA-N to 5000/800 DA-N 1000 ND-D to 10000 ND 500 ND-D to 2000/27 ND 250 ND-D to 4500 ND-D 10000 ND-D to 5000 DA-2 5000/120 ND to 5000/27 ND 250/26 ND to 1400/24 DA-D 50000/1000 DA-D to 1000 DA-2 10000/5000 DA-2 to 10000/10000 DA-2 5000/750 ND to 10000/5000 DA-2

1570	WTFU	Riverhead, NY	1000/500 DA-2 to 5000/1500 DA-2
1580	WANB	Waynesburg, PA	720 ND-D to 5000 ND
1580	WKKD	Aurora, IL	250/250 DA-2 to 1400/1000 DA-2
1580	WNTF	Bitholo, FL	2100 DA-D to 10000 DA-D
1580	WTTN	Watertown, WI	1000/6 ND to 5000/4 DA-D
1600	KLEB	Golden Meadow, LA	5000/250 DA_2 to 7500/250 DA-D
1600	KOPB	Eugene, OR	5000/1000 DA-N to 5000/1000
1600	WCGO	Chicago Heights, IL	1000/23 DA-2 to 10000 DA-D
1600	WLAA	Winter Garden, FL	2200/35 ND to 4000 DA-D

PUBLIC LISTINGS COURTESY OF THERADIOJOURNAL.COM AND 100000WATTS.COM:

- 850: WNTJ 850 Johnstown PA changes calls to WKGE, simulcasting newstalk "Edge" WWGE 1400 Loretto PA. WNTJ 850 Johnstown PA is stunting; its news-talk format has moved to WPRR 1490 Johnstown PA, which flips from sports and which will take the WNTJ calls.
- 880: WSLK 880 Moneta VA flips to oldies as "Lake Radio."
- 900: WUAM 900 Watervliet/Albany NY returns to the air with all-news, simulcasting cable news channel Capital News 9.
- 1090: WCZZ 1090 Greenwood SC flips from black gospel to Sporting News sports as "The Ticket."
- 1120/1110: KJSA 1120 Mineral Wells TX has moved to 1110, testing its new Fort Worth/Dallas signal for its new business radio format.
- 1140: KSFN 1140 Las Vegas NV flips from male-oriented talk "Spike 1140" to "SportsRadio 1140," using Sporting News Radio along with Opie & Anthony and Dan Patrick.
- 1150: KCCT 1150 Corpus Christi TX flips from regional Mexican "Conjunto" to English-language talk/sports.
- 1230: WFAY 1230 Fayetteville NC flips from regional Mexican "La Tremenda" to ESPN sports, simulcasting WCIE 1450 Spring Lake NC.
- 1240: KWAK 1240 Stuttgart AR is off the air after suffering tornado damage to its transmitter site.
- 1250: WHNY 1250 McComb MS is silent after a copper theft at its transmitter site.
- 1450: WQNT 1450 Charleston SC flips from CNN Headline News to Fox sports.
- 1510: WRRD 1510 Waukesha/Milwaukee WI flipped from ESPN sports (now heard on sister station WAUK 540 Jackson WI) to ESPN Deportes Spanish-language sports Monday 5/5.
- 1600: WMCW 1600 Harvard IL goes silent as part of the impending upgrade of WONX 1590 Evanston IL.
- 1670: KNRO 1670 Redding CA flips from sports "ESPN 1670" to "K-Pig"

CANADIAN RADIO NEWS FOR MAY

Dan Sys- dsysca@yahoo.ca

CALL LETTER DATA

660	BC	Vancouver	CKBD	Will become C	KPK (when	flip t	o 100.5	occurs)
BRANDINGS								
600	BC	Vancouver	CKBD	Will become "	THE PEAK"	(when	flip to	100.5 occurs)

OFF THE AIR

1420 ON Peterborough CKPT Simulcast time for FM conversion expired 1420 ON Sioux Lookout CKDR-2 Simulcast time for FM conversion expired AM TO FM CONVERSIONS GRANTED 600 BC Vancouver CKBD Move to 100.5 with 2,600 watts (11,000 watts E.R.P) (will flip format from Standards to Triple A) 690 MB Pukatawagan CBDS Move to 102.5 with 200 watts (CBC Radio One) (will simulcast CBWK 100.9 Thompson) CKRU FM flip granted but applied frequency of 96.7 is 980 ON Peterborough not suitable. Must find an alternative frequency (slated to remain oldies) DENIALS 690 BC Vancouver CBU Plans to shut station down after new-cp at 88.1 signs on were rejected. Must keep 690 on the air due to coverage issues in fringe areas. PROPOSED AM TO FM CONVERSIONS 1270 OC Alma CFGT Move to 97.7 with 50,000 watts

Broadcasting information for June

CALL LETTER CHANGES

FREQ	OLD CA	LL CITY	NEW CALL
970	KNFX	Austin, MN	KQAQ
990	WLGZ	Rochester, NY	WRCI
1050	WRFS	Alexander City, AL	WBNM
1100	WZFN	Dilworth, MN	WZFG
1230	new	Smithville, GA	WUCN
1420	KQYS	Neosho, MO	KBTN
1450	WCIE	Spring Lake, NC	WFBX
1490	KRNR	Roseburg, OR	KSKR
1490	WANA	Anniston, AL	WSYA
1570	WWSZ	New Albany, IN	WNDA
1580	WXRA	Georgetown, KY	WGVN
1600	WRSL	Corbin, KY	WKFO

FORMAT CHANGES

FREQ	CALL	CITY	OLD INFO	NEW INFO
580	WBIL	Tuskegee, AL	black gospel	urban AC
810	WEUS	Orlovista, FL	oldies	religious teaching
860	WFMO	Fairmont, NC	regional Mexican	southern gospel
860	WTZX	Sparta, TN	talk	oldies
950	KAHI	Auburn, CA	oldies	talk
950	KKFN	Denver, CO	sports	format not known
950	KSFW	Seward, AK	silent	adult contemporary
970	KQAQ	Austin, MN	silent	classic country
970	WJFN	Brandon, MS	country	sports
980	new	Junction City, OR	new	format not known
990	KFCD	Farmersville, TX	black gospel	Spanish religion
1100	KQNM	Milan, NM	silent	soft AC

1110 KJSA Mineral Wells, TX 1120 new Manor, TX 1150 KREL Quanah, TX 1160 WMET Gaithersburg, MD 1240 WVOS Liberty, NY 1250 WKDL Warrenton, VA 1260 WXNT Portsmouth, OH 1270 WHEO Stuart, VA 1270 WKBF Rock Island, IL 1280 WONW Defiance, OH 1300 new Gloverville, SC 1310 WNAE Warren, PA 1320 new Keystone, CO 1330 KXLJ Juneau, AK 1340 new Wendell, ID 1350 WELB Elba, AL 1360 WKYO Caro, MI 1370 WELG Ellenville, NY 1400 WSGC Elberton, GA 1420 KBTN Neosho, MO 1440 WBLA Elizabethtown, NC 1450 WRNN Myrtle Beach, SC 1450 WTHU Thurmond, MD 1480 WSRC Fair Bluff, NC 1490 KCLA Pine Bluff, AR 1490 KQTY Borger, TX 1490 KSKR Roseburg, OR 1490 WDUR Durham, NC 1490 WIRB Level Plains, AL 1490 WSYL Sylvania, GA 1490 WWNB New Bern, NC 1570 WNDA New Albany, IN 1580 WDAB Travelers Rest, SC 1580 WXRA Georgetown, KY 1600 WTSZ Eminence, KY 1600 WULM Springfield, OH

classic country business news format not known new classic country silent adult standards Spanish talk classic hits regional Mexican classic country news/talk sports news/talk country Spanish religion format not known adult standards talk format not known new adult contemporary talk new format not known talk new format not known new classic country southern gospel classic country oldies adult standards talk talk oldies talk country oldies classic hits talk sports adult standards religious teaching oldies classic country silent sports country talk classic country sports regional Mexican Spanish religion southern gospel new classic rock oldies black gospel sports sports talk Spanish cont Xtian regional Mexican Spanish news-talk R&B oldies sports talk format not known talk

FACILITY AND PARAMETER APPLICATIONS

630 KTKK Sandy, UT 1050 KLOH Pipestone, MN 1290 WWHM Sumter, SC 1470 WLQR Toledo, OH 1000/500 DA-2 to 935/260 DA-2 9000/400 DA-2 to 9380/420 DA-2 1000/1000 DA-N to 1000/12 ND2 1000/1000 DA-2 to 1000/700 DA-2

FACILITY AND PARAMETER GRANTS

910	WUBR	Baton Rouge, LA	1000/1000 DA-1 to 1200/51 DA-2
950	WPEN	Philadelphia, PA	25000/21000 DA-N to 43000/21000 DA-2
1000	WIOO	Carlisle, PA	1000 ND-D to 5000/60 ND
1030	KWFA	Tye, TX	5000/370 DA-2 to 5000/650 DA-2

1100	WISS	Berlin, WI	1000 ND-D to 2500 ND-D
1120	WXJO	Gordon, GA	10000 ND-D to 1000 ND-D
1190	WAMT	Pine Castle-Sky Lake,	FL 5000 ND-D to 4700/230 DA-N
1230	KSIX	Corpus Christi, TX	1000/1000 ND to 720/720 ND
1240	WMFG	Hibbing, MN	1000/1000 ND to 490/490 ND
1300	KAZN	Pasadena, CA	5000/1000 DA-2 to 23000/1000 DA-2
1300	KSET	Silsbee, TX	500 ND-D to 1500/320 DA-2
1330	WEBO	Owego, NY	3500/36 ND to 5000/36 ND
1410	WEGO	Concord, MS	1000/182 ND to 1000/68 ND
1430	KLO	Ogden, UT	10000/5000 DA-2 to 25000/5000 DA-2
1460	WXOK	Baton Rouge, LA	5000/1000 DA-N to 4700/290 ND
1490	KEYG	Grand Coulee, WA	1000/1000 ND to 1000/960 ND
1490	KWOK	Hoquiam, WA	1000/1000 ND to 1000/820 ND
1510	KCKK	Littleton, CO	9500/19000 DA-2 to 10000/25000 DA-2
1530	KZNX	Creedmoor, TX	10000/12 DA-3 to 10000/220 DA-3
1530	WRPM	Poplarville, MS	10000 ND-D to 5000 DA-2
1550	WAZX	Smyrna, GA	50000/500 DA-2 to 50000/16 DA-D

PUBLIC LISTINGS COURTESY OF THERADIOJOURNAL.COM AND 100000WATTS.COM:

990: WRCI Rochester NY flips from oldies/standards "Legends" to religion. 1090: WCZZ Greenwood SC flips from black gospel to sports as "The Ticket." 1100: WZFN 1100 Dilworth MN/Fargo ND changes calls to WZFG and launches with talk as "The Flag." 1150: KREL 1150 Quanah TX is silent after its tower was destroyed in a storm. 1240: KWAK 1240 Stuttgart AR is off the air after suffering tornado damage. 1340: WALR 1340 Atlanta GA will flip to Fox sports June 23. 1360: KMNY 1360 Hurst/Dallas-Fort Worth TX flips from business talk (now on KJSA 1110 Mineral Wells TX) to "modern classic rock"/progressive talk "Retro Radio 1360." 1400: WSGC 1400 Elberton GA flips from talk to oldies; sister station WSGC-FM 105.1 Elberton GA flips from R&B/black gospel "Love 105" to country. 1480/1490/1280: KNTB 1480 Lakewood/Tacoma WA, KBRO 1490 Bremerton WA and KLDY 1280 Lacey/Olympia WA flip from Spanish religion to ESPN Deportes Spanish sports. 1490: KRNR 1490 Roseburg OR flips from classic country to ESPN sports, while KAVJ 101.1 Sutherlin OR flips from oldies "Cool 101" to ESPN sports, changing calls to KSKR and KSKR-FM, respectively. 1570: WWSZ 1570 New Albany IN/Louisville KY drops sports, changes calls to WNDA and flips to news-talk as "Indiana 1570."

1580: WXRA 1580 Georgetown/Lexington KY flips from regional Mexican "La Pantera" to R&B oldies "Groovin' 1580."

1600: WULM 1600 Springfield OH flips from talk to "Radio Maria" religion.

That just about clears my "In Tray" for the summer. Good time to sort out those antenna jobs hi! I have revamped the earthing system here. Following many recommendations I now have a coax lead in to the shack. Alas, I cannot get rid of the tick tick from a nearby electrified fence!

Darry

34

CENTRAL AMERICAN NEWS

with Tore Larsson

Frejagatan 14A, SE-521 43 Falköping, Sweden e-mail: ca-news@mwcircle.org @ +46-515-13702

Cuba

<u>570</u>	CMDC	R. Reloj, Santa Clara now has a brand new 25 kW transmitter.
740	CMKO	R. Angulo, Sagua de Tanamo, Holguín, now 10 kW
<u>840</u>	CMHW	La Doblevé, Santa Clara is now on the air with a new transmitter.
<u>1110</u>	CMKO	R. Angulo, Holguín has a new 10 kW tx All from Arnie Coro, RHC via HCDX
<u>1310</u>	CM	R. Enciclopedia, Nueva Gerona, Isla de la Juventud heard in Florida.

Terry L. Krueger via DXLD

El Salvador

1080 YSME R. CRET, San Salvador is back on the air with test transmissions. ID "Desde San Salvador, transmite Radio CRET 1080 kHz en su señal de prueba". Stig Hartig Nielsen visiting Guatemala 14.4.2008 via HCDX

Haïti

For coping with the increasing number of subscribers, and for allocating space for future services, the telephone numbering scheme has been changed by March 1st 2008 from 7 to 8 digits. A diagram of the A. J. Kuchelmeister via DXLD changes is available from http://www.conatel.gouv.ht/

Mexico

- 560 XEOC R. Chapultepec, Mexico, DF now belongs to Grupo Radio Digital Héctor García Bojorge 690 XEWW W R América, Tijuana, ex XETRA www.radio.info.com via Doug Smith via DXLD 770 XEACH R. Formula Monterrey, new ID Héctor García Bojorge via Christer Brunström
- 1350 XEQK Tropicalísima 13-50, new slogan

Héctor García Bojorge vid Christer Brunström

SOUTH AMERICAN NEWS

with Tore B. Vik

🖂 Kirkåsveien 15, NO-1850 Mysen, Norway e-mail: sa-news@mwcircle.org a +47-69891192

Argentina

<u>810</u>	R. La Gauchita – new station "no oficial" Marcelo A. Cornachioni in ConDig
<u>1380</u>	LV del Sudeste – new station. Addr: Calle 59, entre 56 y 54, Necochea, BA. Web:
	www.am1380.com.ar – E-mail: info@am1380.com.ar web
<u>1430</u>	R. Independencia – station "no oficial" is reactivated. Addr: Calle Fray Mamerto Esquiú
	2855, (B1823GBO) Remedios de Escalada, BA. Tel: 11 4225 3198. Web:
	www.radioindependencia.com.ar - E-mail: radioindependencia@yahoo.com.
	Marcelo A. Cornachioni in Con Dig
<u>1560</u>	R. Antena Lobos - new station from Lobos - Provincia de Buenos Aires. Web:
	www.elmundodelaradio.com
<u>1610</u>	AM Fortaleza – ex 1520. Addr: Calle Independencia 646, Ezeiza
	Marcelo A. Cornachioni in ConDig
<u>1620</u>	R. AM 1620, Mar del Plata – ex R. Universo (SAND 17.12.2007) Paul Crankshaw

1650 New Argentinean station on 1650 kHz. As the first to report this new Argentinean station is Hasse Mattisson, Vaxjo, Sweden. Since May 14th he has observed a Spanish speaking station on 1650 kHz (see below) and this morning he got the identification: ANTARES AM 1650, West Buenos Aires area.

Bolivia

President Evo Morales inaugurated the 28th station in the Bolivian community radio network on the 10th March, this time in Qaqachaca, municipality of Challapata in Eduardo Abaroa province, located 140 kilometers south of Oruro. The frequency of the station is <u>1040</u> kHz. hoybolivia.com via finndxer

The list of AM community stations launched 2006-2007: 1030 Colquechaca, Provincia José María Linares, Departamento de Potosí. 1030 Orinoca, Provincia Sud Carangas, Departamento de Oruro. 1030 Riberalta, Provincia Vaca Díez, Departamento de Beni. 1030 Totora, Provincia Carrasco, Departamento de Cochabamba. 1030 Mojocoya, Provincia Zudáñez, Departamento de Chuquisaca. 1040 San Julián, Provincia Ñuflo de Chávez, Departamento de Santa Cruz. 1040 Camiri, Provincia Cordillera, Departamento de Santa Cruz. 1040 Villamontes, Provincia Gran Chaco, Departamento de Tarija. 1040 Tarabuco, Provincia Yamparáez, Departamento de Chuquisaca. 1050 Independencia, Provincia Ayopaya, Departamento de Cochabamba. 1050 Sabaya, Provincia Sabaya, Departamento de Oruro. 1050 Caizad, Provincia Chayanta, Departamento de Potosí. 1080 Caranavi, Provincia Caranavi, Departamento de La Paz. Iaprensa.com.bo via finndxer

Brazil

<u>610</u>	ZYK685	R. Presidente Venceslau (SP113) – ex 1130	web
<u>640</u>	ZYJ262	R. Tupi, Londrina (PR08) – ex R. Auri Verde	DX-Clube do Paraná
<u>650</u>	ZYK518	R. CBS, Santos (SP22) – ex R. Tupi – ex R. News	DX-Clube do Paraná
<u>790</u>	ZYJ789	R. Vitória, Videira (SC14) – ex R. Videira	Cláudio Moraes
<u>820</u>	ZYH752	R. 820 AM (GO16) – ex R. Jornal de Goiás	web
<u>930</u>	ZYH605	R. Cetama, Barbalha (CE18) – ex R. Salamanca	web
<u>950</u>	ZYI782	R. Planalto (PE13) – ex R. Temurina	web
1060	ZYH497	R. Barra do Mendes (BA53) – ex 1580	DX Clube do Brasil
1060	ZYJ246	R. Evangelizar, Curitiba (PR42) – ex R. Paraná	DX-Clube do Paraná
1120	ZYJ253	R. Mais - (PR53) ex R. Eldorado	web
1160	ZYH784	R. Silvestre (GO42) – ex R. Itaberaí	DX Clube do Brasil
1250	ZYL367	R. Metropolitana (MG153) - Addr: Av. Francisco Epifânio	Fagundes, 161 – Fagundes,
		33200-000 Vespasiano	DX-Clube do Paraná and web
1300	ZYK649	Onda Viva (SP252) 30kW - ex R. Cultura. Addr: Rua Padro	e João 400, Jardim Esplanada,
		19061 460 Presidente Prudente. E-mail: pascompp@stetnet	.com.br
			DX-Clube do Paraná and web
1320	ZYH243	R. Imaculada Conceição (AL08) – ex R. Milénio	Cláudio Moraes
1370	ZYK377	R. Jornal da Manhã, Ijui (RS173) – ex 1340	DX Clube do Brasil
<u>1420</u>	ZYJ609	R. Farol (RN12) – ex R. Tapuyo	web
1440	ZYJ757	R. Belos Vales, Ibirama (SC69) – ex 1360	web

Peru

<u>1400</u>	OBX4H R. Luz, Tarma (JU30) – ex R. dif. Comerciales	web
<u>1440</u>	OAU7M R. Regional, Sicuani (CU40) – ex R. Satélite	web

WORLD NEWS

(Europe, Asia, Africa) with Ton Timmerman

H. Heijermanspln 10, 2024 JJ Haarlem, The Netherlands e-mail:world-news@mwcircle.org

Due to the combination of June and July news there are a lot of new items in this column. Despite the summer conditions you can try most of the tips at night. Have a nice vacation everyone, Ton

Argentina

1610 kHz, AM FORTALEZA es la nueva denominación de esta emisora religiosa evangélica, anteriormente conocida como "Radio Misión Fortaleza" (Ex 1520 kHz). Su QTH se ubica ahora en la calle Independencia 646 de la localidad de Ezeiza, Tel: (011) 4295-4355. Su director es el pastor Miguel Navarro. (*Marcelo A. Cornachioni Lomas de Zamora, Conexión Digital via DXLD*)

New Argentinean station on 1650 kHz. As the first to report this new Argentinean station is Hasse Mattisson, Vaxjo, Sweden. Since May 14th he has observed a Spanish speaking station on 1650 kHz (see below) and this morning he got the identification: ANTARES AM 1650, West Buenos Aires area.

Since a couple of days I have noted a SS station on 1650 AM believed to be Argentina! My first obs. on 14 May at UTC 0253. Playing mostly non stop mx, and just this part of identification I have noted ".... 16-50 la emisora de familia" by a male voice. Lonely on the X-band!! this morning 16 May at UTC 0244. At UTC 0255 a compostion played similar the style of a national anthmem. At UTC 0300 midnight is in Arg. Before this hour little more popular mx even tangos!! But after very soft and like serious mx, when night starts down there? I have checked the latest info on the Arg site of DX-ing Info, and find a note that RDB is inactive. The two mentioned stns in WRTHB 2008 R Renacer and R Reivir are not listed on your site.May I ask you for the latest news? (*Hasse Mattisson via Mediumwave.info*)

Austria

It appears that ORF has already concluded the Überprüfung of its mediumwave and shortwave services. Chairman Alexander Wrabetz said in a newspaper interview, published June 20: "We will save 50 million Euro. Everybody will contribute to that sum, that's all I will say about it. Many individual measures are necessary. We will also do without certain things. We can do without mediumwave. Some special radio programmes, like student [or schoolboys/schoolgirls] radio, can be transferred into the internet. We also want to transfer shortwave step-by-step into the internet definitely."

http://diepresse.com/home/kultur/medien/392705/index.do?_vl_backlink=/home/kultur/index.do

What I find revealing is how much of a stereotype these statements are. "Transferring shortwave into the internet" --- what is the meaning of that phrase? Putting the few special programmes still produced for shortwave into the Ö1 podcasting service as well? Note also how he gives away the fact of the planned MW and SW closure but does explicitly hide the plans for other cuts they obviously already made as well. (*Kai Ludwig via DXLD via mediumwave.info*)

Bulgaria

The German section of Radio Bulgaria reports in the DX program that the Bulgarian National Radio (BNR) will start DRM broadcasting on May 26. In a first step, the home service "Radio Horizont" will be on air in DRM and in a second step, the foreign services in English, French, German and Spanish will be transmitted in DRM. There are no information given on frequencies or sites. (*Mike Barraclough via DXLD*)

1125 kHz planned 1000kW VoRussia relay site at Cape Kaliakra, towards Egypt, Sudan, Israel, Jordania, Cyprus, 170 degrees, +/-20degr. G.C. 43°23'10.04"N 28°25'30.30"E http://maps.google.de/maps?f=q&hl=de&geocode=&q=43%C2%B023'10.04%22N++28%C2%B0 25'30.30%22E&ie=UTF8&ll=43.392076,28.427639&spn=0.044782,0079222&t=h&z=14



Nighttime coverage main lobe is at approx. 170 degr towards Egypt, Sudan, Israel. Jordania, Cyprus. Max. target at up to 2200 kilometers/1 350 miles level towards maximum Assuan-Nile.

Wolfgang Bueschel (22/6-2008)

China

837 kHz, CNR-5 (Voice of Zhonghua, to Taiwan) on new 837 kHz, first noted by me on 25 March around 1415 listening in Tarakan, Indonesia. According to their Chinese-language website http://www.nihaotw.com the new frequency started operating on 28 Dec 2007.

909: Web sources suggest the new Quanzhou SARFT- (State Administration for Radio, Film, and Television) site is already in operation, with a location near Zhangban in Hui'an County (GE low-res area in the region of 24 53N, 118 48E). The sources specifically mention that high-power transmitting equipment for both MW and SW has been installed at the new site, so the Chinese are evidently still wanting to continue doing whatever they have been doing on SW from the curtain antennas at the old Quanzhou site. It's possible that Zhangban is the site for the new CNR-5 frequency of 837 kHz, but I haven't been able to find any confirmation of that.

1269 kHz: FS can be a fair to strong signal in S Asia and in the western part of SE Asia.

1323: Chinese sources say there is at least one Harris DX-600 unit at the Huadian site, from which Korean 1323 kHz is the only known frequency, and the CRI/VOR Korean signals can sometimes be heard quite well in SE Asia - presumably it's quite a narrow beam southwards.

1377: On the subject of Chinese sites, I recently found a paper published in 2005 describing the lightning-protection arrangements at the SARFT Station at Xingyang (near Zhengzhou). According to this, CNR-1 1377 kHz is also from a Harris DX-600 using a two-tower antenna with a slightly

directional pattern - which must be the rather unimpressive-looking masts at 34 48 28N, 113 23 17E on GE, most likely being a radiator and reflector to give maximum radiation in a direction just north of west. The site also has two Thomson M2W units each operating with 100 kW into single-mast omnidirectional antennas for 630 kHz (CNR-2) and 972 kHz (Henan PBS), which must be the mastsat 34 48 40N, 113 23 22E and 34 48 43N, 113 23 07E. The same article also mentions that the SARFT site at Putian for 549/684 kHz has two Thomson S7HP transmitters.

The sites for Shandong PBS News Service mentioned in various web sources are: 891 kHz: Dongying 918 kHz: Binzhou, Dezhou, Heze (10 kW), Jinan-Huangtai (200 kW), Jining, Laiwu, Rizhao (10 kW), Tai'an, Yantai (10 kW)1467 kHz: *Beizhen (1 kW), Dezhou (1 kW), *Xin Xian (1 kW)1485 kHz: *Dan Xian (1 kW), Liaocheng (1 kW), *Lu Xian (1 kW), *Pingyi (1 kW), *Tai'an (1 kW), *Weihai (1 kW) 1548 kHz: Linyi (7.5 kW), *Longkou (10 kW), *Qingdao (10 kW), *Rongcheng (10 kW), Weifang (10 kW)

*= sites not mentioned on Shandong PBS website

I can't explain the double listings for Dezhou on 918 and 1467 kHz and for Tai'an on 918 and 1485 kHz. Probably there have been frequency changes for these sites. The powers listed for some sites may be out of date, but probably haven't changed dramatically *(Alan Davies, ARC Information Desk via DXLD)*

Italy

New tx on mediumwave in Rome for Radio Broadcast Italia testing on 1485 Khz (150 watt, FP 1 kW). They have also a little TX in fm operating in Frosinone area. *(Roberto Scaglione http://www.bclnews.it via Skywavesmw)*

Faroer Islands

New transmitter on Akraberg 531 kHz to come. Since May 6th Kringvarp Faroya has been silent on this frequency. The old transmitter went down due to technical problems caused by old technology, and was irreparable. It was considered, that the best and cheapest solution was to install a new transmitter. This will come into temporary use during August, and installing the new transmitter will be completed during last quarter of 2008. *(Hans Andor Johannsen, Head of technology, Kringvarp Faroya via Mediumwave.info)*

France

1593 kHz, Littoral AM on air since Feb 21, 1700 UTC. Note the coordinated powers for 1593, as given by Thierry Vignaud: 50 kW day and 5 kW night. This means that at night the transmitter would have to be run at about 1 kW only. I understand that they leave the DRM signal on air with 10 kW throughout the night, or do they turn it off? If not this is a violation like running full day power at night in AM, since only a power level 7 db below the coordinated AM carrier power may be used in DRM mode. Perhaps the permission for this DRM test expires on April 30 for this very reason? (*Kai Ludwig, ARC Information Desk*)

The French radio authority CSA has asked Littoral AM to report the outcome of the test period in June-08. Probably that means that they will continue transmissions on 1593 kHz until that report ispresented. A meeting with CSA is scheduled in May in Paris. Littoral AM has received a reception report from Germany 1000 km from Saint-Gouéno *(Thierry Vignaud via BE via DXLD)*

Trans World Radio (TWR) is planning to modify the antenna of its 1000 kW transmitter at Roumoules in Southern France to provide a stronger signal in Morocco, Algeria and Tunisia. The current omnidirectional antenna on 1467 kHz will be converted to a directional antenna at a cost of US\$200,000. TWR's John Summerville says the change has the potential of reaching 15 million new people in Arabic and four different Berber dialects.

TWR's John Summerville says they're working on a transmitter modification project, where the signal that's coming from southern France will be changed. Summerville explains, "Through this transmitter modification, we can clarify the signal that's already going out into Morocco, Algeria and Tunisia. But we can also send that signal much deeper to be able to reach people who have



never heard the Gospel before." The new signal has the potential of reaching 15 million new people.

The problem: many of these people have never had the Gospel in their own language before. That's complicated by the fact that much of the projected audience doesn't read. Rather than re-invent the wheel, Trans World Radio will use the tools they already have. They're currently broadcasting in Arabic and four different Berber dialects, but in order to reach more people, they would need some way of throwing the signal further. The solution: change the configuration and the reach of their radio signal from an omni-directional, semi-circular one, to a directional one. The importance of this project was confirmed by a Moroccan man Summerville met who had come to know Christ through a radio broadcast. "For ten years, that man had no fellowship with other Christians, and it was only through radio that he had fellowship. Radio can go places missionaries often can't."

That's why TWR has delivered radio/CD players to Morocco and Algeria, along with a CD of TWR programming. If broadcast signals are weak, listeners can still hear the programs. In addition, several hundred pre-fixed radios are being readied for distribution throughout North Africa. The team is also raising roughtly \$200,000 USD to fund the changeover. Despite ministry challenges, Summerville says, "We know through anecdotal evidence that churches are being planted; we know that people are

coming to know Christ. They contact us in many different ways, and when they do, they're telling us, 'Please give us more programs so that we can hear what God has for us." As producers focus their radio program content towards women, youth, oral-speakers, and the general public, pray for their wisdom and safety. Many will take on increased prayer ministry responsibilities, as well as financial investment. (*Media Network Weblog*)

Indonesia

999 kHz, Jakarta sounds reasonably powerful, and probably in the tens of kW at least. RRI seem to be maintaining their MW transmitters better these days than a few years ago. Most of the regional frequencies are regularly active at the moment, and a few have increased their hours - e.g. Samarinda 1215 kHz which is now on throughout the usual broadcast day (approx 2100 or 2200 to 1600), instead of a few hours each day as previously (*Alan Davies, ARC Information Desk*)

Another sign of the times from Indonesia: I can only confirm three mediumwave frequencies still active on the whole island of Bali. In East Java province, there are perhaps 15-20 mediumwave transmitters still alive in the entire province (population nearly 40 million). Once upon a time there must have been a hundred or more, not to mention a dozen or more on shortwave which are now all gone (*Alan Davies, touring in Indonesia, wwdxc BC-DX via DXLD*)

Kuwait

A committee formed by the Ministry of Information to investigate irregularities at Radio Kuwait has recommended that the case file should be referred to the Public Prosecution, reports Al-Jareedah daily. A report submitted by the said committee stated that, as a result of the irregularities, the project to strengthen the mediumwave band at Radio Kuwait was delayed for four years. Moreover, the suspects are said to have violated the terms and conditions of the contract. (Arab Times via Media Network Weblog)

Malaysia

1475 kHz is definitely for reception in Mindanao. Why does Malaysia bother with the Tagalog Service? Probably because the Philippines still make a theoretical claim of sovereignty over Sabah. Also there are many Filipinos working legally and illegally in Malaysia, especially in Sabah, so there is strong a cultural link with Sabah. I've found reception of 1475 in various parts of the Philippines is not great, especially because there is a local station in Mindanao on 1476.

I think 5979 from Sabah died some time in 2004, or maybe 2005 at the latest, but I can't remember the exact date. The domestic MW stations in Sabah have been disappearing too. Kota Kinabalu was actually on 690 rather than 693, but it and the other KK frequency 603 seem to be inactive nowadays. Tenom 565, and Kudat 801 and 1197 have been heard over the last year or two, but probably they will disappear when the transmitters eventually die.

Almost anywhere you go on Borneo, there's little left that is local on MW these days, whether in Brunei or the Malaysian and Indonesian sections. Everything is moving to FM or going silent *(Alan Davies, touring in Indonesia, wwdxc BC-DX via DXLD)*

Netherlands

GrootNieuws Radio, the Dutch Christian broadcaster that took over the use of mediumwave 1008 kHz from Radio 10 Gold on 1 September last year, is in financial difficulties due to the high cost of operating the mediumwave transmitter. Its website is requesting donations, and says there's a chance that the station may go silent on 1 August. The station says it needs half a million euro to survive up to the end of this year. (www.grootnieuwsradio.nl/ via Media Network Weblog)

Russia

The Russian DX'er Dmitry Mezin from Kazan informs us about his website:

I decided to revive the MW bandscan project on my website. The frequency table, that lists stations heard more or less regularly in my location, has been put to:http://dxsignal.ru/read/mw_eng.htm (English version) and http://dxsignal.ru/read/mw_rus.htm (Russian version). Certainly, it is far from complete. Most frequencies were only explored in the daytime. I will update the table from time to time. (*Dmitry Mezin via emwg*)

Sao Tomé

VOA relay on 1530, Pinheira 600 kW for A-08: 0300-0430 Daily English, 1600-1700 Daily English, 0430-0500 Daily Portuguese, 1700-1800 Daily Portuguese, 0500-0530 Daily Hausa 1800-1830 M-F Portuguese, 0530-0600 M-F French, 1830-2000 Daily French, 0600-0700 Daily English, 2000-2200 Daily English. (VOA schedule via Tony Rogers BDXC-UK)

Saudi Arabia

I heard BSKSA Qurayyat (Saudi Arabia) on 1098 kHz on 5 JUN 2008 at 1900 UTC with A2 program (Second Arabic). Nice signal. This transmitter is not listed in EMWG. *(Karel Honzik)*

Sri Lanka

From 01-06-2008, Sri Lankan Broadcasting Corporation(SLBC) stopped the MW Service on 873 KHz to Indian Listeners. This frequency mainly used for Tamil Service. This particular service started on 1925. At present the only MW Tamil service from SLBC is on 855 kHz for the Sri Lankan Tamil listeners. Few years back they stopped the evening service on 873k kHz. From January 2008 they reduced the morning service. According to the SLBC officials, they didn't get advertisement for that service. They spend three lahks Rupees per day for transmitt the programme to South India. Here in Tamil Nadu so many private FM's acquired the SLBC clients for the advertisement. This is also the one of the reason to stopped the well known historical service. (http://www.gnu.org/licenses/dsl.html via HCDX)

South Africa

657 kHz: The Christian Radio Station, Radio Pulpit, has purchased a new transmitter with capacity of broadcasting simultaneously in analog and digital systems. Listeners will be informed of how they would be affected during the installation process and on which frequency they will be able to listen to their favourite programs. The old transmitter is 26 years old. Power indicated today 50 kW. Email: gospel@radiopulpit.co.za . Webpage: <u>http://www.radiopulpit.co.za</u> (*Bengt Ericson, ARC Information Desk via DXLD*)

Switzerland

The Monte Ceneri transmitter on 558 kHz will be shut down at the end of this month, so in all likelyhood on June 30. "Closing down the obsolete mediumwave technology does not impair the broadcast reception in southern Switzerland and enables SRG to save high expenses", thus the close-down has been approved: <u>http://www.news.admin.ch/message/?lang=de&msg-id=19386</u>

And here is a discussion about Beromünster 531 kHz: <u>http://www.forum.mysnip.de/read.php</u> .To sum it up, SRG still sticks with the plan to close it down at yearend, but it remains to be seen if 531 will really go dark. In theory it could also fall into the hands of a competitor, something SRG is quite scared of. Operating the transmitter at reduced power of 160 kW, as it is the case already for some time, does not violate any fieldstrength limits in the vicinity of the site, no matter that SRG uses this argument as an excuse for the planned shut-down (they are required to not exceed 8.5 V/m, produced up to 12.7 V/m when 600 kW were run, thus the fieldstrength drops below the 8.5 V/m limit when going below 170 kW). But they still could turn around and tell people that technical adjustments now make it possible etc.etc.etc. *(Kai Ludwig via DXLD via mediumwave.info)*

Thailand

R. Thailand MW sites in Bangkok area, according to the plausible information on their website at <u>http://center.prd.go.th/engineer/surveySection/AM.htm</u> (details in parentheses are added from other sources): 819 kHz - Rangsit (Pathum Thani Province) 10 kW, 837 kHz - Bang Phun (Pathum Thani Province) 10 kW, 891 kHz - (Nong Rong, Nong Khae District) Sara Buri Province 1000 kW, 918 kHz - Salaya (Phutthamonthon District, Nakhon Pathom Prov) 100 kW, 1476 kHz (typo for 1467) - Rangsit (Pathum Thani Province) 100 kW. *(Alan Davies, ARC Information Desk)*

UTILITY DESK

The home of non-broadcast news with Andy Robins KB8QGF

1529 Miles Avenue, Kalamazoo, MI 49001, USA e-mail:utility@mwcircle.org

Summer is Here, Unfortunately

At least for those of us in the northern hemisphere. North American listeners report rather abysmal conditions due to severe static and a general lack of propagation. An exception has been the seasonal return of NDBs from the South Pacific for listeners on or near the West Coast of the USA and Canada. Here in the "Middle Coast", however, the only thing being heard well is lightning. Dave Tomasko K9QU west of Chicago reported on the *NDB List* that he recently logged nearly 150,000 strokes in a *two hour* period, which Dave says may be a record. Listeners in Europe report somewhat better conditions but I'm sure everyone is impatiently waiting for the quieter nights of fall and winter.

NDB News

Here are the latest updates courtesy of Michael Oexner in Germany via the NDB List:

Europe, Africa and the Middle East:

New beacons or changes in frequency and/or ID: Bosnia: ZV 402.0 Tuzla N44 27 52 E018 38 51 (ex ZV-420); Ivory Coast: SS 358.0 Sassandra N04 56 18 W006 07 40 (ex SS-290); Georgia: VP 342.0 Tbilisi/Lochini N41 42 46 E044 53 45 (ex VP-697); Italy: PRU 398.0 Perugia/San Egidio N43 06 07 E012 30 39; Poland: NB 708.0 Malbork N54 01 49 E019 10 08 (ex B-708); NR 189.0 Inowroclaw N52 50 05 E018 20 37 (may actually be on 262 kHz); NRD 392.0 Inowroclaw N52 50 41 E018 21 54 (may actually be on 444 kHz); NW 520.0 Leczyca N51 59 59 E019 10 41; NWT 385.0 Leczyca N51 59 36 E019 13 15; P 437.0 Tomaszow-Mazowiecki/Porter N51 34 36 E020 07 25; Russia: D 591.0 Maykop/Khanskaya N44 40 00 E040 00 54; T 650.0 Roschino/Tyumen Northwest N57 11 42 E065 19 54 (ex Q-650); TM 315.0 Roschino/Tyumen Northwest RUS N57 12 48 E065 22 06 (ex QF-315); Ukraine: ME 1220.0 Mezhvodnoe N45 34 51 E032 51 29.

Decommissioned beacons: Armenia: ST 602.0 Stepanavan; Germany: BTH 373.0 Barth (effective 05/06/2008); MU 367.0 Magdeburg (effective 05/06/2008); United Kingdom: NH 371.5 Norwich (effective 03/07/2008); Guinea-Bissau: BS 325.0 Bissau/Oswaldo Vieira; Iran: RUS 275.0 Tehran/Mehrabad/Rudeshur (effective 05/06/2008); Norway: KB 275.0 Kristiansund Kvernberget Haltvik (effective 03/07/2008); Russia: DE 310.0 Yedinka; HY 685.0 Khalaktyrka; IA 405.0 Bodaybo (effective 05/06/2008); KS 1025.0 Krasny (effective 05/06/2008); ND 190.0 Smyshlyayevka (effective 05/06/2008); SD 305.0 Nizhnaya Tavda (effective 05/06/2008); TX 380.0 Tomsk (effective 05/06/2008); VG 441.0 Zhigansk (effective 05/06/2008).

Other European news: Alan Gale G4TMV and Hartmut Wolff in Germany are hearing OBN 404.0 Oban, Scotland, on the new offset of -1020 Hz. It had previously been heard at 400 Hz USB and LSB. Alan adds, "It did occur to me that they could now be using the former West Freugh NDB, which was the only one in the UK with a 1020 Hz offset prior to its closure."

Quite a few European listeners are hearing new SVC 418.0 Aosta, Italy, with USB and LSB offsets of 1020 Hz. According to a NOTAM (Notice to Airmen) provided by Aldo Moroni, this beacon is being tested and is not yet to be used for air navigation. (Both of the items above courtesy of the *NDB List*).

North, Central and South America and the Caribbean:

New beacons or changes in frequency and/or ID: Bolivia: JOA 301.0 San Joaquin S13 02 57 W064 40 01 (ex JOA-217); **Canada**: M4 296.0 Gimli Indus Park MB N50 38 03 W097 02 37 (listed again).

Decommissioned beacons: Brazil: CBF 515.0 Cabo Frio; FLU 275.0 Fluminense/Macaé; **Canada**: 4X 386.0 Lac du Bonnet MB; NA 385.0 Natashquan QC (not listed anymore; still active?).

In addition to these, *NDB List* member Craig LeRoy in New York reports that BA 230.0 Westfield MA, **USA**, was permanently shutdown some time ago, according to airport officials there.

Pacific and Asia:

New beacons or changes in frequency and/or ID: China: G 458.0 Xishuangbanna/Gasa N21 59 36 E100 45 18; HJ 300.0 Qitai N44 01 06 E089 37 54; L 375.0 Xishuangbanna/Gasa N21 57 24 E100 46 06; **Indonesia**: CC 235.0 Cilacap S07 38 33 E109 02 07 (ex CP-235).

Decommissioned beacons: Australia: ARS 398.0 Ardrossan; WAV 203.0 Wave Hill; India: CA 268.0 Cochin International; Japan: SK 219.0 Shinoda; Kazakhstan: EL 440.0 Shalkar; PT 360.0 Petropavlovsk; YZ 396.0 Ekibastuz; North Korea: CR 350.0 Uiju; New Zealand: OH 218.0 Ohakea; PM 258.0 Palmerston North; Papua New Guinea: DAU 290.0 Daru.

Using the Perseus SDR to Hunt NDBs:

This receiver has apparently been all the rage in MW broadcast DX circles of late. It has also attracted the interest of beacon hunters, in large part because of its ability to record a chunk of the LF/MF spectrum for later analysis. Roelof Bakker PA0RDT in the Netherlands is among those using the Perseus this way. He recently posted the following to the *NDB List*:

"Common sense tells us that receiving Canadian NDBs in Europe is a winter pastime. However, there have been some reception reports in summer. Recently Vincent Lecler from France sent a log with some nice Canadian catches.

"Since I purchased a Perseus SDR, I have made overnight recordings on a regular basis. Though conditions are not always favourable, there always seem to be a few Canadian NDBs that make it across the pond into the Netherlands. Just out of curiosity, an overnight recording was made on June 20 / 21. For once static was not too bad and the conditions were quite nice.

"A grand total of ten Canadian NDBs could be unearthed from the recording. The strongest was AY-356, St. Anthony NL, 4032 km, 20 dB above my noise floor but plagued by interference from RSY-356, France, 282 km. YHR-276, Chevery QC, 4301 km, had also a nice signal at 15 dB over the band noise.

"Most stations peaked around 0245 UTC, approximately 40 minutes before local sunrise. There have been some discussions about which time is best for pre-dawn listening. In winter this is often 15 minutes before sunrise. My guess is that the best time varies with the season. At present the dawn period is very long here; hence the relatively long time between optimum reception and actual sunrise."

Roelof adds that he used one of his homebrew mini active whip antennas built into a film canister (!) mounted five meters above ground level for these receptions.

73, Andy

THE HOME FRONT

with John Williams

e-mail: homefront@mwcircle.org 201442 408567

Ofcom News

Ofcom fines Gcap Radio £1m

Ofcom has imposed the largest ever fine - ± 1.1 million - on a UK radio group after listeners paid to enter a premium-rate competition they had no chance of winning. The broadcasting watchdog imposed the penalty on 30 local radio stations owned by GCap after discovering that producers routinely manipulated the results of the quiz.

The fine related to a competition called Secret Sound, which asked listeners to guess the identity of a sound being broadcast on air by calling or texting in answers. Ofcom found that instead of choosing listeners at random, programme makers deliberately selected those who had the wrong answer to prevent the prize being won too soon. It said the production team's actions were "calculated and deliberate" and showed "a complete disregard" for listeners who had paid to enter the competition.

Almost 300,000 entries were made to the competition over a four-week period last year, making a total of more than £104,000, of which GCap received a share of £42,000. In a statement, GCap, which was recently bought by Global Radio, said it took the ruling "extremely seriously".

Gcap are owners of the Gold network. (www.telegraph.co.uk)

Commercial Radio News

Higher than expected trading for talkSPORT

The national AM station has increased revenue by 19% over the four months from January to April this year. UTV described the growth in their trading statement released today as "demonstrating the continued strong demand for the product."

Revenue for UTV's independent local radio stations did not fare as well, down by 3% across the group with no improvement expected through into the summer. The

statement also noted that the launch date for DAB station talkRADIO is likely to be delayed to allow for "completion of the transmission infrastructure."

Overall UTV's radio division increased revenues by 7% compared to the overall market, understood to have grown by 4% during this period.(www.radiotoday.co.uk)

Revenue up for commercial radio

Despite losing market share in the latest set of audience results, figures released today by the Radio Centre show that radio advertising revenue is increasing. Commercial radio revenue increased to nearly £159 million in the first quarter of 2008, an increase of nearly 7 per cent year on year.(www.radiotoday.co.uk)

Virgin Radio Sale

VIRGIN Radio will disappear as a brand name under the terms of 53.2million sale negotiated by its owner SMG. Furthermore, Richard Huntingford is set to step down as the Virgin Radio executive chairman following the station's sale to the Times of India Group. This will be the second time in a year that Huntingford has stepped down from a radio group following its sale. He left his post as Chrysalis chief executive last year after its radio division was sold to Global Radio.

45



2<u>6 June, 2008</u>

<u>19 May, 2008</u>

<u>20 May, 2008</u>

2 June. 2008

In a statement, Virgin Radio said Huntingford was contracted to the company for another three months and was "considering future options". "He will remain with the company to ensure a smooth transition following completion of the sale of the business to TIML [Times Infotainment Media Limited] Radio and is currently considering future options." Huntingford was appointed non-executive chairman of Virgin Radio in August last year as its parent company SMG prepared it for sale or stock market floatation.

Virgin Radio was sold to Times of India Group subsidiary TIML. It will be run by European radio group Absolute Radio. (www.guardianmedia.co.uk)

RSL & LPAM News

Hospital Broadcasting Services (HBS) 1431 kHz Sheffield is on air. The station commenced 1430 hours 3 May 2008 and covers three hospitals. The studio is located at Royal Hallam, the transmitter is at the Northern General and they also broadcast to Western Park Hospital. The station is on air 24/7 (Ken Lancaster).



Red Sands Radio 1278 kHz will be on air from 4 -13 July 2008 broadcasting off the Coast of Whitstable Kent from the old WW11 fort. Contact: Robin John Adcroft telephone: 01242 525 900 Email: admin@project-redsand.com.

I Love West Leeds Festival Radio 1431 AM – Leeds I love west Leeds festival radio broadcast On air from: 6 July until 18 July, 2008. Contact: Steve Byrne Telephone: 0113 2638 556 Email: <u>info@interplaytheatre.org</u>

Radio Croft 1602 kHz Croft on Tees Motor racing radio broadcast was on air from 31 May to 1 June, 2008. Contact: Diane Smith telephone: 01280 820 438. Email: <u>diane.smith@arb-teamwork.com</u>. This is a frequency used in the past by other motor racing circuits. However, it's almost impossible to get future details of definite dates they will be broadcasting. In the past Donnington Park Leics; Knockhill Fife; Thruston Hants and Oulton Park Cheshire have used this frequency.

Radio XL 1278 kHz - Ilford, Essex School radio broadcast on air from 4 to 11 July. Contact: Phil Thomas Telephone: 020 8551 4954 Email: phil_thomas@mac.com

Radio City at Morrison Hospital Swansea has recently been awarded an LPAM licence The frequency of 1386 kHz has been allocated launch date not yet known. (Dave Kenny BDXC-UK.)

It is expected that the following football clubs' will continue to broadcast their home games this coming season. Ofcom continues to state "There are currently no Sporting RSL broadcasters" despite all the stations being heard last season!

Football Club	Station	August, 2008	September 2008
Crystal Palace	Palace Radio 1278 kHz	9 Watford	13 Swansea
		23 Burnley	20 Plymouth
			30 Charlton
Blackburn	Radio Rovers 1404 kHz	23 Hull	13 Arsenal
			20 Fulham
Manchester Utd	Manchester Utd Radio 1413	16 Newcastle	27 Bolton
	kHz	30 Fulham	
Barnsley	Oakwell 1575 kHz	16 Coventry	16 Cardiff
		30 Derby	27 Norwich
Rushden and	Radio Diamonds 1503 kHz	Details of matches	
Diamonds		not yet given	

Annual summary of LPAMs

It's that time of year again - when I provide details of all the Low Powered stations broadcasting. These licences allow freely radiating transmissions with a maximum effective radiated power of 1 Watt e.r.p. There are now 72 stations (including relays) listed although not all stations are broadcasting. A few stations have left the AM band to broadcast on FM only. I have personally checked all the web sites listed. (Although information is available through a number of web sites not all the information is correct or up to date!)

<u>1134kHz</u>

BFBS Gurkha Radio, Gamecock Barracks, Bramcote, Nuneaton 1134 kHz, relaying output from Shorncliffe studio. (See listing under 1278 kHz)

BFBS Gurkha Radio 1134 kHz, Royal Military Academy Sandhurst, Berks. Also relays the programmes from Shorncliffe.

Burst Radio1134 kHz (Bristol University Radio Station) Web site www. Burstradio.org.uk.Address University of Bristol Students Union, Queens Road, Clifton, Bristol BS8 1LN Telephone No 0117 954 5777.



L&D Radio from Luton and Dunstable Hospital . Their website is www.ldhr.co.uk Address: L&D Hospital Radio, c/o L&D Hospital NHS Trust, Lewsey Road, Bedfordshire, LU4 0DZ, United Kingdom. Tel: 01582 582313.

Queens Radio 1134 kHz Queens University, University Road Belfast BT7 1NF.Telephone number 028 90 97 1065. Email studio@queensradio.org Web site www.queensradio.org

<u>1251 kHz</u>

BFBS Gurkha Radio 1251 kHz broadcasts from Imphal Barracks Fulford Road, York Programmes are fed by satellite from Shorncliffe Barracks in Kent and there is no local studio.

KCC Live 1251 kHz from Knowsley Community College, Cherryfield Drive, Kirkby Liverpool L32 8SF. Web site <u>http://www.knowsleycollege.ac.uk/about/detail.asp?newsid=244</u>. The College has recently been awarded a licence to broadcast on FM – and this will eventually replace the AM service.

RaW. Address: Students' Union, University of Warwick, Coventry, CV4 7AL. Web. http://www.radio.warwick.ac.uk/ Email <u>studio@raw.warwick.ac.uk</u>. Tel: 024 7657 3077 Fax: 024 7657 2759. 24 hour local programming.

The Cat 1251 kHz from Warrington Collegiate Institute, Crab Lane Warrington WA2 0DB. Unable to find a web site for them. Email <u>studio@thecat1251.</u>hotmail.co. uk. Telephone number 01925 494494. Programming is 24 hours.

<u>1278 kHz</u>



BFBS Nepali Service 1278 kHz –BFBS Shorncliffe, Sir John

Moore Barracks, Shorncliffe near Folkestone, Kent CT20 3HJ. Programmes in Nepali language for Gurkas based at the barracks

1278 kHz BFBS Gurkha Radio Beacon Barracks, Stafford Staffs.

Blue Bull Radio 1278 kHz is being broadcast by RAF Marham Kings Lynn Norfolk PE33 9 NP.Web address: <u>http://www.bluebullradio.co.uk/;</u> email <u>studio@bluebullradio.co.uk</u>. Phone number 01760 446140

Crush (University of Hertfordshire) Address Students Union, College Lane, Hatfield AL10 9A. <u>www.crushradio.co.uk/</u> Telephone 01707 261312 and fax number 01707 268736.

Pinesbury AM 1278 kHz from Pinehurst Junior School Beech Ave Swindon. SN2 1JT. Telephone 01793 534909 Broadcasts limited to school hours. <u>http://www.pinehurst-jun.swindon.sch.uk</u>

Radio Royal 1278 kHz, Falkirk Royal Infirmary, Falkirk, The station website:



www.radioroyal.org. Contact details: telephone: 0845 430 1278; fax: 0845 644 3290 email : enquiries@radioroyal.org Post :Radio Royal, Falkirk & District Royal Infirmary, 1 Majors Loan, Falkirk, FK1 5QE .

Trust AM Address: The Studio Bassetlaw District General Hospital, Blyth Road Worksop, Nottinghamshire S80 0BD. Telephone 01909

500990. Web site <u>www.trustam.com</u>. The station broadcasts from Doncaster, Bassetlaw and Montagu Hospitals and broadcasts 24 hours a day.

<u>1287 kHz</u>

Basildon Hospital Radio Telephone: 01268 282828.Address: Basildon Hospital Radio, Basildon Hospital, Nether Mayne, Basildon, Essex, SS16 5NL. Web site http://www.bhr1287.net/ Email: studios@bhr1287.net

BFBS Northern Ireland. With the Barracks at Aldergrove Ballykinler, Holywood, and Ballykelly now given an FM frequencies only one station **Ballykelly is on 1287 kHz.** The programmes broadcast are from BFBS Radio 1 http://www.ssvc.com/bfbs/radio/nireland/ni main.htm

The following Gurkha stations relay the output from the Shornecliff Barracks (1278 kHz):

BFBS Gurkha Radio 1287 kHz IBS Brecon.

BFBS Gurkha Radio 1287 kHz, Maidstone.



BFBS Gurkha Radio 1287 kHz at Buckley Barracks Wiltshire

Garrison Radio. The web site http://www2.army.mod.uk/garrisonradio/homeandabroad.htm lists 3 stations in the network: (Catterick has now been allocated an FM licence)Garrison Radio Bassingbourn 1287 kHz receives a regional feed from Colchester

Garrison FM, which now includes items and information from the base itself.

Glencorse Garrison Radio 1287 kHz address Glencorse Barracks Penicuik, Midlothian EH26 0NP. Tel: 0131 310 2898 email: <u>edinburgh@garrisonfm.com</u>.

Wattisham Garrison Radio 1287 kHz address Wattisham Garrison Ipswich Suffolk IP7 7RA. Tel: 01206 782589 email: <u>wattisham@garrisonradio.com</u>

Hospital Radio Crawley. Crawley Hospital, West Green Drive, Crawley West Sussex RH11 7UD, telephone 01293 534859. Web site http://www.hospitalradiocrawley.org.uk/. Email: <u>HospitalRadioCrawley@hotmail.com</u>. **Insanity** Egham Surrey Royal Holloway College – University of London. Address: Students' Union, RHUL, Egham, Surrey, TW20 0EX Tel: 01784 414267 Fax: 01784 486312. Web site <u>http://www.insanityradio.com</u>: Email studio@su.rhul.ac.uk

Nevill Hall Sound 1287 kHz broadcasts from Nevill Hall Hospital Abergavenny. They broadcast 24/7 and carry back to back music when not carrying full programming. Web site: http://www.nevillhallsound.com/. The address is: Nevill Hall Sound (Hospital Radio for Abergavenny), The Old Workhouse, Hatherleigh Place, Abergavenny NP7 telephone 01873 858633; Email <u>nhsound@aol.com</u>

Radio Ysbyty Glan Clwyd / Rhyl 1287 kHz. Glan Clwyd Hospital, Rhuddlan Road, Bodelwyddan, Denbighshire LL18 5UJ. 01248 670033 or dylananeil@noddfa.fsnet.co.uk . Unable to locate a web site for the station.

Radio Gwendolen 1287 kHz is the hospital broadcasting station of Leicester General Hospital. Contact detail is via Hospital Radio Gwendolen, Leicester General Hospital, Gwendolen Road, Leicester LE5 4PW or 0116 2584290. web site : http://www.radiogwendolen.co.uk/ Email : enquiries@radiogwendolen.co.uk. Broadcasts 24 hours a day.

Hospital Radio Gwendolen

Radio Hotspot 1287 kHz. Website <u>http://www.royalhospitalschool.org/</u> although no details of the station are given. The station broadcasts from its studio at the School in Holbrook, Ipswich from 7.00 to 7.30 each morning and on Tuesday and Thursday evenings between 9pm and 9.30pm. Term time only. Email castaldo@talk21.com.

Solar AM. St Helens College, Water Street, St Helens, Merseyside WA10 1PZ, telephone 01744 733766.Email <u>solar1287@hotmail.com</u> Web site: http://www.sthelens.ac.uk/college/facilities/solar.asp

Surge Southampton University, Glen Eyre Hall, Bassett, Southampton SO16 3UF, telephone 0870



3572252, fax 0870 3572243. Web site <u>www.surgeradio.co.uk</u>. Email <u>lex@surgeradio.com</u>. Local programmes: Daily from 0900 until midnight. (Weekends from 11.00 until 2100 Saturday and 2300 Sunday)

VRN (Victoria Radio Network) Kirkcaldy 1287 kHz. Address:Victoria Hospital, PO Box 1287 Kirkcaldy Fife KY2 5RA. Web site <u>www.victoriaradionetwork.co.uk</u> Email <u>info@victoriaradionetwork.co.uk</u>. Now broadcasts 24 hours a day.

<u>1350 kHz</u>

Air3 University of Stirling. Address: Radio Airthrey, The Robbins Centre, University of Stirling, Stirling FK9 4LA. Web site http://air3.susaonline.org.uk/. Email stationmanager@ air3.susaonline.org.uk. Telephone 01786 467179 Fax 01786 467190



Cambridge University Radio (CUR) 1350 kHz from Churchill College Cambridge. Telephone 01223 569509. Web site <u>www.cur.co.uk</u>. Email <u>studio@cur.co.uk</u>.

Dorton College Radio. Dorton College, Seal Drive, Seal, Sevenoaks Kent TN15 0AH, telephone 01732 592600. Web

site: http://www.rlsb.org.uk/college/dortonradio.htm

Frequency 1350 at the University of Central Lancashire Preston.PR1 2TQ. The station's website, http://www.frequency1350.co.uk/telephone no 01772894895.

GU2 1350 kHz. Surrey UNI Radio, University of Guildford Surrey Union House, The University of Surrey Guildford GU2 5XH. Web address <u>www.gu2.co.uk</u> Email address: enquiries@gu2.co.uk Telephone number:0870 2820415 Fax 01483 534749.

Hemel Hospital Radio Their address is Hemel hospital radio, Hillfield Rd, Hemel Hempstead HP2 4AD. Web site is: www.hemelradio.org.uk.

Hospital Radio Pulse. Their address is Alexandra Hospital, Woodrow Drive, Redditch Worcestershire B98 7UB. Web site <u>www.hospitalradiopulse.com</u>. Email <u>studio@hospitalradiopulse.com</u>

Hospital Radio Yare. Address: Northgate Hospital, Northgate street, Great Yarmouth, Norfolk Tel: 01493 842613 Studios are at Northgate Hospital, transmitter is at James Paget Hospital. Web site: <u>http://radioyare.com/index.html</u>. Station on air 24 hours a day – repeating the day time programmes overnight.

Kingstown Radio Address: The Fulstow Studios, Hull Royal Infirmary, Anlaby Road, Kingston upon Hull. Telephone: 01482 327711. Fax 01482 327711, Web <u>http://www.kingstown.karoo.net/</u>. Email: <u>onair@kingstown.karoo.co.uk</u>.

Knutsford AM from Knutsford High School. Web site. <u>http://www.school-portal.co.uk/GroupHomepage.asp?GroupID=51102</u> Postal address Media Centre Upper School, Bexton Road, Knutsford WA 16 0EA; telephone 01565 632777. According to Andrew Appleby who is in charge of the station replied to my email saying "We broadcast mainly through the school hours and 7 days a week. Our broadcasts are student based and often have entertainment news, school news and that sort of chit chat. We are relatively new having just re-launched to the whole school so are building pupils shows, from the ground up".

LCR Loughborough University Ashby Road Loughborough LE11 3TT.. Web site http://www.lcr1350.co.uk/ Email studio@lcr1350.co.uk Tel: 01509 632027 Fax: 01509 235593



Hemel Hospital

1350AM Radio

Livewire (University of East Anglia) Address: Union House, University of East Anglia, Norwich NR4 7TJ. Web site http://www.livewire1350.com/ Telephone 01603 250020 or 01603 592512 Fax 01603 250144.

Mid Downs Radio Address: The Princess Royal Hospital, Lewes Road, Haywards Heath, West Sussex RH16 4EX. Phone No: 01444 441881 ext 4139. Fax: 01444 443392. Web site: http://www.mdr.org.uk/ Email <u>studio@mdr.org.uk</u>. Broadcasts 0900-2100 hours weekdays; Sat: 0700 -1900 and Sun 0900-2100 hours

Radio Cavell. The Studios, The Royal Oldham Hospital, Rochdale Road, Oldham. Lancs. OL1 2 JH Web <u>http://www.radiocavell1350.org.uk/</u> Email: <u>information@radiocavell1350.org.uk</u> 2JH. Tel: 0161 620 3033 Fax: 0161 627 8355

Radio Hope 1350 kHz. The College has modern studios and the latest computer automation software which allows programming to be scheduled 24 hours a day. Address : Liverpool Hope University College, Hope Park Liverpool L16 9JD Web site:http://www.radiohope.co.uk

Radio Nightingale. Rotherham District Hospital, Moorgate Road Rotherham S60 2UD telephone: 01709 304244 Fax: 01709 304718. Web site



http://www.radionightingale.org.uk/ Email:admin@radionightingale.org.uk

Radio RamAir. The Communal Building, Richmond Road, Bradford, BD7 1DP Tel: 01274 233269 Web http://www.ramair.co.uk/ Email: <u>studio@ramair.co.uk</u>.

Radio West Suffolk. Tel: 01284 713403. West Suffolk Hospital, Hardwick Lane, Bury St Edmunds IP33 2QZ Telephone 01284 713403. Web site <u>http://www.radiowestsuffolk.com/</u> Email <u>mail@radiowestsuffolk.com</u>. The station is on 24 hours a day but generally local programmes are from 1000 – 2200 hours.

Range Radio 1350 AM. Broadcasts term time only from Whalley Range School Wilbraham Rd Manchester M16 8GW Web site http://www.whalleyrange.manchester.sch.uk/radio/



University Radio Nottingham 1350 kHz. Address: Portland Building, University Park Nottingham NG7 2RD.. Web site http://urn1350.net/. Telephone 0115 951 5522

University Radio York (URY). Address: c/o Vanbrugh College, University Of York, Heslington, York, YO1 5DD Tel: 01904 433840 Fax: 01904 433840.

Web http://ury.york.ac.uk/ Email: ury@york.ac.uk The station broadcasts 24 hours a day.

<u>1386 kHz</u>

Anker Radio 1386 kHz broadcast from George Eliot Hospital College St Nuneaton CV10 7DJ.Web: http://www.ankerradio1386am.org.uk/ Email <u>anker.radio@geh.nhs.uk</u>, telephone 024 7686 5018. The station broadcasts 24 hours a day.

Blast 1386 is from Reading College of Arts and Technology Reading. Telephone 0118 967 5068. http://www.blast1386.com Email address : <u>blast1386@reading-college.ac.uk</u>

Carillon Radio Loughborough Hospital. Telephone 01509 564433. Carillon Radio, Loughborough Hospital Eppinal Way Loughborough LE11 5JY. Web site. http://www.carillonradio.com.



Carillon Radio Coalville Hospital is listed by Ofcom broadcasting on the same frequency.

<u>1404 kHz</u>

University Radio Essex. University of Essex, Students Union, Wivenhoe Park, Colchester CO4 3SQ. Telephone: 01206 863211 Fax: 01206 870915. Web address: http://www.essexstudent.com/ The station broadcasts 24 hours a day according to this web site.

<u>1431 kHz</u>

Apple AM 1431 kHz commenced broadcasting from Musgrove Park Hospital Taunton, Somerset TA1 5DA. Telephone 01823 342591. Web site . http://www.appleam.com/. No email address given. The station is on air 24 hours a day.

Carillion Radio 1431 kHz at A&DH Ashby & District Hospital. Relaying the 1386 outlet.

Carillion Radio 1431 kHz at Rutland Memorial Hospital also relays the 1386 outlet.

Chichester Hospital Radio Address: Chichester Hospital Radio, The Studios, St Richards Hospital, Spitalfields Lane, Chichester, West Sussex Phone: 01243 788122 ext 3000, Web www.chr1431.org.uk Email studio@chr1431.org.uk. They broadcast 24 hours a day.

Hospital Broadcasting Services (HBS) 1431 kHz Sheffield. The station covers three hospitals. The studio is located at Royal Hallam, the transmitter is at the Northern General and they also broadcast to Western Park Hospital. The station is on air 24/7

Radio Redhill East Surrey Hospital, Canada Ave Redhill Surrey RH1 5RH. Telephone: 01737 768511 Ext. 6290 Web site <u>www.radioredhill.co.uk</u> Email: <u>Studio@radioredhill.free-online.co.uk</u> Broadcasts local programmes 24 hours a day.

Source Radio Coventry 1431 kHz. The station is run by Coventry University Students Union at their University Priory St Coventry CV1 5FJ.. Web site <u>http://www.sourceradio.co.uk</u>. Email address <u>studio@sourceradio.co.uk</u>

URF 1431 (University Radio Falmer) serving University of Sussex & Brighton launched on 1431 kHz. Website is at: <u>http://www.urfonline.com</u> and Email : <u>studio@uronline.com</u>, telephone 01273 678 999.

Xtreme AM. Address: Union House, Singleton Park, Swansea, SA2 8PP. Tel: 01792 295989 Fax: 01792 206029.Website: http://www.xtremeradio.org/

<u>1449 kHz</u>

The Hub 1449 kHz is a station at the University of Western England (UWE) in Bristol. Their web site is <u>http://www.thehub1449.com</u>. The address is: The Hub 1449, PO Box 2352, Bristol BS1 9NX and telephone number 01117 328 5940.



Radio Lyneham 1449 kHz . Lyneham Radio 1449 kHz has launched. Postal address: RAF Lyneham Chippingham Wilts SN 15 4PL. Website http://www.raf.mod.uk/raflyneham/newsweather/localradio.cfm.

Taunton School 1449 kHz. Their web site is <u>www.tauntonschoolam.com/</u> Email : studio@ tauntonschool. Co.uk. Address :Taunton School Radio, c/o Simon Smith, Taunton School, Taunton, Somerset TA2 6AD.

1449 kHz University of Bath. The address is: Students Union University of Bath, Claverton Down, Bath BA2 7AY. Telephone 01225 826611.. Web site. <u>http://people.bath.ac.uk</u>. Email <u>studio@bath.ac.uk</u> The station is on air 24 hours a day.

<u>1575 kHz</u>

Radio Tyneside. Address: Radio Tyneside, The Studios, Newcastle General Hospital, Westgate Road, Newcastle upon Tyne, NE4 6BE Telephone: 0191 2736970 Web <u>www.radiotyneside.co.uk/</u> Email: <u>info@radiotyneside.co.uk</u>. The station is on air 24 hours a day.



Stoke Mandeville Hospital Radio. Mandeville Road Aylesbury HP21 8AL, telephone 01296 433588 Fax: 01296 437868.Web <u>http://www.smhr.co.uk/</u> Email <u>info@smhr.co.uk</u>. Of interest to us(!) they have a form specifically headed "QSL confirmation of reception reports".

As far as is known the following stations (from those listed last year) are not currently broadcasting on AM:

1134 kHz Kool AM Harlow; 1503 kHz Sound Radio London and 1575 kHz Jam Hull

COMMUNITY RADIO STATIONS

Community radio is a new sector of radio being introduced in the UK. It will become the third tier of radio which will complement the mix of services already provided by the BBC and commercial radio sectors. The characteristics of community radio are distinct from commercial radio in that the services will cover a small geographical area and be provided on a not-for-profit basis focusing on the delivery of specific social benefits to enrich a particular geographical community or a community of interest.

Three stations are currently broadcasting on AM under this sector:

Celtic Music Radio 1530 kHz Website:www.celticmusicradio.net/. Email – studio@celticmusicradio.net Celtic Music Radio studio phone-in 0141 548 4041 Celtic Music Radio (Studio), Hunter Centre for Entrepreneurship,University of Strathclyde, Livingstone Tower, 26 Richmond Street, Glasgow G1 1XH

Desi Radio 1602 kHz. Address: The Panjabi Centre 30 Sussex Road Southall Middx UB2 5EG Tel: 020 8574 9591,Email: info@desiradio.org.uk Website: http://www.desiradio.org.uk. Tel: 020 8525 1111

Forest Of Dean Community Radio 1503 and 1521 kHz. Address: The Studio 1 Beresford Court Cinderford Glos GL14 2BS Tel: 01594 820722. Email: <u>contactus@fodradio.org</u>. Website: <u>http://www.fodradio.org/</u>

Ofcom has awarded an additional three community licences but these are not yet broadcasting:

Flame Christian Radio.Contact: Mr Norman Polden, Wirral Christian Media Limited, P.O. Box 53, Upton, Wirral CH49 3WB. Telephone: 0151 643 1696. E-mail address: office@ flameccr.org.uk Website: www.flameccr.org.uk . No further details on web site.

Leeds Radio JCom started internet broadcasting and says it will be on its new AM frequency

across North Leeds soon. Web site <u>http://www.radiojcom.net/</u> gives no further information. Also licensed is "**Toradio**": community radio for Cwmbran, Pontypool and

Blaenavon. This station will broadcast on AM .Web site <u>http://www.tormedia.info</u> gives no information. I have emailed them to ascertain when they will commence broadcasting.

If you are aware of any additions/alterations to any LPAM station, please let me know

Other News

Digital group calls for early analogue switchover as costs rise24 June, 2008A deadline for the switchover of analogue radio to digital across Britain's national, regional and
larger local stations should come no later that 2020, according to recommendations released
yesterday. As the industry strives to make a success of digital radio, which has not grown at the
same speed as digital television, eagerly anticipated proposals have been put to the Government to
try to boost digital radio sales.

The recommendations have come from the Digital Radio Working Group, a body that includes representatives from the Department for Culture, Media and Sport; Ofcom; the BBC; commercial radio and set manufacturers. It was formed six months ago to discuss the future of digital radio.

The working group has proposed that all national, regional and larger local stations should switch from analogue to digital radio by 2015 if possible and no later than 2020. However, smaller local





and community radio stations will remain analogue. The working group decided that analogue is still the most effective, and cheapest, way of delivering radio to smaller geographic areas. Community radio accounts for less than 1 per cent of listening hours, while smaller local radio stations account for about 5 per cent.

(http://business.timesonline.co.uk/tol/business/industry_sectors/media/article4200426.ece)

Will island seize the light? First Britons to vote on dumping GMT

24 June, 2008

Jersey will become the first of the British Isles to hold a referendum on abandoning Greenwich Mean Time (GMT) and aligning its clocks with the French. The clocks would move forward an hour throughout the year. Supporters say that the adoption of Central European Time (CET) would maximise the use of daylight and bring Jersey into line with most of the Continent.

Senator Jimmy Perchard, who proposed the referendum, said: "Culturally, socially and economically there will be many advantages. We would have an hour's head start on the rest of the country and geographically we are much nearer to France." He admitted that it was proving controversial among the 91,000 islanders, who were fiercely proud of being a British crown dependency.

There has been a growing campaign in Britain to adopt continental times. During winter an estimated third of the population are still asleep when the sun rises but arrive home from school or work in the dark and cold.

The result of the referendum on October 15 is not binding on the States. It said that any change would be for an initial three-year trial period.

(http://www.timesonline.co.uk/tol/news/uk/article4193273.ece)

EUROLOG

with John Williams

100 Gravel Lane Hemel Hempstead, Herts. HP1 1SB, UK e-mail: <u>eurolog@mwcircle</u>.org 01442 408567

1.11.	Station locations datails bound at	SIO	UTC	Data	Who
	2 Station, location; details heard etc	SIO		Date	Who
531	Radio Nacional 5, various, ID, news	222	0200	27/5	$\mathbf{F}\mathbf{W}$
549	Deutschlandfunk, Nordkirchen, Music	555	2255	29/5	FW
558	R. Svizzera - Rete 1, Monte Ceneri-Cima, Music	444	2250	30/5	$\mathbf{F}\mathbf{W}$
558	Radio Nacional 5, various, ID, news	222	2300	30/5	FW
558	Spectrum R., London - ID, EE OM, Indian song	333	1122	24/4	NH
567	România Actualitata, various, ID, news	333	0200	2/6	FW
576	SWR Cont. Ra, Baden-Württemb. Mühlacker, ID, news	444	0200	3/6	FW
585	Radio Nacional 1, Majadahonda (Madrid), ID, news	222	0200	4/6	FW
585	RNE1 Madrid (tentative) - SS YL, OM	322	1001	26/4	NH
603	France Info, Tramoyes (Lyon), talk	222	2255	5/6	$\mathbf{F}\mathbf{W}$
603	România Actualitata, various, ID, news	444	2258	5/6	FW
603	Gold, Littlebourne - pops //828	232	1122	24/4	NH
612	BH Radio 1, Donje Moštre, Music	333	2310	6/6	FW
621	Radio Nacional 1, various, ID, news	222	0200	8/6	FW
630	BBC R.Cornwall, Redruth - ID, pops	333	1007	25/4	NH
666	Gold, Exeter - pops, ID, irritating YL	555	1016	26/4	NH
828	Gold, Bournemouth - pops //603	555	1133	24/4	NH
855	România Actualitata, Tancabesti, Nat.Ant., ID, news	333	0159	17/5	FW
855	RNE 1, varios, ID, news	333	2300	16/5	FW

kHz	Station, location; details heard etc	SIO	UTC	Date	Who
891	Radio 538, Hulsberg, Pop mUsic	444	2300	27/8	FW
900	Rai Radio 1, Milano, Classic Music, ID	444	2250	28/4	FW
900	Radio Popular de Bilbao, Bilbao, News	222	2302	28/4	FW
909	BBC Radio 5 Live, various, Football live (ManU - Barca)	444	1850	29/4	FW
909	Radio Nacional 5, Palma de Mallorca, Spanish Music	222	1851	29/4	FW
918	Radio Slovenija 1, Ljubljana-Domzale, Music px	444	0200	1/5	FW
927	VRT Radio 1, Wolvertem, Music px	333	1850	2/5	FW
936	Fresh Radio, Hawes; "In Richmond on 102.6 FM, Ilkley on 107.1 FM,		0400	18/5	mah
750	and across the Dales on 9-3-6, 14-13 and 14-31 medium wave, Fresh Radio"	ľ	0400	10/5	man
936	Rai Radio 1, various, talk	333	2250	4/5	FW
936	Radio Bremen 1, Bremen-Oberneuland, news	333	2300	4/5	FW
945	France Info, Toulouse-Muret, news	333	2305	5/5	FW
945	Gold, Bexhill (Eastbourne), Music from Juli Iglesias	322	2312	5/5	FW
954	Ceský rozhlas 2/6, various, ID, news	444	0200	7/5	FW
963	Club Asia, London; "Your number one station for Asian Club Asia 9-6-3 and 9-7-2 AM"		0400	18/5	mah
963	Radio Euskadi, Vitoria, talk	222	0155	8/5	FW
963	Radio Horizont, various, ID "Horizont", news	222	0200	8/5	FW
972	NDR Info, Hamburg, ID, news	444	0200	9/5	FW
990	BBC R Scotland, Redmoss; Aberdeen traffic news, "The next bulletin from Aberdeen will be at 10 to 8 – join me if you can"	W/F	0600	19/5	mah
990	Deutschlandradio Kultur, Berlin-Britz, Music px	444	2310	10/5	FW
999	Magic 999, Preston; "Across the red rose county, this is Magic 9-99 News"	W	0400	18/5	mah
1017	Gold, Wolverhampton; "Across the of Shropshire, this is Gold"	W	0400	12/5	mah
1026	BBC Radio Cambridgeshire, Cambridge; "This is BBC Radio Cambridgeshire"	W/F	0400	12/5	mah
1026	Downtown Radio, Belfast; "Downtown Radio News"	F	0600	19/5	mah
1035	WestSound, Ayr; "On digital, online and on 10-35 AM, this is WestSound Breaking News"	W	0600	19/5	mah
1035	NorthSound 2; "Broadcasting from Aberdeen to north-east Scotland, the music of your life and the news that matters – NorthSound 2"	W	0601	19/5	mah
1107	Moray Firth Radio, Inverness; "Across the Highlands, Moray and Aberdeenshire, this is Moray Firth Radio, first for news"	F	0400	18/5	mah
1116	Valleys Radio, Ebbw Vale; promo, ID "This is Valleys Radio" in mix	W	0400	12/5	mah
1134	LPAM: BFBS Gurkha Radio, Gamecock Barracks, Bramcote; regular signal but varies in reception quality due to noise levels. // 1251kHz	W	0945	30/5	SW
1152	Clyde 2, Glasgow; "11-52 AM Clyde 2"	F	0400	18/5	mah
1161	Tay AM, Dundee; 11-61 and 15-84 AM and 96.4 and 102.8 FM, this is Radio Tay"	W	0359	18/5	mah
1170	Magic 1170, Teesside; "Middlesbrough, Hartlepool, Northallerton first for news, Magic 11-70"; xd WWVA	W	0400	12/5	mah
1206	France Info, Bordeaux-Néac, Infos, talk	444	2257	7/5	FW
1215	COPE various, ID, news	222	2300	6/5	FW
1215	Virgin 1215, various, Music	444	2305	6/5	FW
1224	COPE various, ID, news	333	0200	6/5	FW
1224	Radio Popular de San Sebastián, talk, Spanish Music	222	0215	6/5	FW
1233	RTBF Pure FM, Rocourt, French Music	333	0250	5/5	FW

kHz	Station, location; details heard etc	SIO	UTC	Date	Who
1233	TWR/Radio Mt Carlo Doualiya, Cape Greco, talk	222	0305	5/5	FW
1233	Virgin 1215, various, Pop Music	333	0315	5/5	FW
1242	France Info, Marseille-Cabriès-Réaltor, ID, news	333	2300	3/5	FW
1242	Virgin 1215, various, Pop music	333	2310	3/5	FW
1251	Gold, Bury St Edmunds; "On 12-51 and 11-70 across Suffolk, this is Gold"	W	0400	12/5	mah
1251	Gold Digital Amber, Great Barton, Classic Hits	222	2310	2/5	FW
1260	Gold, Wrexham; "On 12-60 AM Sky and Virgin media, in Wrexham and Chester, this is Gold"	W	0600	19/5	mah
1260	BBC Radio York, Row Bow ID "BBC R. York"	333	2300	30/4	FW
1260	SER Radio Murcia, Murcia, News	222	2305	30/4	FW
1269	Deutschlandfunk, Neumünster, ID, news	444	2300	29/4	FW
1269	COPE various; news	222	2303	29/4	FW
1278	France Bleu, Sélestat, French Music	444	0155	29/4	FW
1270	SER Radio various, Spanish Music, ID, news	333	0150	28/4	FW
1287	LPAM: R Gwendolen clear with Catterick (Garrison R) silent except	Fair	1614	28/6	SW
1207	for blank carrier	I ull	1011	20/0	511
1287	LPAM: Garrison R, Catterick; loop announcement to retune to 106.9 throughout May & June. But audio gone late June.			May	SW
1341	BBC R Ulster, Lisnagarvey; TS, ID "92 to 95 FM and 13-41 medium wave, BBC Radio Ulster"	F/G	0600	19/5	mah
1350	LPAM: URY York went off air for student vacation today	Local	1200	28/6	SW
1350	LPAM: Kingstown Radio, Hull; excellent with URY off air	Exc	0940	30/6	SW
1386	LPAM: Carillon Radio Loughborough Hospital; daily regular	good	0950	30/6	SW
1386	Energy, Dublin; "Energy Power AM 1395 (sic)" presumably an old recorded programme	Good	0003	8/6	SW
1404	France-Info, Bretagne-FF OM, YL - Public Announcements, ID	544	1506	19/5	NH
1413	BBC Radio Gloucestershire, 2 sites listed; "BBC Radio Gloucestershire"	W/F	0400	12/5	mah
1413	Fresh Radio, 3 sites listed; partial ID noted under BBC R Gloucester	W	0600	19/5	mah
1413	R.Gloucestershire, Berkeley Heath - ID, news	434	1501	19/5	NH
1431	Gold, Reading (tentative)- pops, ads	322	1457	19/5	NH
1458	Gold, Manchester; " across Manchester, this is Gold"	W/F	0400	18/5	mah
1458	R.Devon, Torquay - ID, local announcements	544	1122	19/5	NH
1476	WNKR, Kent, England; IDs and 60s music	Fair	2305	28/6	SW
1485	BBC R Merseyside, Wallasey; "Online from Liverpool this is BBC Radio Merseyside"	W/F	0600	19/5	mah
1485	Gold, Newbury; partial ID " Virgin media across Berkshire and north Hampshire"	W	0600	19/5	mah
1485	BBC R Humberside, Hull; partial ID " BBC Radio Humberside"	W	0600	19/5	mah
1485	Gold, Newbury (tentative) - pops, ads	3322	1115	7/5	NH
1485	BBC Southern Counties, Brighton - (in null)- ID, int.re guide dogs	333	1118	7/5	NH
1503	BBC R Stoke, Sideway; "This is BBC Radio Stoke"	W/F	0600	19/5	mah
1521	Gold, Reigate; " across Sussex and Surrey, this is Gold"	W	0600	19/5	mah
1530	Pulse Gold, Huddersfield; "Across and Bradford, this is Pulse Gold"	W	0600	19/5	mah
1530	Pulse Gold, Huddersfield, Infos, Music	333	2255	7/6	FW
1530	Sunshine R., Worcester- news, ID	333	1106	19/5	NH
1539	SER Radio Elche/Manresa, talk. Infos, Music	333	0259	7/6	FW

kHz	Station, location; details heard etc	SIO	UTC	Date	Who
1539	Evangeliums Rundfunk, Mainflingen, English Program	555	0305	7/6	FW
1548	Gold, Saffron Green, Music	433	0155	6/6	FW
1548	BBC Radio Bristol, Mangotsfield, Px BBC World Servie (?)	211	0200	6/6	FW
1557	BBC R Lancashire, Oxcliffe; "On FM, AM, digital and online right across the county, BBC Radio Lancashire"	W	0600	19/5	mah
1557	Gold, Northampton; "On 15-57 AM Sky and Virgin media in Northamptonshire, this is Gold"	W	0600	19/5	mah
1566	County Sound R., Guildford; "The latest County Sound headlines at 7"	W/F	0600	19/5	mah
1566	County Sound, Peasmarsh (Guildford), ID, Infos	333	2255	3/6	FW
1575	LPAM: Radio Tyneside, Newcastle; fading in & out of noise floor but clear ID; this is rarely heard here	Weak	0730	15/5	SW
1584	Tay AM, Perth; "On 11-61 and 15-84 this is Tay AM News"	F/G	0600	19/5	mah
1584	BBC Radio Nottingham, Clipstone, Pan Midlands Px, Infos	333	2250	1/6	FW
1584	SER various, News	222	2305	1/6	FW
1602	Euskadi Irratia R. Vitoria, Cerro Estibaliz, Music, ID, news	433	0155	30/5	FW
1602	BBC Radio Kent, Rusthall, ID, Px 5Live	222	0200	30/5	FW
1602	Sunrise R., London - ID, Indian OM,YL,music,ads (<i>Broadcasting from Desi Radio? Ed</i>)	543	1036	2/6	NH
1665	Radio Technical Man, Netherlands; English ID strong & good quality	Good	2310	17/5	SW

In addition to the these logs I heard from Clive Grey, West Kirby, Wirral Cheshire who tells me "I bought a VW Golf Mark 5 in January this year and I have to say that the factory radio that comes with it is frankly sensational. It comes with a straightforward amplified aerial attached to the roof. I know this is hardly the traditional setup for DX but I thought it worth reporting the results!

Daytime reception right here on the Wirral coast on Merseyside is remarkable anyway. Listening in the car though here has made me start to rethink what medium wave DXing actually is. I'm beginning to think it doesn't have to be a night time event after all! Clive heard the following stations:

- 585 BBC R Scotland Dumfries SIO: 555 UTC 0950 20/6/08 (a 2kW station belting in at 170km distance, a direct seapath to here)
- BBC Radio 4 Newcastle SIO: 555 UTC 0950 20/6/08 (it is really strong here)
- 630 BBC Three Counties Radio SIO: 333 UTC: 1005 20/6/08 (200 watts over land from nearly 300km away)
- BBC Hereford and Worcester (Worcester relay) SIO: 444 UTC: 1015 20/6/08
- 792 BBC R Foyle SIO: 322 UTC: 1000 (local news ident) 20/6/08

Many thanks to:

FW Friedhelm Wittlieb, Grundig Satellite 700, Martens-Fram Dortmund Germany

- mah Martin Hall, Clashmore, Sutherland. Perseus SDR, NRD-545, RPA-1 preamp, MFJ-1026 phaser (modified), beverages: 513m at 233° degrees, terminated; 506m at 279°, terminated, 550m at 338°, terminated, 50m at 321°, unterminated; TotalRecorder.
- NH Norman Hixson Poole, AOR AR 7030, with 1-metre octagonal loop
- SW Steve Whitt

The closing date for the next issue is 13 August, 2008 73's John

DX LOGGINGS

. Glackin, 199 Clashmore, Lochinver, Lairg, Sutherland IV27 4JQ, Scotland with Martin Hall

,	·) · J) · · · · · ·	
e-mail:	dxlogs@mwcircle.org	2 01571-855360

kHz	Callsign	Station, location; details heard etc	SIO	UTC	Date	Who
531	0	Alger Chaîne 1, El Ain Beida, Algeria; talk	333	0150	27/5	FW
550	CW1	R Colonia; "Radio Colonia república oriental del Uruguay"	vW	0400	27/6	mah
560	CHVO	Spaniard's Bay NL; country mx, "103.9 FM Kixx Country"	W	0400	11/5	PC
570	CFCB	Corner Brook NL (pres); country mx	W	0300	28/5	PC
580	LW1	R Universidad, Córdoba; SS ID " de Radio Universidad	W/Fpk	0401	29/6	mah
		en 580 kHz amplitud modulada, desde Córdoba, república Argentina Radio Universidad"; UK FIRST	Ĩ			
590	VOCM	St John's NL; country mx "VOCM – depend on it"	F/G	0200	9/6	PC
590	LS4	R Continental, Buenos Aires; SS anns, ID "Radio Continental" no VOCM at this time I haven't heard R Continental for the last 6 months!	W/Fpks	30330	2/5	Rha
590	LS4	R Continental, Buenos Aires; TS, "La una de la mañana. Continental servicios informativos"	W/Fpks	s 0400	29/6	mah
600	CBNA	St Anthony NL; CBC News	W/F	0300	28/5	PC
610	CHNC	New Carlisle QC; FF news mentioning Canada	W/F	0200	9/6	PC
610	CX4	R Rural, Montevideo (presumed); SS tlk with mention of Uruguay, and possibly "Rural"	Wpks	0300	27/6	mah
620	CKCM	Grand Falls NL; "Today's best country, 5-90 VOCM"	F	0400	11/5	PC
620	CKCM	Grand Falls NL; surprise at 0048utc! VOCM ID	F	0048	7/6	SW
620	ZYH590	R Globo, Fortaleza; PP anns, "Globo" IDs; in the mix	W	0301	27/6	mah
640	CBN	St John's NL; CBC News	W	0400	11/5	PC
650	CKGA	Gander NL; "Today's best country, 5-90 VOCM"	W	0400	11/5	PC
650	CX6	SODRE, R Clasica, Montevideo; SS ID "Radio Clasica 650 AM, Radio Uruguay, 1,050 AM, Emisora del Sur Uruguay, para todo el país"	W	0301	27/6	mah
660	WFAN	New York NY; "The Fan. Sports Radio 66, WFAN and WFAN-HD New York"	F	0200	9/6	PC
700		NBC, Radio Kingstown, St Vincent (presumed); scheduled BBC/WS time signal, BBC/WS ID & nx	W	0400	6/5	BD
700		NBC, Kingstown, St Vincent (pres); BBC World Service	W	0400	11/5	PC
700	LV3	R Córdoba; SS ID "Transmite LV3 Radio Córdoba, AM 700 y FM Radio 3 de la Cadena 3 Argentina"; u/o ZYK686	W	0300	29/6	mah
700	ZYK686	R Eldorado, São Paulo; "Eldorado" mentioned x3 in PP anns	Fpks	0303	27/6	mah
710	CKVO	Clarenville NL; VOCM IDs	W/F	0417	1/5	PC
710	СМ	R Rebelde, 4 sites listed; "Rebelde, La Habana. Emisora de la revolución"	W	0430	1/5	PC
730	CKAC	Montréal QC; FF discussion	W/F	0303	25/5	PC
730	HJCU	R Lider, SF de Bogotá; "Radio Lider informa"	W	0430	1/5	PC
730	ZP7	Cardinal, Asunción; SS ID "Cardinal AM 730 la radio más potencia del país"	W	0359	27/6	mah
740	CHCM	Marystown NL; "VOCM Satellite Weather"	W/F	0433	1/5	PC
740	ZYH446	R Sociedade da Bahia, Salvador; full ID at toth; romantic mx	W/F	0300	2/5	PC
740	ZYH446	RS da Bahia, Salvador; PP ID "ZYH446 AM 740 kHz Rádio Sociedade da Bahia 24 horas"	F	0359	27/6	mah

kHz	Callsign	Station, location; details heard etc	SIO	UTC	Date	Who
750	CBGY	Bonavista Bay NL; CBC Radio Overnight	W	0400	3/5	PC
750	CBGY	Bonavista Bay NL; CBC News	F	0200	14/5	JF
750	YVKS	RCR, Caracas; mention of "Radio Caracas" in item before toth	F	0400	1/5	PC
760	ZYH588	R Uirapuru, Fortaleza; "Rádio Uirapuru de Fortaleza" in full ID		0100	3/5	PC
770	WABC	New York NY; program trailer, "Saturday afternoon at 1, only		0400	3/5	PC
		on 77 WABC				
780	CFDR	Dartmouth NS; "CFDR 7-80 AM .Classic Country 7-80 Kixx"	F	0300	2/5	PC
780	CFDR	Dartmouth NS; still C&W music in splatter	W	0338	5/5	Rha
800	VOWR	St John's NL; "You're listening to VOWR"; lugubrious	W/F	0430	3/5	PC
		presenter				
800	CHRC	Quebec QC (presumed); with French talking in the mix	F	0800	14/5	JF
830	WCRN	Worcester MA; "Red Sox baseball on True Talk 8-30 WCRN"		0301	28/5	PC
855	~~~~~	BSKSA, Dammam, Saudi Arabia; Koran px	222	0210	17/5	FW
860	CJBC	Toronto ON; FF news	W	0200	9/6	PC
860	ZYJ459	Radio CBN, Rio de Janeiro; "CBN" ID	W/F	0330	10/6	PC
860	ZYJ459	CBN, Rio de Janeiro; PP anns, "CBN" IDs, "CBN Madrugada"		0301	27/6	mah
870	WWL	New Orleans LA; International Gospel Hour – matching sched		0200	9/6	PC
880	WCBS	New York NY; "WCBS news time, 12 midnight"	W/F	0400	3/5	PC
891		Alger Chaîne 1, Alger; music	222 Walt	2255	27/4	FW
900		CBC Radio 900, St Michael, Barbados (tentative); no more than half a minute of EE anns mentioning Barbados twice, and	Wpk	0359	15/5	mah
		St Lucia, then faded				
909		Voice of America, Sebele Pikwe, Botswana; ID, news	211	0300	30/4	FW
910	LR5	La Red, Capital Federal; SS ID "La Red Informativa –	P/Fpks		22/6	mah
		noticias"; battling with Five Live splatter from 909 kHz	1			
920	CJCH	Halifax NS; "This is 92 CJCH, all oldies all the time"	W	0300	2/5	PC
920	CJCH	Halifax NS; "The Greatest Oldies Of All Time, 92 CJCH"	F	0230	13/5	JF
920	ZYK775	R Nacional Gospel, Cotia (presumed); PP "Nacional" IDs	vW	0303	21/6	mah
930	CFBC	Saint John NB; "Oldies 9-30 CFBC" ID; Brief peak	F	0204	13/5	JF
930	CFBC	Saintt John NB; "Good time oldies – 93 CFBC"	F	0300	25/5	PC
930	CJYQ	St John's NL; "Your home away from home. We are Radio	W/F	0400	3/5	PC
		Newfoundland"				
930	LV7	R Tucamán, San Miguel de Tucamán; SS ID "Desde Tucamán,	Wpks	0305	21/6	mah
		república Argentina, transmite AM 9-30, LV7, Radio Tucamán"				
930	CB93	R Nuevo Mundo, Santiago ; SS anns, ID " de Radio Nuevo	Enke	0301	19/6	mah
)50	(1)5	Mundo. 23 horas, 11 de la noche, 1 minuto"; UK FIRST	тркз	0501	17/0	man
940	CINW	Montreal QC; "This is 9-40 Montreal"	W	0400	3/5	PC
940	CINW	Montreal QC; " 9-40 Montreal, a radio station"	W/P	0200	17/5	mah
940	ZYJ453	Super R Brasil, Rio de Janeiro; PP tlk with several mentions of		0303	21/6	mah
		"Boa Vontade"				
950	CKNB	Campbellton NB; Country mx "95 CKNB"	W	0300	22/5	PC
950	LR3	R Belgrano, Buenos Aires; "Belgrano AM 9-50"	W/F	0420	3/5	PC
950	LR3	R Belgrano, Buenos Aires; SS "Radio Belgrano Informa"	W/F	0300	21/6	mah
960	LRA6	R Nacional, Mendoza; "Argentina se informa" followed by	W	0400	11/5	PC
		news. Tnx to AB for suggesting R Nacional. Announcement				
0.62		matched webstream. Last reported in the UK in 1991 - mah	222	0015	0/5	
963 070	11/7 A NT	Radio Tunisia Cultural channel, Tunis; music	333 W	0215	8/5	FW
970	WZAN	Portland ME; "9-70 WZAN, Portland" CNN News	W	0400	3/5	PC

kHz	Callsign	Station, location; details heard etc	SIO	UTC	Date	Who
980	ZYH707	R Nacional, Brasília; PP anns, "Nacional" IDs	W/F	0300	21/6	mah
981		Alger Chaîne 2, Ouled Fayet; ID, news	433	0200	10/5	FW
990	CBY	Corner Brook NL; "This is CBC News"	F	0300	18/5	mah
999		RTM A, Tanger, Morocco; Arabic music	333	2310	11/5	FW
1000	ZYK522	R Record, São Paulo; PP ID " AM mil kHz e ondas curtas 31	Fpks	0401	21/6	mah
		e 49 metros", followed by jingle ID " Rádio Record"				
1010	WINS	New York NY; traffic news "Stay tuned to 10-10 Wins"	F/G	0402	1/5	PC
1010	WINS	New York NY; news "WINS Newstime " IDs xf CFRB	F	0300	13/5	JF
1010	WINS	New York NY; "Wins 10-10" time" & rolling news	W	0308	20/5	BD
1010	CFRB	Toronto ON; program trailer "on 10-10, Toronto's radio station for breaking news"	W/F	0400	3/5	PC
1010	CFRB	Toronto ON; ID "CFRB news" heard in QRM	W	0400	7/5	JW
1010	CFRB	Toronto ON; "CFRB News Talk 10-10", dom over WINS	F	0300	12/5	mah
1010	CFRB	Toronto ON; "CFRB News" ID	F	0204	13/5	JF
1010	CFRB	Toronto ON; programme promos on "News Talk 10-10 CFRB"	W/F	0229	22/6	BD
1020	KDKA	Pittsburgh PA; "This is the Voice of Pittsburgh News Radio 10- 20 KDKA", CBS News	-F	0400	12/5	mah
1026		IRIB 1, Tabriz, Iran; ID, news	333	2310	17/5	FW
1030	WBZ	Boston MA; "WBZ, WBZ-HD Boston"	F	0200	10/6	PC
1030	LS10	R.del Plata, Capital Federal; studio talk and ID after jingle	Fpks	0132	7/5	AB
		"Presenta – Amargo Marolio. Radio Noticias del Plata". Thanks to HK for deciphering the Amargo Marolio, a type of Argentine herbal tea.				
1030	LS10	R del Plata, Capital Federal; SS ID "Radio Noticias del Plata. Hora 23"	F	0200	22/6	mah
1050	WEPN	New York NY; "ESPN New York"	W/F	0200	2/5	PC
1050	WEPN	New York NY; ESPN sports news	F	0105	14/5	JF
1060	WBIX	Natick MA; WBIX ID and ad for home delivery of the Boston Herald	W	0300	2/5	PC
1060	WBIX	Natick MA; "This news is brought to you by The Boston Herald WBIX The Boston Herald"	F	0200	13/5	mah
1060	WBIX	Natick MA; financial talk "Business Talk Radio"	W	0300	2/6	JF
1060	CMGW	Radio 26, Matanzas; News "26 desde Matanzas"	F	0433	1/5	PC
1062		TRT-4, Diyarbakir, Turkey; Turkish talk	222	2250	23/5	FW
1070	CBA	Moncton NB; CBC News. CBC was audible most of the night despite the station having officially closed down. CBC's reply to another DXer was "CBA was on for a few hours April 29th.We were asked to do a few tests. Unfortunately, that's probable the last you will hear of CBA."	F	0400	29/4	PC
1070	LR1	R El Mundo, Buenos Aires; SS tlks, anns; at 0401 "AM 1,070"; at 0403 "Voz de la Liberación, desde Capital Federal, Buenos Aires, Argentina"	; W	0401	20/6	mah
1080	WTIC	Hartford CT; "WTIC News Talk 10-80 and wtic.com", sports	F	0158	20/5	mah
1100	WTAM	Cleveland OH; promo for "Coast To Coast"	F	0300	2/6	JF
1100	ZYK694	R Globo, São Paulo; sung "Globo" jingle during OM talk	W	0133	30/4	AB
1100	ZYK694	Rádio Globo, São Paulo; music leading up to "Rádio Globo" IE at toth	W	0400	2/5	PC
1100	ZYK694	R Globo, São Paulo; echoey "Globo" jingle then spoken ID; I've not heard this since the 80s!	F	0300	13/5	JF
1100	ZYK694	R Globo, São Paulo; "Rádio Globo" and "Globo Noticias"	W	0300	21/6	mah

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1110	WBT	Charlotte NC; "News talk 11-10 WBT Charlotte"	W/F	0200	20/5	mah
1130	WBBR	New York NY; WBBR and Bloomberg Radio IDs	F/F	0400	1/5	PC
1130	WBBR	New York NY; "This is Bloomberg News", "Bloomberg 11-3-	F	0335	13/5	JF
		oh traffic and weather"				
1130	WBBR	New York NY; Bloomberg business & political talk	W	0335	15/5	Rha
1130	WBBR	New York NY; YL with "Bloomberg 11-3-0" slogan & news	W	0307	24/6	BD
1130	ZYJ460	R Nacional, Rio de Janeiro; nice PP ID "Rádio Nacional de Rio de Janeiro 1,130 kHz …"	W/G	0300	21/6	mah
1140	CBI	Sydney NS; CBC News	W	0400	1/5	PC
1140	CBI	Sydney NS; CBC News jingle and ID	F	0300	13/5	JF
1140	ZYH449	R Cultura, Salvador; PP ID "ZYH449 AM 1,140 kHz onda media Rádio Cultura, Salvador, Bahia"	W/F	0259	19/6	mah
1140	HJDL	R Paisa, Medellín; "Radio Paisa, 23 horas y 11 minutos" Lively dance music.	W/F	0411	1/5	PC
1160	WYLL	Chicago IL; "This is Chicago's Christian Talk AM 16-60 WYLL Chicago, online at wyll.com", then rlgs px	F	0300	17/5	mah
1180	WHAM	Rochester NY; "Wham Radio, Rochester, New York" ID	F	0300	2/5	JF
1180	WHAM	Rochester NY; "The Sports Leader 11-80 WHAM Rochester"	W/F	0300	17/5	mah
1180	WHAM	Rochester NY; "This is the home of the 26 time world	W	0300	19/5	PC
		champion New York Yankees. This is 50,000 watt 11-80 WHAM Rochester"				
1180	CMBA	Radio Rebelde, 2 sites; "Rebelde, La Habana"; usual tones	F	0430	3/5	PC
1180	CB118	R Portales, Santiago; SS ID "Radio Portales"	W/F	0300	21/6	mah
1190	WLIB	New York NY; "11-90 WLIB, New York's praise and inspiration station"	W	0400	3/5	PC
1190	WLIB	New York NY; "You're listening to The Miracle Revival Hour broadcast; I'm your host Pastor David Hall"	F	0230	13/5	JF
1190	WLIB	New York NY; religious talk & hosts	W	0338	15/5	Rha
1190	WLIB	New York NY; "Your praise and inspiration station 11-90 WLIB"	F/G	0159	20/5	mah
1190	LR9	Radio América, Buenos Aires; "Radio América informa"; news	W/F	0000	4/5	PC
1190	LR9	R América, Buenos Aires; SS; info about Argentine and ID "Radio América Informa"	W	0341	5/5	Rha
1190	LR9	Radio América, Capital Federal; "Informa Radio América. AM 11-90" jingle during news	F	0332	7/5	AB
1190	LR9	R América, Buenos Aires; "Radio América Informa"	F	0230	17/5	JF
1190	LR9	R América, Buenos Aires; "Radio América Informa"; xf Brazilian	W	0200	19/6	mah
1190	ZYJ594	Radio CBN, Natal, RN; information and news at toth. The music at the start of the news matches CBN webcast	W/F	0100	20/5	PC
1190	UNID	Brazil with Portuguese talk over the hour; brief sports commentary clip at 2303; a second Latin station underneath	vW	2300	21/5	JF
1200	CFGO	Ottawa ON; talking about Ottawa sporting event and "Fox Sports" IDs before top of hour	F	0300	14/5	JF
1200	CFGO	Ottawa ON; "Sports Radio. The Team 12-hundred"	W/F	0300	19/5	PC
1200		Ceará R Clube, Fortaleza (tentative); a couple of rather indistinct PP IDs sounding like "Rádio Clube"	W/Fpks		21/6	mah
1220	ZYJ458	Rádio Globo, Rio de Janeiro; "O Globo" and "Rádio Globo Noticias"	F	0200	10/6	PC
1220	ZYJ458	R Globo, Rio de Janeiro; "Rádio Globo Noticias"	F/G	0300	21/6	mah

kHz	Callsign	Station, location; details heard etc	SIO	UTC	Date	Who
1230	WGAN	Manchester NH; "This is Radio 12-50 WGAN Manchester	W	0200	17/5	mah
		and 900 WGAM Nashua New Hampshire's best sports				
1.0.0	awe	report starts right now"	-		~ - / -	ЪС
1250	CJYE	Oakville ON; Haven Today program with Charles Morris – matches schedule	F	0300	27/5	PC
1251		Voice of Africa, Tripoli, Libya; ID, news	333	2300	2/5	FW
1270	CJCB	Sydney NS; country mx "12-70 CJCB"	W/F	0259	7/6	PC
1270	LS11	Radio Provincia, La Plata; "Radio Provincia" and "Deportes	F/G	0430	3/5	PC
12,0	2011	Provincia"	1,0	0.20	576	10
1270	LS11	R Provincia de Buenos Aires, La Plata; SS ID, "LS11 Radio	Fpks	0300	20/6	mah
		Provincia de Buenos Aires, La Plata, Argentina", TS, anns, NA				
1270		R Brasil Central, Goiânia; PP "Rádio Brasil Central" IDs	W	0300	21/6	mah
1280	VSB2	Hamilton, Bermuda; "You're listening to BBN" followed by bible commentary	W	0430	1/5	PC
1280	WCMN	Arecibo PR; "NotiUno 6-30" IDs	F	0400	13/5	mah
1280	WCMN	Noti Uno, Arecibo; "Noti Uno" ID and rolling news; Familiar	W	0300	3/6	JF
		jingle ID at toh listing all the stations on the network				
1280	ZYJ455	R Tupi, Rio de Janeiro (presumed); OM in Portuguese with	W	0341	21/5	JF
		possible ID; lively Portuguese promos				
1280	ZYJ455	R Tupi, Rio de Janeiro; PP IDs, jingles, "Super Madrugada Tupi"; also Fpks 0500 5/5; Fpks 0300 20/6	W/F	0300	21/6	mah
1290	WHIO	Dayton OH; "AM 12-90 and 95.7 FM News Talk Radio	W	0300	20/5	mah
1270	WIIIO	WHIO"	••	0500	20/5	man
1290	WRNI	Providence RI; "This is 12-90 WRNI AM Providence 102.7	W/P	0400	13/5	mah
		WRNI FM online at wrni.org WRNI Rhode Island",				
		BBCWS				_
1290	CJBK	London ON; "News Talk 12-90 CJBK", ESPN Radio	Fpk	0300	12/5	mah
1300	WOOD	Grand Rapids MI; I just caught W-O-O-D in talk before the TOH in heavy QRM	W	0259	16/5	AB
1300	WOOD	Grand Rapids MI; "This is Radio 1300 WOOD Grand	W/F	0200	18/5	mah
		Rapids"				
1300	WJMO	Cleveland OH; "Cleveland's Inspiration Station, The New	W	0300	12/5	mah
1210		Praise 13 hundred AM"	Г	0000	17/5	1
1310	WLOB	Portland ME; "News Talk WLOB"	F W/E	0200	17/5	mah
1310	CIWW	Ottawa ON; I think this had sports until 0300, then oldies; "Oldies 13-10" ID at 0305	W/F	0305	18/5	mah
1310	YV	Radio Nacional de Venezuela; serious South America current	W/F	0405	5/5	BD
		affairs talk				
1320	CKEC	New Glasgow NS (pres); soft pops & ID "94.1 East Coast FM"	-		2/5	Rha
1320	CJMR	Mississauga ON; TOH legal ID "You're listening to CJMR 13-	F	0300	16/5	AB
1220		20" then Asian music	W	0200	1615	Ш
1320	CJMR	Mississauga ON; "You're listening to CJMR 13-20 " then Asian style singing	W	0300	16/5	JF
1320	CJMR	Mississauga ON; "Asian mx, EE ID "You're listening to CJMR	F	0300	18/5	mah
		13-20, the Voice of the City"				
1320	CJMR	Mississauga ON; "You're listening to CJMR 13-20 The Voice	W/F	0300	20/5	PC
1000	* /* /** ***	of the City" Indian music	-	0.42.0	a c / :	
1320	YVWP	R.Apolo, Turmero; robotic sounding Apolo ID, TS followed by Venezuelan NA	F	0430	30/4	AB
1320	YVWP	R Apolo, Turmero; Radio Apolo ID and National Anthem	W/F	0430	30/4	PC
1520	1 4 441	rapolo, rumero, radio apolo id and National Antifelli	VV/I	0-1-50	50/4	10

kHz	Callsign	Station, location; details heard etc	SIO	UTC	Date	Who
1320	YVWP	Radio Apolo Turmero; cultural info, "Apolo" jingle and light	W/F	0400	1/5	BD
1330	WRCA	MOR songs; thanks to Henrik Klemetz for assistance Waltham MA; "A member of the Beasley Broadcast service 13-30 WRCA Waltham Boston"	W/P	0400	13/5	mah
1330	WRCA	Waltham MA; "This is 13-30 WRCA, Waltham, Boston"	W/F	0300	20/5	PC
1330	WWRV	New York NY (presumed location); usual "WWRV 13-30 AM New York" ID, straight after the WRCA ID	W/P	0400	13/5	mah
1350	WOYK	York PA; "First in York, first in sport, 13-50 WOYK"	W/F	0303	17/5	mah
1350	LS6	Radio Buenos Aires; "Radio Buenos Aires AM 13-50"	F	0200	26/5	PC
1350	LS6	R Buenos Aires; "www.radiobuenosaires.com.ar", "Radio Buenos Aires AM 1,350 24 horas"; also W/F 0059 21/5	Fpks	0159	19/6	mah
1370	WDEA	Ellsworth ME; ID heard in 1368 splatter	W	0100	13/5	JF
1370	WDEA	Ellsworth ME; "AM 13-70 WDEA Ellsworth, a Cumulus station", then CBS News	W/F	0400	13/5	mah
1370	WDEA	Ellsworth ME (pres); nostalgia in background	W	0340	15/5	Rha
1370	WDEA	Ellsworth ME; "AM 13-70 WDEA Ellsworth. A Cumulus station"	W	0300	20/5	PC
1370		R da Cidade, São Paulo; PP, OM ID, soft songs; W/F 0325 12/5	5W/F	0259	26/5	HP
1370		R da Cidade, São Paulo; PP ID "Rádio da Cidade AM 1,370"	W	0401	20/6	mah
1380	СКРС	Brantford ON; "From Brantford you're listening to 13-80 CKPC"	W	0300	18/5	mah
1380	CB138	R Corporación, Santiago; "Radio Corporación" IDs heard – but not much else!	W	0400	3/5	PC
1380	CB138	R Corporación, Santiago; SS ID "Portales Corporación, en Santiago 1,380 kHz"	W/F	0300	19/6	mah
1380	OCY4U	R Nuevo Tiempo, Lima (tent); soft SS ballads	W/F	0320	5/5	HP
1380	YVNG	Ondas del Mar, Puerto Cabello; "Ondas del Mar, ?? y 44 minutos"	W	0414	1/5	PC
1390	WEGP	Presque Isle ME; talk show "The ? show on Westwood One"	F	0400	8/5	JW
1390	WEGP	Presque Isle ME; sung jingle ID after ad break at 0108; mixing unidentified Spanish	F	0108	13/5	JF
1390	WFBL	Syracuse NY; classic rock and roll, "Oldies 13-90 WFBL"; under/over WEGP	Fpks	0205	13/5	mah
1390	WXTC	Charleston SC (presumed); with inspirational Gospel/soul music	W	0340	13/5	JF
1390	WXTC	Charleston SC; gospel & soul in mix; WXTC dominant – the other station not identified!	W	0342	15/5	Rha
1390	WXTC	Charleston SC; "WXTC Charleston, Heaven 13-90"	Fpks	0204	18/5	mah
1389.99	OAU7T	R Enlace, Kunturkanki ; SS huaynos, OM ID " Radio Enlace, 13-90 AM " s/off 0319, tnx to Henrik Klemetz for help on that.	W/F	0310	18/5	HP
		Personal first! My best log ever made!				
1390	YVZA	Radio Fé y Alegría, Caracas; "Radio Fé y Alegría" ID; at 0430 "Himno Nacional de la Republica Bolivariana de Venezuela" followed by the Venezuelan anthem	W	0414	1/5	PC
1400	CBG	followed by the Venezuelan anthem Gander NL; CBC News	W	0400	1/5	PC
1400 1400	CBG	Gander NL; // 1140 kHz	W	0400	1/5	JF
1400 1410	WPOP		w W/F	0300	13/3 12/5	
1410 1410	WPOP	Hartford CT; "This is ESPN Radio 14-10 WPOP Hartford" Hartford CT; ESPN IDs and sports talk	W/F F	0300	12/5	mah JF
1410 1420	WHK	Cleveland OH; several very weak "WHK" IDs heard in the	г vW	0250	17/5	лг mah
1420	VV 11K	noise	V VV	0300	12/3	mall

kHz	Callsign	Station, location; details heard etc	SIO	UTC	Date	Who
1430	WENE	Endicott NY; "Sports Radio 14-30 The Team"	W	0400	1/5	PC
1430	WENE	Endicott NY; "Fox Sports Radio 14-30 The Team"	F	0243	17/5	JF
1430	CHKT	Toronto ON; "AM 14-30 CHKT Fairchild Radio Toronto"	F	0200	13/5	mah
1430	CHKT	Toronto ON; OM & YL alternating with ID AM 14-30 CHKT,	F	0300	16/5	JF
		Fairchild Radio, 14-30 CHKT, Fairchild Radio, Toronto"				
1430	СНКТ	Toronto ON; disclaimer then "now a Japanese programme on AM 14-30 Fairchild Radio"	F	0300	17/5	AB
1430	СНКТ	Toronto ON; Russian language programme "AM 14-30, CHKT Fairchild Radio" xf WENE	,W/F	0300	27/5	PC
1430	ZYJ671	R Caiari, Porto Velho; PP tlk, IS, ID "Rádio Caiari Porto Velho"; in and out of the noise; tnx for help with the clip from AB and PC	Wpks	0300	19/6	mah
1440	WJJB	Westbrook ME; sports commentary, mixing UNID Spanish	W	0100	13/5	JF
1440	WJJB	Westbrook ME; Public Information announcement about seatbelt wearing, then "Sports Radio WJAB – The Jab" before more commercials and SNR	F	0224	16/5	AB
1440	WJJB	Westbrook ME; "Big Jab Sports Radio. WJJB AM and FM Westbrook, Portland South, Portland-Thompson WWBJ Brunswick"; over a station with // sports commentary 1 sec later	W/F	0206	20/5	mah
1440	WJJB	Westbrook ME (pres); Red Sox Radio Network	F	0200	4/6	PC
1440	WJJB	Westbrook ME; "WJAB" slogan sports talk on Sporting News	W/F	0225	12/6	BD
		Radio				
1440	WHKZ	Warren OH; "The Word" IDs and call letters in ad break	W	0231	6/6	JF
1440	WHKZ	Warren OH; "WHKW Cleveland, WHKZ Warren. News from the Salem Communications Network on The Word"	W/F	0200	12/5	mah
1440	WHKZ	Warren OH; invitation to listeners to write to " Drive, Cleveland, Ohio 44131 or visit whkwradio.com"	Fpks	0229	16/5	AB
1440	WHKZ	Warren OH; "Salem Communications" "12-20 The Word" surprising catch; over WJJB	Fpks	0200	9/5	SW
1440	ZYH285	R Globo, Manaus; studio talk and music with a couple of sung Rádio Globo IDs	W	0145	9/6	AB
1450	WENJ	Atlantic City NJ; ESPN "14-50 WENJ Atlantic City"	W/F	0300	27/5	PC
1450	WENJ	Atlantic City NJ; WENJ call clearly heard in splatter and "espn.com"	W	0300	3/6	JF
1460	CJOY	Guelph ON; mx, poor/difficult ID "14-60 CJOY"	W/P	0300	18/5	mah
1470	WWNN	Pompano Beach FL (tent); talk about abortion	W	0330	2/5	HP
1470	WMBD	Peoria IL (tentative); very weak ID sounding like "This is WMBD" heard in gap in WNYY speech	vW	0200	12/5	mah
1470	WLAM	Lewiston ME; lots of ESPN sports in mixed with YVSY	W/F	0343	25/4	Rha
1470	WLAM	Lewiston ME; ESPN "WLAM Lewiston"	W	0400	1/5	PC
1470	WLAM	Lewiston ME; "you can depend on AM 8-70 and 14-70 ESPN, Maine's Sports Station" followed by ESPN Sports Centre	F	0321	16/5	AB
1470	WLAM	Lewiston ME; ESPN "WLAM Lewiston"	Poor	0200	19/6	SW
1470	WNYY	Ithaca NY; "5000 watts of free speech every day – this is Progressive Talk 14-70 WNYY Ithaca"	W/F	0200	12/5	mah
1470	WNYY	Ithaca NY; "AM 14-70 WNYY forecast" several IDs	W/F	0333	11/5	mah
1470	WBKV	West Bend WI; easy listening music. "Your personal jukebox. It's the songs you pick – 14-70 BKV" Earlier Milwaukee weather	F	0319	16/5	AB

kHz	Callsign	Station, location; details heard etc	SIO	UTC	Date	Who
1470	ZYJ616	Rádio Rural AM, Parelhas, RN; full ID at toth including "Rádio	W/F	2300	19/5	PC
		Rural AM de Parelhas"				
1470	OAU4B	Lima Peru; more Pare de Sufrir with promotion for "La limpia	F	0414	1/5	AB
		espiritual", Fridays at 7.30 and 10 a.m, 12mid-day, 4 and 8pm,				
1 470		details matching with web site; also vG at 0337 on 14/6		0225	<i>E 1 E</i>	IID
1470	OAU4B	CPN Radio, Lima; continuous rel talks, Pare de Sufrir ID	W/F	0325	5/5	HP
	OAU6E	R Victoria, Arequipa; SS adv, YL ID "transmite R.Victoria"	W/F	0300	18/5	HP
1470	CX147	R Cristal del Uruguay, Las Piedras; the familiar Cristal jingle heard	Vw	2300	21/5	JF
1470	CX147	Radio Cristal del Uruguay, Las Piedras; full ID at toth	F	0000	26/5	PC
1470	YVJW	Llanerisma, Valencia; SS TC "cuatro minuto" followed by	W/F	0335	9/5	Rha
		Latin folk mx and full station ID "esta Llanerisma onda media"		0.0.0.6	- / -	-
1470	YVSY	Vibración, Carúpano; SS anns and LA mx	W	0336	5/5	Rha
1480	WHBC	Canton OH; "News talk 14-80 WHBC"	W	0300	19/5	PC
1480	WMDD	R Tropical, Fajardo PR (presumed); with sports commentary	F	0100	14/5	JF
1500	WWWT	mentioning Fajardo; ads before toh, then lost in the noise	F	0330	13/5	JF
1500 1500	WWWT WWWT	Washington DC (presumed) with talk show Washington DC; "3WT" ID	г W	0300	13/3	JF PC
1500		Washington DC, 5 w 1 1D Washington DC (presumed); ads and news reports YL/OM	W	0158	23/6	JW
1500	WWZN	Boston MA; disclaimer – program not necessarily reflecting the		0138	2/5	PC
1510	VV VV ZIN	opinion of "WWZN Boston and The Zone"	• 1 '	0200	215	10
1500	YVRZ	R Dos Mil, Cumaná; SS, LA mx and ballads	W/F	0345	25/4	Rha
1500	UNID	Brazilian with PP IDs sounding like "Presta AM", or "Fresca	Wpks	0400	20/6	mah
		AM", but unclear since very weak and in and out of the noise;	··· F			
		tnx AB for comments on the clip				
1510	WWZN	Boston MA; ads; "The following programme is not necessarily	F	0359	2/5	JW
		the views of WWZN Boston"				
1510	WWZN	Boston MA; truth & Bible lessons	W/F	0330	5/5	Rha
1510	WWZN	Boston MA; religious talk programme	W	0302	10/5	BD
1510	WWZN	Boston MA; WWZN programme content disclaimer then	G	0401	16/5	AB
1510	YV	Overcomer Ministries P. Informative Citigüe: SS: tllt ny and "LV del Centre" ID in	W/F	0220	0/5	Dha
1510	I V	R.Informativa, Güigüe; SS; tlk px and "LV del Centro" ID in mix with another unidentified latino!	W/F	0330	9/5	Rha
1520	WWKB	Buffalo NY; "15-20 WWKB Buffalo" ID, sport commentary	F	0200	2/5	PC
1520	WWKB	Buffalo NY; "This is the voice of the new majority WWKB"	F	0400	3/5	JW
1520	WWKB	Buffalo NY; "AM 15-20 WWKB Buffalo" CNN News	W/F	0400	10/5	BD
1520	WWKB	Buffalo NY; Baseball; ID as "The Bisons Baseball Network"	F	0130	13/5	JF
1530	WCKY	Cincinnati OH; " Cincinnati Sports Animal, Fox National		0400	18/5	mah
		Sports Report starts right now"				
1540	WDCD	Albany NY; "Life 15-40 WDCD"	F	0200	13/5	mah
1540	WDCD	Albany NY; "15-40 WDCD Albany" ID at toth	W	0300	20/6	PC
1540	CHIN	Toronto ON; "Broadcasting to Toronto on AM 1540 This is the	F	0130	13/5	JF
		voice of multicultural radio, this is Chin Radio"				
1540	CHIN	Toronto ON; "Broadcasting from Toronto on AM 15-40,	F	0200	13/5	mah
		simulcasting on 91.9 FM and worldwide on chinradio.com, this				
1	am	is the voice of multicultural radio. This is Chin Radio"	XX 7 / ***	0000	4 - / -	
1540	CHIN	Toronto ON; traditional II mx & info	W/F	0229	17/5	BD
1540	CHIN	Toronto ON; CC program. "This is the Voice of Multicultural	F	0300	19/5	PC
		Radio. This is Chin Radio"				

kHz	Callsign	Station, location; details heard etc	SIO	UTC	Date	Who
1540	CHIN	Toronto ON; promo for the CHIN International Picnic,	F	0248	10/6	AB
		sponsored by City TV and the Toronto Sun, also Silver				
		Boutique a business in Woodbridge ON				
1560	WQEW	New York NY; Radio Disney	W/F	0300	19/5	PC
1566		TWR Benin (presumed); Afropop mx programme in mix with	W/Fpks	2035	16/5	Rha
		UKs – nonstop Afropop				
1570	CFAV	Laval QC; FF ID "À Radio Boomer AM 15-70 – nouvelles"	W/F	0300	17/5	mah
1570	CFAV	Laval QC; "Radio Boomer" ID	W	0300	19/5	PC
1580	CKDO	Oshawa ON; "This is CKDO 15-80 AM and 107.7 FM,	F	0300	12/5	mah
		Oshawa's radio station since 1946" and "You're listening to				
1500	QUEDO	Oshawa's Oldies, CKDO"		0.200	10/5	DC
1580	CKDO	Oshawa ON; "Oshawa Oldies" ID	W/F	0300	19/5	PC
1600	ZYK//9	R Nove de Julho, Sao Paulo (pres); PP talk, ads music. No ID	F/G	0402	9/6	PC
1620	WTAW	but only Brazilian on the frequency College Station TX; " 16-20 WTAW College Station",	W/F	0300	17/5	mah
1020	WIAW	ABC News	VV / 1	0300	1775	man
1620	WDHP	Frederiksted USVI; "Love me Tender" by Elvis Presley then	W	0300	30/4	AB
1020	WDIII	usual WDHP toth ID with addresses etc	••	0200	5071	1 ID
1620	WDHP	Frederiksted USVI; legal ID & regular address	Fair	0303	8/5	SW
1620	LU9	AM 1620, Mar del Plata; "AM 16-20, AM Nuevo, desde Mar	F/G	0400	21/6	mah
		del Plata, provincial de Buenos Aires, república Argentina"				
1630	KCJJ	Iowa City IA; "Broadcasting from Coralville this is	W/P	0200	15/5	mah
		Coralville 16-30 KCJJ Iowa City and Coralville"				
1630	KCJJ	Iowa City IA; "Coralville 16-30 KCJJ- Iowa City and	W	0300	19/5	PC
		Coralville"				
1630		AM Restauración, Hurlingham; SS ID "Mil seiscientos la AM	W	0201	22/6	mah
1650	WILLT	Restauración"	W	0254	20/4	Dha
1650	WHKT	Portsmouth VA; R Disney pop music	W	0354	28/4	Rha
1650 1650	WHKT WHKT	Portsmouth VA; Radio Disney pops Portsmouth VA; R Disney talk, dot com ID	W W	0402 0312	9/5 12/5	JW HP
1650	WHKT	Portsmouth VA, R Disney tark, dot com ID Portsmouth VA; Radio Disney ID	W	0312	12/3	лР JF
1650	WHKT	Portsmouth VA; Radio Disney // 1560 kHz	w W/F	0400	19/5	PC
1650	CJRS	Montréal QC; "Montreal, 16-50 AM, Radio Shalom" under	W/F	0200	2/5	PC
1050	CJKS	what sounded like a pirate; also G 28/05 0300	vv / 1*	0200	215	IC
1650	CJRS	Montréal QC; Middle Eastern music, EE ID "CJRS Montreal	W/F	0202	13/5	mah
1000	cons	16-50 AM Radio Shalom", FF anns, then EE px		0202	10/0	mun
1650	CJRS	Montréal QC (tent); instrumental mx with piano & accordion	W/F	0325	18/5	HP
1650		Antares, Argentina; light Latin mx, SS ID "Transmite Antares	F	0058	21/5	mah
		Antares AM 16-50, la emisora de la familia"; UK FIRST				
1650		Antares AM, Buenos Aires, Argentina; announcement	F	0257	23/5	AB
		"Transmite Antares" and "Antares 1650 AM. La emisora de la				
		familia." – thanks to Torolf Jonsson for identifying this new				
		station from Argentina. Following these announcements came				
1650		the National Anthem then uninterrupted instrumental music	Б	0200	22/5	DC
1650		Antares AM 1650, Argentina (pres); Argentinian national	F	0300	22/5	PC
1660	WCNZ	anthem followed by instrumental music Marco Island FL, Relevant Radio ID, Holy father in the USA	W/F	0337	2/5	HP
1660	WCNZ	Marco Island FL; full toh ID "WCNZ", Relevant Radio", etc;	w/r F	0400	13/5	JF
1660	WQLR	Kalamazoo MI; "espn1660.com"	Fpks	0303	17/5	mah
1000			1 142	0505	1115	mall

kHz	Callsign	Station, location; details heard etc	SIO	UTC	Date	Who
1660	WQLR	Kalamazoo MI; ESPN "16-60 WQLR Kalamazoo" heard	W	0300	7/6	PC
1660	WWRU	mixing with other stations Jersey City NJ; "This is Multicultural Radio Broadcasting. This is WWRU (?). New York City, 16-60 AM, WWRU"	W/F	0200	2/5	PC
1660	WWRU	Jersey City NJ; KK talk; OM with ID "This is WWRU 16-60 AM Jersey City/New York"	W	0358	6/5	JW
1660	WWRU	Jersey City NJ; KK & "16-60 AM WWRU" ID	W/F	0300	12/5	BD
1660	WWRU	Jersey City NJ; "16-60 AM, WWRU Jersey City" ID	W	0300	13/5	JF
1660	WWRU	New York City NY; instrumental music with YL talk in presumed Korean; toth ID "WWRU Jersey City New York 16- 60 AM WWRU"	F	0300	1/6	AB
1660	WWRU	Jersey City NJ; YL+OM Korean tlks, soft Korean ballads; also W 0300 2/6	W/F	0245	11/6	HP
1660	WFNA	Charlotte NC; "Where Charlotte comes for sport 16-60 AM WFNA"	W/F	0303	18/5	mah
1670	WVVM	Dry Branch GA; "Viva" IDs and Mexican rhythms	W	0321	13/5	JF
1680	WOKB	Winter Garden FL; poor ID "WOKB 16-80 AM WOKB", light rlgs songs; ex WLAA since 6 May 08	Fpks	0200	15/5	mah
1690	СНТО	Toronto ON; "You're listening to CHTO, AM 16-90 Toronto. Visit our website at <u>www.am1690.ca</u> "; also F 0300 19/5	F	0200	4/6	PC
1700	WEUP	Huntsville AL; gospel singing	W/Fpks	0340	13/5	Rha
1700	WJCC	Miami Springs FL; "This is WJCC 17 hundred Miami Springs Miami" ID SS and Salsa type mx	W/F	0400	12/5	BD
1700	KVNS	Brownsville TX; "AM 17-hundred KVNS, Brownsville and the Rio Grande Valley"	W	0200	2/5	PC

Many thanks to the following reporters:

AB Andrew Brade, Holme-on-Spalding Moor, East Riding of Yorkshire. AOR AR 7030 plus, Wellbrook phased array 235°, 305m beverage at 220°. Recording on Sony MZ-NH1 minidisc + Total Recorder.

- BD Barry Davies, Carlisle, Cumbria. AOR AR 7030, 130m longwire.
- FW Friedhelm Wittlieb, Lünen, Germany. Grundig Satellite 700 with martens fram-antenna.
- HP Hans Pammer, Loosdorf, Austria. Icom R75, AOR 7030 Plus, MFJ 1026 (mod.), K9AY, 75-m Beverage at 215°, 65-m Beverage at 225°, Zoom H2 Audio Recorder.
- JF John Faulkner, Sutton-in-Ashfield, Notts. Perseus SDR & ewe antenna.
- JW John Williams, Hemel Hempstead. AOR 7030 and 40m long wire.
- mah Martin Hall, Clashmore, Sutherland. Perseus SDR, NRD-545, RPA-1 preamp, MFJ-1026 phaser (modified), beverages: 513m at 233°, terminated; 506m at 279°, terminated, 550m at 338 degrees, terminated, 50m at 321°, unterminated; TotalRecorder.
- PC Paul Crankshaw; Troon, Ayrshire. AR7030, Perseus SDR; EWE, MFJ1025 phaser (mod.).
- Rha Ronald Hagensen, Ottersberg, Germany. AOR 7030plus, 22m at 315°, 28m at 290°, 243m beverage at 345/360°, coupled with the Mizuho AT-2000, Wellbrook ALA 1530 outdoors.
- SW Steve Whitt, High Catton near York. AOR7030+ and HF225 Europa with dual loop K9AY.

John F writes about his experiences with **Perseus**: "I think this is my first ever MWC log to include transatlantic DX heard in June.

The Perseus has made a noticeable improvement to my mw DX listening. The noise filtering removes my night-time buzzing and the variable bandwidth has allowed me to dig deep into the transatlantic channels, some of which would not have been possible on the AR7030 for the same signal levels. For instance, I have heard audio regularly on 1210 and 1340 and also occasionally on 1230 and 1240. The digital processing somehow allows reasonable intelligibility of audio when

narrowing the IF bandwidth down to little more than 1kHz IF - when listening with headphones. I typically set the IF to between 1.5kHz to 2kHz and find this quite acceptable. The notch filter is also very good.

There has been some debate about the sensitivity of the Perseus and I have seen reports that it is not as sensitive as the AR7030. I can report that, in my case, the Perseus seems slightly more sensitive that the AR7030. Even without using any filtering on the Perseus I can hear very weak speech better than on the AR7030. 1566kHz in the daytime is a good example. I have roughly 50% copy on County Sound and BBC Somerset on the Perseus but 0% on the AR7030.

I am using version v1.0 of the Perseus software to record as the latest versions v1.0e and v1.0f do not work properly on my laptop – Perseus will record OK but locks up on playback. Many DXers are reporting the same. Hopefully future software versions will address this problem. Playback of the Perseus files is done on my main desktop machine so I can then take advantage of v1.0f. I cannot wait to see what improvements future versions of the software bring.

Currently Perseus allows me to record a span of 800kHz but I can actually tune a little beyond this. Performance is degraded outside the 800kHz though I cannot say I have noticed any real problems, unless I stray too far beyond this. My usual recording span is from 770 to 1570 which enables me to access 670 to 1670". My experiences of using Perseus are very similar, and I'll be making a few observations of my own in the coming months – **mah**.

Hans tells us: "Just one brilliant day with great reception of Radio Enlace from Peru. This could be a "#1 in Europe" reception. Henrik Klemetz tells about an earlier reception of R Enlace in Finland but with no positive ID. Otherwise not much has been heard. May reception was much better than June. I only heard 2 T/A Signals in June. Because of the poor conditions I reduced my daily listening at dawn to 2 times a week. From 1-15 august I will be again at DX-183 visiting my good friend Wilhelm Herbst. Main purpose is holiday making not primary DX, but I will look out for South American stations from time to time. I will join another DXer during the second week. Ronald Hagensen and his wife Annette from Germany will be there. So we sure have a nice stay in beautiful Jutland".

Andrew writes: "Please find herewith my rather miserable DX Logs. These do not betray any lack of effort on my part; I think they reflect rather poor conditions especially in the month of June". **Paul C** has similar comments: "Results from the last few weeks of overnight recordings have been very poor here. My EWE doesn't seem to be nulling very well but I can't find any fault, so I suspect it might just be drier summer conditions affecting the earth connections. At least I hope so"!

Here in **Clashmore** conditions have been rather poor, though mid-May brought in a few less common stations from the eastern US. From mid-June onwards I've been looking for openings to South America, and although signal levels have been rather poor a variety of stations have been getting through. Like Paul, I'm tempted to think that the antenna is at fault, so it will be getting a good overhaul in the next few days, though I suspect poor propagation is the real culprit! - **mah**

The **deadline** for the September DX Loggings is **Thursday 21st August**. I look forward to receiving your logs by then, preferably electronically/via e-mail using the Word pro-forma, which I can supply on request. I regret that I am unable to accept logs of more than 20 stations in manuscript, paper or fax copy. Please also remember that I don't automatically include loggings sent to the MWC e-List, so please copy me separately if you would like them included in DX Loggings.

73's Martin