



Euro-African Medium Wave Guide
2011 edition

Ladies' View, Killarney National Park, Ireland

Personal copy of Andrei Vlaicu

Compiled by Herman Boel

EMWG homepage: www.emwg.info

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PREFACE AND COPYRIGHT

Welcome to the Euro-African Medium Wave Guide

What lies in front of you or what you see on your computer screen is the result of a lot of hard work and love.

In the mid-1990s I was becoming more and more interested in medium wave, in particular the European medium wave. I noticed that the sources I used to consult, the WRTH and Sender&Frequenzen, mostly contained concise frequency lists with nothing more than the frequency, station name and power output. This led to a continuous browsing between pages to get as much information as possible and make DXing easier. Just like many other DXers I started to make my own list with the information I could find. That information came especially from various club bulletins, but also from messages in the DXAntwerp Bulletin Board System. This was the internet's predecessor and meant a true revolution for DXers who could now exchange information through their computer.

At the time the **EMWG** was still called the *Long and Medium Wave Guide for Europe, North Africa, and the Middle East* and was initially drawn up in the Flemish language. As non-Flemish speaking DXers also became interested I switched to English and uploaded the list at regular intervals onto the DXA Bulletin Board.

Initially a modest attempt to help myself with the hobby, the list soon turned out to be a hole in the market. The later renamed *European Medium Wave Guide* caught on well, and thanks to some renowned DXers and DX clubs, the publication became more and more professional.

At the end of 2002 the EMWG could be consulted on-line and was now even more being kept up-to-date.

In December 2004, the EMWG was merged with James Niven's **African Medium Wave Guide** and subsequently covered not only the whole of Europe and the Middle East, but the whole of Africa as well.

Today, it is an indispensable tool for the medium wave DXer.

I truly hope you will enjoy and benefit from the EMWG during your DX activities.

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INTRODUCTION TO THE EMWG

Contents

This publication gives an overview of literally all long and medium wave broadcast stations in Europe, Africa, and the Middle East.

Times

All times are in UTC: please subtract one hour during European Summer time (unless otherwise stated) if and when you are in a country in the northern hemisphere where Summer time is in order. However, please note that some stations do not move with Summer Time and keep programmes aligned with UTC. These are mainly international cross border broadcasters. Also North Africa and parts of Middle East do not observe Summer/Winter time differences. Other countries (e.g. Israel) move from Summer/Winter time on different dates to Western Europe.

Power Output

All powers are expressed in kiloWatt. As much as possible the effective radiated power output is given, rather than the official or allowed power. Please note that **Spanish** MW stations are known to use much higher powers than the ones listed.

Geography

The countries listed in this publication can be seen on the ITU list of EMWG countries. Only the European part of Russia is listed. At the (official) European side, the oblasts (republics) are: Nenetskiy avt. okrug (Naryan-Mar), Resp. Komi (Syktyvkar), Permskaya obl. (Perm), Resp. Bashkortostan (Ufa), Orenburgskaya obl. (Orenburg). As for the coordinates information, please note that they are expressed in degrees and minutes.

Special stations

Low power stations in the UK (RSLs/LPAMs) as well as DRM stations are included only if they are broadcasting full-time or if they operate a regular schedule (e.g. on air during sports matches). Pirate stations are not listed (with the possible exception of Ireland, very regular pirate stations, and offshore stations).

Abbreviations

LPAM: Low Power AM; Px: programme; RSL: Restricted Service License; Tx: transmitter

Mo-Tu-We-Th-Fr-Sa-Su: Monday-Tuesday-Wednesday-Thursday-Friday-Saturday-Sunday

Feedback & Update information

This list is by no means considered to be entirely correct and complete. Your feedback is most welcome and will help improving this list so it meets the needs of all users. You are welcome to join the EMWG mailing list at <http://groups.yahoo.com/group/emwg>.

INTRODUCTION TO LONG AND MEDIUM WAVE

On shortwave the tropical bands are known as the bands to listen to local, regional and also some international radio stations. What does this have to do with medium wave, you will ask. Well, medium wave has the same function, but on a European scale. This can seem less interesting, but it is not. As Europeans, we generally feel more related to the European cultures, of which we do not always know that much about. Also the reception possibilities are much more favourable, so you do not need any specialised equipment.

General Information

The majority of broadcasters on medium wave are **local stations**. The transmitter is usually situated in the middle of the target area, which generally covers part of the country. The programmes consist of music and local information/advertising. Transmitter power ranges from 1 Watt to 100 kiloWatt, depending on the size of the target area and the interference that can be expected from other stations.

Mainly in Spain and the UK network stations occupy the band. These stations all broadcast the same programmes, except for some local interruptions. Sometimes the same frequency is being used by different transmitters. These are so-called **synchronised networks**; examples are BBC Radio 5 Live (693/909 kHz) and Absolute Radio.

Regional stations occur mainly in Spain. They cover a larger area of the country than local stations. Apart from Spain, this is a typically American type of station.

Due to the relative small size of the European countries, medium wave is ideal for **international stations**. Contrary to other continents, some high power transmitters suffice to guarantee a large coverage.

Another type of stations are **micro-power stations**, such as the British LPAM stations. These stations usually transmit with only 1 Watt of power, just enough to cover the area of a school, football field or hospital. Despite the limited power, these stations are sometimes heard hundreds of kilometres away.

Finally, medium wave is also a favourite band for **clandestine** and **pirate stations**. The clandestine stations can be found mainly in the Middle East, the pirate stations are located especially in The Netherlands, UK, Greece, and Serbia.

Several **other stations** can be found on medium wave (navigation beacons, utility stations), but we only cover broadcast stations here.

News & current affairs

Many listen to medium wave for information on current affairs. You can listen the whole day long to some broadcasters to keep up-to-date with the news. There is of course the renowned **BBC World Service** which can be heard in English on 648 kHz 24 hours per day.

Then there is something like **Talkradio**, a programme concept wherein current and less current affairs are discussed, but with direct participation from the listeners (usu. over the phone). These kind of programmes are known to be rather dull and these stations do not really enjoy a great success. Try Talkradio UK (1053/1089 kHz).

What other countries provide us with information? A short overview: In Italy the RAI is interesting esp. at night. The programme Notturmo Italiano gives news in German, French and English, alternated with long periods in Italian. In Spain almost all stations provide you with loads of news, although most stations do look like talkradio. Just browse the band and you will encounter many of them. Germany also has some interesting stations:

Deutschlandfunk and Deutschlandradio Kultur are national broadcasters. The regional broadcasters are also well represented. Some examples: MDR Info, Westdeutscher Rundfunk and the Hessischer RF.

Other stations are: Flanders (927 kHz), Wallonia (621 kHz), The Netherlands (747 kHz), Luxembourg (234 kHz), Bosnia-Herzegovina (612 kHz), Croatia (1134 kHz), Denmark (1062 kHz), Slovenia (918 kHz) and Serbia (684 kHz).

When talking about news and current affairs, you cannot forget the international broadcasters. Although you probably know most of them, I'm giving here an overview of those that can best be heard in Western Europe. We already mentioned the BBC. Radio Sweden (1179 kHz) has been there for years. This is also valid for the Voice of Russia that can be heard evenings in English, French and German on 1215 & 1323 kHz. Radio Tirana can be heard in several languages on 1458 kHz. Larger stations like the BBC and Deutsche Welle also use relay transmitters in the Mediterranean with programmes for the Middle East. Those transmitters are rarely heard in Western Europe though.

Other programmetypes

If you are very much interested in **sports**, then medium wave is for you: BBC Radio 5 Live (693/909 kHz) informs you all day long on sport events. The BBC World Service also has some special sport programmes. If you're interested in the Spanish Primera División, then you need to listen esp. in weekends to the Spanish broadcasters. Almost every station covers the games live. The general Spanish public believes stations exaggerate, but they really only broadcast what the listeners want to hear.

Most other stations also give sport information, but only when it is relevant.

You would be surprised to see how many types of **music** can be found on medium wave. It is impossible to give you a full overview of the music on medium wave. Here's a selection:

For pop and rock music, tune into Absolute Radio (1215 kHz). For Scottish folk music try BBC Radio Scotland (810 kHz) esp. evenings between 21.00 and 23.00utc. For Irish folk music try RTÉ Radio 1 (252 kHz). Jazz is also frequently heard on medium wave. Classical music can be found everywhere, mainly on the Eastern European stations. You can also find beautiful local music, e.g. on Radio Slovenia (918 kHz). If you like Asian music, tune into Asian Sound Radio (963 kHz) and Sunrise Radio (1458 kHz).

As you can see, for music medium wave is the place to be.

Just as on shortwave, the inevitable **religious** stations are well represented on medium wave. First of all there's Vatican Radio (1530/1611 kHz) that can be heard in several languages. Via the Voice of Russia transmitters, you can regularly hear the German Universelles Leben. Another German station is Evangeliums Rundfunk. This religious station can be heard all day long on 1539 kHz. These are the main stations, but there are others.

Outside Europe

We can also pick up stations from outside Europe. Algeria is a regular client. Tune to 891 and 981 kHz. A little bit further away lies Saudi Arabia. When Radio Luxemburg has left 1440 kHz, you can listen to the Arab station. You may be even more lucky on 1521 kHz, though, where Saudi Arabia has a powerful transmitter. When propagation conditions are favourable, All India Radio Nagpur can be heard on 1566. Try just before sunset. You can also try to listen to stations from the American continent at night, but then we are talking about pure DXing, and not programme listening.

Important

This overview clearly shows that medium wave is some kind of treasure. It is important to know that this treasure can hold quite a few surprises. When you're tuning to a frequency, please **never** assume it is a certain station without having heard an identification. The best example is the British local stations. Several stations occupy one single frequency. It can happen that you are suddenly hearing an other station than you are used to on that frequency. Exactly that is so typical for medium wave. And exactly that makes medium wave so much more exciting than shortwave.

DRM

A recent development on medium wave is digital broadcasting. DRM, Digital Radio Mondiale, is a digital transmission type that brings FM quality to medium wave, with less power output. Unfortunately, it also means the listener needs to buy a new receiver, capable of receiving these digital signals.

Listening tools

Logically you can listen to medium wave with each receiver equipped to receive that band. If you're only interested in the strong signals, any receiver will do. Especially the older receivers -from the time before FM- will give excellent performance. If you also want to listen to weaker stations, then a receiver with digital readout -if possible with SSB- is preferred.

Generally the built-in ferrite antenna of most receivers suffices. However, it can be very interesting to buy or make a loop antenna. This is very handy to separate two stations broadcasting on the same frequency (but coming from a different direction). A nice example in my area is Radio Vilnius and Südwestfunk on 666 kHz. A loop antenna allows me to choose nicely what station I want to listen to. This can also be done with the built-in ferrite antenna, but you risk having to put the receiver in such way that the speaker is directed away from you. A longwire is not directional (unless it involves a long beverage antenna) and you'll mostly hear both stations at the same time.

But don't let this frighten you. A normal receiver is more than enough to start with.

Happy listening!

ITU LIST OF EMWG COUNTRIES

AFS South Africa
AGL Angola
ALB Albania
ALG Algeria
ARM Armenia
ARS Saudi Arabia
ASC Ascension Island
AZE Azerbaijan
AZR Azores
BEL Belgium
BEN Benin
BFA Burkina Faso
BHR Bahrain
BIH Bosnia-Herzegovina
BLR Belarus
BOT Botswana
BUL Bulgaria
CAF Central-African Republic
CEU Ceuta
CGO Congo
CNR Canary Islands
COG Congo
CVA Vatican City
CYP Cyprus
CZE Czech Republic
D Germany
DJI Djibouti
DNK Denmark
E Spain
EGY Egypt
ERI Eritrea
EST Estonia
ETH Ethiopia
F France
FAR Farøer Islands
FIN Finland
G United Kingdom
GAB Gabon

GEO Georgia
GIB Gibraltar
GMB Gambia
GRC Greece
GUI Guinea
HNG Hungary
HOL The Netherlands
HRV Croatia
I Italy
IRL Ireland
IRN Iran
IRQ Iraq
ISL Iceland
ISR Israel
JOR Jordan
KAL Kaliningrad
KEN Kenya
KOS Kosovo
KWT Kuwait
LBN Lebanon
LBY Libya
LIT Lithuania
LSO Lesotho
LUX Luxembourg
LVA Latvia
MAU Mauritius
MCO Monaco
MDA Moldova
MDG Madagascar
MDR Madeira
MEL Melilla
MKD Macedonia
MLD Maldives
MLI Mali
MLT Malta
MNE Montenegro
MOZ Mozambique

MRC Morocco
MTN Mauritania
MWI Malawi
MYT Mayotte
NGR Niger
NIG Nigeria
NOR Norway
OMA Oman
POL Poland
POR Portugal
QAT Qatar
REU Réunion
ROU Romania
RUS Russia
SDN Sudan
SEN Senegal
SEY Seychelles
SHN Saint-Helena
SLN Slovenia
SOM Somalia
SRB Serbia
STP Sao Tomé & Príncipe
SUI Switzerland
SVK Slovakia
SWZ Swaziland
SYR Syria
TCD Chad
TGO Togo
TUN Tunisia
TUR Turkey
TZA Tanzania
UAE United Arab Emirates
UGA Uganda
UKR Ukraine
YEM Yemen
ZMB Zambia

LW/MW PROGRAMME GUIDE

key

time (utc)	Station	type	languages	programme name	frequency
Monday					
0513-0549	Rai 1	<i>culture</i>	Italian	Italia: Istruzioni per l'uso	various
0810-0830	Deutschlandfunk	<i>current affairs</i>	German	Europa Heute	153-207-549-756-855-1269-1422
0842	RNE 5	<i>science</i>	Spanish	Ciencia al cubo	various
0900-1100	Radio 5 Nostalgia	<i>music</i>	Dutch	Toppers van toen	747
0933	Voice of Russia	<i>media</i>	Russian	Programme Club DX	612 972 999 1170 1377
1000-1030	Rai 3	<i>science</i>	Italian	Radio 3 Scienza	846
1230-1300	France Inter	<i>history</i>	French	2000 ans d'histoire	162
1550-1600	România Actualități	<i>technology</i>	Romanian	IT mania	various
1845	Voice of Russia	<i>media</i>	Russian	Programme Club DX	630 648 999 1026 1089 1170 1431 1503
2000-2200	RTBFi	<i>music</i>	French	Classic 21 Blues	621
2100-2200	Moray Firth Radio	<i>music</i>	English	James Munro	1107
2100-2200	Big L	<i>music</i>	English	Wolfman Jack	1395
2105-2150	Deutschlandfk	<i>music</i>	German	Rock et cetera	153-207-549-756-855-1269-1422
2155	Radio Pretoria	<i>music</i>	Afrikaans	Volksliedere	1584
2200-2300	RTL	<i>music</i>	French	La collection Georges Lang	234
Tuesday					
0513-0549	Rai 1	<i>culture</i>	Italian	Italia: Istruzioni per l'uso	various
0810-0830	Deutschlandfk	<i>current affairs</i>	German	Europa Heute	153-207-549-756-855-1269-1422
0842	RNE 5	<i>science</i>	Spanish	Ciencia al cubo	various
0900-1100	Radio 5 Nostalgia	<i>music</i>	Dutch	Toppers van toen	747
1000-1030	Rai 3	<i>science</i>	Italian	Radio 3 Scienza	846
1230-1300	France Inter	<i>history</i>	French	2000 ans d'histoire	162
1232	BBC WS	<i>tech</i>	English	Digital Planet	648
1930	RTÉ Radio 1	<i>music</i>	English	The John Creedon Show	252
2100-2200	RNE 5	<i>tech</i>	Spanish	5.0	various
2100-2200	Big L	<i>music</i>	English	Wolfman Jack	1395

2155	Radio Pretoria	<i>music</i>	Afrikaans	Volksliedere	1584
2200-2300	RTL	<i>music</i>	French	La collection Georges Lang	234

Wednesday

0513-0549	Rai 1	<i>culture</i>	Italian	Italia: Istruzioni per l'uso	various
0810-0830	Deutschlandfunk	<i>current affairs</i>	German	Europa Heute	153-207-549-756-855-1269-1422
0842	RNE 5	<i>science</i>	Spanish	Ciencia al cubo	various
0900-1100	Radio 5 Nostalgia	<i>music</i>	Dutch	Toppers van toen	747
1000-1030	Rai 3	<i>science</i>	Italian	Radio 3 Scienza	846
1230-1300	France Inter	<i>history</i>	French	2000 ans d'histoire	162
1232	BBC WS	<i>science</i>	English	Discovery	648
1330-1400	BBC Radio 4	<i>media</i>	English	The Media Show	198
1400	Radio Nezalezhnist	<i>music</i>	Ukrainian	Зірковий п'єдестал	1467 (Ukrainian music)
1535-1600	Deutschlandfunk	<i>science</i>	German	Forschung aktuell	153-207-549-756-855-1269-1422
1930	RTÉ Radio 1	<i>music</i>	English	The John Creedon Show	252
2100-2200	Big L	<i>music</i>	English	Wolfman Jack	1395
2155	Radio Pretoria	<i>music</i>	Afrikaans	Volksliedere	1584
2200-2300	RTL	<i>music</i>	French	La collection Georges Lang	234

Thursday

0513-0549	Rai 1	<i>culture</i>	Italian	Italia: Istruzioni per l'uso	various
0745	Médi1	<i>technology</i>	French	Ciel et Espace	171
0810-0830	Deutschlandfunk	<i>current affairs</i>	German	Europa Heute	153-207-549-756-855-1269-1422
0842	RNE 5	<i>science</i>	Spanish	Ciencia al cubo	various
0900-1100	Radio 5 Nostalgia	<i>music</i>	Dutch	Toppers van toen	747
1000-1030	Rai 3	<i>science</i>	Italian	Radio 3 Scienza	846
1230-1300	France Inter	<i>history</i>	French	2000 ans d'histoire	162
2100-2200	Big L	<i>music</i>	English	Wolfman Jack	1395
2155	Radio Pretoria	<i>music</i>	Afrikaans	Volksliedere	1584
2200-2300	RTL	<i>music</i>	French	La collection Georges Lang	234

Friday

0513-0549	Rai 1	<i>culture</i>	Italian	Italia: Istruzioni per l'uso	various
0810 (utc)	RTBFi	<i>media</i>	French	Intermedias	621
0810-0830	Deutschlandfunk	<i>current affairs</i>	German	Europa Heute	153-207-549-756-855-1269-1422
0900-1100	Radio 5 Nostalgia	<i>music</i>	Dutch	Toppers van toen	747

0842	RNE 5	<i>science</i>	Spanish	Ciencia al cubo	various
1000-1030	Rai 3	<i>science</i>	Italian	Radio 3 Scienza	846
1230-1300	France Inter	<i>history</i>	French	2000 ans d'histoire	162
1232	BBC WS	<i>science</i>	English	Science in action	648
1405	Radio Verona	<i>music</i>	Italian	Top Ten Italia	1584
1550-1600	România Actualități	<i>technology</i>	Romanian	IT mania	various
2100-2200	Big L	<i>music</i>	English	Wolfman Jack	1395
2155	Radio Pretoria	<i>music</i>	Afrikaans	Volksliedere	1584
2200-2300	RTL	<i>music</i>	French	La collection Georges Lang	234

Saturday

0513-0549	Rai 1	<i>culture</i>	Italian	Italia: Istruzioni per l'uso	various
0632	BBC WS	<i>current affairs</i>	English	The Interview	648
0905	RTBFi	<i>current affairs</i>	French	Une semaine pas banale	621
0905-1000	Deutschlandfunk	<i>music</i>	German	Klassik-Pop-et cetera	153-207-549-756-855-1269-1422
0942	RNE 5	<i>science</i>	Spanish	Ciencia al cubo	various
1005	Radio Verona	<i>music</i>	Italian	Top Ten Italia	1584
1007-1200	Antena 1	<i>current affairs</i>	Portuguese	Hotel Babilonia	630 666 720 756 1287
1008	NRK P1	<i>music</i>	Norwegian	Popquiz	153 630 675 1485
1132-1259	Rai 1	<i>science</i>	Italian	Fantasticamente	various
1230-1257	BBC Radio 4	<i>comedy</i>	English	The now show	198
1300	Radio Cluj	<i>music</i>	Romanian	Top 10 Radio Cluj	909 1404 1593
1600-1800	Magic AM	<i>music</i>	English	Dave Campbell 80's Magic	990 1305 1548
1605-1630	Deutschlandfunk	<i>media</i>	German	Markt und Medien	153-207-549-756-855-1269-1422
1900-2200	Absolut Radio	<i>music</i>	English	Absolute Classic Rock Party	1197 1215 1233 1242 1260
2105	Radio Vitoria	<i>music</i>	Spanish	Gure Musika	1197 1602 (Basque music)
2155	Radio Pretoria	<i>music</i>	Afrikaans	Volksliedere	1584
2200-2400	Radio Sim	<i>music</i>	Portuguese	Casa de Fados	576 594 891 927 963 981 1251

Sunday

0513-0549	Rai 1	<i>culture</i>	Italian	Italia: Istruzioni per l'uso	various
0905	Radio Verona	<i>music</i>	Italian	Top Ten Italia	1584
0942	RNE 5	<i>science</i>	Spanish	Ciencia al cubo	various
1000-1100	Radio Vlaanderen Info	<i>current affairs</i>	Flemish	Vlamingen in de wereld	927
1000-1100	Europe 1	<i>comedy</i>	French	C'est quoi ce bordel	183
1000-1200	Manx Radio	<i>language & culture</i>	English	Moghrey Jedoonee	1368

1007-1100	Antena 1	<i>culture</i>	Portuguese	O amor é	630 666 720 756 1287
1105-1140	Radio Studio X	<i>media</i>	Italian	Studio DX	1584
1303	NRK P1	<i>music</i>	Norwegian	Norsk på norsk	153 630 675 1485 (Norwegian music)
1700	Gold	<i>music</i>	English	60s Sunday with Dean Martin	various
1800-1900	Downtown Radio	<i>music</i>	English	All Time Country Hits	1026
1900-2100	Celtic Music Radio	<i>music</i>	English	The Mary K Burke Show	1530
1932	BBC WS	<i>science</i>	English	Health check	648
2100-2200	LBC News 1152	<i>celebrity</i>	English	In conversation with...	1152
2200-2300	RTL	<i>music</i>	French	L'heure du Jazz	234
2200-2400	Radio Sim	<i>music</i>	Portuguese	Casa de Fados	576 594 891 927 963 981 1251

THE BEST LW/MW INTERNET LINKS

1. Lists

Euro-African Medium Wave Guide	http://www.emwg.info/	
Pacific-Asian Log	http://www.radioheritage.net/PAL.asp	EMWG's counterpart for S&SE Asia and Pacific; Recommended!
BCB DX Logbook	http://www.amlogbook.com/	MW list of USA and Canadian stations
UK LPAM list	http://www.dxradioco.uk/lpam	
New Zealand MW Station List	http://radiodx.com/	
X-band stations from North America	http://www.dxing.info/lists/x_na.dx	The most up-to-date list of X-band stations
MW Offset list	http://www.myradiobase.de/mediumwave/mwoffset.txt	List of MW stations that broadcast outside of their nominal frequency
UK Transmitter Maps	http://www.mediumwaveradio.com	maps of all UK MW transmitters by Mark Hattam
Overview of current and former Dutch MW stations	http://www.middengolf.info	excellent page - in the Dutch language
QIP - the QSL Information Pages for BC-DX'ers	http://www.schoechi.de/qip.html	the best place for information on QSLs from MW (and SW) stations
Eike Bierwirth's Shortwave Transmissions	http://www.eibispace.de	Not LW/MW but excellent resource for SW

2. News

Ydun M. Ritz' MW news	http://mediumwave.info	
The AM Stereo Page	http://www.amstereoradio.com/	All you ever wanted to know about AM stereo

3. Publications & clubs

Medium Wave Circle	http://www.mwcircle.org	excellent UK based MW club
Long Distance Medium Wave Listening	http://www.rnw.nl/realradio/practical/html/longdistan-cemw.html	the pre-eminently starting guide by Steve Whitt

4. MW Antennas

Grahn	http://www.grahn-spezialantennen.de	
BAZ Spezialantennen	http://www.spezialantennen.com	
PK's Loop Antennas	http://www.amradioantennas.com/	
Hard-Core-DX Loop antennas	http://www.hard-core-dx.com/nordicdx/antenna/loop/index.html	all on this type of antenna
How to build an MW antenna	http://www.radiobloemendaal.nl/AM_antenne.asp	excellent paper in the Dutch language

5. Other interesting sites

Old Swedish long and medium wave transmitters	http://hem.passagen.se/longwave/?noframe/	
Radio Jamming	http://www.radiojamming.info/	interesting site on jamming in the radio history

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