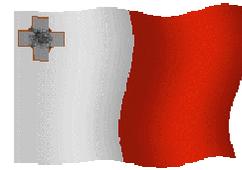


MARL



MALTA



Magazine by MARL

For Maltese and Gozitan
Radio Amateurs

Number 37

April 2009



Smoking is prohibited **Tpejjipx** at the Centre No Smoking

From the Editor

Friends,

I welcome you to another issue of this magazine for April 2009, which is issue 37 of this series.

The first thing that I wish is to send condolences in my name and on behalf of **MARL** to **Dominic 9H1M** and his families who on Wednesday 25 March lost their dear mother. It was a good thing that there were a number of committee members as well as a number of radio amateurs present during the funeral mass.

Today we also have a copy of a **QSL** card sent to me by Mr **Otfried Möhlmann, DL9YG** that confirms a contact that he had in 1962 with **ZB1BW**. Mr **Möhlmann** also has the Maltese call sign **9H3JW** and came several times to the **MARL** Centre.

I thank **DL9YG** who sent me a copy of this **QSL** card that confirms that our magazine is read even outside Malta. Thus this will also go down in the list on this magazine to remain as part of the history of radio amateurs in Malta.

Therefore I again appeal to anyone who has access for some **QSL** cards or any other information about any radio amateur that used to operate from Malta to please send me the information so that we will publish it.

My e-mail address is **9h1av at searchmalta dot com**

A number of radio amateurs from the emergency group took part in an exercise by the **Red Cross** on 31 March so that they will always be prepared for any emergency that may arise.

I would like to remind the emergency communications group that the next world-wide emergency exercise called **ECOMSET** is to be held on **Saturday 18 April 2009** between **11.00 – 15.00 UTC**, that is between **12.00 – 16.00 Malta time**.

We also give our wishes to the group that are attending for a first aid course by the St John Ambulance to do well in the exam.

I hope that you find the information in the magazine useful to you and if you have some article please leave it in my **QSL** box.

Lawrence
9H1AV/9H9MHR

QSL from DL9YG



The operator was Flight Officer **Gerry Smillie, G3PEU**, and the address given on the **QSL** card was Royal Air Force Wyton Huntingdonshire England. It's a pity that there is no address from where he operated in Malta on the **QSL** card. I have a much clearer PDF copy but I couldn't reduce it and copy it.

TO RADIO..... **DL9YG**
Tex Our QSO on **29 APR 1962** at **0915** GMT **20m** SSB
On **10m** **15m** **20m** **30m** **40m** **140m** Ur RST..... **58**
Transmitter: **KW VICEROY** Power **140 watts**
Receiver: **KW 77**
Antenna: **G8KW TRAP DIPOLE**
Dist: **73** ex **DX** of **ilyerry**
PSL ~~FOR~~ QSL via **RSGD** or **ISWL** or **G3PEU** DIRECT

As you can see the contact was made on **29 April 1962** at **9.15 GMT** on a **20** metre frequency with **SSB** and a report of **58**. The transmitter was a **KW Viceroy**, the receiver was a **KW77** and the antenna was a **G8KW Trap Dipole**

Thanks to **Otfried DL9YG, 9H3JW**



This is the **KW77** receiver that was triple conversion, and had all HF amateur radio frequencies. At that time it cost £120 transport not included.

As regards the **Viceroy** transmitter there were a number of models at least up to MKIII. This is the MKIII version

If there is anyone else that has information about other radio amateurs please give it to me personally or sent it to my e-mail address **9h1av** at **searchmalta dot com**.



Lawrence
9H1AV/9H9MHR

Electricity meters

In the last issue of this magazine I brought to your attention the possibility that we may have interference from electricity and water meters that will be sending their reading every fifteen minutes to the information collection centre by means of radio waves.

This article is found on <http://euobserver.com/9/27840>

Now we have another threat because as I have already sent the link to the article from the **EUobserver** of 24 March 2009 on the yahoo group, it is planned that by 2020 80 per cent of European consumers will have smart electricity meters to be able to change from one supplier to another, that is to choose from which supplier they will buy their electricity.

If we take that the population is **500** million and also take that there are **300** million electricity meters, this means that there will be around **240** million meters that can create radio interference.

This may also lead to interference and also a rise in background noise in the absence of signals because there will be hundreds of millions of meters connected to the electricity and the cables delivering the supply become antennas.

We hope that these things are discussed by knowledgeable people and not simply bureaucrats that have no idea what they are talking about.

To show how true this is, the **British MEP Eluned Morgan** explained during a press conference that, "So if you could take the peak hours out by getting people to use dishwashers or washing machines at night, you would get a more sophisticated way of using electricity."

He was right up to here, but look at what he continued to say.

"These smart meters can actually speak to the generator and tell it to stop putting up the amount of energy they use,"

How can you have good laws and regulations when you have such people saying such crap.

Lawrence
9H1AV/9H9MHR

Wires and Resistance

Hereunder you have a table about wire sizes, how much they can vary in their size, and their resistance per thousand feet at a temperature of 20 degrees Celsius. Thus you can know what resistance to expect when using a particular thickness of wire according to the length that you are using.

Note that the size is an American size and if you want to know the size in **SWG** or **millimeters** see earlier magazines where you should find tables from which you can know the **SWG** and **millimeter** sizes.

Size (AWG)	Diameter (inches)			Resistance (ohms per 1000 feet @ 20°C)					
	Minimum	Nominal	Maximum	100% IACS			101.5% IACS		
				Minimum	Nominal	Maximum	Minimum	Nominal	Maximum
4	.2023	.2043	.2063	.2437	.2485	.2534	.2401	.2448	.2497
5	.1801	.1819	.1837	.3073	.3134	.3197	.3028	.3088	.3150
6	.1604	.1620	.1636	.3875	.3952	.4031	.3818	.3893	.3971
7	.1429	.1443	.1457	.4885	.4981	.5079	.4813	.4907	.5004
8	.1272	.1285	.1298	.6156	.6281	.6410	.6065	.6188	.6315
9	.1133	.1144	.1155	.7774	.7924	.8079	.7659	.7807	.7960
10	.1009	.1019	.1029	.9795	.9988	1.019	.9650	.9840	1.0036
11	.0898	.0907	.0916	1.236	1.261	1.286	1.218	1.242	1.267
12	.0800	.0808	.0816	1.558	1.589	1.620	1.535	1.565	1.597
13	.0713	.0720	.0727	1.962	2.001	2.040	1.933	1.971	2.010
14	.0635	.0641	.0647	2.477	2.524	2.572	2.441	2.487	2.534
15	.0565	.0571	.0577	3.115	3.181	3.249	3.069	3.134	3.201
16	.0503	.0508	.0513	3.941	4.019	4.099	3.883	3.959	4.038
17	.0448	.0453	.0458	4.944	5.054	5.167	4.871	4.979	5.091
18	.0399	.0403	.0407	6.261	6.386	6.514	6.168	6.291	6.418
19	.0355	.0359	.0363	7.971	8.047	8.229	7.754	7.928	8.108
20	.0317	.0320	.0323	9.941	10.13	10.32	9.79	9.98	10.17
21	.0282	.0285	.0288	12.50	12.77	13.04	12.32	12.58	12.85
22	.0250	.0253	.0256	15.82	16.20	16.59	15.59	15.96	16.35
23	.0224	.0226	.0228	19.95	20.31	20.67	19.66	20.00	20.36
24	.0199	.0201	.0203	25.17	25.67	26.19	24.74	25.29	25.80
25	.0177	.0179	.0181	31.66	32.37	33.10	31.19	31.89	32.61
26	.0157	.0159	.0161	40.01	41.02	42.07	39.42	40.42	41.45
27	.0141	.0142	.0143	50.72	51.43	52.17	49.97	50.67	51.39
28	.0125	.0126	.0127	64.30	65.33	66.37	63.35	64.36	65.39
29	.0112	.0113	.0114	79.80	81.22	82.68	78.62	80.02	81.46
30	.0099	.0100	.0101	101.7	103.7	105.8	100.2	102.2	104.3
31	.0088	.0089	.0090	128.0	130.9	133.9	126.1	129.0	131.9
32	.0079	.0080	.0081	158.1	162.0	166.2	155.7	159.7	163.7
33	.0070	.0071	.0072	200.1	205.7	211.7	197.1	202.7	208.5
34	.0062	.0063	.0064	253.2	261.3	269.8	249.5	257.4	265.8
35	.0055	.0056	.0057	319.2	330.7	342.8	314.5	325.8	337.7
36	.0049	.0050	.0051	398.7	414.8	431.9	392.8	408.7	425.6
37	.0044	.0045	.0046	490.1	512.1	535.7	482.9	505.0	527.8
38	.0039	.0040	.0041	617.0	648.2	681.9	607.8	639.0	671.8
39	.0034	.0035	.0036	800.2	846.6	897.1	788.4	834.0	883.9
40	.0030	.0031	.0032	1013	1097	1152	997.8	1063.0	1135.3
41	.0027	.0028	.0029	1233	1323	1423	1215.0	1303.0	1401.6
42	.0024	.0025	.0026	1534	1659	1801	1511.5	1635.0	1773.9
43	.0021	.022	.0023	1960	2143	2352	1913.5	2111.0	2316.9
44	.0019	.0020	.0021	2352	2593	2873	2316.9	2554.0	2830.4
45	.00169	.00176	.00183	3080.0	3348.0	3616.0	3051.1	3299.0	3577.5
46	.00151	.00157	.00164	3870.0	4207.5	4544.0	3799.0	4145.0	4481.3

I hope that you find the information useful.

Lawrence
9H1AV/9H9MHR

70MHz

This year the first contact on this frequency by means of signals reflected from the moon has been held. His contact took place on **Sunday 15 February 2009** between **Robert GD4GNH** and **Willem ZS6WAB** by means of a computer programme **WSJT**. The distance between these two stations is **9238,7km**

More details may be found on http://www.gd0tep.com/wsjt/4m/World_1st_on_4m.htm

Another page that interests those interested on this frequency is that of **OK2KKW** where there are the greatest distances reached on it <http://www.ok2kkw.com/dxrecords.htm#70>

On this page there are also other links for other frequencies, the first time that radio amateurs talked on microwave, as well as other interesting links.

It's a pity that among those listed there is not a single Maltese.

However, on the webpage <http://www.ham.se/vhf/dxrecord/dxrec.htm> there are listed **9H1PA** and **9H1CG** that had contacted **VP6BR** by means of trans-equatorial propagation **TEP** on **50MHz** on **21 March 2000** at a distance of **16428km**.

United States of Amerika

This frequency is raising interest around the world. **K4RV** wrote on the 4-metre webpage (you can find links from my internet webpage <http://9h1av.topcities.com/hp.html>) that he has his transverter ready and is waiting for the sporadic-e season to begin working.

He also wrote that in America they are expecting to be given an allocation because the television stations that were still using these frequencies are going digital and are therefore going on **UHF**.

Austria

In Austria between 1 June and the end of August and possibly after they are going to have a beacon on **70.045MHz**. Transmissions will be between **04.00** and **17.45 UTC** for **2** minutes on **00**, **15**, **30** and **45** minutes the first minute with a power of **1W** and the second minuet with **5W**.

These transmissions are as a test and they will try to continue after the en of August and even to be on for 24 hours every day. The call sign is **OE5QL** and the locator is **JN78CJ**, at a height of **860 metres** above sea level and the antenna is going to be a half wave vertical.

Norway

Norwegian radio amateurs also have an allocation on this frequency between **70MHz** to **70.5MHz**. Further down you have a link where you can read a Google translation from Norwegian to English.

<http://translate.google.com/translate?u=http%3A%2F%2Fwww.nrnl.no%2FNewsArticle.asp%3Fid%3D296&sl=no&tl=en&ie=UTF-8>

Denmark

The Danish allocation is between **69.9875MHz** to **70.5125MHz** although there are still some other operators apart from radio amateurs, but they are always being decreased and only a few on channelized frequencies remain.

In the Czech Republic and Spain they also have an allocation on this frequency.

And here in Malta we are still waiting notwithstanding that in the United Kingdom they have had this frequency for **51** years.

7Mhz

Don't forget that on this frequency all commercial broadcasters had to leave by Sunday 29 March.

This does not mean that they would all have left, but radio amateurs should be attentive to report those broadcasting stations that may still be transmitting between **7MHz** and **7.2MHz** which is now totally allocated to radio amateurs on a primary basis.

Do not forget that the more we use our frequencies the more we shall be protecting them from other stations who are not supposed to be there.

Do not forget that we have been able to use frequencies between **7.1MHz** to **7.2MHz** since September 2006 and you should use them as much as possible.

500kHz

I would like to remind readers that we are still asking for this frequency notwithstanding that we have not been given a favourable reply until now.

Like other countries, Norwegian radio amateurs were allocated this frequency and exactly between **490kHz** to **510kHz** with a power of **100** watts.

This is apart from a substantial number of countries whose radio amateurs were given an allocation on this frequency.

5MHz

As **MARL** we had held talks with the authorities to be granted an allocation on this frequency, but up till now we have not been successful because like **500kHz** there is yet no decision by the **ITU** notwithstanding that a substantial number of countries have given an allocation to their radio amateurs.

The Norwegians have also been given an allocation to use between **5.260MHz** to **5.410MHz** with a power of **100** watts.

It appears that we will always remain the last people in the world to be given an allocation on frequencies that radio amateurs from other countries would have been given an allocation on them for years.

Sweden

It's good that you should know that Sweden has removed individual licenses for those holding a radio amateur certificate issued by their national society SSA that also assigns their call sign.

In other words, the license did not remain renewable from year to year but for all their life.

Lawrence

9H1AV/9H9MHR

IARU Region 1 Certificate

The **RSGB** issues an award called **IARU Region 1 Award** for those who work a certain number of stations, naturally those found in **Region 1**.

This award can be issued in three categories and can be claimed by every licensed radio amateur under the general regulations and who can provide proof that he contacted a number of stations whose national societies are members of the **IARU Region 1 Division**.

The three classes are for these contacts

Class 1 – All the members on the current list

Class 2 – 60 member countries

Class 3 – 40 member countries

These are the Region 1 members (Total 89)

Albania, Algeria, Andorra, Armenia, Austria, Bahrain, Belarus, Belgium, Bosnia-Herzegovina, Botswana, Bulgaria, Burkina Faso, Cameroon, Croatia, Cyprus, Czech Republic, Denmark, Djibouti, Egypt, Estonia, Ethiopia, Faeroes, Finland, France, Gabon, Gambia, Germany, Georgia, Ghana, Gibraltar, Greece, Hungary, Iceland, Iraq, Ireland, Israel, Italy, Ivory Coast, Jordan, Kenya, Kuwait, Latvia, Lebanon, Lesotho, Liberia, Liechtenstein, Lithuania, Luxembourg, Macedonia, Mali, Malta, Mauritius, Moldavia, Monaco, Mongolia, Morocco, Mozambique, Namibia, Netherlands, Nigeria, Norway, Oman, Poland, Portugal, Qatar, Romania, Russian Federation, San Marino, Senegal, Sierra Leone, Slovak Republic, Slovenia, South Africa, Spain, Swaziland, Sweden, Switzerland, Syria, Tadjikistan, Tanzania, Tunisia, Turkey, Turkmenistan, Uganda, Ukraine, United Kingdom, Yugoslavia, Zambia, Zimbabwe.

There is also a special version of this award in the same three classes for confirmed contacts on **28MHz** made after **1 July 1983**.

For this award send an alphabetical list with the call sign and date of contact. An application form can be requested from the HF manager, **hf.awards at rsgb.org.uk** or from

RSGB HF Awards Manager,
John Dunnington G3LZQ
Box-36
Gilberdyke
East Yorkshire
HU15 2WX England

136kHz Award

Another award is that given to those who has contacted or received a number of stations on **136kHz** and is intended to stimulate experimentation and station improvement.

This award is issued in three categories with additions for each country contacted or received.

The basic award is issued to those who had made contact on the **136kHz** frequency with **5 countries** on the **ARRL DXCC/WAE** list.

The award known as **SWL** is issued to listeners and is issued if they have **5 countries** confirmed. The same award can also be requested by those who have contacted stations on the **136kHz** frequency using cross band.

The third category of this award is issued to those who transmit on **136kHz** and had contacted stations from **5 countries** who had transmitted on another frequency.

Different modes contacts are allowed for this award. This award's categories cannot be mixed, but contacts from one award can be used for other awards.

Once the first award is issued, it is updated for every **5 new countries** that have been worked or heard.

Notes.

The **RSGB** general rules for **HF** awards apply.

The **ARRL/WAE** list of countries has some additional European countries such as the **Shetland** and **Scilly Isles** that are not on the **DXCC** list.

These awards have been issued.

Certificate	5-Countries	10-Countries	15-Countries	20-Countries	25-Countries
1	G4GVC	G4GVC	G4GVC	PA0BWL	
2	G0MIN	DJ7RD	PA0BWL	F6BWO	
3	G3XTZ	F6BWO	DK1IS	DK1IS	
4	OK1FIG	PA0BWL			
5	G0AKY	S52AB			
6	F6BWO				
7	G3YMC				
8	PA0BWL				

Signals reflected from Venus

On **25 March 2009** a number of German radio amateurs from the AMSAT-DL space organization made another step forward to send a satellite probe to Mars.



By means of the **Bochum** Observatory they transmitted signals to **Venus**. These signals travelled nearly **100 million kilometers** for the round trip, a voyage that takes nearly **5 minutes**.

These signals were received back and were the first signals reflected from **Venus** that were received in **Germany** and **Europe**.

This is also the first time that signals sent by radio amateurs went so far, which is more than **100** times the distance of signals reflected from the moon.

The frequency used was on **2.4GHz**, and the power amplifier was high power and is explained in the current **AMSAT-DL** <http://www.amsat-dl.org/>

This was a crucial test for important apparatus for the satellite probe **P5-A** that is going to be sent to **MARS**.

This experiment was repeated on Thursday 26 March and continued for several hours with good echoes from Venus.

AMSAT-DL is negotiating with **DLR (Deutsches Zentrum für Luft-und Raumfahrt)** for the financing of the building and launch of the satellite and the rest of the finances of around 20 million Euros.

This photo shows **AMSAT-UK** member **James Miller G3RUH** and **Achim Vollhardt DH2VA** receiving Voyager signals while using the Bochum amateur radio Observatory in 2006.



Further information (in German) is found on http://www.amsat-dl.org//index.php?option=com_content&task=view&id=166&Itemid=97

A video which shows the P5-A project leader **Professor Dr. Karl Meinzer DJ4ZC** and **Freddy ON6UG** with the **2.4GHz** amplifier that was used in this **EVE (Earth-Venus-Earth)** experiment is on <http://tinyurl.com/EVE13cmAmp>



The **Bochum** Observatory was acquired by **AMSAT-DL** after it was abandoned and succeeded in repairing it to be used to control the P5-A project and succeeded in making many firsts.

These are a few interesting links about **AMSAT-DL** and their experiments.

<http://www.uk.amsat.org/colloquium>

<http://amsat.org/amsat-new/articles/G3RUH/>

<http://www.southgatearc.org/news/april2006/voyager1.htm>

http://www.southgatearc.org/news/june2006/receiving_voyager1.htm

<http://www.amsat-dl.org/p5a/p5a-bochum-eng.htm>

http://www.southgatearc.org/news/july2008/p5a_and_p3e_presentations.htm

<http://www.ticket-to-mars.org/>

This information was sent by **Christopher, 9H1BW** and is found on the internet webpage of the Southgate Amateur Radio Club <http://www.southgatearc.org/index.htm>

According to what was announced by the ARRL

<http://www.arrl.org/news/stories/2009/03/31/10738/?nc=1>

the power used for this experiment was **6Kw**, but on the **AMSAT-DL** webpage video it states that it is **5Kw**.

The Observatory and **G3RUH** and **DH2VA** photos are from the internet webpage of the **Southgate Amateur Radio Club** while the **Venus** photo is from the **ARRL** internet webpage.

Lawrence

9H1AV/9H9MHR

Book on Antennas

Those who like reading on antennas can now download a well-known book that one frequently finds reference to it when reading some antenna article. This was written by **Edmund A. Laporte** who was the **Chief Engineer, RCA International Division, Radio Corporation of America, Fellow, Institute of Radio Engineers** and was published in 1952.

The internet link where one can find other links to download the book in different formats as well as an engineering map is

<http://snulbug.mtview.ca.us/books/RadioAntennaEngineering/>

Lawrence

9H1AV/9H9MHR

ECOMSET

The emergency communications exercise is going to be held on **Saturday 18 April 2009**. Those who are in the emergency group have received details by e-mail. Don't forget to leave this date free and prepare.

Please leave these frequencies free from interference

Region 1	Region 2	Region 3
3760	3750 or 3985	3760
7060 or 7110	7060, 7240 or 7290	7060
14300	14300	14300
18160	18160	18160
21360	21360	21360

Lawrence
9H1AV/9H9MHR



On behalf of MARL and the Committee we wish you and your families a Happy Easter.



Activities

Membership payments

For all those who want to pay their membership the Financial Secretary is waiting for you with open arms to receive your payment. Payment of €23 can be made every Tuesday and Thursday between 6.00 p.m. and 8.00 p.m. and on Sundays between 10.00 and Noon or by cheque by post payable to M.A.R.L.

Yahoo Group

Be attentive and become members in the yahoo group to be fully informed with the latest activities that we intend to hold.

Food

I remind you that every alternate Thursday, that is, Thursday yes Thursday no, an eating activity is held at the Club where whoever is present and is not on diet may eat against a nominal payment. For more details speak to Joe, 9H1AJ.

Lawrence
9H1AV/9H9MHR