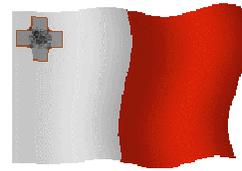


MARL



MALTA



Magazine by MARL

For Maltese and Gozitan
Radio Amateurs

Number 45

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Tpejjipx
No Smoking

Smoking is prohibited at the Centre

From the Editor

Friends,

I welcome you to another issue of this magazine for December 2009, which is issue 45 of this series.

On the weekend of 14-15 November **MARL** members took part in an emergency simulation activity where they passed messages to other stations in foreign countries.

They went to Ghajn Tuffieħa for this activity and there were a number of radio amateurs who are members of the emergency group who always keep themselves updates so that if God forbid an emergency arises in Malta they will be able to give their help.

Saint Nicholas appears reading the radio amateurs wishes on this magazine. I think that he has a lot of work to convince the Maltese authorities not to remain so reluctant to give us what we are asking for and that has already been given to radio amateurs in other countries.



I REMIND those who like to listen on very low frequencies that the station **SAQ** is again going to be operative on **fr-24 December Christmas Eve at 08.00 UTC** on the frequency of **17.2kHz**. If you hear it send a report and it will send you a QSL card and you will have a really nice Christmas present.

Today I am also giving you some more details on the new frequencies that were given to Norwegian radio amateurs for which we had also applied, but while they were given to them we expect a very long wait from the Maltese authorities.

Before closing these few words I wish to convey my wishes as well as those of the **MARL** Committee to the members and their families as well as to all those reading this magazine.

As always, 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 or you can send it to me on my e-mail **9h1av at searchmalta dot com**.

Lawrence
9H1AV/9H9MHR





VLF

Last time we gave information that was sent to us by **Frank 9H1BM** about low frequencies and some stations that one can find and that Frank had found on his receiver. Now I am going to give you further information about stations that one can find on these low frequencies.

Call	F. kHz	Location	Remarks
	11.905	Russia different locations	Alfa Navigation
	12.649	Russia	Alfa Navigation
	14.881	Russia	
GBR	15.8	Rugby	Transmissions stopped April 2003 Some used to give the frequency as 16kHz
JXN	16.4	Helgeland Norway	
SAQ	17.2	Grimeton Sweden	
	~17.5	Russia?	
	17.8	Russia?	Sometimes transmits huge pulses
RDL	18.1	Russia different locations	
UPD	18.1	“	
UFQE	18.1	“	
UPP	18.1	“	
UPD8	18.1	“	
HWU	18.3	Le Blanc France	Does not transmit too often
RKS	18.9	Russia	Rarely transmits
GBZ	19.6	Anthorn UK	Different transmissions including huge pulses
NWC	19.8	Exmouth West Australia	Submarine communications <u>1 Megawatt</u>
ICV	20.27	Tavolara Italy	
RJH63	20.5	Russia different locations	Beta time signals
RJH66	20.5	“	“
RJH69	20.5	“	“
RJH77	20.5	“	“
RJH99	20.5	“	“
ICV	20.76	Tavolara Italy	
HWU	20.9	Le Blanc France	
RDL	21.1	Russia different locations	
HWU	21.75	Le Blanc France	
GBZ	22.1	Skelton UK	
	22.2	Ebino Japan	
	22.3	Russia?	Every 2nd day of the month 1100-1300 1000-1200 in Winter if the 2nd is not a Sunday
RJH63	23	Russia different locations	Beta time signals
RJH66	23	“	“
RJH69	23	“	“
RJH77	23	“	“
RJH99	23	“	“
DH038	23.4	Near Rheuderfehn Germany	Submarine communications
NAA	24	Cutler Maine USA	Submarine communications <u>2 Megawatts</u>
NLF	24.8	Arlington Washington USA	Submarine communications

As you can see there is a lot which one can try to listen to on these low frequencies.

Lawrence
9H1AV/9H9MHR





Tsunami on the Sun

If you thought that a tsunami can only occur on earth you were mistaken. Now **NASA** has discovered that tsunami also occur on the sun which when compared with that which happens on earth are enormous.

(http://science.nasa.gov/headlines/y2009/24nov_solartsunami.htm?list1097538).

The tsunami was caught by the **STEREO (Solar Terrestrial Relations Observatory <http://stereo.gsfc.nasa.gov/>)** satellites and happened on 13 February 2009.

This was not the first time that they became aware of it, but because previously there was one satellite observing the sun (**SOHO Solar and Heliospheric Observatory <http://sohowww.nascom.nasa.gov/home.html>)** there were some doubts about them.

In fact, the first observation was made on 6 December 2006 by the Solar National Observatory in New Mexico (<http://www.nso.edu/press/tsunami/>)

It was calculated that the tsunami was higher than the earth and extended millions of miles in circumference where the explosion occurred. This was confirmed by **STEREO** and occurred when an explosion of sunspot number **11012** occurred.

This explosion **CME (Coronal Mass Ejection)** sent a billion tons of gas into space and created a tsunami that ran on the surface of the sun. This tsunami was **100,000 kilometru** high and ran at a speed of **250 km/s (250 kilometres per second) 560,000 miles per hour**. It was calculated that it had an energy of **2400 million tons of TNT (24 megatons 10^{29} ergs)**.

It's good to have a look at the link which you have further down where you do not only find this report but also photos and videos of this event that are really interesting.

http://science.nasa.gov/headlines/y2009/24nov_solartsunami.htm?list1097538

SOFIA

Another interesting thing is the use of aircraft instead of satellites to observe space. In fact, **NASA** modified a **Boeing 747** to make a telescope **9 feet wide (2.5 metri)** and weighs 17 tons called **SOFIA (Stratospheric Observatory for Infrared Astronomy)**.

This aircraft goes up to the stratosphere at **45,000 feet** high so that scientists could better observe the universe because it would be flying higher than the vapour veil that surrounds the earth. The telescope was built by Germany.

This will be the biggest and most advanced telescope that will be flying when it starts being used next year.

SOFIA is a partnership programme between **NASA** and the German Space Agency Deutsches Zentrum fur Luft- und Raumfahrt that is found in Bonn in Germany. Further information about this project can be found on this link

http://science.nasa.gov/headlines/y2009/19nov_sofia.htm?list1097538

Lawrence

9H1AV/9H9MHR





As usual the **MARL** emergency group took part in the world-wide emergency exercise that was held on the weekend of 14 November 2009. This year the group went to Ghajin Tuffieha.

Propagation conditions were not so good except on the low frequencies and there was also interference on them. **20** metres was dead, on **40** metres there were many broadcast stations from **7.1 MHz** upwards although they all were supposed to have left by March this year and in **Ivan 9H1PI** words, **80** metres was a zoo due to a contest.

Notwithstanding these problems, the group managed to make a number of good contacts even with those who were not taking part in the exercise.

The equipment used by the group was

9H1VW Joe: Icom 706MKIIG vhf/uhf
9H1PI Ivan: Icom 208 vhf/uhf

9H1BW Christopher:
Flex Radio 3000 SDR transceiver for HF frequencies with a power of 100 W PEP
Acer Travel Mate 8000 laptop with a 400 MBs fire wire connection
Antenna Windom 80 to 10 metres.
Microphone electret

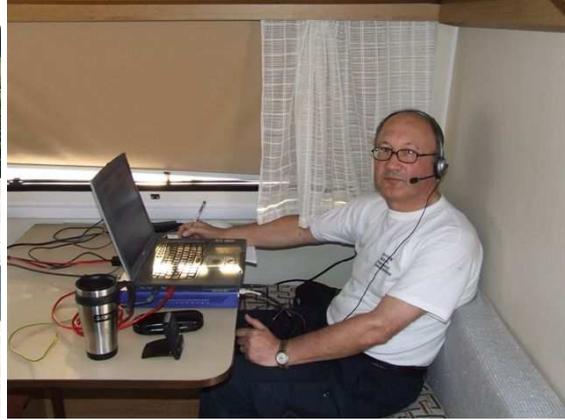
9H5OU Joseph
Kenwood TS-50
ATU AT-50
Lafayette PS-300V Power Supply.
Desk Mic MC-80

EMCOM 2009 Photos





EMCOM 2009 Photos



9H1BW Christopher



9H1SF 9H5OU 9H1PI 9H1BW 9H1VW 9H1AA



9H1BW Christopher, 9H1PI Ivan




EMCOM 2009 Photos



9H1AA George



9H1VW Joe



9H5OU Joseph



9H1PI Ivan 9H1BW Christopher



9H1PI Ivan

As you can notice from the photos for the first time the group had a caravan for its disposal which served well for this occasion. Thanks to the group for the photos.

Lawrence
9H1AV/9H9MHR





Interesting Links

All those who want to work on low frequencies such as **136 kHz** and when they give us permission on **500 kHz** can go to this link and find much useful information
<http://www.wireless.org.uk/>

There they will find information on the latest developments, transmitter circuits and other links to amateur pages where they find more interesting information.

Special Stations

On **10 December 1909 Professor Ferdinand Braun** and **Giuglielmo Marconi** had received the **Nobel** price for Physics in Stockholm Sweden for their developments in radio communications.

To commemorate this occasion, on **10 December 2009 DL0PFB (PFB Professor Ferdinand Braun)** is going to transmit form a special station by using the **DDH47** transmitter on a frequency of **147.3 kHz** and listens on **3.565 MHz**, **7.025 MHz** and **14.052 MHz** so that radio amateurs can contact it and be given a special **QSL** card.

That is, radio amateurs listen on **147.3 kHz** and transmit on the mentioned frequencies on **80**, **40** and **20** metres. **CW** contacts only. **DL0PFB** also transmits on the same frequencies and sometimes also transmits on **147.3kHz**.

This station of the national weather service and is in **Pinneberg** in **Germany**, **Latitude 53 40N** and **Longitude 9-48E** and transmitter power is **20 kilowatts**.

These transmissions are going to be made on **9 December 23.00 to 1-0100 of 10 December 2009**. During the silence periods that used to be held previously by the maritime service (**H+15 – 18 u H+45 – 48**) there are going to be very slow transmissions with **3 seconds dots** for long range tests.

Contacts have to be made with **DL0PFB** and not with **DDH47** and therefore you have to call **DL0PFB** not **DDH47**. If you hear **DDH47** also send a report for it.

This occasion is being organized by the National Swedish Radio Amateurs Organization **SSA** <http://www.ssa.se/> from where one can also download the conditions for this award and ist conditions.

Further information is found on <http://www.doese-apprt.de/pfbday/nobel.html> and a **PDF** coy can be downloaded from <http://www.doese-apprt.de/pfbday/nobeled.pdf>

Lawrence
9H1AV/9H9MHR





500 kHz

Today we are going to give you further news about this frequency. Norwegian radio amateurs were given an allocation on this frequency between **493 kHz** and **510 kHz**. The transmitter power that they can use is **100 Watt** with **Morse code A1A (CW)**.

And Malta? Always waiting for the white flies to arrive.

5.2 MHz

Today we also have news about this frequency. Norwegian radio amateurs were not only given the use of the **500 kHz** frequency, not only were they also given the use of **70 MHz**, but were also given the use of all the frequencies between **5.260 MHz** to **5.410 MHz**.

Once we had also brought you a list of countries that gave the use of these frequencies to their radio amateurs. The Norwegian radio amateurs can use a power of **100 Watts** and a bandwidth of up to **6 kHz**.

Do not forget that we had also applied for this frequency apart from the frequencies of **500 kHz** and of **70 MHz**, but as always happens in Malta we are not given anything before there is a decision by the International Telecommunications Union **ITU**.

Other countries give frequencies to their radio amateurs before there is a decision by the **ITU**, but the Maltese authorities never want to take any decision themselves but want others to take a decision for them so that there may not be any objection from someone. Other countries take decisions, but not the Maltese authorities.

24 MHz

The granting of the frequencies previously mentioned to Norwegian radio amateurs, that is **500 kHz**, **5.2 MHz** and **70 MHz** were not enough. These radio amateurs were also given an increase on the frequency of **24 MHz** which as you is normally between **24.890 MHz** to **24.990 MHz**.

The Norwegian radio amateurs were given an increase on this frequency and now also have between **24.740 MHz** to **24.890 MHz** on a secondary basis with a power of **100 Watt** and a bandwidth of up to **6 kHz**.

We congratulate them and hope that other radio amateurs from other countries who still do not have these frequencies will also be given to them so that some time in the future we will also be given the use of these frequencies.

Such are the authorities of countries that are progressive and at the forefront of developments in electronics and every other scientific sector.

Lawrence
9H1AV/9H9MHR





Last time I gave you information about this frequency and I mentioned the year **1957/58** that had been declared the geophysical year where radio amateurs were given frequencies to experiment on between **50 MHz** and **72 MHz**.

Today you have a copy of this notice as it had appeared on the Danish radio amateurs' magazine.

**IGY-års VHF-frekvenstildelinger til
amatører i en række europæiske lande**

I forbindelse med det internationale geofysiske år kan vi meddele, at følgende lande har tildelt deres amatører frekvenser i området mellem 50—72 MC/s.

Irland: 70.575—70.775 Mc/s
Frankrig: 72.0—72.8 Mc/s
Finland: 70.2—70.3 Mc/s
Tyskland: 70.3—70.4 Mc/s
England: 70.2—70.4 Mc/s. 50 watts A1., A2, A3.
Holland: 70.3—70.4 Mc/s
Norge: 50.0—54.0 Mc/s. A1, A2, A3, F3.
Norge: 70.6—72.0 Mc/s. A1, A2, A3, F3.
Sverrig: 50.0—50.5 Mc/s. 150 watts.
Jugoslavien: 72.0—72.8 Mc/s

Det vil bl. a. sige de skandinaviske lande undtagen Danmark, men herom forhandles der for tiden. **Børge Petersen, OZ2NU.**

As I told you about the frequencies of **500 kHz** and of **5.2 MHz** here in Malta as usual we are still waiting and perhaps we will be given permission to use it when the white flies arrive.

Other information that is connected with this frequency is that every third **Thursday** of the month there is an activity called the Northern Activity Contest held between **7.00 p.m. – 11.00 p.m.** and the frequency used is **70.275 MHz**. Therefore, the next activity that is to be held will be held on Thursday 17 December 2009.

Further information on points and other contests on other frequencies may be acquired from www.vushf.dk/Pages/contest/nac/nacopen.htm

Further information is that as from 19 November radio amateurs in **Belgium** were also given an allocation although it is below **70 MHz** and exactly on **69.950 MHz**. All they have to do is to inform the Belgian authorities that they are going to use this frequency.

Although this frequency does not tally with the other frequencies given to radio amateurs in other countries, nothing can stop the making of contacts by radio amateurs using the frequency given to them and listening on frequencies given to radio amateurs in other countries.

And here in Malta we always wait for the authorities who from their end always for the arrival of white flies before they take any decision.

Lawrence
9H1AV/9H9MHR





Programmi għall-Antenni

Here you have a few links from where you can download programmes so that you will be able to correctly plan and calculate your antennas.

10 Metre Delta Loop	http://www.antenna-street.com/delta-loop-1en.php
AC6LA programmes	http://www.ac6la.com/
Programmes from MEI	http://www.myerseng.com/download.html
Other AC6LA programmes	http://www.ac6la.com/
Different programmes	http://www.ac6v.com/software.htm
From Spread Spectrum	http://sss-mag.com/swindex.html
Antenna Solver	http://www.gsolver.com/
Myers Engineering	http://www.myerseng.com/download.html
OK1RR	http://www.ok1rr.com/
W7EL	http://www.ez nec.com/
QRZ.com	http://www.qrz.com/i/dlcatalog.html
KD6DKZ (Quads)	http://www.softcom.net/users/kd6dks/quad.html
EMMCap	http://www.emmcap.com.ar/
EZNEC3	http://www.ez nec.com/demoinfo.htm
Black Cat Systems	http://www.blackcatsystems.com/software/antenna.html
Mininec	http://www.emsci.com/
MMANA Including sstv etc	http://mmhamssoft.amateur-radio.ca/
NEC4WIN	http://www.orionmicro.com/
Nittany Scientific	http://www.nittany-scientific.com/
G4HFQ	http://www.g4hfq.co.uk/
W6SM Power loss calculator	http://www.cstone.net/~w4sm/software/dbCalc.zip
WA7CS RF Calculator	http://webpages.charter.net/crstrode/calcs/RFcalcs.htm
YagiStress	http://k7nv.com/yagistress/
Yagimax	http://www3.sympatico.ca/wilgraham/ve3etkweb/yagimax.html
WA7RAI Quickyagi	http://www.raibeam.com/wa7rai.html

Other interesting links

<http://www.audiosystemsgroup.com/RFI-Ham.pdf>
http://www.elnamagnetics.com/library/catalogs/fairrite/14th_rev2/CUP%20Paper.pdf

Antenna 160 Metres
<http://www.qsl.net/xe3rn/160.htm>

Number of programmes
<http://www.speroni.com/AH0A.html>

CW
<ftp://jzap.com/pub/je1cka/contest/index.html>

Lawrence
9H1AV/9H9MHR



MARL Activities

Merry Christmas

The **MARL** Committee wishes a Merry Christmas to all the Maltese and Gozitan radio amateurs and their families.



Payment of Membership

We remind you that this is the last month of the year and the time has come for one to pay his/her membership to remain a **MARL** member. The financial secretary is always ready to accept membership fees whenever the **MARL** Centre is open or if you cannot come you can pay by cheque payable to **MARL**.

We remind you that the **MARL** is open every Tuesday and Thursday between 6.00 p.m. and 8.00 p.m. and Sunday between 10.00 and Midday.

Yahoo Group

Be attentive and become members in the yahoo group to be fully informed with the latest activities that we intend to hold. Do not forget that we may have activities which may not be able to appear on this magazine because it may have already been issued and therefore the notice will be sent on the yahoo group. Therefore make sure that if you are not already in the group to become members so that you will not lose any activity that we will be organizing. Send an e-mail to **Ivan**, **9H1PI** [ivan.privitera at gmail.com](mailto:ivan.privitera@gmail.com) to become members in the group.

Lawrence
9H1AV/9H9MHR

