



MARL



Magazine by MARL

For Maltese and Gozitan

Radio Amateurs

Number 13

April 2007

Smoking is prohibited



at the centre

From the Editor

Friends,
I welcome you to another issue of this magazine for April 2007, which is the 13th edition in this series.

This means that with this issue we have been issuing this magazine for two years.

The original plan by the 2005-2007 Committee was for this magazine to be issued every 4 months, but we have succeeded in issuing it every two months.

This was not easy, because although it has 11 pages of information, you need a lot of time to collect and process the information before it can be used.

As was previously used to be said, about the services, **“If an egg had ears it would be lifted by two [persons]”**

In other words, any help is good and welcome and will lighten the load one would have to carry in his work.

This also applies to us as a voluntary organisation and all members especially the committee contribute their time and work for the good and the development of the society and its members.

Therefore, I again invite anyone who has an article and/or information to pass it on to us to also try if possible to issue this magazine more frequently or with more pages and more useful information both

for members as well as for all those who read this magazine.

Lawrence 9H1AV / 9H9MHR

Balloons for Experiments

There were some radio amateurs who have shown interest to experiment with vertical antennae suspended by balloons.

This interests those radio amateurs who do not have a big roof where they can make antennae especially for low frequencies.

Other amateurs have shown interest to experiment by hoisting aloft a transmitter to see how far it goes, how high it goes and also to find the direction it takes.

This is an interesting experiment to carry out especially during the scout jamboree with coordination between different groups.

These are all experiments that one can make as well as other experiments that one can think about.

One experiment that one can do is to hoist up a low power repeater and see how much and how far communications can be carried out.

Other experiments that have been made by foreign radio amateurs were to attach a photographic as well as a video camera to take photographs and transmit what can be seen from that height.

Such experiments are known as space edge science because these balloons rise up to very high altitudes.

One common factor in these experiments is the big balloons that one needs to be able to carry out the experiments that one wishes.

A common factor for the other experiments apart from vertical antennae is that the balloons with the equipment are released and continue to rise until they burst.

This does not mean that the apparatus is destroyed, because it is attached to a parachute and in containers as outside protection apart from having other apparatus that transmits tracking signals.

To know what is being done in other countries, I am going to give you a webpage address about this subject.

This is <http://www.eoss.org/> and is an interesting webpage about experiments being made by American radio amateurs.

Have a look and see how interesting it is. You will also find other links about balloons and other things that you will require if you want to experiment.

Since we are on space matters, small satellites are being made, sized 4x4x4 inches, by a number of universities. These satellites are called cubesats.

A lot of these satellites are being made together with, and use radio amateur frequencies.

One can have a look at these satellites internet webpage to get more information about them. This is <http://cubesat.atl.calpoly.edu/>

A list of some of these satellites together with other details and internet links is also found on WORPK's webpage which is <http://showcase.netins.net/web/wallio/> and find the link which takes you to the CubeSat.htm page.

One can see that there are many universities experimenting with these satellites that cost about \$75,000 including putting in orbit.

Would the University of Malta be interested to make one together with us?

Lawrence
9H1AV / 9H9MHR

The use of Radio in Vehicles

Many radio amateurs are sometimes very concerned whether they would be breaking some traffic regulation when they use their radio apparatus from their vehicle.

This is especially worrying due to the great number of wardens on their guard for the slightest mistake that one can make.

It is therefore good to know that the use of radio apparatus from vehicles is permitted according to a specific traffic regulation.

I am here referring to Subsidiary Legislation 65.11 titled "**Motor Vehicle Regulations**", published on 27 September, 1994, and subsequently amended a number of times.

I am here attaching a copy of the relevant parts. It would be wise if you keep a copy with you so that if you are stopped by someone you can bring this regulation to his/her attention and if s/he keeps insisting tell him/her that you will hold him/her personally responsible for all damages.

I am going to give you Article 15 of these Regulations that is the relevant article for our purposes as well as the introduction to these regulations.

As can be seen, these were amended this year by Legal Notice No. 3 of 2007.

This has therefore cleared things about the use of radio apparatus. It also give the opportunity for a challenge if one gets a ticket for using a cellular phone, but these are arguments for a court room.

**SUBSIDIARY LEGISLATION 65.11
MOTOR VEHICLE REGULATIONS**
27 September 1994

LEGAL NOTICE 128 OF 1994, as amended by Legal Notices 92, 98, 109 and 149 of 1995, 1 and 234 of 1997, 125 and 268 of 1998, 68, 85 and 174 of 1999 and 206 of 2000, 91 of 2001, 58, 191, 236, 322 and 335 of 2002, 93, 146, 162 and 407 of

2003, 104, 156, 386, 400 and 476 of 2004, 44 and 2006, and 3 of 2007.

Use of mobile phones and other devices
Substituted: L.N. 3 of 2007.

115. (1) No person shall drive any motor vehicle whilst wearing or using on both ears earphones or headphones or any other device which may hinder or is likely to hinder that person from hearing properly.

Comments

Here we have an exemption on the use of cellular telephones if you are using one earphone or headphone, because this provision is making it clear that the use of earphones or headphones on both ears is prohibited.

This is expected because if you have earphones or headphones on both ears you cannot hear well the traffic or signals being made by the traffic.

We now come to subarticle 2 of this article. This provides that,

(2) No person shall drive a motor vehicle on a road if that person is holding and, or using a hand-held mobile telephone or any other similar hand-held device, other than a hand-free device or a two-way radio, while the motor vehicle is in motion.

Comments

Here it will be better to examine this provision more carefully.

There is first a prohibition that a cellular telephone or similar apparatus that is handheld cannot be used.

Under **“other similar hand-held device”** one can include personal apparatus such as MP3 players, pocket personal radios that use earphones and similar apparatus.

This is because to operate them, increase or decrease the volume, search for

stations, etc. you have to hold them in your hands.

Then there is the exemption, and here I am referring to its first part, where it is stated **“other than a hand-free device”**.

This means that if you have an apparatus that allows you to use the cellular telephone without holding it in your hands, and one can find such apparatus, you can use the cellular telephone.

But the part that is relevant to our hobby is where it provides **“or a two-way radio.”**

This means that if we have a **“a two-way radio”** as is normally the equipment that we use, this can be used by the driver while the vehicle is moving.

The question that arises here is what type of **“two-way radio”** can be used, whether it is one that is normally fixed to the vehicle or even one that we hold in our hands.

My interpretation and opinion is that any **“two-way radio”, whether it is a handheld two-way radio**, as well as a **two-way radio that is fixed to the vehicle** and is operated by means of the microphone that is held in the hands can be used.

The distinction is that the words **“two-way radio”** are not qualified that it cannot be held in the hands as are qualified the words **“hand-held mobile telephone or any other similar hand-held device”**, so much so that it is distinct from a cellular telephone and other handheld device and is exempted from the prohibition.

The exact words of the exemption from the prohibition are **“other than a hand-free device or a two-way radio”**

This means that a driver can use any hand-free device and any **“two-way radio”** while the vehicle is moving.

Apparatus that is normally fixed to the vehicle and is not handheld is normally operated by using a microphone in our

hands, and because it is a “two-way radio” there is the mentioned exemption.

In this case, the “two-way radio” is not handheld, but it is the microphone that has to be held in the hands so that the apparatus can be operated.

This is a good provision for us that had to be introduced because of the great number of “two-way radio” equipment that has been fitted to taxis, buses, ambulances and other commercial vehicles include those of the security forces.

It’s therefore good to keep a copy of these Regulations and specifically Article 115 in case it’s needed.

Since we are on traffic it’s better to give some interesting information of a general nature.

If someone receives a notification about an alleged act or omission and this is sent by post later than two days after the alleged act or omission is committed, this notification is not valid.

This is according to Legal Notice 350 of 2004 which provides that,

Supplement of the Malta Government Gazette, No. 17,617, 2 July, 2004 Section B

L.N. 350 of 2004

COMMISSIONERS FOR JUSTICE ACT (CAP. 291)

Service of Notice by Mail Regulations, 2004

IN exercise of the powers conferred by article 13 of the Commissioners for Justice Act, the Deputy Prime Minister and Minister for Justice and Home Affairs has made the following regulations:

3. (1) The notice referred to in article 14(2) of the principal Act shall be handed over to the person suspected of having committed a scheduled offence

at the time the person was detected committing the act or omission giving rise to the suspicion.

(2) Where -

(a) for any of the reasons laid down in paragraph (3) it is not practical to hand over the notice to the person as aforesaid or to fix the notice as provided in article 14(2) of the principal Act: or

(b) the person is captured committing the act or omission giving rise to the suspicion on a film or photograph taken by means of close circuit television,

the authorised officer shall ensure that within two days from the day on which the person was detected committing the act or omission giving rise to the suspicion, the notice is sent by mail to that person.

Subarticle 3 states the reasons why the notice is sent by post, but what interests us most is subarticle 4 of Article 3.

(3) The reasons referred to in paragraph (2) are the following:

(a) for reasons of distance, over-speeding, dangerous driving or other serious reason:

(b) where in the exercise of his duties under article 14(2) of the principal Act the authorised officer is threatened, assaulted or insulted or is otherwise confronted with a hostile conduct.

(4) The notice referred to in paragraph (2) of this regulation shall, besides the information required by article 14(2) of the principal Act, include all the facts that led the authorised officer to issue the notice, and also the reasons why the notice was not served at the time the person was detected committing the act or omission giving rise to the suspicion.

This means that not only must the notice be sent within two days from the day that the person is suspected of having carried out the alleged act or omission, but the

information laid down in subarticle 4 of Article 3 must also be given in the notice.

There has already been a case where a person has been freed because there were no details as required by subarticle 4.

To understand clearly, if the alleged act or omission was made on Tuesday, the notice must be sent not later than Thursday.

It is therefore important to see the postal date stamp on the envelope to see whether the notice was sent within two days or not, and if not, you will be able to show it as evidence that the notice was not sent in the time provided by law and is therefore null, void and not valid.

I hope that first of all you will not need to use this information, but if you require it you will find it useful.

While I have made a copy of the relevant parts of these Regulations, I suggest that you download an official copy from the Government webpage.

Legal Notice 3/2007 about the use of two-way radio can be downloaded from <http://www.doi.gov.mt/EN/legalnotices/2007/01/LN3.pdf>

Legal Notice 350/2004 can be downloaded from <http://www.doi.gov.mt/EN/legalnotices/2004/07/LN350.pdf>

Lawrence 9H1AV / 9H9MHR

This space is blank due to differences in length between the Maltese and English texts.

WRC

In March there was a preparatory meeting for the World Radio Conference that is to be held later this year.

There is a proposal on the agenda for this World Conference for radio amateurs to be granted a secondary allocation on a frequency of 136 kHz.

You know that we have been requesting the Maltese authorities so that we join those countries, of which there are already some 40, who have already granted an allocation to their radio amateurs years ago.

If the World Conference decides to grant such an allocation, the authorities have told us many times that they are ready to favourably consider our request.

First of all we hope that this World Conference grants the requested allocation and that afterwards the Maltese authorities will not try to find any problem so that we join the rest of the world and be granted such an allocation.

There is also a request before the same World Conference to grant an allocation to radio amateurs on 5 MHz and also to officially have the 7 MHz allocation between 7 MHz and 7.3MHz on a worldwide basis.

500 kHz

You should know that although we have made our requests for permission to use this frequency a number of times, we are not going to be given permission unless there is an allocation from the World Radio Conference of the International Telecommunications Union (ITU)

We bring to your attention that apart from a number of American radio amateurs, as from 1 March UK radio amateurs can apply for permission to be able to carry out experiments on this frequency.

Although presently this permission was granted for a one-year trial period, there is

no doubt that this will lead to a permanent allocation.

Applications were also made by the Irish Radio Transmitters Society (IRTS) of Ireland¹, by the Wireless Institute of Australia (WIA)², while permission has been granted to a radio amateur in Germany, and Sweden³ presently until November 2007.

You should know that British radio amateurs have already been heard in Spain and Sweden notwithstanding their low transmitter power.

Measurements

Many radio amateurs know the formula to find the wavelength in metres, which is $300/F$, where F is the frequency in MHz.

There is no doubt that everyone also remembers how to find a quarter wave to make a quarter wave antenna, that is $234/F$, where F is also the frequency in MHz.

For a half-wave antenna you can either use $468/F$ where F is also the frequency in MHz, or if you have found the quarter wave measurement you simply double it.

To save you from having to work out the measurements, I am going to give you tables that show the frequency, the wavelength in metres, the length of a quarter-wave, and the length of a half-wave.

These tables are calculated for different frequencies so that if you want to you can cut a vertical antenna or dipole for a particular frequency

These are calculated for antennae made of wire, because if you use tubing of, e.g., aluminium, the length will be somewhat

less because of the tubing diameter when compared with wire.

In practice you will find that a few inches on low frequencies will not make a big difference because the antenna will not be high and probably the measurements will be a little longer than required, as well as for another reason that we will see later on.

However, you will have to tune every antenna in place to find the exact measurement because of different factors that vary from place to place.

The higher we go in frequency the more you will notice that small differences have a greater effect because the size of the antenna becomes smaller.

This is easily understood if you see that while an inch in 1000 inches is only **0.1%**, an inch in 100 inches is 1% and an inch in 10 inches is 10%.

In practice therefore, you have to be more careful and increase or decrease the length little by little to tune the antenna the higher the frequency.

It may be that the figures in the tables will not add up exactly because in practice you cannot easily measure fractions of an inch unless you are using tubing, but you have to tune the antenna little by little in place.

Although presently we do not have an allocation on the frequencies of 136 kHz, 500 kHz, 5.2 MHz and 70 MHz, I am also going to give measurements for these frequencies.

If you work them out you may find that some measurements are not exact, because if there is an inch and a quarter I put down one inch and if an inch and three quarters I put down two inches.

However, on low frequencies parts of an inch will not make any difference, while on high frequencies you still have to tune the antenna.

¹<http://www.irts.ie/cgi/showarchive.cgi?060723.txt>

²<http://www.wia.org.au/news/2007/20070214-01.php>

³ Gus, SM6BHZ, (Bernt Gustafson) (505 kHz)

The first column is the frequency.
The second column is the wavelength in metres.

The third column is the length of a quarter-wave in feet and inches.

The last column is the length of a half-wave in feet and inches.

The 136 kHz frequency allocation is from 135.7 kHz to 137.8 kHz.

F kHz	M	1/4W	1/2W
135	2222.22	1733'4"	3466'8"
136	2205.88	1720'7"	3441'1
137	2189.78	1708'	3416'7"

The 500 kHz frequency allocation is presently between 501 kHz – 510 kHz

F kHz	M	1/4W	1/2W
500	600	468	936'
505	594	463'4"	926'8"
510	488.235	458'10"	917'8"
515	582.52	454'4"	908'8"

The 160-metre allocation is between 1.810 Mhz to 2 Mhz

F MHz	M	1/4W	1/2W
1.810	165.74	129'3"	258'7"
1.825	164.38	126'5"	252'11"
1.85	162.16	126'5"	252'11"
1.875	160	124'10"	249'7"
1.9	157.89	123'2"	246'4"
1.925	155.84	121'7"	243'1"
1.95	153.85	120	240
1.975	151.89	118'5"	236'11"

The 80-metre allocation is between 3.5 Mhz – 3.8 Mhz.

FMhz	M	1/4W	1/2W
3.525	85.1	66'4"	132'7"
3.55	84.5	65'11"	131'10"
3.575	83.92	65'5"	130'11"
3.6	83.33	65'	130'
3.625	82.76	64'6"	129'
3.65	82.2	64'1"	128'2"
3.675	81.63	63'8"	127'4"
3.7	81.08	63'3"	126'6"
3.725	80.54	62'10"	125'8"
3.75	80	62'5"	124'10"
3.775	79.47	61'11"	123'11"

The most common allocation on 60 metres is between 5.25 MHz to 5.45 MHz

FMhz	M	1/4W	1/2W
5.25	57.14	44'7"	89'1"
5.275	56.87	44'4"	88'8"
5.3	56.6	44'2"	88'4"
5.325	56.34	43'11"	87'10"
5.35	56.07	43'9"	87'6"
5.375	55.81	43'6"	87'
5.4	55.55	43'4"	86'8"
5.425	55.29	43'2"	86'4"
5.45	55.05	42'11"	85'10"

The allocation is between 7 MHz and 7.2 MHz. There is a proposal on the agenda of the World Radio Conference to increase it to 7.3 MHz worldwide.

FMhz	M	1/4W	1/2W
7.025	42.7	33'4"	66'8"
7.05	42.55	33'2"	66'4"
7.075	42.4	33'1"	66'2"
7.1	42.25	32'11"	65'10"
7.125	42.1	32'10"	65'8"
7.15	41.96	32'8"	65'5"
7.175	41.81	32'7"	65'2"
7.2	41.66	32'6"	65'
7.225	41.52	32'4"	64'9"
7.25	41.38	32'3"	64'6"
7.275	41.24	32'2"	64'4"

The allocation on 30 metres is between 10.1 MHz and 10.15 MHz

FMHz	M	1/4W	1/2W
10.125	29.63	23'1"	46'2"

The allocation on 20 metres is between 14 MHz and 14.35 MHz.

Note that on different frequencies some measurements are the same. This is because parts of an inch result in the calculations.

This means that a small difference in measurement makes a substantial difference in antenna tuning and swr and therefore you have to be careful to exactly tune the antenna on the wanted frequency.

However, this also means that the frequencies where you have low swr are greater than on lower frequencies and where a small difference in frequency

makes a big difference in the length of the antenna as you yourself can prove.

FMhz	M	1/4W	1/2W
14.025	21.39	16'8"	33'4"
14.05	21.35	16'8"	33'4"
14.075	21.3	16'7"	33'3"
14.1	21.28	16'7"	33'2"
14.125	21.24	16'7"	33'1"
14.15	21.2	16'6"	33'
14.175	21.16	16'6"	33'
14.2	21.13	16'6"	32'10"
14.225	21.09	16'5"	32'10"
14.25	21.05	16'5"	32'10"
14.272	21.02	16'5"	32'9"
14.3	20.98	16'4"	32'9"
14.325	20.94	16'4"	32'8"

The allocation on 16 metres is between 18.068 MHz and 18.168 MHz

FMhz	M	1/4W	1/2W
18.093	16.58	12'11"	25'10"
18.118	16.55	12'11"	25'10"
18.143	16.54	12'11"	25'9"

The allocation on 15 metres is between 21 MHz and 21.45 MHz

FMhz	M	1/4W	1/2W
21.025	14.269	11'1"	22'3"
21.05	14.25	11'1"	22'3"
21.075	14.24	11'1"	22'2"
21.1	14.22	11'1"	22'2"
21.125	14.2	11'1"	22'2"
21.15	14.18	11'1"	22'1"
21.175	14.17	11'	21'1"
21.2	14.15	11'	22'1"
21.225	14.13	11'	22'
21.25	14.11	11'	22'
21.275	14.1	11'	22'
21.3	14.08	11'	22'
21.325	14.07	11'	21'11"
21.35	14.05	10'11"	21'11"
21.375	14.03	10'11"	21'11"
21.4	14.02	10'11"	21'10"
21.425	14	10'11"	21'10"

The allocation on 12 metres is between 24.890 MHz and 24.990 MHz

FMhz	M	1/4W	1/2W
24.915	12.04	9'5"	18'9"
24.94	12.03	9'5"	18'9"
24.965	12.01	9'4"	18'8"

We will continue next time.

Lawrence 9H1AV / 9H9MHR

Committee Election

As most of our members know, and all members are supposed to know, this year we had to have the election for the MARL committee.

10 candidates were nominated for election and 9 had to be elected.

From the previous committee Robin, 9H1ZZ was not elected and Domenic, 9H1M was elected instead.

This does not mean that whoever does not remain in the committee was not doing his work, but 9 had to be chosen and someone had to be left out.

We bring to your attention to what is provided in the MARL statute about the Annual General Meeting.

We are doing this because there were some who were disappointed because they could not vote because they had not paid their membership as stated in the statute.

We had brought to your attention several times that the financial secretary will be waiting for you to pay your membership before the Annual General Meeting starts.

If one sees the February 2007 magazine one can see that in MARL Activities the following is written down.

Membership Fee

The Financial Secretary will be waiting for you to pay your Lm10.00 2007 membership fee.

Do not forget that whoever has not paid will not be able to vote for the committee at the AGM.

We had already done the same in the December 2006 issue, where we had brought your attention to the membership fee as follows.

Yearly social gathering
The Committee would like to inform the members that the yearly social gathering will be held at the MARL Centre on Sunday, 7 January, 2007 at 10.00. There will be food and drinks.



Membership Fee
Membership payment for the year 2007 has already started. The Financial Secretary will be waiting for you to pay your LM10.00 membership fee.

Do not forget that whoever has not paid will not be able to vote for the committee during the Annual General Meeting.

As you can see, the Financial Secretary was also available to whoever wanted to pay not only whenever the Club is open, but also during the social gathering.

Notwithstanding this, there were members who came for the social gathering and have neither paid for their membership for 2006 nor for 2007.

We think that everyone knows how much expenses and payments we have to make to run the club and we do not think that the members do not appreciate what MARL does for them.

We therefore do not think that we would be expecting too much when we expect that members pay their membership so that we can keep the Club and through MARL continue to provide our services for the benefit of radio amateurs.

Remember that if we do not have our Society to defend our interests especially with the commercial pressure that there is today we will not only not be able to get new allocations and other things, but may quickly lose what we have today

Remember that the more members we have the more we can face the authorities and the more will our strength be when we hold talks with the authorities.

We therefore feel that every radio amateur in Malta should be a MARL member, which is the only society in Malta for radio amateurs and pay membership regularly if we want to continue to enjoy our hobby.

Regarding what the statute provides, we had published the statute in this magazine so that everyone could have and keep a copy.

To remind you therefore, we are again going to give you point 6.5.4 of the statute which is about the Agenda for the General Meeting.

6.5.4 The agenda for general meetings shall include, among other things:

Reading, discussion and approval of the minutes.

Reading, discussion and approval of the administrative report.

Reading, discussion and approval of the financial report.

Appointment of an Auditor.

It shall specify that ONLY fully paid up members that have paid up to 31 December of the previous year, and who have renewed their membership for the new year before the start of the meeting may take part in the discussions and vote

We hope that we have thus clarified the matter and our members will take care to pay their membership before the General Meeting starts so that they will not be disappointed.

The new committee thanked the MARL members while it also thanked Robin for his useful work in the QSL bureau.

The committee asked Robin who accepted to continue to take care of the distribution of the QSL cards.

Robin is going to continue distributing the QSL cards in the members boxes and packing of cards that have to be sent.

The difference is that on his own request, he will no longer have anything to do with the handling of money, which is going to be the financial secretary's responsibility.

We hope that the members will take care to pay their membership on time, both for the advancement of our Society as well as not to be disappointed again.

Lawrence 9H1AV / 9H9MHR

SPAM

Many internet users have e-mails and complain that they receive a lot of irritating e-mails called spam.

You have a choice of either deleting them, or you can send a copy to an American Government address where if they are sent from America measures will be taken against them.

This address is spam@uce.gov

You can also take their e-mail addresses and copy it to all the other e-mail addresses.

By doing this, each one will receive the others addresses and will also start sending them e-mails.

I think that if we do this they themselves will quickly get fed up because their inbox will quickly fill up.

Thus we will be using their own system and will force them to block each other's e-mail system.

Lawrence 9H1AV / 9H9MHR

Ċertifikati tal-MARL

While a lot of people know that MARL has certificates for those that qualify for them, there may be some, especially new radio amateurs, who do not know about them.

I therefore thought of giving you details about them so that whoever is interested can work for them.

You can also find these details on our internet webpage at <http://www.9h1mrl.org>

The first one that appears hereunder is known as "**All Malta Award**", that is, to qualify for it you have to work a number of stations from the Maltese Islands.



To apply for this certificate if you are from a European country you need 10 points and if from outside Europe you need 5 points.

Every Malta station counts 1 point, while a station from Ghawdex counts 2 points.

A contact with MARL station 9H1MRL also counts as 2 points.

You may have contacts with stations in Malta or Ghawdex only or mixed together, as well as on one frequency or more and with one or modes of transmission.

In other words, you may apply for a certificate for 160 metres, 80 metres, 40 metres, etc, or mixed.

You may also apply, e.g. on CW, SSB, SSTV and any other mode individually or mixed.

You can apply for a certificate, e.g., on 160-metre CW, on 160-metre SSB, and the same applies on all other frequencies.

In the same manner, you can apply for a certificate where you had contacted the required number of stations on different frequencies with one or more modes of transmission. The same applies for the other certificate.

The other certificate is called “**Dip Med Award**” and may also be acquired for a particular or mixed frequency.

In the same manner, it can be acquired for different modes of transmission or mixed, in the same manner as the other certificate can be acquired.

This certificate is that shown hereunder.



To acquire this certificate you have to have contacted a station from Malta together with 15 other stations from other countries from around the Mediterranean.

These are the prefixes of the countries from around the Mediterranean. Do not forget that together with these, the new countries that have emerged after the fall of Yugoslavia as well as Palestine, E4, will have to be added.

CN, EA, EA6, EA9, F, I, IS, IT, OD, SU, SV, SV5, SV9, T9, TA, TK, YK, YU, ZA, ZB, 3A, 3V, 4X, 5A, 5B, 7X, S5, 9A and 9H.

To apply for these certificates one has to send a certified QSL list together with a payment of American \$10 for Europe and American \$15 if outside Europe.

Applications are to be sent to,

**Malta Amateur Radio League (MARL)
P.O. Box 575
Valletta
Repubblika ta' Malta.**

If correct payment is not included the application will not be considered.

*****Computer Course*****

A computer course is going to be held at the MARL Club.

This is going to be held every Thursday evening.

Whoever wants to attend may tell Karmenu, 9H1AQ or Paul, 9H1JT.

Hurry because it is going to start.

MARL ACTIVITIES

Membership fee

The Financial Secretary is still waiting for you to pay your LM10.00 2007 membership fee.

He will be at the Club every Tuesday and Thursday between 6.00 p.m. and 8.00 p.m. and Sunday between 10.00 a.m. and 12.00 a.m.

See you