

OM: beginning, portable and pedestrian mobile. A conversation among radioamateur's friends (From E.R.A. Magazine, 2015 November)

by Giovanni Francia I0KQB

Devoted to the world of radiohams. One day, after have read this sentence that stands on the cover of QST magazine, some thoughts and subsequently even remembers of how my radioamateur's adventure began, come into my mind. How this adventure have began? Why become radioamateurs? What do you feel? Why do we transmit on portable and pedestrian mobile?

All started with one name pronounced during a history lesson at school: Guglielmo Marconi, and his Villa Griffoni experiment. That was for me, something similar to the kick starter of the motorcycles; once kicked down, the engine starts and goes.

More than this, so happened that my father was one radioamateur and so, hearing him speaking often with the entire world, I was fascinated by that unknown universe that struck me very deeply. Then, while still 16 years old, I built by myself my 1strtx, that was an italian DIY rtx for the 27mhz, with only 1 watt power output.

It had one channel and it worked in A.M. only. Little but valid rtx. The 2nd rtx was a Lafayette Micro 723, another AM rtx that, thanking also to the very strong radio propagation present at that time, throw me directly into the world of C.B. Dcxers, using one CB antenna for mobile mounted on a bicycle, and powering the equipment by a car's battery. Amazing results. At that point, I studied radio technology in order to get my OM license and call sign. Finally, in 1978 I began a complete radioamateur.

Two years of activity as an OM and then, more than 30 years of radio silence. Some years ago, by chance, I started again and so the story goes.

As a today's OM, the kind of activity that I prefer is going on /P, activity that allows me to experiment every kind of antennas from any kind of locations I choose.

When I started to go /P at the seaside and in the public parks, I asked from myself if I were the "only" crazy man" that goes everywhere with his own trolley, carrying the radio, the antennas, the fish pole and battery. No matter at all about what the unknown people that saw me could have thought about it. At the the same time, to all the people that stopped next to me for asking what I had been doing, I gave always polite answers and explanations. Believe me if I say that the results of my answers have been a lot of amazed and smiling faces.

Certain times, I used to ask even from myself some questions about this hobby/passion/scientific game, the same questions made to me from the people met during my Qsy, answers as:

Why using the radio? What do you say one each other? What do you feel while you are operating, especially on /P? How long will this passion last?

Probably, the reasons and the aims of being an OM are various and differents among the radioamateurs.

I found my personal answers, but at the same time I asked from myself what the others OM think, feel and do.

So, in order to have answers to my curiosity, I finally decided to ask some questions to some radioamateurs with which I share this particular section of the OM activity, the radio /P and /PM, sometimes experimenting beyond the thinkable (I.E. phony SSB transmission on HF bands, successfully achieved using just 100 mw or less, or build by itself a real minimal rtx, using components taken from the drawer of the laboratory or disassembled by other equipments, or experimenting many types of antennas in different places and conditions. And it all works. Look for yourself. On the web you'll find so many things, simply typing their individual call sign. These radioamateur friends, users and experimenters of /P, /PM and Qrp are: G4AKC Dave Starkie, VK3YE Peter Parker, G7UFI Barrie Courtenay, VK2BSY Dave Oliver.

To them I have given a number of question they have been subjected. Here they are the questions, together with their answers.

When how & why did you approach with the OM's world?



Dave G4AKC

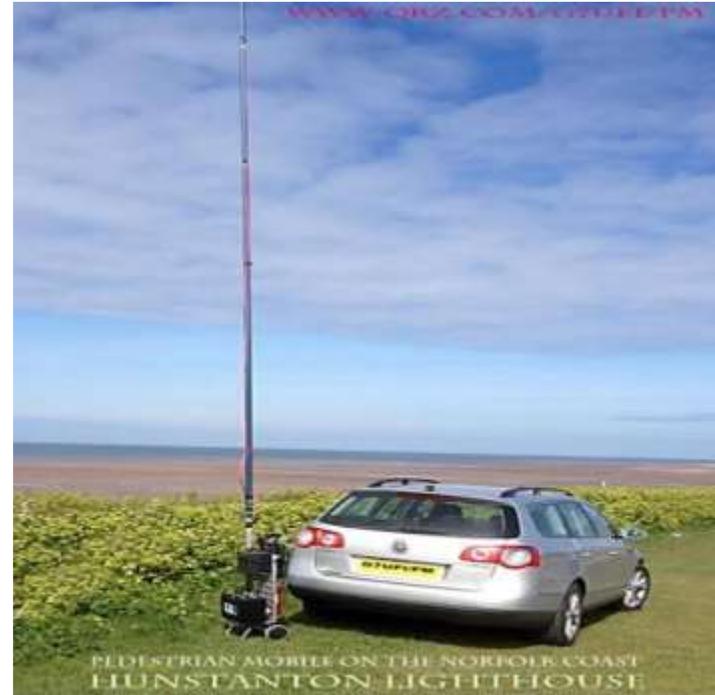
I was introduced to amateur radio, by my father, to another local radio amateur when I was only 10 years old in 1964, and I was so captivated by being able to talk to other

people on the other side of the world, and so by the age of thirteen I was making my own radio receivers to listen to the shortwave bands. I passed my amateur radio exams at the age of 16 back in 1970.



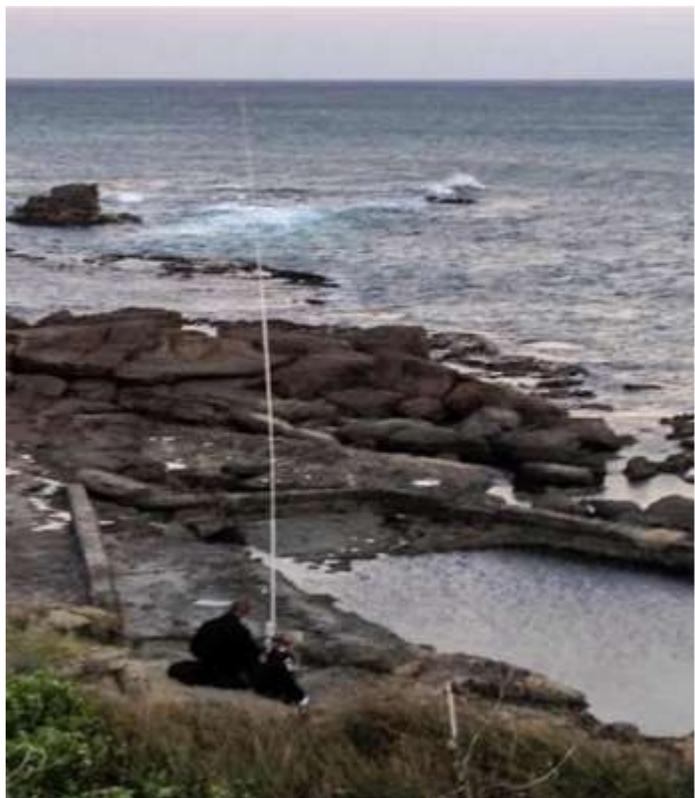
Peter VK3YE

A childhood spent taking apart radios, haunting rubbish tips and trying to build electronic things led to an interest in radio and getting on air after hearing radio amateurs as a 12 year old on an AM/shortwave radio.



Barrie G7UFI

I became a shortwave listener at a very young age and when I left school and started work a friend of mine introduced me to amateur radio and encouraged me to take my RAE exam.



Dave Vk2BSY

I have always been interested in radio since a young boy and subscribed to Practical Wireless. Having spent some time on 27Mhz, which was illegal in the UK and spending most of my time DXing, speaking to AT Group members, I needed to move to a legal system. A mate and myself decided that we needed to take our exams to get licensed.

Do you still remember your 1st qso and 1st dx? Who were the Om? What did you feel?

Dave G4

My first QSO was on FM on the 2M VHF band to a local station and I was very nervous, but after a short QSO I felt more confident. My first DX QSO was to Peter WB2DQC on 20 metres and we kept in touch for many years after our first QSO.

Peter VK3

I have vivid memories of my first QSO under my novice callsign VK6NNN. I was on CW calling in to the weekly Sunday morning amateur radio news broadcast on 80 metres which happened to operate on the only frequency that I had a crystal for. Contacts were had with VK6ED about 50km away and VK6ABY 250km away that morning.

Barrie G7

My first QSO was with G4XPR and my first DX in my log was OH2LY.

Dave VK2

Not my first QSO but I do remember one morning when I was off sick from work, I had recently passed my Morse test, I turned the radio on and there was a guy talking with an accent, and just signing with someone. His call was **VK2WU**. The noise from everybody calling him was unbelievable. I thought I don't have a chance Again the noise of everybody calling was intense. Well I nearly fell off my stool when he came back to me. I really didn't know what to say. But you can't explain the feeling you get on that first big one.

What kind of Rtx did you use first?

Dave G4

My very first transceiver, was a VHF FM Pye Cambridge which I used both from home and mobile, but quickly became more interested in HF communications, and used the local club station transceiver which was a Drake T4X transmitter and R4B receiver, which were very popular at the time.

Peter VK3

A homebrew, one valve crystal controlled transmitter on 3.58 MHz, using a 6GV8 salvaged from an old TV. The triode section was the crystal oscillator with the pentode being the RF power amplifier. Output approx. 4 watts. It was inspired by a similar design, in the 1973 ARRL Handbook. I had been licensed at the age of 13, but it took about 18 months to build a transmitter, good enough to make contacts. The receiver was a transistor AM/shortwave set. The local oscillator of another receiver, was used to provide a BFO to hear SSB / CW signals.

Barrie G7

My very first radio I brought was a Icom 746 all mode HF 2m 6m and 70cm.

Dave VK2

My first Radio was for the 2 Meters band, a Yaesu FT209R and I still have it. My first HF radio was a Yaesu FT101ZD.

Your memories about the radio equipments and radio technologies at the time you started to operate.

Dave G4

When I first started operating in 1970 most if not all the radio equipment I had at the time was very big and mainly using valves.

When I first started going mobile I used a Yaesu FT101 from the car passenger seat, I had to keep the engine running all the time as the amount of current it took from the car battery was very high and I needed to keep the engine running to prevent the car battery from going flat!

Peter VK3

The ment (both homeequipment was heavy, primitive and stuck, on a small number of crystal controlled frequencies. With much better equipebrew and commercial) now, I do not miss what I used to use one bit!

Barrie G7

My memories of the radio equipment and technology was the high power 100 watt, I thought that was very high power at that time.

Dave VK2

When I started playing with radio everything was valve, by the time CB was available to me it had moved to transistor. But my first HF radio was Transistor on the receive and Valve on the output. There was the option I recall of having a fully transistorized transmitter/receiver but I knew at that time transistors didn't like any mismatch on the aerial, whereas valves wouldn't just die on you if you done something stupid.

Before to be an OM, had you ever used to operate in the C.B. on 27 Mhz?

Dave G4

I never used CB radio although I did listen on there from time to time, but it never appealed to me.

Peter VK3

I did have a 27 MHz walkie talkie it was so low powered that I'd occasionally hear stations on it but no one ever heard me. Interest switched to shortwave listening for a few years until I started hearing amateurs.

Barrie G7

Ye I started my radio experience in the 1970's as a CB SSB operator which was illegal at the time.

Dave VK2

Yes, mentioned above.

When and why did you decide to operate mostly or only on /P or /PM?

Dave G4

A lot of the televisions in use during the 1970's and 1980's, were very prone to picking up signals from high power HF radio signals (TVI) and so, operating from my home station was difficult, as it was causing interference to my neighbours television sets, and even though I made filters to fit to their televisions in the antenna coax line, it would still cause some problems, and so I initially decided to go out car mobile away from the houses, and operate from near to the sea or from a remote hill top location. I was able to work DX. using just low power from my bicycle by the sea, often working into the USA on 20M ssb with just 2 Watts using a hand-held Mizuho MX-14S powered by dry batteries and fed into a full size quarter wave vertical on the back of my bike.

Peter VK3

My operating is a mix of transmitting from home, portable or pedestrian mobile. A big benefit is the lower noise on receive compared to the home location, making it easier to work other stations running QRP. A move to a beachside suburb about 7 years ago has increased my interest in HF pedestrian mobile due to the number of portable and mobile operating locations within a short walk.

Barrie G7

I came across /PM by accident,I decided to try mobile HF as my home qth suffered with high noise level and had problems with RF getting into my equipment /mobile so I did a search for HF Mobile on google and I came across G4AKC in my search,I then looked up G4AKC on QRZ and looked at Daves web page " Pedestrian Mobile" so I decided to join Daves group "REALHFMOBILE" asked lots of questions on how to build the trolly that Dave used and built one myself,I then went down to my Local beach in Norfolk and made contact with Dave on backscatter and made several contacts to VK and ZL, places I never thought possible on low power and now when weather conditions are good I drive 25 miles to the beach and DX.

Dave VK2

Well this didn't happen until this year, when I became licensed here in Australia. I was looking at spending not too much money on a radio, and it was to be HF. I looked at a new ICOM IC-718 for \$800.00 and was going to buy it. Then I was offered a second hand ICOM IC-706MkIIIG for the same money. I was so lucky I bought the 706. The reason being the IC-718 was base station where the IC-706 was a mobile station. Soon after I set the radio up at home I discovered I had s7 of noise but happened to hear a portable station broadcasting with a whopping s9+40db signal. This was VK2HAS Alex. The next time he came

down I paid him a visit and that was it, I was hooked. I was going portable. Haven't looked back since. Nothing like working stations from the other side of the world and being told you are the only VK they can hear.

What do you feel doing it?

Dave G4

I used to be very self conscious of operating near other people but I have got used to it and so when operating HF bicycle or pedestrian mobile, many people stop me as their curiosity gets the better of them and the large antenna on the back of the bike or cart draws a lot of attention!

When they come over to me I tell them its amateur or ham radio and the usual question then follows "what is amateur radio?" so a lot of time can be spent on describing the unusual side to our hobby! The HF "pedestrian mobile" set-up allows me to operate well away from the main public areas and reduces the number of people who are asking what I am doing!

Peter VK3

No answer.

Barrie G7

I feel amazed at the contacts that come back to my CQ call using just a 1/4 wave (16.5 feet)length of wire vertical as the antenna, and not knowing where in the world the next contact is going to answer your cq call,20 meters I think is the best band for dxing in my opinion.

Dave VK2

A sense of achievement.

Would you suggest to others radio amateurs to try going on /P or /PM? Why?

Dave G4

The results, especially when working near to salt water, are well worth the effort of putting all the equipment onto a bike or pedestrian trolley and provide results that will compare with other stations that are using a yagi beam up at 20 Metres high with high power, it also will keep you fit and is a healthy way of enjoying the hobby. In addition most of the remote locations provide you with very low noise levels, so it is possible to hear very weak stations that you can not hear at you home station.

Peter VK3

Yes. Especially if you want a new interest in amateur radio and have already worked a lot of DX with your home station. There is an elegance in achieving long distances with a simple portable station, that weighs only a few hundred grams.

HF QRP equipment, batteries and lightweight telescoping masts are both affordable and small these days so all that you need to do is build a suitable antenna. This can be anything from a bit of wire and antenna coupler for portable operating to a loop or backpack vertical for pedestrian mobile.

Barrie G7

I would suggest all hams have a go at dxing from near the sea /PM I think they would be very surprised the performance a 1/4 wave vertical antenna near.

Dave VK2

Highly recommend it to everyone. Nothing like being sat next to the ocean relaxing talking to people all over the world.

Do you use to build by yourself antennas and equipments? Why?

Dave G4

I like to build all my own antennas as in addition to enjoying manufacturing them I find that I can make a better performance antenna. I also make my own ground tuning units to couple the bike or trolley into the surrounding area without the need for trailing wires or radials as this would be impossible to use trailing wires whilst on the move.

As most of my operating is from near to the sea water the majority of my home made antenna's are vertical antenna's as the vertical antenna near to salt water uses the ideal ground-plane of the sea, the performance of the vertical is far better than a horizontal antenna.

Peter VK3

Yes. All of my antennas and most of my gear is homebrew. There is always the thrill of working stations on equipment you put together yourself. There's hundreds of ideas, circuits and videos on homebrew gear. And you can customise it to suit your requirements.

But there are however times, especially when pedestrian mobile, that the multiband convenience and compactness of the FT817 is a great advantage.

Barrie G7

I only build my antenna's as I am a mechanical engineer and not electrical,I do not have the knowledge of building radio's etc

Dave Vk2

I build my own antenna's.I have built a Ground Tuning Unit.The reason being is because I don't like to spend money on something I can't build myself. And it gives you enormous satisfaction when it works.

Your most amazing radio project.

Dave G4

About 7 years ago I put my Mizuho MX-14S radio onto another trolley powered entirely by on board solar panels, so no battery power at all and managed to work into New Zealand on 20M ssb with this trolley set up using 2 Watts without any battery power at all.

Peter VK3

Most of my projects are fairly simple and I haven't made any really ambitious projects that require months and months of intensive work. I do enjoy simple homebrew 7 MHz DSB transceivers because of the excellent contacts possible for the small number of parts required.

Barrie G7

Building and operating my /PM trolley.

Dave Vk2

I was going to say I don't have one, but I used to go RTTY/M with a FT101ZD together with a Dragon computer and a portable TV, because that TV's were used as monitors. And all this fitted in a Triumph Spitfire Mk IV. Oh and of course a homebrew Mobile antenna for 20 Meters. I used to get a lot of calls being mobile RTTY.

According with your experiences, when going to different locations, i.e. seaside, hill or plane landscape, what kind of antenna would you suggest for any of them?

Dave G4

I have experienced lots of different locations operating mobile and portable and without doubt on the lower HF bands (80M to 20M) a seaside location will always provide much better results compared to a hill top location, however the higher HF bands above 20M the benefits of the sea water compared to a hill top are reduced. A sloping hill top site into the direction of propagation also provides good results, however the ground under the antenna is a major factor and a high conductivity ground will always provide better results specially when using a vertical antenna. When ground conditions are poor on a hill top a horizontal antenna will usually produce better results than a vertical.

Peter VK3

Depends on the environment, who you wish to work and the bands used.

On the beach it's some sort of vertical, especially if I'm pedestrian mobile (typically walking/standing in the water) or on the end of a pier over salt water. Details of my 7

– 50 MHz Wadetenna vertical are at www.vk3ye.com and a series of videos at www.youtube.com/vk3ye

I also have several magnetic loops built for pedestrian mobile. These are excellent if you're on land and don't have a water ground. But given my location, being near a saltwater bay, the Wadetenna vertical gets most use.

For portable operating on the sand, I like either a half square or a full wavelength delta loop fed $\frac{1}{4}$ wavelength below the apex to achieve vertical polarisation.

In the bush I often use an end-fed half wavelength of wire supported on a 9 metre telescoping squid pole. This gets reliable QRP contacts up to about 800 km on 7 MHz which is my favourite band.

Barrie G7

I only ever use $\frac{1}{4}$ wave vertical on 20 meters and $\frac{1}{4}$ wave vertical for 17 meters as near the sea as possible.

Dave Vk2

For DX work the $\frac{1}{4}$ λ Vertical. It's easy to build, It's easy to carry, It's easy to put up and take down.

After so many years, what does still tie you to the radio?

Dave G4

As I live very close to the sea, the results on HF are very good and I still enjoy either riding my bike, or walking down the beach and speaking all over the world to the DX and find it a continual challenge to get out there and enjoy the hobby. I don't think I will ever get bored with the excitement of turning the radio on and speaking to the world!

Peter VK3

No answer.

Barrie G7

I think making contacts from around the world and talking to different nationalities and also making some very good friends, brilliant hobby.

Dave Vk2

I enjoy speaking to people of the same mindset. Someone told me, not so long ago, radio hams are probably the only people who talk to each other.

Nowadays, what do you feel and think as turning on the radio, and listening to the voices coming out from the

Loudspeaker?

Dave G4

It's exciting to see what the propagation brings each day and it's great to speak with the many friends I have made all over the world over the last 45 years of being licensed, it's specially good to speak with friends across the other side of the world that have visited me over here in my house in Blackpool Enland.

Peter VK3

The mystery. It's like fishing. You have no idea who you'll catch when you issue a CQ call or reply to someone else. Your contact could be a first for them or someone you haven't spoken to for years. Or some unexpected DX.

Barrie G7

I feel the same as many years ago when turning on my radio nothing has changed, there is always someone to talk to day or night.

Dave Vk2

Anticipation on whom I will be talking to today.

Finally, an episode about your radio behaviours that has really impressed you.

Dave G4

I love to get on the radio in the early morning on 20M to work into the Pacific area long path on ssb and find that the Australian stations have excellent radio manners

Peter VK3

Three things:

- a) The reaction of others who work you. Very often you're their first and only pedestrian mobile contact.
- b) The questions you get from others who see you out and about with some strange antenna talking to the other side of the world.
- c) Much rarer than the above two is when people don't believe you're running QRP because your signal is so good. Example here:

<https://www.youtube.com/watch?v=pORkKmdlRWo&lc>

Barrie G7

I think my first experience that really impressed me was going out for the first time with the /pm trolley and wondering if its going to work and hearing a +9 signal come back from Australia to my cq call, I will never forget that.

Dave Vk2

I try to be courteous, I always ask if the frequency is clear, a few times, before transmitting.

If someone starts transmitting 1 or 2 KC's up I will continue for as long as I can before I find another frequency. My thoughts are that I must have a clean signal going out otherwise I would be interfering with them. I don't get upset, it's only a hobby.

So, what more? I hope that these witnesses may have intrigued you and perhaps stimulated to try the portable activit /P or /PM. I invite you to visit the web and you tube pages of these friends, I believe you will like them. In these answers I have found similarities in my personal memories that made me pleasure. I found not only the sharing of a common scientific interest, but also similarities in the origins of this passion.

Amateur radio, people scientifically curious and happy to share their experiences, people without any prejudices, people simple and honest, people of this world.

Interview realized, translated and adapted by Giovanni Francia
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