

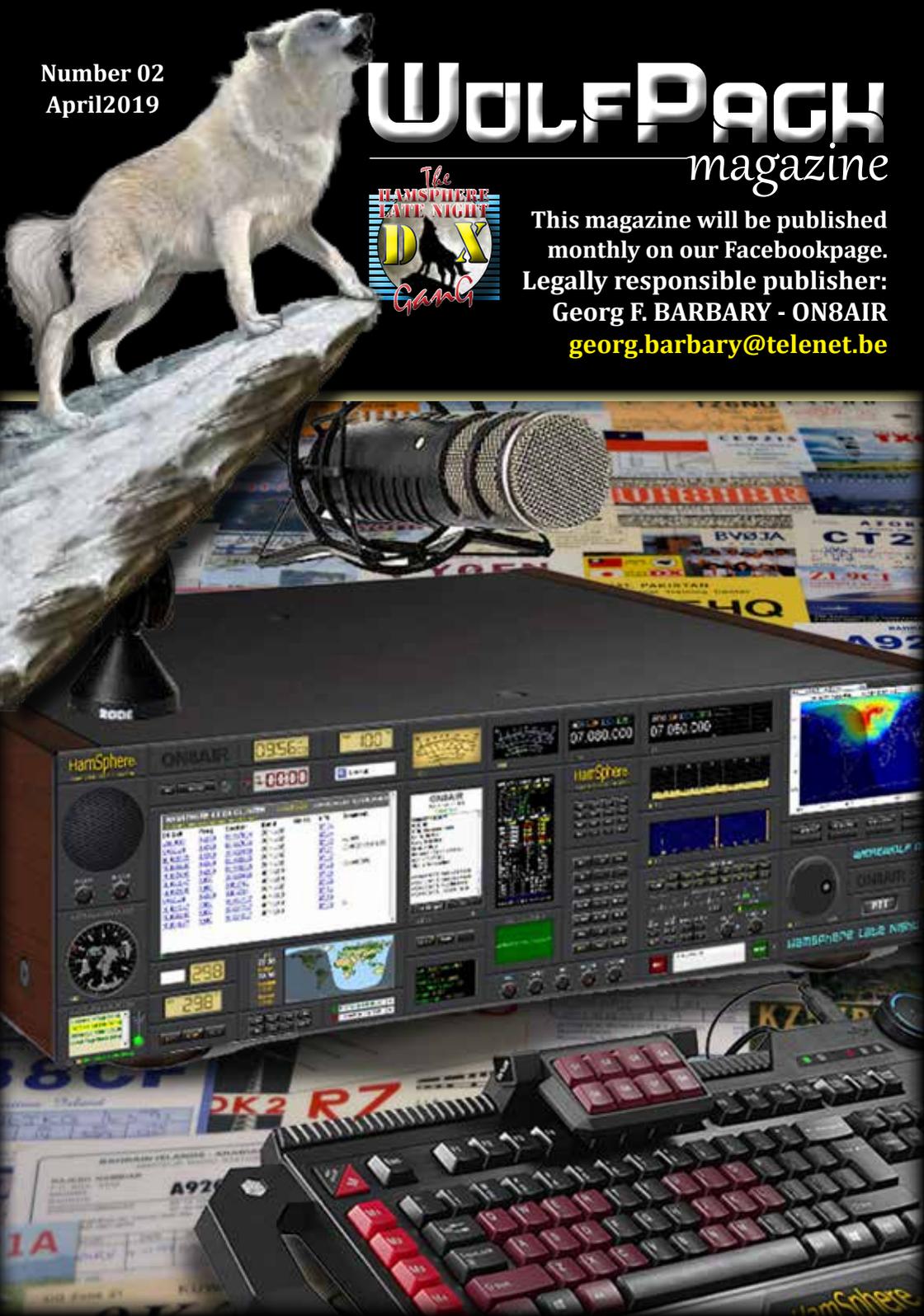
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# WOLFPACK

magazine



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# Let's have a Keyte with...

## 9HS4755

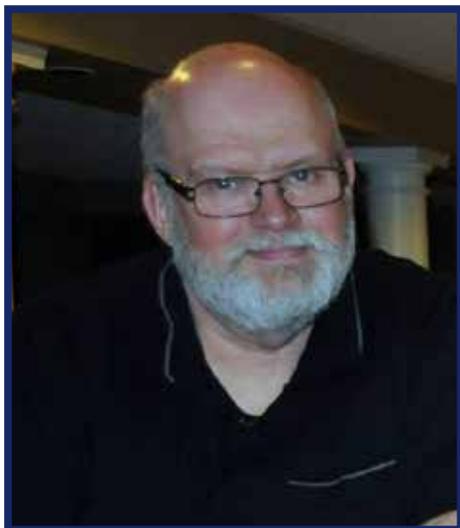


*A 'Keyte' is a Belgian beer brewed in the city of Ostend... the city where the Late Night DX-gang was born back in 2015. In each magazine we will have a drink with another Wolf.*

*In this second WolfPack Magazine we have a Keyte and a talk with Wayne Anderson, 9HS4755 in Kingston (Ontario Canada).*

*Hello Wayne, nice to meet you. Can you tell us about yourself?*

My name is Wayne Anderson and I was born in Saint John, New Brunswick, grew up in what was then Newcastle, New Brunswick and now called Miramichi City.



In 1969 I joined the Royal Canadian Air Force and spent the next 25 years as a Air Weapons Technician in the Canadian Military.

During my career I worked in electronics and communication.

When I retired from the Canadian Forces in 1994 I went to work for Bombardier and worked in the High Speed Rapid Transit (Trains) Division as a Technical Writer and Training Developer.

Fully retired in 2014 and am a member of the Free Masons and just before retirement took up learning to play music on the Mountain Dulcimer.

My wife Patty (since 1970) and I enjoy attending Dulcimer music workshops and taking classes and learning to play this fun instrument.

By the way, Georg... That Ostend Keyte is a wonderful beer (laughing loud).



***You are very active on HS4.  
Was HS4 your first contact with  
shortwave?***

My first contact with Short Wave was as a young child on my Grandparents Dairy Farm, they had a huge old tube radio and we use to listen to all of the music coming out of the Southern US as well my Uncle could tune in short wave and we would listen to this from all over the world.

To a young child this was most interesting and exciting.



***Have you been on CB?***

Oh boy... Yes, very much!  
In the 1970's I was very active on the CB radio, was president of the local CB club where I lived and was communications coordinator for a local Search and Rescue group. As well our CB Club provided back up to local police forces during times of emergency or when called upon.

One fun thing that a buddy and I did was take a big stick fiber glass antenna and we would mount it on the beach near the Bay of Fundy in Nova Scotia. We grounded it and then ran coax cable from the antenna to the mobile rig in my car. We were amazed at the distances that we covered and the contacts that we made by doing so.

At my home QTH I had a Browning Golden Eagle and by using long steel poles my antenna was mounted up through the branches of a very tall pine tree, again very good reception from my home system.

As well I had picked up a Short Wave Receiver and spent many happy hours listening to the various bands.





***Interesting... go on Wayne!***  
My first Mobile CB rig was a 12 Volt 6 Channel Hali-crafter and then moved up to a Cobra 40 channel Side Band unit.

### ***How did you start this hobby?***

Since a young child, I have had an interest in radios and communications – even worked in commercial radio for a short time.

I was a member of the Amateur Radio Club at my base in Greenwood Nova Scotia VE1ZX, but newly married, new career and our children coming along the radio hobby took a lower spot in the list of priorities.

### ***Do you have your HAM license?***

No... at this time I do not, but just say time and circumstance conspired to not get me to move forward with the license, not to say it may not happen in the future.

But HamSphere gave me the opportunity to “wet my feet” once again in the amateur radio world and it has been a fun and exciting journey ever since.

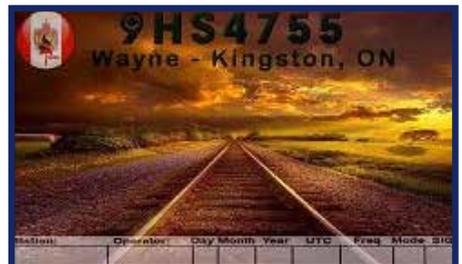
My very first contact on the HS Platform was with VA7FT from the software belonging to 9HS3886 – once I found out that a HAM License



was not required, I was excited to download and install the software on my laptop and the rest as they say has been a blast.

### ***Do you have other hobbies? Tell something about it.***

Yes... I work with Graphics and do video editing and find that a great



deal of fun, I have taken a number of online courses (Webinars) from the Company that supplies the software I use and each time I learn something and start applying it to the graphics I make.

I enjoy making QSL Cards for my friends on HamSphere and hope they enjoy what I produce for them.

### ***You also play music I heard.***

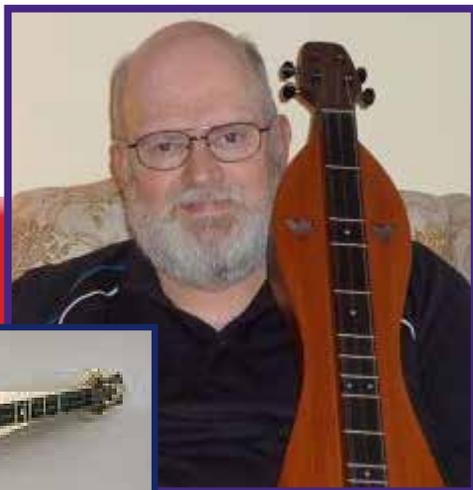
Indeed, coming up to my full retirement in 2012 I started learning the Mountain Dulcimer, it is a musical instrument that came out of the Appalachian Mountains of the United States, some claim it originated there, while other historians claim it came over from Europe with the early settlers. Both my wife and I play and have a great deal of fun learning. I do have a few videos on YouTube if some of our readers are interested.

### ***Since some months you are the advisor for HS4-DXPeditions and activations... What is your Job?***

The official title is “DXPedition Manager”, when ever a HamSphere Operator wants to go on a DXPedition he contacts me (9hs4755@gmail.com) and I send the Operator a PDF form (English or French) for them to fill out – usually request 14 days advance notice at a minimum.

My process is then to check their form, set them up in our DataBase and make them between 3 and 5 QSL Cards (depending on length of DXPedition).

Most everyone has been very easy to work with but there are some, always are, who are a little more demanding. But I look forward to working with and assisting our operators to set up these DXPeditions.





We can do DXPeditions to Islands (IOHS) Castles (COHS) and Light-houses (LOHS).

But we do not cover are visits to cities, travel within the operators own country and travel to foreign countries.

***Do you have to discuss each DXpedition and activation with the HS-staff?***

At the beginning worked with Geert (ADMIN in ULM Germany) very closely and as I gained experience, I contact Geert with the occasional question as the system we have set up works quite well.

***Since January 2019 you are part of the LNDX board of directors.***

***Why did you decide to become a board member?***

I wished to assist our Fellow Wolves to enjoy this great platform we have and because I am very proud to be

Wolf No. 206 – and know the great work done in the past and going forward we hope to continue the good work.

I am helping out as much as I can with this great group.

***What is your task in the LNDX board of directors?***

I was asked to be secretary and I record and produce the minutes of each meeting and assist as one of the moderators on the LNDX Facebook page.

***What is the most amazing QSO you have ever made on real radio?***

Flying on a military aircraft returning home from a deployment – I called on the 11 meter band and made contact with a station in South Africa and soon as he said '73' a station in Norway came on...

It was one of those "Oh My" events.





*And... Wayne, what is your most amazing QSO ever made on HS4?*

Most fun and interesting contact on HS4 was with 4S7DA Denver (Sri Lanka) and in on the call was 2HS6874 Rob and KS1K Dave (both USA) and we were all working Denver on the Grey Line – I managed to keep the contact going a bit longer than Dave and Rob and to me that was very interesting and exciting.

I have also made a couple of Long Path contacts but when reporting them on Facebook, as we were asked to do, I was told it was not long path, so I still try... but do not report them (laughing).

*Thank you Wayne for this interview... We wish you all the best of luck with the hobby and we all hope to hear you soon!*

## 16HC16 Meet & Greet WolfNet

Each FRIDAY from 19.00 til 21.00 UTC

QRG: REPEATER 145.500KHz (2Meterband)

Reduce your power to 10 Watts (no antenna required)



**16HC16 is operated by:**

16HS1597 ..... Sophie

16HS1594 ..... Ronny

ON8AIR ..... Georg

**CLUBSTATION LOCATION: MarinaCenter Ostend - Belgium**



# 48 Meterband: The BroadCast Adventure

## **RADIO\_ROCK (QRG 6220): FRANCE**

Back in 2013, Franck (F4DUW France) started broadcasting on HamSphere3. On HS3-QRG 6290 I had my own BC-station with the name 'Eiffel Tower Radio'.

We played music and frequently I plugged in my electric guitar to play some tracks for the listeners.

At that moment we were free to start a BC-station. Even at the begin of HS4 we could transmit our music without subscription. Nowadays we must pay extra to broadcast on HS4 and that's why I stopped my transmissions.

At the end of 2018 I decided to restart a music radio. RADIO\_ROCK was born.

The main programs on RADIO\_ROCK contain rock, reggae, blues and even hard rock. My good old Dutch friend 19HS1474 made a nickname for me: 'Frankie Santana' as I love to pluck the strings of my guitar during our transmissions. The listeners love my live guitarplay and sometimes I receive guitar requests.

As a child I listened our good old TSF

tube receiver in the kitchen. Back in the 60ies I admired the Beatles and the Rolling Stones. Even the musicprograms on television could give me a thrill.

In 1981 we had some Free Radio stations near Paris. With some friends on CB we started our own Free Radio. We boosted 100 Watts on an antenna mounted on the roof of my 6 floor high apartment. When I was not ON AIR I listened piratestations on shortwave. I contacted some of those stations and they permitted me to send my musicradiocassettes. Handling that way, I was able to listen my own music broadcasted on shortwave.

Nowadays we are live on HS4 with RADIO\_ROCK and the listeners can send a SWL-report. Each SWL-report will be answered with a QSL card.

In 2019 I started adressing DXCC-QSL cards. Each day I send out another DXCC-country-QSL.

Even more: Stations who have sent 10 SWL-reports will receive a nice RADIO\_ROCK certificate.



### **GOLDEN HINT FOR BC-LISTENERS:**

I found out that listening with the IDC-antenna is not that good.

**That's why I tune my radio on 40 Meter band. I choose a directive antenna and beams it to the azimuth of the musicstation I wish to hear on BC-band.**

**Once turned the antenna, I switch my radio on 48 Meterband and maybe you will not believe it... but the IDC will give a better reception. Just try it! It works!!!**

Some listeners are moaning if they can't hear my station, but also on 48M we must take the propagation into account.

When you are listening to a BC-station and you wish to send a SWL-card, will consider that you have to fill in the frequency manually. Otherwise your card will be sent with a QRG from another band.

Even more: when you send a SWL-card don't give a 59 when the BC-station is heard weakly (e.g. 43). Be honest, because the BCstation loves to have a real radio report. In fact, all HS4-users love to have a real report.

### **More info about RADIO\_ROCK:**

<https://hamspheref0duw.blogspot.com/search/label/radio%20qsl%20card>

### ***RADIO\_ULM (QRG 6260): GERMANY***

My name is Geert, better known as RADIO\_ULM (Germany) or 13HS575 on the regular shortwave bands.

I was active on HamSphere since the very beginning of the software.

Since 2010 I am ADMIN and some years later I started working as a Support Admin on Hamsphere. In fact I do a lot for HS4 behind the curtains.

At the very beginning, the HS3-BC Band was free for all stations. You can imagine that the 48M on HS3 was very crowded and busy.

The Qsl cards were sent over the new logbook which was not possible on Hamsphere2. In HS2 we had to send QSL cards through eQSL.

At a certain moment the HS-staff decided to close the Hamsphere 3.0 BC-band. Nowadays we have Hamsphere 4.0 with a lot of active BC-subscribers. One of the stations (RADIO\_Q5) is 24/24 online on 6285 Khz.

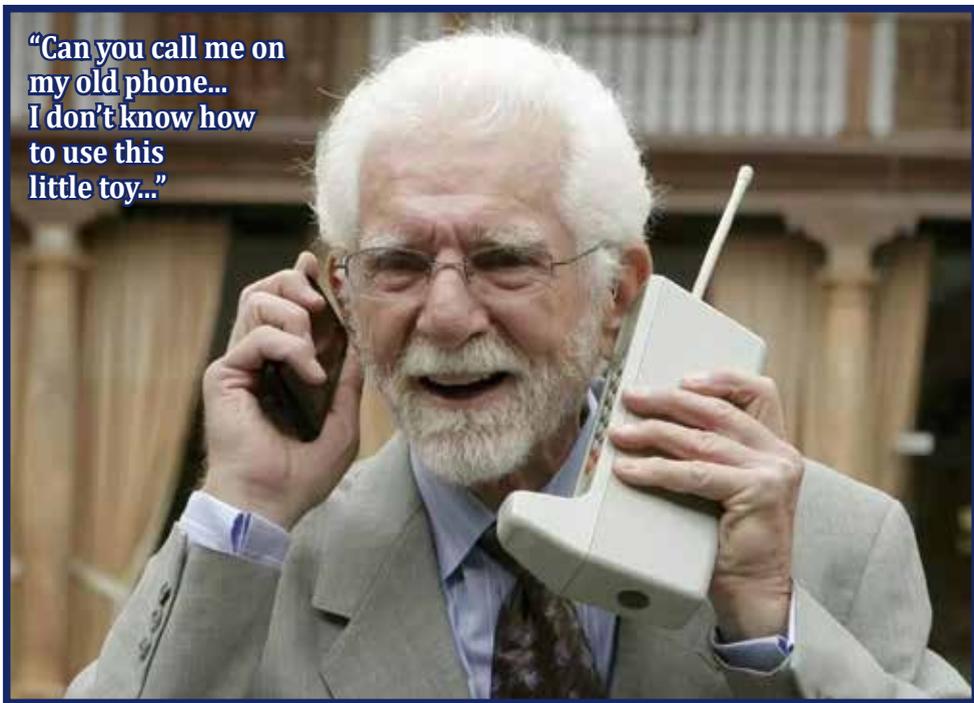
My broadcaststation (RADIO\_ULM) is mostly active during the weekends or during European evenings. During the transmissions RADIO\_ULM receives a lot of SWL-cards from Europe, North and South America, Australia and New Zealand. Russia has a lot of BC-listeners who love to send a signalreport. More info about BC-accounts can be asked through chat, email or by sending a HS-ticket.

**Check now our 'BOOK OF WOLVES MANUAL' for the latest BC frequencies. This book can be downloaded on our Facebookpage.**



# Martin Cooper, the inventor of the cellphone

**“Can you call me on my old phone... I don't know how to use this little toy...”**



***Till 2015 Georg Barbary - ON8AIR was chief-editor of CQ-QSO, the news magazine of the UBA (Union of Belgian Amateurradio).***

***At a certain moment he was looking for a good article and he saw that a certain Martin COOPER came to the University of Leuven (KUL - Belgium) for a lecture. He received a permission to follow his reading and had a seat between young students.***

Martin Cooper started his lecture with these legendary words:

***“Have you tried doing that with a telephone? A phone connected to a solid copper wire. Do you have a landline at***

***home? Wouldn't it look ridiculous to have a tangible tail of wire following you everywhere you go? What a mess it would be if everyone had this copper tail. Either no one would go around with it or a chaos of wires would havoc the streets. Its sheer madness! But wait, why am I talking about this?...”***

Nowadays kids in sixth-seventh grade are using cell phones these days. Well it's not a big deal, but way back in 1970s... it was! Till then, no one knew what mobile phones were, as there weren't any.

The only way you could talk on a phone was through a landline or a car radio. Heck! Even the landlines were

wired, not cordless.

You probably wouldn't even know what 'car radios' are... it's one of those things that were out dated by cell phones.

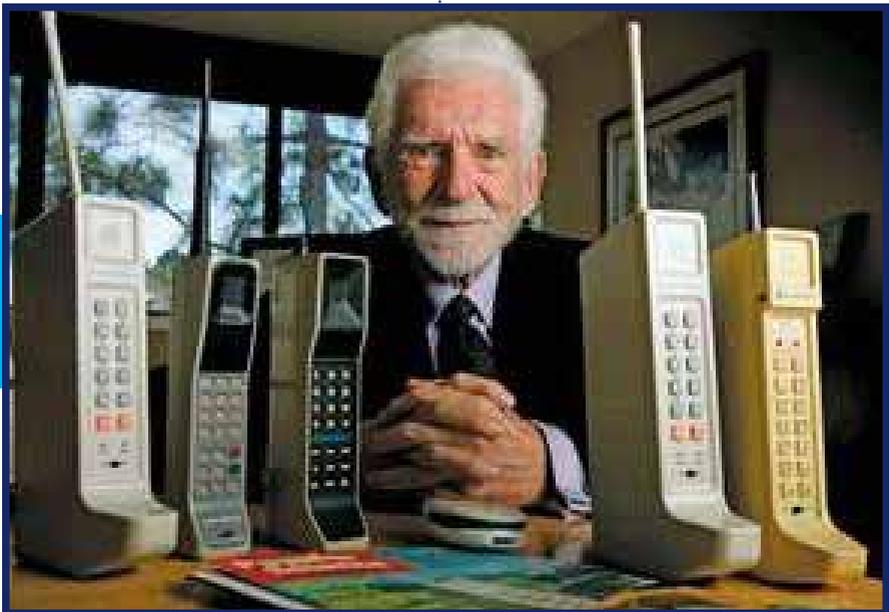
Due to cell phones a lot of things have changed over the years. So many lives are saved daily as help is just a call away. Many crimes are stopped and even avoided by simply a concern call. Because of mobile phones we can be rest assured if our loved ones are safe, even if they are miles away. We can instantly change our plans and notify those concerned. We can navigate our friends in need. Calls to foreign locations are made easily. We can call who we want to, when we want to! It goes on.

To think of a world without cell phones is now difficult. Today, people

throughout the world use cell phones daily. In fact, we use cell phones countless number of times every day. It is so much a part of us now, that if for some reason we don't have it, the day feels odd. The fear of being disconnected haunts us all... personally, I feel handicapped. Life has become so simple since we started using cell phones.

And the credit goes to one man – MARTIN COOPER (His wife called him 'Marty') ... a man whose belief and dedication led to the invention of cell phones... a landmark in communications that changed the world in every aspect. An invention made for masses, which left its impression at the very individual level.

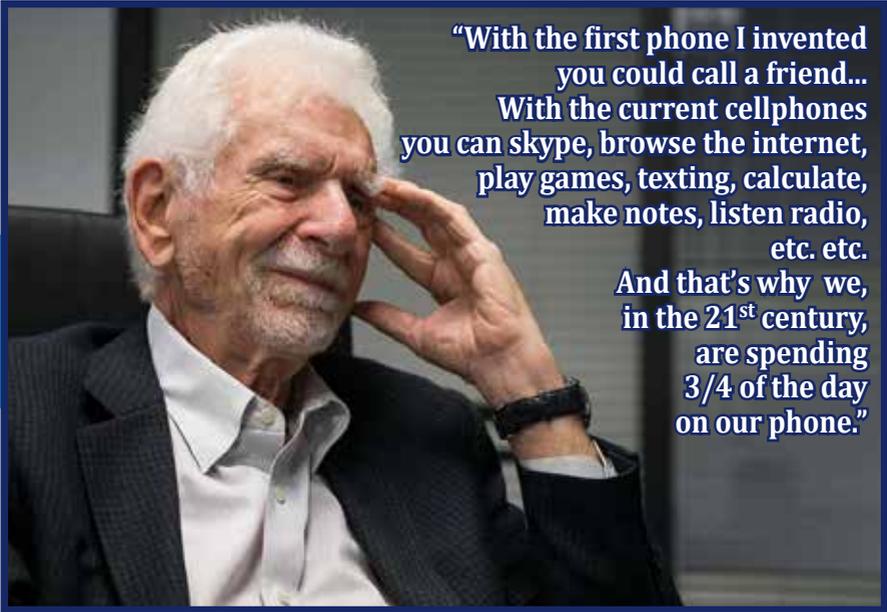
Martin Cooper, the reason each one of us has our own private personal



phone number.

Cooper freed us from copper wires and gave us unbound freedom of communication. Martin Cooper was the first born of Mary Cooper and Arthur Cooper, born on 26th December, 1928, during the Great Depression in Chicago, Illinois, U.S.A. Arthur and Mary had emigrated to U.S.A. from Ukraine, Russia (former). They made modest living, selling merchandise

During his early years, Martin lived in Winnipeg, Canada along with his family. He was an inquisitive soul since his childhood days. He constantly tried to figure out how things worked. By the time Martin was around four, he had started pulling things apart out of curiosity. One day Martin found a bunch of boys playing with a magnifying glass. As Martin got a clear view, he saw that they were burning a piece



**“With the first phone I invented  
you could call a friend...**

**With the current cellphones  
you can skype, browse the internet,  
play games, texting, calculate,  
make notes, listen radio,  
etc. etc.**

**And that’s why we,  
in the 21<sup>st</sup> century,  
are spending  
3/4 of the day  
on our phone.”**

door-to-door, on instalment plans. The Cooper Family had a culture where education was of much importance. This was also one of the main foundations of Martin’s life. Martin who inherited his mother’s everlasting enormous energy, later said *“My dad was a very thoughtful guy and whatever I am, I credit really good genes, and good culture.”* Martin had a brother, Will Cooper, who was three years younger to him.

of paper by focusing sun rays onto the paper through the magnifying glass. Martin was astonished at the sight of it. He just had to know how that happened. Martin did not have a magnifying glass and the boys were way elder to him to entertain his curiosity. However, this wasn’t to stop him from knowing. So, he took a ‘soda-pop’ bottle and broke it to make his own magnifying glass. This was one of the many instances when Martin satis-

fied his curiosity in an unconventional way. Instead of stopping him from destroying things, Mary and Arthur too patiently let Martin satisfy his urge.

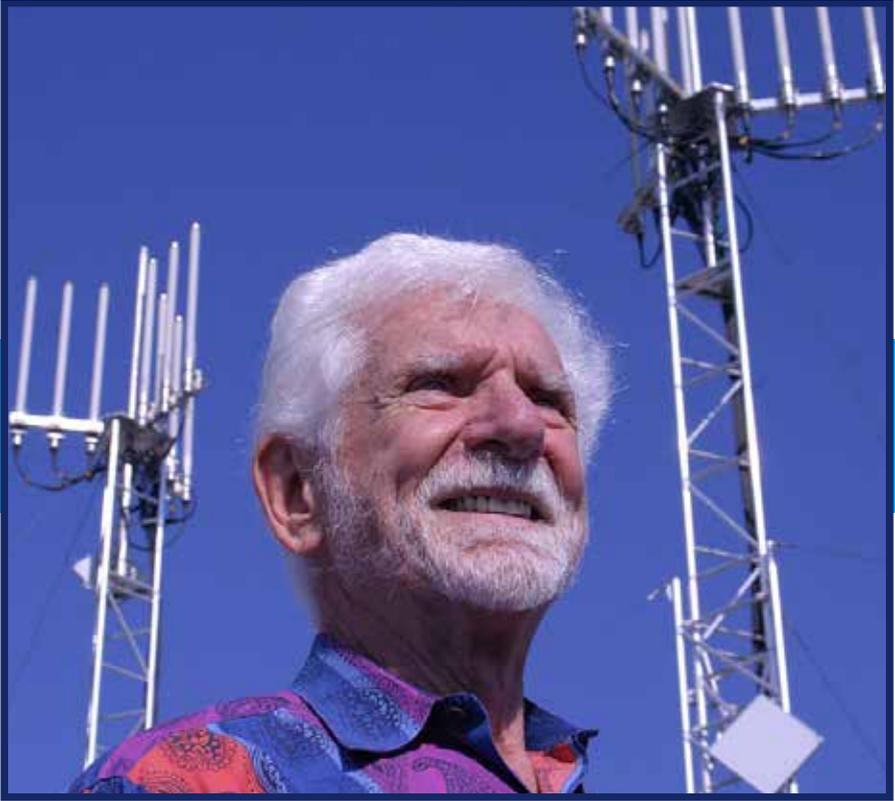


Later, at an early age of 9, Martin conceived the idea to improve the trains travelling far north to down south. He had just learnt about friction, so he knew it was necessary to get rid of it. He thought, *‘Why don’t we support this train on magnets.’* By that time he already knew that when two mag-

nets of same charge come closer, they force themselves apart. This was just part of it. He further analysed that as air created friction, he had to get rid of it too. So, the train would have to be in an air tight vacuum tunnel. Damn! I mean to think of such a complex idea at that age, totally beats me.

Martin started his education from Lawson Elementary School in Chicago. He enjoyed studying. It gave him satisfaction as his hunger for knowledge was fulfilled. After that, Martin joined the Crane Technical High School in Chicago. Here he came across two teachers who became a great inspiration to him in life. First, Mr Kinney – a perfectionist, who taught home grooming and wood shop classes. Although he was demanding, Kenny was very kind beneath a tough veneer. He would push Martin to utilize his complete potential. Instead of retaliating against this pressure, Martin acknowledged it and pursued perfection. The second teacher was Miss Corrigan, Martin’s English tutor. As Martin was immensely interested in gaining knowledge, books became his obsession. Miss Corrigan was always supportive of Martin’s endeavours. She used to encourage and appreciate Martin’s voracious reading.

After leaving the navy, Martin joined Bell system, a division of American Telephone & Telegraph (AT&T). Unlike today, AT&T was the only giant in the field of communication in U.S.A. The Bell Laboratories of AT&T had



conceived the cellular telephony concept in 1946 and enjoyed a monopoly in the field of radio communication. AT&T followed strict procedures and had a very orderly progression. Martin found himself uncomfortable with the Bell system's culture. He would start at 9a.m. sitting in room along with hundred and fifty other engineers. As a bell rang at 5p.m., he had to leave along with all the others. This orderly progression did not appeal to Martin. During his time at Bell system, Martin once noticed an event that filled him with abhorrence towards the company. He saw a new superintendent come in and because he was a level lower than the guy who

had previously occupied the office, the head had the carpet removed. Martin felt it was unnecessary and vulgar to display the employee's social status in such a manner.

So, Martin left Bell system and joined the Teletype Corporation, a subsidiary of Western Electric. After his first three months of working on teletype-writer machines, Martin took apart 'model 28' teletype machines and put them back together again. Martin realized that he always had a few leftover parts and still the machines would work just as well. It still did not click to him that he had the potential to improve and innovate.

While working at Teletype Corp, Martin got an offer from Motorola. He joined 'Motorola Inc.', of Schaumburg, Illinois, in 1954. At that time, Motorola dealt in Radio-related products. It was a small company compared to AT&T's Bell Systems and had a completely different work environment. Unlike AT&T's formal and highly disciplined structure, Motorola had a more casual and flexible environment. Martin found this to his liking and often found himself discussing technical ideas and related issues well past his working hours. And guess what! Martin used to study alongside. He would attend classes and would study during the night for his master's degree. But this did not hinder his devotion to his work. Within two years, Martin was awarded his first patent for a selective signalling device. He achieved his M.S. degree in 1957. The following year, Martin got a patent for the first automatic push-button radio telephone for rural U.S.A.

In 1960, Martin was instrumental in changing the CMOS sheets that were previously limited to the information technology. He saw the potential for it to become a more widespread 'inter-city' link.

Martin also helped to fix the defects in the crystal which Motorola made for radio. This prompted the company to mass-produce the first quartz crystals. He also received a patent for introducing radio-controlled traffic light system.

In 1963, the IEEE Vehicular Technolo-

gy Society chose Martin as their president and he was granted the Centennial Medal. The guy was brilliant and had colossal energy. This was when Martin's boss, John F. Mitchell noticed him. John was quick to learn that Martin was gifted and had great potential in overcoming hurdles. He assigned Martin to the division that was working on the first portable hand-held police radios, which were introduced in Chicago in 1967. Later, Martin also played a major role in the establishment of the high-capacity paging market. He introduced the Pageboy II, the first of its kind, high-capacity, nationwide radio. He was also a part of the team that made supporting terminals for city wide high-capacity paging. During this time, he met Homer Harris in Los Angeles. Homer had his own family business in the paging industry and became one of Motorola's customers for their hundred thousand pager terminal. John grew confident with his observations about Martin. He was promoted and made a Division Manager.

At AT&T, an important technological breakthrough came with an idea that would change the way people would communicate. The idea was that the phone's signal could be carried over a geographical area, passing from transmitter to transmitter in individual 'cells' of territory. In December 1971, AT&T made a proposal to FCC (Federal Communications Commission) that threatened Motorola's existence. The FCC is a government body



**“The great-grandchildren of my invention look nice, but I miss the technical knowledge to work with them...”**

that regulates interstate and international communications by radio, television, wire, satellite and cable. AT&T proposed to provide air to ground services, a public switch telephone service, in other words a private ‘land-mobile’. For this, they asked for thirty megahertz of spectrum. Since each city only had thirty channels, it meant a monopoly.

Martin understood that if FCC granted this proposal, AT&T would either control them or put them out of business. What Martin found unacceptable was that AT&T’s vision of cellular telephony was, ‘Car phones’. Car phones were phones that were attached to the car’s dash board. Their model required immense charge, which was provided by the car battery, hence bounding it and the user to the car. Moreover, it’s

estimated cost was between \$3000 to \$5000.

Motorola had learnt from their land-mobile business experiences that people are fundamentally mobile. Martin remembered what the superintendent of police in Chicago once told him when he was working on Two-way car radios, *“I have a real problem. My officers have to constantly be in communications, the only way they can talk is to be in their cars and yet the people they were protecting were walking on the streets. How can I have my officers connected and still in mingling with the people.”* And Martin discovered that this was also true for people working in managing airports, businesses and real estate people. He became aware of the fact that real communication was portable

communication. People did not want to be chained to the walls, or stuck in their cars or homes; they liked to move around.

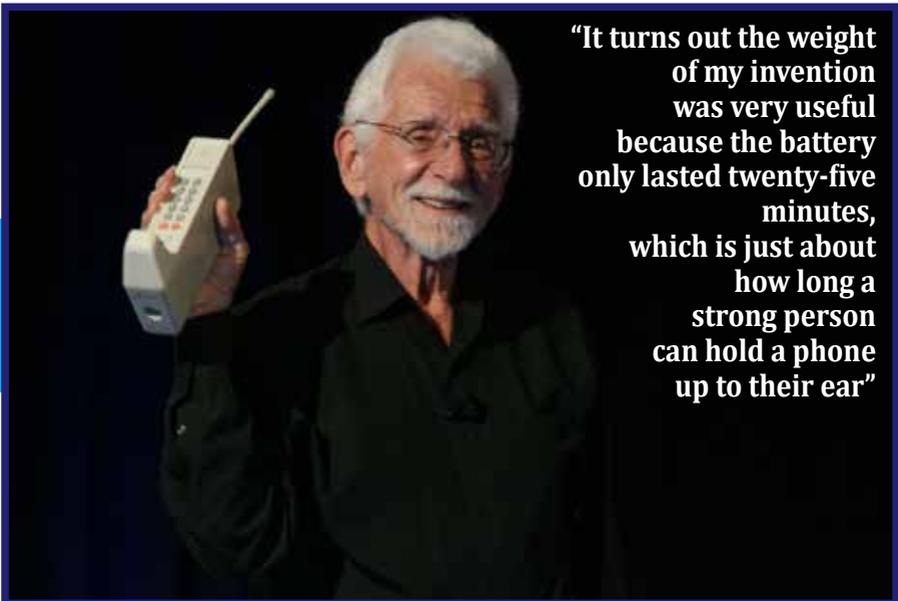
Martin voiced his opinion at Motorola. He said, *“People want to talk to other people – not a house, or an office, or a car. Given a choice, people will demand the freedom to communicate wherever they are, unfettered by the infamous copper wire.”* His belief was that cellular telephony had a better concluding product than ‘car phones’. His strong protesting views about monopoly drove him to muse and find a way to defeat AT&T’s reverie.

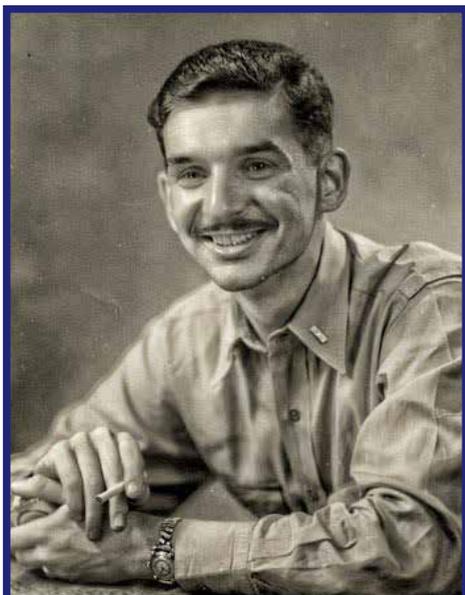
AT&T also claimed that they were the only company in the world who had the technical capability and financial resources to do this.

Martin believed that competition was necessary for excelling development. He found AT&T’s proposal abhorrent in ethics and against public interest. He suggested, that they at Motorola, had the capability of creating such a technology and it really could be done, that it was practical. But that wasn’t enough, since AT&T had an edge over Motorola in terms of staff strength and resources. Even if Motorola managed to deliver the same product, AT&T could easily outrun their competition by cheaper pricing.

So, taking it a step further, Martin claimed that they could create something better, something that could beat AT&T’s proposal without difficulty.

Martin speculated that they could create a wireless hand-held cell phone.





Cooper was a line officer in the U.S. Navy as a result of NROTC involvement in college. He served on destroyers and submarines and saw action in the Korean War. He left the Navy as a Lieutenant j.g.

Although he served as a communications officer in the service, he had a minimal interest in communications. It wasn't until he joined Motorola in 1954 that he found inventing and improving communications products to be his calling.

[WirelessEstimator.com](http://WirelessEstimator.com)

The first step was to stall FCC from granting AT&T's proposal. So, Motorola's legal team began working on a proposal to the FCC to win approval. The proposal was to allow private companies like itself to operate network communications over radio frequencies. This was a necessary step in entering the mobile phone service market and preventing AT&T's continued monopoly. Motorola also needed to show the government agency that a working mobile phone was indeed feasible from a practical standpoint, despite AT&T's claims that car-based units were the future

of communications.

It's such a horror to even think of it. What about people who could not afford a car.

In November of 1972, after convincing his boss, Martin pursued to transform his idea into an invention. His zeal hypnotized those around him and made them his followers. They virtually had to shut down all engineering in the company and have everyone working on the phone and the infrastructure. Motorola had already been working on integrating, and a lot of departments were working on things that would miniaturize the portable experience. Motorola had its own division of semiconductors, a substance that could conduct electricity under some favourable conditions, making it a good medium for the control of electrical current. This played a major factor in Martin's team's success. They successfully created a prototype cell phone in just 90 days. What it lacked was a body shell. For this, Martin sponsored a contest in Motorola. It even included departments that were not under his control. The contest was to create a design for the body of the cell phone. He picked five participants and the deadline was set to December, giving the participants a couple of months to build it. At the end of the contest, Martin chose the phone which though unattractive, was the simplest to use. He believed that simple functioning made a product easy to use and hence, popular. Motorola staffers dubbed "the shoe

phone” for its design made by Rudy Krolopp (an engineer in Motorola). The initial design was just a couple of inches long, but when the engineers started assembling all the parts, the size grew thrice as big.

The prototype cell phone was named Motorola DYNA T.A.C. (Dynamic Adaptive Total Area Coverage). It weighed 2.5 pounds and was 9 inches long, 5 inches deep and 1.75 inches wide. It was hefty and had a ‘rubber duck’ antenna. It offered a talk time of just 25 minutes on every recharge. The recharge time was ten hours. The phone performed basic functions i.e. dialling, talking and listening.

*“It turns out the weight was very useful because the battery only lasted twenty-five minutes, which is just about how long a strong person can hold a phone up to their ear”,* later humoured Martin in an interview.

The cost Motorola had to bear for this prototype was enormous, but was worth it. Martin set up a base station in New York. After some initial testing in Washington for the FCC, Martin Cooper and Motorola took the phone technology to New York to show to the public. There, they literally did nothing but show the phone to anyone who was interested. Thinking about it now, wouldn’t those people have a tale to tell? May be that’s how Martin got the media interested.

A press conference was arranged in New York to demonstrate the new

invention. While going to the press conference, Martin was struck by an idea. He wanted their competitor and business rival, AT&T to feel the pinch. This was a huge victory in the war against monopoly. AT&T was one of the biggest companies in the world and the fact that a small company like Motorola had beaten them, had to burn. On 3rd April, 1973, while walking on a street near the Manhattan Hilton, 44 years old Martin picked up the DYNA Tac and pushed the ‘off hook’ button. He dialled the number to Bell Labs. The phone came alive as it connected him wirelessly to the DYNA T.A.C system that Motorola had set up on the roof of a building called Burlington Consolidated Tower. As he placed the two-and-a-half pound phone to his ear, the base station connected to the landline. His heart beats increased. There were little doubts in his mind although they had tested this invention multiple times, but when something is done for the first time ever, one can never be too sure. Amongst the few people around him was a journalist, so he did not have a second chance also. Martin heard the tone on the other end, it was ringing!

His heartbeat raced as he waited in anticipation. A big smile appeared on Martin’s face as the call went through. Joel Engel was online.

Joel Engel at that time was Bell Labs cellular program Divisional manager, an equivalent position to that of Martin’s. This was it!

"Hi" said Joel E.

In his characteristic, low-key Mid-western accent, Martin said, 'Hi, Joel. This is Marty Cooper.'

Martin noticed people walking around him, stare with puzzled expression. It added to Martin's joy.

"I'm calling you from a cell phone — but a real cell phone," He paused. He wanted Joel to feel the sting in each and every word. "a personal, [pause again] hand-held cell phone."

The silence on the other end of the line fed Martin's delight. He even imagined Joel to be gritting his teeth in jealous anger. A grin decorated Martin's face. Joel replied and they had a polite conversation for a few moments. Martin could identify from Joel's tone that he was annoyed with the fact that Martin had beaten him. After hanging up, Martin had a spark in his eyes as he went on for the press conference. I'm sure he must have thrown a few fists in air with a 'woohoo!' These were times of celebration at Motorola.

Martin was now fully confident. He had the aura that entranced everyone. He allowed the journalists attending press conference to handle the phone themselves. They were given the chance to dial and make calls. The first reporter he gave the phone to, called her mother in Australia and she was astounded when her mother answered. She could not understand how this little phone could talk half-way across the earth. Umm... did she

say little phone!??? 9 inches is 'little'? Well relatively it was... at that time.

Later, after the journalists had tried and tested the phone, Martin explained that "*Motorola DYNA T.A.C eliminates the phone cord. All information today goes on the wire, including dialling and hanging up the phone. Through the use of a few integrated circuits, chips, and devices, we are performing the functions of tens of thousands of parts in the normal phone system*". Martin also stated that the network would probably be ready for subscribers by 1976. He speculated that the monthly costs would be \$60 to \$100 a month.

One of the few questions asked was if the 'cell phone' would replace car phones and landline. The answer given was, "*Absolutely not. The portable phone is designed for use 'on the go,' when one is away from office or home, where conventional telephones are not available.*" We might find Martin's answer to that a little untrue today.

On April 4, 1973, 'Motorola Introduces Wire-Less Telephone' were the headlines printed in the New York Times newspaper. Martin Cooper was named as the first inventor of the 'Radio telephone system'.

Martin's DYNA T.A.C appeared on the July 1973 cover of Popular Science magazine. The technological breakthrough helped Motorola achieve its goal of winning FCC's permission for



private companies to operate a wireless communications network over radio frequencies. So, Martin played a crucial role in U.S.A's inclination towards capitalism, at least in the field of communications.

But above all the achievements, Martin was glad that he had avoided a monopoly from taking control. The battle wasn't won yet. Martin and his team instantly began working on commercializing the cell phone. Initially, their vision was to give these phones to every policeman and public servants. But soon, they thought of everyone having it.

The number of issues they had to solve were countless though. Martin and his team were reported to work day and night until the issue was solved and they could move on. One of them was that when Martin and his team had assembled the proto-

type, they only had thirty channels to work on. So the prototype had the basic twelve channels and they had to incorporate a separate crystal to lock onto every channel. Later, the team realized that the number of channels had increased to 611. This was a problem which Martin had to solve as early as possible. Martin knew it was impossible to have so many crystals in a phone. So, he pushed the other department to create a thing called synthesizers. He had to work closely with the semiconductor department to increase the efficiency and reduce the weight of the phone before his team could launch it in the market. He kept pushing the departments to make a chip with low drain. This was a challenge as there were very few applications and they had to use basic ones like CMOS. Heck, even personal computers weren't there at that time. With a lot of hard work and brainstorming, the semiconductor team



ended up making an elementary processor. This solved one of the many issues which the team faced.

In 2004, Martin was awarded honorary Doctorate in the field of wireless communications by the same institute he had graduated from, IIT. His achievements only served as a driving force for him.

In the following years, Martin received multiple awards for his past and recent achievements in the wireless technology. Many also refer him as the '*father of cell phones*', although it is not much to his liking. "*Makes me feel old*", is what he says. Martin has a big fan following in the field of technology. Students, professors and even certain businessmen seek and follow his vision. After receiving so much recognition and following, it is but natural for anyone to have pride and sometimes even ego. It is seen that fame turns even the most humble and polite people into arrogant snooty jerks. Fortunately, this cannot be said in the case of Martin Cooper. Even after reaching the pinnacle of success and making an enormous contribution to the world, Martin continues to remain down to earth. His intentions are not clouded by monetary achievements or hunger for fame and recognition. This may be one of the reasons why most of the world is unaware of his existence, and he too doesn't seem to be bothered about it. His true vision is to improve the life of every human on this earth. Martin spends his time in ways to achieve this. He

believes, the wireless technology is only in its infancy, that the potential it holds is not yet fully realized. He believes that the coming generations would have much more to offer than integrating existing features in a cell phone.

In 2006, Martin helped his wife Arlene in the foundation of Greatcall's famous Jitterbug, the simplest phone in modern times. It is made to give its users an experience of calling through the operator's domain. The phone asks questions to which the user has to simply choose '*yes*' or '*no*'. To place a call, the user is connected to a 24x7 hotline, where personnel are available who act as an operator. So, the user has to mention the name or number he/she desires to call and the rest is done by the operator. The operators even personalize the phone for the user and make the desired changes on request. I must get my grandparents one of these.

Martin has given many interviews to multiple newspapers, magazines and websites. On one of them Martin commented, "*People keep asking me which cell phone to buy. Now, you cannot understand things theoretically, you have to immerse yourself into a product, into a system and use it in order to really understand it and that's why I have a new cell phone every month.*"

At the age of 85, most people find getting out of bed their most tedious task of the day. They use sticks for their

support and find it difficult to see without glasses. So does Martin, the only difference is, the sticks he holds help him steer while skiing down the snow mountains and the glasses he wears help him keep the water out of his eyes while swimming. Perfectly fit and fine, Martin also sports Kayaking and lawn tennis with his wife Arlene. She admits that even though she is more than 20 years younger to him, she finds it difficult to keep up with his fast pace. For a person who has led such an exciting and active life, this only adds to my amazement. I really want to know Martin's secret for being this healthy and active. Martin also expresses that we must focus on inventing new technology instead of modifying what is presently available. He envisions that wireless technology can help save lives and even improve them.

***At the end of the lecture the students and I could ask one question to this big man.***

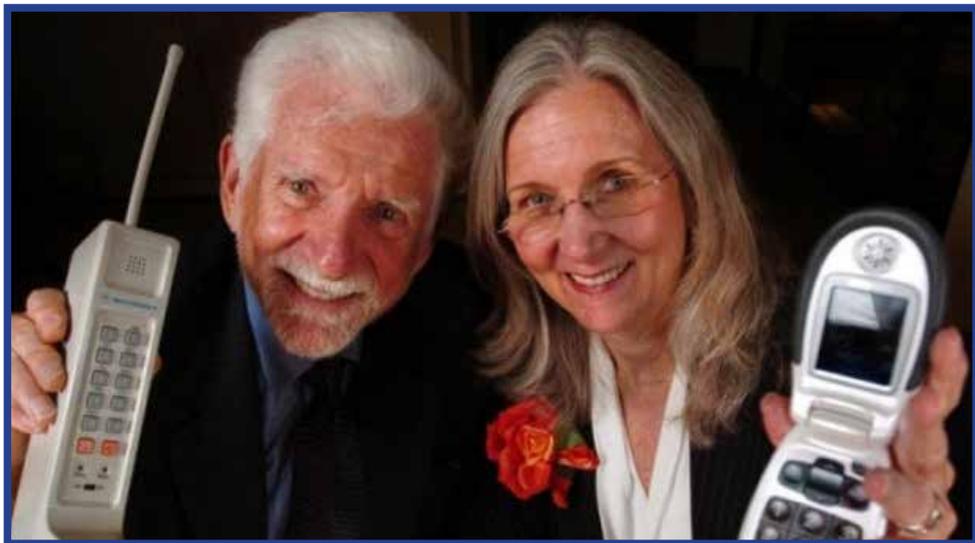
**My question:**

"As you are the inventor of cell-phones, have you ever tried amateur-radio?"

**His answer was:**

"Sir, when I was young I had a neighbor who had a hamradio and a huge antenna. I loved to listen to the radiocontacts he made... But as you know... to become an amateur-radio operator you have to pass some tests. And I have figured out that I am not smart enough to learn all those difficult electricity theories."

*Imagine: The inventor of the wireless cellphone says about himself he isn't smart enough to become a HAM-radio.*



# Plug In of the Month:

.....You can find this plug in at: [shop.hamsphere.com](http://shop.hamsphere.com) .....

For the price of 10 euro you can upgrade your traditional HS4-station with a handy Ham Radio Audio Bulletin Newsplayer.

Currently supporting 'RSGB GB2RS', 'This week in Amateur Radio', 'Amateur Radio Newline', 'ARRL Audio News', 'VK6 NewsWest broadcast', 'ICQ Ham Radio Podcast'.

But more to come.

Player has fastforward and fastbackward, play and pause. Comes with a separate Volume knob.

## Our score:

Lay-out of the plug-in..... 10/10

Price/Quality ..... 10/10

**TOTAL SCORE: .....20/20**



## Conclusion: Worth the price!

This plug-in is a nice 'must-have' and keeps you informed about the latest amateurradio news.



**See all Contest Results on your transceiver. Get the Contest Results Plug-In for free in the HS4-shop <http://shop.hamsphere.com> (Browse PLUGINS 4.0 - 'Interactive Tools').**

## UPCOMING HAMSPHERE 4 CONTESTS:

**rules: [www.hamsphere4.com/contest](http://www.hamsphere4.com/contest)**

*HamSphere 4.0 Latin America and Caribbeans contest 2019*

start: 2019-04-06 07:00 end: 2019-04-07 06:59

*HamSphere 4.0 4-hour series contest stage 2*

start: 2019-04-27 08:00 end: 2019-04-27 11:59

*HamSphere 4.0 CIS & Baltic May Day contest 2019*

start: 2019-05-04 04:00 end: 2019-05-05 03:59

*HamSphere 4.0 PSK31 contest 2019*

start: 2019-05-25 04:00 end: 2019-05-26 03:59



# Upcoming DX-peditions on HS4



**12 April to 15 April: IOHS/K107**

Andre 153HS460 will be operating out of Koh Larn – his Call Sign **IOHS/K107** times online various

.....

**06 May to 09 May: JW/LA7CL**

Paul LA7CL will be operating out of Spitsbergen on the Svalbard Island group his Call Sign **JW/LA7CL** – times online various– this will be a new country for some operators.

.....

**19 May to 25 May: IOHS/SA003**

Tom 54HS105 will be operating out of Fernando de Noronha his Call Sign **IOHS/SA003** – times online various and this has been designated a new country on HS4.

.....

**22 June to 29 June: IOHS/AF014**

Gerard 19HS190 will be operating out of Canico on the Mediera (Mah-Dear-AH) Island his Call Sign **IOHS/AF014** operating times 14:00 to 23:00

.....

*All of these Operators will follow good DX Procedures and have their list of rules to follow.*



# Visit Clubstation 16HC16 at 'Ostend at Anchor' - Belgium 23 - 26 May 2019 [www.oostendevooranker.be](http://www.oostendevooranker.be)

Oostende  
voor  
Anker.



During 'Ostend at Anchor' we will activate our HS4-Clubstation 16HC16 on board of ship MERCATOR.

Operators will be:

16HS1597 ..... Sophie

16HS1594 ..... Ronny

ON8AIR ..... Georg

You can visit us to have a nice eye-ball contact. See the website for the complete program of this mega event. Go on board of fantastic ships. Taste seafood, Belgian chocolate and Belgian beers while you enjoy hundreds of marvelous activities.



Visit Clubstation **16HC16** at  
'Ostend at Anchor' - Belgium  
23 - 26 May 2019  
[www.oostendevooranker.be](http://www.oostendevooranker.be)

Oostende  
voor  
Anker.

*You are welcome!*



Have you missed our **First WolfPackMagazine?** (26 pages)  
Haven't you seen our **Book of Wolves Manual?** (45 pages)  
Didn't you find our **Book of Wolves Memberlist?** (40 pages)  
Browse our Facebook: 'HamSphere Late Night DX-gang'  
and check these documents in the 'Files'-part of that page.

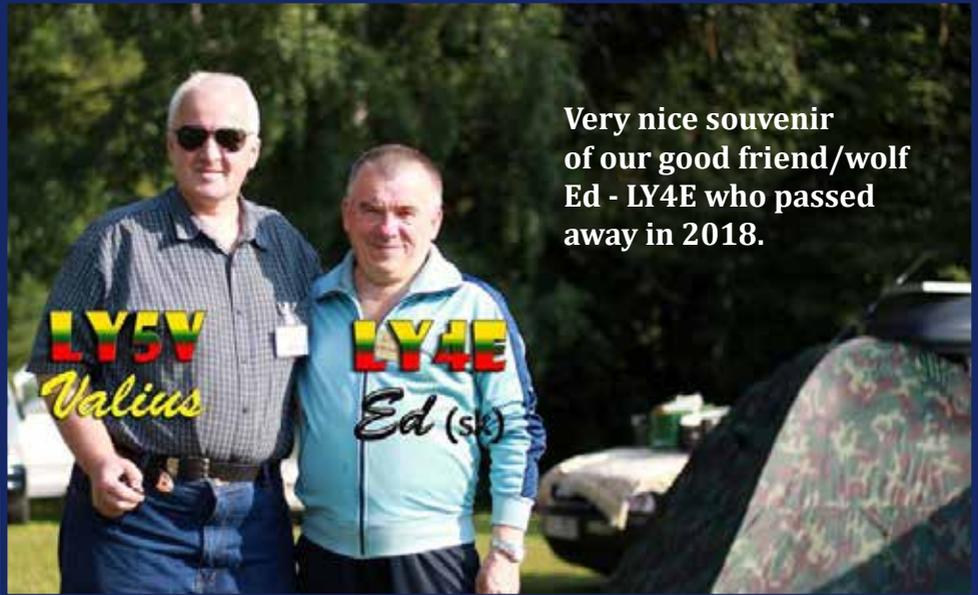


# Amazing EyeBall Meeting with members



Andre VK7AE Graeme VK7KT and Chris 41hs389 at Burnie Foreshore

Wolf LY5V operator Valius and our dear friend/wolf LY4E operator Ed (Silent Key)



Very nice souvenir  
of our good friend/wolf  
Ed - LY4E who passed  
away in 2018.

# Amazing EyeBall Meeting with members



Some French Wolves : Bernard Wolf 259 - Sebastien Wolf 31 and Franck Wolf 169

French Wolves on NABOR-TECH Salon Radioamateur.



tune in  
now **6267 USB**



*RADIO\_LNDX is broadcasting on 6267 **USB** since Saturday 23th of March 2019. The studio is located in Ostend (Belgium) in cooperation with clubstation 16HC16 and is broadcasting golden oldies and current music.*

Each hour you can listen our very own **RADIO\_LNDX Newsbulletin** with our professional newsanchor NA1NA (North-America).

The bulletin will be repeated during the week and each Sunday we submit a new newflash. The news is dealing with upcoming DX-peditions, contestnews and Late Night DX-gang news in general.

The '**jingles**' are recorded by VO2AA George Andrews (Canada)

***We are one big family... and you are part of it!***

You can have your own WolfMusicShow on our station.

Contact [georg.barbary@telenet.be](mailto:georg.barbary@telenet.be) for further information.

***Thank you for the amazing gifts:***

ZL3MA Graham Kingswell gifted 80HS coins for aBC Phased Array antenna.

F4ICZ gifted a 'custom nameplate' and a Cardioid 48M antenna.

***Golden hint:***

***If you have problems to copy our station... go to 40Meterband, choose a directional antenna... head that antenna to Ostend Belgium.***

***Once done, go back to 48Meterband and tune in on 6267 USB (UpperSideBand). You will notice a much better reception... Tune in!***





**We want you  
in our  
WolfPack!**

*If you are reading this magazine, but you aren't a member of the Late Night DX-gang yet... we friendly ask you to join our group.*

Being part of this group means you are a decent radio operator because we discuss each member request with our board of directors. Stations with bad behavior on the HS4 bands cannot belong to our wolfpack.

***We have 2 types of membership:***

**a. The NOVICE howler:**

The NOVICE howler hasn't worked 50 countries on HS4 yet. This station can become a novice wolf and will receive some QSL cards. The novice will be helped out by a Godfather (member of our board of directors) to work more countries.

**b. The Wolf:**

The full member (or Wolf) is a station who can prove with the '50 worked countries award on HS4' that he/she is ready to become part of our WolfPack.

***Membership is free (no costs).***

Send an email to: [georg.barbary@telenet.be](mailto:georg.barbary@telenet.be)

***Give extra information:*** Your callsign - Operatorname - Cityname - ...

Send us a recent picture (for our 'Book of Wolves').

If you have obtained the 'worked 50 countries award on HS4': please include it.

Handling this way we know you will be a full member.



# This WolfPack Magazine is yours...



Every **FIRST** day of the month we announce an update of 'The Book of Wolves' and in-between we launch a brandnew WolfPack Magazine on our Facebookpage.

**Example:**

**1st of April:**

Update 'The Book of Wolves'

**15th of April:**

WolfPack Magazine

If you have missed an edition, you can find it between the 'files' on our page.

**This WolfPack Magazine is yours...**

If you have an article, a nice HamSphere4 related picture of yourself, a report of a DX-pedition, a technical discussion, etc... etc... you can send it to: [georg.barbary@telenet.be](mailto:georg.barbary@telenet.be)

**Please:**

*Will edit your articles in English.*



## WolfPack Word Contest

In this WolfPack Magazine you will find

9 wolf pictures  with a character in it.

Try to find them and puzzle a word:

<input type="text"/>							
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Send correct answer + your your callsign and wolfnumber to:  
[\*\*georg.barbary@telenet.be\*\*](mailto:georg.barbary@telenet.be)

The first WOLF who sends in the correct answer will win 5 HS-coins.

The name of the winner will be published on our Facebookpage.

