

What Is Ham Radio?

[What is Ham Radio?](#)

[View a short video about Ham Radio](#)

[Who's the Typical Ham?](#)

[What's the Appeal of Ham Radio?](#)

[Why Do You Need a License?](#)

[Why Do They Call Themselves "Hams"?](#)

[Do I Have to Learn Morse Code?](#)

[What are some of the other ways radio hams](#)

[communicate? What do they sound like?](#)

[What are the Amateur Radio Bands?](#)

[How Much Does it Cost?](#)

[What is the SARL?](#)

[Where Do I Get More Information?](#)



What is Ham Radio?

A housewife in North Carolina makes friends over the radio with another ham in Lithuania. An Ohio teenager uses his computer to upload a digital chess move to an orbiting space satellite, where it's retrieved by a fellow chess enthusiast in Japan. An aircraft engineer in Florida participating in a "DX contest" swaps his call sign and talks to hams in 100 different countries during a single weekend. In California, volunteers save lives as part of their involvement in an emergency response. And from his room in Chicago, a ham's pocket-sized hand-held radio allows him to talk to friends in the Carolinas. This unique mix of fun, public service and convenience is the distinguishing characteristic of Amateur Radio. Although hams get involved for many reasons, they all have in common a basic knowledge of radio technology and operating principles, and pass an examination for the **ICASA** license to operate on radio frequencies known as the "Amateur Bands." These bands are radio frequencies reserved by the **independent Communications Authority of South Africa (ICASA)** for use by hams at intervals from just above the AM broadcast band all the way up into extremely high microwave frequencies.

Who's the Typical Ham?

Amateur Radio operators come from all walks of life -- movie stars, missionaries, doctors, students, politicians, truck drivers and just plain folks. They are all ages, sexes, income levels and nationalities. They say Hello to the world in many languages and many ways. But whether they prefer Morse code on an old brass telegraph key, voice communication on a hand-held radio, or computerized messages transmitted via satellite, they all have an interest in what's happening in the world, and they use radio to reach out.

What's the Appeal of Ham Radio?

Some hams are attracted by the ability to communicate across the country, around the globe, or even with astronauts on space missions. Others may like to build and experiment with electronics. Computer hobbyists enjoy using Amateur Radio's digital communications opportunities. Those with a competitive streak enjoy "DX contests," where the object is to see how many hams in distant locations they can contact. Some like the convenience of a technology that gives them portable communication. Mostly we use it to open the door to new friendships over the air or through participation in one of more than 15 Amateur Radio clubs throughout the country.

Why Do You Need a License?

Although the main purpose of Amateur Radio is fun, it is called the "Amateur Radio Service" because it also has a serious face. ICASA created this "Service" to fill the need for a pool of experts who could provide backup during emergencies. In addition, ICASA acknowledged the ability of the hobby to advance the communication and technical skills of radio, and to enhance international goodwill. This philosophy has paid off. Countless lives have been saved where skilled hobbyists act as emergency communicators to render aid, whether it's during an earthquake in Italy or a hurricane in the U.S.

Why Do They Call Themselves "Hams"?

"Ham: a poor operator. A 'plug.'"

That's the definition of the word given in G. M. Dodge's "The Telegraph Instructor" even before there was radio. The definition has never changed in wire telegraphy. The first wireless operators were landline telegraphers who left their offices to go to sea or to man the coastal stations. They brought with them their language and much of the tradition of their older profession. In those early days, every station occupied the same wavelength-or, more accurately perhaps, every station occupied the whole spectrum with its broad spark signal. Government stations, ships, coastal stations and the increasingly numerous amateur operators all competed for time

and signal supremacy in each other's receivers. Many of the amateur stations were very powerful. Two amateurs, working each other across town, could effectively jam all the other operations in the area. Frustrated commercial operators would refer to the ham radio interference by calling them "hams." Amateurs, possibly unfamiliar with the real meaning of the term, picked it up and applied it to themselves in true "Yankee Doodle" fashion and wore it with pride. As the years advanced, the original meaning has completely disappeared.

Do I Have to Learn Morse Code?

Not any more! While many hams LIKE to use Morse code, it is not required.

What are some of the other ways radio hams communicate? What do they sound like?

There is a great variety of ways that Amateur Radio operators are able to communicate. Using voice is just one. Morse code is still widely used. Here is what "hello" sounds like in Morse code. [Packet](#), [Radio Teletype](#) (often called Ritty) and [PSK](#) are three more. Even faster transmissions are being developed using methods which can send almost any form of digital data. Hams also use [television](#) to send pictures over the air.

What are the Amateur Radio Bands?

Look at the dial on an old AM radio and you'll see frequencies marked from 535 to 1605 kilohertz. This is one radio "band." There are other bands of radio spectrum for amateur, government, military and commercial radio uses. If you could hear the many different bands, you would find aircraft, ship, fire and police communication, as well as the so-called "shortwave" stations, which are worldwide commercial and government broadcast stations from the U.S. and overseas. Amateurs are allocated 26 bands (i.e., specific groups of frequencies) spaced from 1.8 Megahertz, which is just above the broadcast radio frequencies, all the way up to 275 Gigahertz! Depending on which band we use, we can talk across town, around the world, or out to satellites in space. Hams can even bounce signals off the moon!

How Much Does it Cost?

Basic study materials for passing the ICASA test and getting your initial license is freely available from the SARL Website. There are also classes held by many local groups for people who want more interaction. If possible, taking part in one of these classes is the best way to go, but there's even an online course you can take if your personal schedule is too hectic. Once you have your first license, most hams find it best to start with simple equipment and grow over time. It usually costs less than R3000 to get your own first radio and start saying Hello. Many ham radio flea markets are held all over the country that sells good used equipment for even less.

What is the SARL?

Founded in 1925, The South African Radio League is the national association for Amateur Radio in the RSA. Other countries also have their own national associations. The SARL not only reflects the commitment and many enthusiasms of South African hams, but also provides leadership as the voice of Amateur Radio in South Africa, whether in dealings with the independent Communications Authority of South Africa, the World Administrative Radio Conference, the International Amateur Radio Union, or with the general public. The SARL is the primary source of information about what is going on in the ham radio world. It provides books, news, support and information for individuals and clubs, special operating events, all sorts of continuing education classes and other benefits for its members. Being a member of the SARL is important for hams!

Where Do I Get More Information?

The best ways to learn about Amateur Radio is to talk to hams face-to-face. Hams take pride in their ability to "Elmer" (teach) newcomers the ropes to get them started in the hobby. There is probably an Amateur Radio club near you that will welcome your interest. To find out who to contact in your area, [Click here](#).

"Why I Love It!"

Long before receiving my license, ham radio has been synonymous with the word "FUN" for me because of the wonderful experience of making new friends at Field Days as well as national and international gatherings that I attended with my husband, Reinhard, DL1UF. My competitive streak resonates with the exciting activity of contesting and DXing, which led me to jump right into an ARRL VHF QSO Party and make more than enough radio contacts around the country to win my first award only two months after getting my own callsign. Working as a Medical Technologist in a hospital setting, I quickly gained an appreciation for the importance of Emergency Communication and now aim to be trained and become a valuable part of the Amateur Radio Emergency Services so that I can contribute during emergency situations in our nation.

Ingrid S. Geissler, W7ISG

What's not to love? There are challenges - testing for the license, contests, and awards. There's fun - events, clubs, and friends in all parts of the world. There's satisfaction - communications for public events, emergency communications for disasters and delivering a radiogram that says "Happy Mother's Day." There's life-long

learning - new equipment, new kinds of radio transmissions, geography, and electronics. There's your unique name - your amateur radio call sign. There's something for everyone.

Sherri Brower, W4STB
Vero Beach, FL

Amateur Radio is a never-ending journey, because (as for true travelers in ancient times) its aim is not the destination, but the journey itself. My experience has been rewarding in many ways, mainly from a human point of view. I have made friends that have become life-time friends. We have searched and done things together. We have succeeded. We have failed. We have always tried. By trying to improve ourselves, we have shared opinions and knowledge with others. I started more than 40 years ago, when I was 12, and still feel the excitement as it were the first day. That's why I love ham radio.

Luigi Belvederi, I4AWX / AB1FJ
President of the Italian Amateur Radio Society

Ham Radio is always there, even when you don't think about it. For me, just knowing that 'when all else fails' there is a form of communications that has withstood the test of time. As I look around and watch old ways of communications constantly being updated by newer, more modern forms like digital communications, I can still get excited about making a contact. What other hobby/public service can you reach out across the world and know if you were in need, the hams would always be there? It's like landing in a foreign country, not knowing anyone, then stepping off the plane and reaching out through ham radio, and knowing that you would have a place to stay. That's the magic of ham radio.

Joyce Birmingham, KA2ANF

Amateur Radio is all about Magic! It's magic to talk to a complete stranger on the other side of the world while sitting in my car watching my son's football practice. It's magic to watch the eyes of a child light up when they talk to an astronaut on the International Space Station. It's magic to see the relief in a mother's face because the Amateur Radio operators providing communications at the county fair found her lost child. It's magic to see the excitement on the face of my son after getting his license and making his first contact. And who said magic isn't real.

Kevin O'Dell, N0IRW
Ardmore, OK

"Had this been an actual emergency, you would be instructed where to tune." This is something we have heard a billion times, but as hams we know where to turn--the frequencies reserved for us by treaty, so we can provide community service. And the community is world-wide--tsunamis in Thailand; hurricanes in America; mudslides in the Philippines, etc. But through it all, ham radio was there helping and it made no difference if the operators were young or old, able-bodied or impaired, black, white or blue--they were there to help and that is why I love ham radio.

Jim McDonald, KB9LEI
Muncie, IN

Ham radio is a reflection of our world in miniature. There are so many wide ranging interests, so many fascinating people all with so much dedication and passion for the service they love. And just think of it -- decades of public service and friendships that extend across town across the country and around the world. And you'll find every walk of life and every generation in ham radio. It's fascinating and challenging and rewarding! It's unique! So say "Hello", get on the air and see for yourself!

Mary M. Hobart, K1MMH
Newington, CT