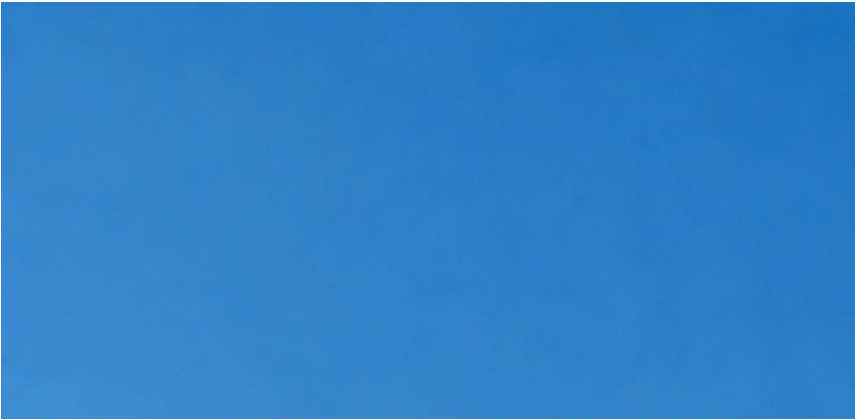


Why Ham Radio?

*One hobby. A dozen hobbies.
A lifetime of next goals.*

WEST ISLAND
AMATEUR RADIO CLUB





A Message from the President

Dear Friends,

Thank you for your interest in amateur radio and our club. Amateur radio is much more than a hobby—it's a community of people who enjoy learning, experimenting, serving others, and making connections around the world. Whether you're interested in emergency communications, public service, contesting, digital technologies, satellite communications, or simply talking with fellow operators, there's something in amateur radio for everyone.

Our club welcomes members of all experience levels, from those just beginning their journey to seasoned operators with decades of experience. We believe that sharing knowledge, mentoring new hams, and enjoying the hobby together are what make our club special.

By joining our club, you'll have opportunities to participate in meetings, hands-on workshops, field events, community service activities, and on-the-air operating. Most importantly, you'll become part of a friendly group that is always willing to help, answer questions, and encourage your growth in amateur radio.

I invite you to join us and discover the many rewarding experiences that amateur radio has to offer. We look forward to meeting you, sharing our passion for the hobby, and welcoming you into our amateur radio family.

On behalf of all our members, thank you for your interest, and I hope to see you at one of our upcoming meetings or events.

73,

Tino Zottola, VE2GCE

President, **West Island Amateur Radio Club**





Communicate Across Town — or Around the World

Somewhere out there, another station is listening. It might be a neighbour a few streets away, an operator in a village north of the treeline, or a station on the other side of the planet. Amateur radio lets you talk to them directly — no phone company, no internet provider, no platform in between. Just your equipment, theirs, and the physics of a radio wave.

Local contacts are often made with a small handheld radio, sometimes extended through a repeater on a tower or hilltop. Long-distance contacts work differently: on the right frequencies, radio waves bend and reflect through the upper atmosphere, and a modest home station can suddenly reach another continent. You can speak by voice, tap out Morse code, or let your computer exchange digital signals too faint for the human ear.

This is what separates a radio contact from a phone call:

you make the connection happen. You choose the frequency, read the conditions, adjust the antenna and listen — really listen — for a voice rising out of the noise. When a station in Japan or Chile answers your call, it isn't because a network routed you there. It's because you understood how to get there. Every long-distance contact is both a conversation and a small technical victory.

Some operators enjoy relaxed chats with the same friends every evening. Others try to reach as many countries and rare places as they can. Either way, the fascination is the same: with knowledge, a radio and a length of wire in the air, your voice can travel farther than you would ever guess.

Radio has its own language

A contact is a "QSO." A distant station is "DX." "73" means best wishes, and "CQ" means "anyone, anywhere — please answer." Within your first week on the air, you'll be speaking it too.



When Everything Else Goes Down

The ice storm. The flood. The week-long blackout. Every few years, something reminds us how much daily life depends on networks we don't control — and how quickly cell towers overload, internet service fails, and the power goes out with them.

An amateur radio station doesn't need any of that infrastructure. A radio, an antenna and a battery form a complete, working communication system that belongs to you. Amateurs practise deliberately for the day it matters: setting up stations away from home, raising antennas in poor conditions, running equipment on batteries, generators or solar panels, and passing messages clearly and accurately when it counts.

That practice builds a particular kind of competence. Reliable emergency communication takes more than owning a radio — you have to know your equipment's limits and be able to find the weak point when

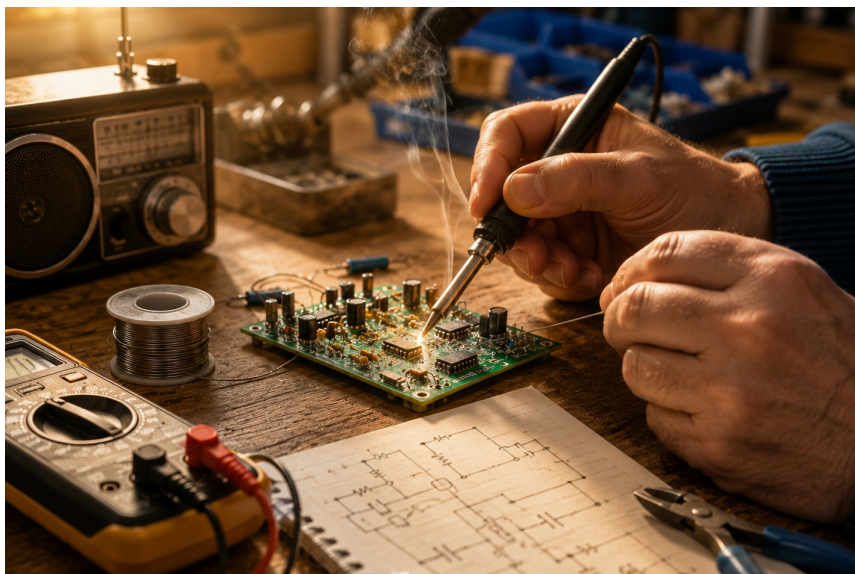
something fails. Dead battery? Damaged cable? Wrong frequency for the distance? Operators develop the habit of observing, testing and fixing, rather than waiting for someone else to restore service.

Each June, radio clubs across North America put this to the test during Field Day. Members haul radios, antennas, and power into a park or field and build a complete station from nothing, then keep it on the air around the clock, contacting hundreds of other temporary stations doing the same. It's a social highlight of the year — and a full-scale rehearsal in creating communications where none existed.

When a real disaster strikes, trained amateurs can relay messages for emergency organizations, report local conditions, and link places that have lost normal contact. They don't replace professional emergency services; they add a flexible, independent layer of communication that has proven its worth in disaster after disaster. For many operators, that's part of the hobby's meaning: the skills you enjoy building on a quiet weekend are the same ones your community may someday need.

Remember January 1998?

During the Ice Storm, millions in Québec and eastern Ontario lost power — some for weeks. Amateur radio operators helped relay communications for shelters, municipalities and relief organizations while much of the regular infrastructure was down. It wasn't the first time hams filled that gap, and it won't be the last.



Learn by Doing

Most of us were taught electricity and physics from a blackboard. Amateur radio teaches them through your fingertips.

Every principle in the textbook shows up in your station as something you can see, hear and measure. Why does one antenna outperform another? Why does a signal fade at sunset? Why does a cheap power supply put a growl in your audio? On the air, these aren't exam questions — they're differences you hear in your headphones, and finding the cause is part of the fun. The Basic qualification course covers real ground: electricity, Ohm's law, capacitance, inductance, resonance, propagation, transmission lines, antennas, transmitters, receivers, interference and safety. Radio is where all of it stops being abstract.

The learning never stays theoretical for long, because the hobby rewards tinkering. You might compare two

antennas and measure the difference, hunt down a source of electrical noise in your house, or connect your radio to a computer and watch it decode signals buried in static. Many amateurs go further — soldering cables, building simple circuits, repairing old equipment, or designing an antenna from wire, insulators and a formula. Nothing else in the hobby quite matches hearing a distant station answer through something you built yourself.

You don't need to become an engineer, and most amateurs aren't. What you develop is something rarer: the confidence to look at a technical system, understand it, and make it better. Progress is easy to recognize — a clearer signal, a farther contact, a problem finally solved after methodical testing. Each success comes from applying knowledge, not from buying a newer gadget and pressing a button.

For anyone who learns best by doing — and for any young person deciding whether science is "for them" — there are few better proving grounds. Skills learned at a radio bench lead naturally toward electronics, telecommunications, computing and engineering. More than a few careers, and more than a few astronauts, started with a soldering iron and a call sign.

No genius required

The Basic course assumes zero technical background. If you can learn the rules of a card game, you can learn Ohm's law — and unlike the card game, this one comes with an instructor, a workbook and a club full of people who've already passed.



Every Contact Is an Experiment

Between your antenna and a station three thousand kilometres away, there is nothing but atmosphere — and the atmosphere never behaves the same way twice.

Radio waves travel in different ways depending on their frequency. Some hug the ground, some go only as far as the horizon, and some are bent back to Earth by electrically charged layers high in the atmosphere — layers created by the Sun, and constantly changing with the time of day, the season, and the eleven-year rhythm of solar activity. This is why a station you couldn't hear yesterday booms in today, and why signals cross oceans at sunset that go nowhere at noon.

Working with these conditions turns every operator into a field scientist, whether they intend it or not. You form a hunch — this band should open to Europe around supertime — then you test it at the radio. You raise an antenna two metres and note what changes.

You keep a logbook, and over the months your own records begin to reveal the patterns: solar flares that wipe out the shortwave bands, quiet winter evenings when weak signals travel astonishing distances. Space weather stops being a headline and becomes something you observe from your own chair.

Some amateurs take the experimentation much further — probing weak-signal techniques at the edge of detectability, studying rare propagation modes, or contributing their logs to worldwide databases that researchers actually use to study the ionosphere. Radio amateurs were experimenting with the shortwave spectrum before science fully understood it, and the tradition of discovery never stopped.

You don't need any of that to enjoy the hobby. But it changes what a contact means. A phone call either connects or it doesn't. A radio contact is a question you put to the planet — and the answer is different every day.

The Sun runs the show

Solar activity rises and falls on an eleven-year cycle, and radio conditions follow it. We're currently near a cycle peak — meaning some of the best long-distance conditions in two decades. A great time to get licensed.



A Signal Off the Moon

On a clear night, you can point an antenna at the Moon, transmit, and — two and a half seconds later — hear your own signal come back, having travelled nearly 800,000 kilometres. Somewhere on Earth, another amateur can hear it too. Operators call it moonbounce, and it is exactly what it sounds like: using the Moon as a reflector to link two stations on opposite sides of the planet.

That's the far edge of the hobby, but space starts much closer. More than 150 amateur radio satellites have been launched since OSCAR 1 in 1961 — years before commercial satellite communication existed — and dozens are overhead right now, carrying relays that any licensed amateur may use free of charge. The International Space Station carries amateur gear as well; astronauts, many of them licensed hams, regularly make contacts with schools and operators on the

ground. Talking to space is not a metaphor here. It's a Tuesday evening.

A satellite contact is a small mission of its own. The satellite crosses the sky in minutes, so you find out when it rises, aim your antenna along its path, and correct for the way its motion shifts the signal's frequency — the same Doppler effect that bends the pitch of a passing siren. Radio, computing, geography and orbital mechanics all converge on one brief, moving target. And the entry cost is surprisingly low: some operators make their first satellite contact with a handheld radio and a hand-aimed antenna from a parking lot.

Nature offers reflectors too. Meteors burning up in the upper atmosphere leave trails of ionized air that last a few seconds — long enough to bounce a burst of data to a station a thousand kilometres away. Shooting stars, repurposed as infrastructure.

For anyone who has stood outside looking up and wished space were something you could touch rather than watch, this is the closest a hobby comes.

Your signal's travel times

Across town: instant. Bounced off the ionosphere to Europe: about 1/20th of a second. Through a satellite: a quarter second. Off the Moon and back: 2.5 seconds. You will actually hear that pause — your own echo, returning from 768,000 km away.



Out of the Shack and Into the Field

Nothing says amateur radio has to happen indoors. Some of the hobby's best moments occur on a summit, at a campsite, or in a park on a bright fall morning — wherever an operator decides to build a station where none exists.

Portable operation is radio distilled to its essentials. Everything must be carried in: a small radio, a battery, a length of wire, something to hold it in the air. Then the questions begin. Where does the antenna go? Is a tree branch high enough? Will the battery last the afternoon? A single corroded connector can silence the whole station, so preparation and troubleshooting are part of the outing — and getting it right is the satisfaction. Programs like Summits on the Air (**SOTA**) and Parks on the Air (**POTA**) have turned this into a worldwide pursuit: activate a mountaintop or a provincial park, and stations across the continent will

be listening for you. Hiking, camping and radio fold naturally into one activity.

Then there's the fox hunt. A small transmitter is hidden — in a woodlot, a park, a neighbourhood — and participants set out with receivers and directional antennas to find it. The signal doesn't give itself up easily: it reflects off buildings and hillsides, fades and swells, points you confidently in the wrong direction. Winning takes radio knowledge, map sense, deduction and a good pair of legs. It can be a relaxed club outing or a timed competition, and it's one of the best entry points for newcomers and kids, because the equipment is simple and the goal is a treasure hunt.

Bigger field events run on teamwork. At a club's **Field Day** site — the annual exercise described earlier — one member raises antennas while another wires up power, others operate and log, and visitors wander in to see what a station built from nothing looks like. Many hands, one working signal.

If your idea of a good weekend involves boots, a backpack and a problem to solve, this side of the hobby was made for you.

Fits in a daypack

A portable station: radio the size of a paperback, a battery, 20 metres of wire, some cord, a lightweight mast or a handy tree. Total weight: a few kilograms. Total reach: the other side of the Atlantic, from a picnic table.

See it live at **Field Day**: every June, on the fourth full weekend, clubs across North America set up off-grid stations for 24 hours — WIARC included. Come find us.



Earn Your Call Sign

You can't simply buy a radio and start transmitting — and that's a feature, not an obstacle.

In Canada, amateur radio operates under federal regulation. Before going on the air, you study the material, pass an examination with an accredited examiner, and receive your Basic qualification and a call sign of your own. The exam covers real substance: basic electricity and electronics, how radio waves travel, antennas, transmitters and receivers, interference, safety, and the rules that govern the airwaves. A club course — including the one MARC runs — takes you through all of it, no prior technical background required. People pass this exam at twelve years old and at eighty.

The qualification matters because the radio spectrum is shared. The same physics that carries your signal also carries aviation, marine, public safety and broadcast

traffic, and every user depends on every other user knowing what they're doing. Amateurs identify themselves, stay within their authorized frequencies and power, and operate so as not to interfere with anyone else. The rules aren't bureaucracy for its own sake — they're what keeps a worldwide, self-policing service running smoothly on trust and competence.

What you receive in exchange is remarkable: legal access to wide portions of the radio spectrum, the right to build and modify your own transmitting equipment, and privileges that extend through international agreements to much of the world. Your call sign is registered, unique and yours — on the air, it identifies you as a qualified operator of an internationally recognized service, part of a tradition reaching back more than a century.

That's the quiet appeal of the license: it's earned. In a world of instant sign-ups and disposable accounts, amateur radio still asks you to demonstrate knowledge before handing you the key — and then trusts you with far more than any commercial service ever will. The achievement means something. So does the responsibility.

No, you don't need Morse code

The most persistent myth in amateur radio. Canada dropped the Morse requirement years ago — the exam is multiple choice, and clubs run courses that prepare you for exactly what's on it. (Plenty of hams still learn Morse afterward. By choice. It grows on you.)



A Club Behind You

Amateur radio can be practised alone. Almost nobody learns it alone.

The gap between passing the exam and confidently operating a station is real: which radio to buy first, how to get an antenna up at home (or on a condo balcony), what that repeater etiquette is, why your signal sounds bad when everything looks right. Manuals and forums only go so far. What actually works is having someone nearby who has already solved your exact problem — someone who will look at your setup, spot the issue in minutes, and probably lend you the part.

That's what a club is. At WIARC you'll find retired engineers and complete beginners, students and tradespeople, operators who chase distant countries and operators who mostly come for the coffee. The mix is the point. A newcomer arrives with questions; a veteran arrives with forty years of answers; and

increasingly the exchange runs both ways, because newer members bring fresh skills in computing and digital modes that longtime operators want to learn. Knowledge moves across generations in both directions — there aren't many hobbies left where a sixteen-year-old and a seventy-five-year-old work on the same project as genuine peers.

Clubs also make possible what no individual could easily organize: courses and exam preparation, Field Day, fox hunts, antenna-raising parties, emergency exercises, public demonstrations, technical talks. You learn by watching, then by helping, then by running things — at whatever pace suits you.

And the friendships are not incidental. They often begin with something small — a question after a meeting, a contact through the local repeater — and run for decades. Radio gives people a reason to talk, a project to share and an excuse to keep showing up. In the end, many operators will tell you the same thing: they came for the technology and stayed for the people.

Your first radio: less than a restaurant dinner

A capable handheld radio costs under \$100. Club members will happily tell you which ones are worth it, which to avoid, and someone will probably lend you one to try before you spend a dollar.



There's Always a Next Goal

Every operator remembers their first contact. Maybe it was a neighbour across town through the local repeater, voice a little nervous, finger hesitating over the button. It's a small moment — and it's the first rung of a ladder that has no top.

The goals that follow are yours to choose. A first contact on the shortwave bands. A first antenna built by hand. A first station heard through a satellite, a first message in Morse code, a first contact with all ten provinces — then a hundred countries. Operators confirm their contacts with cards and electronic records, and over the years the collection becomes a kind of travel diary written in radio: proof of everywhere your signal has been, gathered without leaving home.

For those who enjoy competition, contests fill weekends year-round — a timed sprint to contact as many stations and regions as possible. Success takes more than

talking fast: you have to read the propagation, pick the right band at the right hour, pull call signs out of crowded frequencies and keep a station running efficiently for hours. Others prefer the opposite challenge: QRP, the art of reaching across the world on less power than a night light uses. And many amateurs never compete at all — the contest that matters is with your own previous best. A cleaner signal. A farther contact. Less power, more distance.

This is why people stay for decades. Conditions change daily, technology keeps evolving, and each corner of the spectrum plays by different rules — so there is always another skill to learn, and the hobby grows along with you. It can begin as simple conversation and become experimentation, public service, teaching, or all of them in turn.

Fifty years in, operators are still learning. That's not a hardship. That's the hobby keeping its promise.

Awards you can chase

Contact all ten provinces: Worked All Provinces. A hundred countries: DXCC, the hobby's most famous award. All Canadian territories, all US states, all continents — or invent your own challenge. Every award starts with one contact.

One Hobby, a Dozen Hobbies

Nobody does all of this. Everybody finds their corner.

DX chasing — Hunting contacts with distant countries and rare islands. Some operators have "worked" more places than any traveller will ever visit.

Contesting — Weekend sprints to contact as many stations as possible. Part sport, part chess, part endurance test.

QRP — Crossing oceans on less power than a night light. The art of doing more with less.

Morse code — Dropped from the exam, kept by choice. A rhythmic skill that cuts through noise no voice can penetrate — and yes, it's oddly addictive.

Digital modes — Radio meets computer: signals decoded from below the noise floor, messages exchanged with stations you can't even hear.

Satellites — Dozens of amateur relays overhead right now, free to use. Some operators work them with a handheld radio from a parking lot.

Moonbounce — Your signal, off the Moon, back to Earth. The far edge of the hobby — and people really do it.

Fox hunting — A hidden transmitter, a directional antenna, and a treasure hunt on foot. The best entry point for kids.

Portable operations — Summits, parks, campsites. A station in a daypack and the Atlantic within reach from a picnic table.

Building and experimenting — Antennas from wire, kits from parts, repairs from stubbornness. The license lets you build your own transmitter — legally.

Emergency communications — Training and exercises so that when infrastructure fails, someone is still on the air.

Award chasing — All provinces, a hundred countries, every continent. A collection written in radio contacts instead of stamps.

A Word to Parents

Most of this booklet speaks to the person who'll hold the microphone. This page is for the person wondering whether to encourage them.

Here's what amateur radio quietly teaches a young person. Physics and electronics, learned through the fingertips instead of a blackboard — the same material that later shows up in engineering, computing and telecommunications classrooms, except here it's a hobby, not homework. Patience and troubleshooting: when a station doesn't work, nobody can press a button to fix it — you find the fault, and that habit of methodical problem-solving transfers to everything. And real achievement: the license is earned by passing a federal examination. No participation ribbons — a call sign is a credential, and kids know the difference.

There's something else, harder to name. Radio is a screen the world talks back through. A young operator speaks with adults, elders and experts as an equal — the airwaves don't ask your age, only your call sign. In a club like ours, they'll find patient mentors who remember being twelve and curious, and a community where competence matters more than anything else about them.

More than a few engineers, scientists and astronauts trace the whole thing back to a soldering iron and a call sign earned in a bedroom station. Nobody can promise that. But a hobby that rewards curiosity, builds real skills and hands a teenager the far side of the Atlantic — that's a door worth opening.

The best part: you can explore it together. The course is open to any age, and the fox hunt doesn't care who finds the transmitter first.

Ready to Get On the Air?

You've seen what the hobby offers. Here's how it starts.

Take the course.

Our sister club, the **Montreal Amateur Radio Club (MARC)**, runs the Basic qualification course — no technical background required, everything on the exam covered, taught by people who remember being beginners. Upcoming course dates and registration details are on their website: **www.marc.ca/course**.

Prefer to study online? The Basic Amateur Radio Course, sponsored jointly by **Radio Amateurs of Canada (RAC)** and the **Annapolis Valley Amateur Radio Club (AVARC)**, is taught over the internet — details at **avarc.ca**.

Or just come meet us first. The club meets every third Monday, 7:30 p.m. at Lakeside Heights Baptist Church, 275 Braebrook Ave, Pointe-Claire, Quebec H9R 1W1.

Visitors are always welcome — no license, no radio, no obligation. Come for the coffee; see if the rest grows on you.

Already licensed? Join us on the club repeater: **VE2RWI**, **146.91 MHz -600 kHz 88.5 Hz**, or drop into any meeting.

Find us:

Web:	WIARC.CA
Email:	info@wiarc.ca
Become a club member:	https://wiarc.ca/membership/

Your call sign is waiting.

