

Live workshops

- How to become a Ham?
- Exploring the World of Amateur Radio
- Live & Listening
- Completing a QSO in every mode on 5 bands

How to become a Ham?

How to Become a Ham - Beginner Workshop

Group Members:

- DL6BW
- HA0XD
- E71HB Haaarun
- 9A3BQR
- ES2ADO

Event Overview:

- **Name of the Event:** How to Become a Ham
- **Number of Participants:** 3-6 people
- **Level of Experience:** Beginner (no prior experience required, participants are preparing to get their licenses)
- **Duration:**
 - 3 hours per session, every week.
 - Each session is split into 1.5 hours for lecture and 1.5 hours for practical activities.
- **Location/Space Needed:**
 - A local radio club or a similar facility equipped with basic radio equipment.
 - The space should have a lecture area and room for radio operation practice.

Food:

- **Meals:** No food required.
- **Refreshments:** Optionally, provide water or coffee.

Budget:

- **Do you need money for the event?**
 - Yes, around **5-10 € per person** to cover materials (pens, notebooks, etc.).
 - Money can be collected from participants or sourced from the local radio club.

Materials and Equipment Needed:

- **For Lectures:**
 - Pen and paper for participants.
 - A blackboard/whiteboard or a projector for the instructor to explain concepts.
- **For Practical Sessions:**
 - A working radio station for participants to practice QSOs.
 - A morse key and software/hardware for trying out CW (optional).
 - A computer or station to try digital modes (optional).

Organizer's Preparations:

- Prepare all necessary teaching materials in advance (lecture slides, handouts, etc.).
- Set up the radio station and ensure it is functional for practical exercises.
- If using digital modes, install the necessary software and verify the setup.

What Participants Need to Bring:

- A notebook for taking notes.
- A positive attitude and a smile!

Workshop Content:

Workshop Structure:

1. **Lectures (1.5 hours per session):**
 - Cover the following topics over the course of several weeks:

- **Basics of Amateur Radio:** What it is, the different modes (voice, CW, digital), and the purpose of getting licensed.
 - **Operating a Radio:** How to handle radio equipment safely and efficiently.
 - **Call Signs & Procedures:** How to identify yourself and communicate properly on the air.
 - **Radio Etiquette:** Common dos and don'ts during QSOs.
 - **The Phonetic Alphabet:** Learn and practice using it in mock QSOs.
 - **Basic Regulations and Frequencies:** An overview of important laws and frequency bands for amateur radio operators.
2. **Practical Sessions (1.5 hours per session):**
- **Simulated QSOs:** Each participant practices making a basic QSO with their peers under instructor supervision.
 - Focus on proper use of call signs, signal reports, and correct radio procedures.
 - **Introduction to CW (Morse Code):** Try basic CW operations using a Morse key or software.
 - Start with simple letters and numbers, progressing to simple words.
 - **Digital Modes (optional):** A brief introduction to FT8, PSK31, or another digital mode.
 - Demonstrate how to set up a computer-radio interface and make digital contacts.
3. **Weekly Focus:**
- **Week 1: Introduction & Radio Basics**
 - Learn what amateur radio is, basic concepts, and hands-on radio operation.
 - **Week 2: Call Signs, QSO Procedures, and Phonetic Alphabet**
 - Focus on how to make QSOs and communicate on the radio effectively.
 - **Week 3: CW & Digital Modes Introduction**
 - Introduce participants to CW and some basic digital modes, allowing them to practice both.
 - **Week 4: Practice QSOs, Mock Radio Exams, & Review**
 - Give participants time to practice their skills and prepare for their amateur radio license exams with mock scenarios and exam questions.

Learning Objectives:

- Help participants understand the basics of ham radio and the procedures for making QSOs.
- Build confidence in using a radio station, handling equipment, and operating on different modes (voice, CW, digital).
- Prepare participants for their upcoming amateur radio license exam by teaching key concepts and allowing practical hands-on experience.

Role of the Referee:

- Ensure participants are following proper radio procedures during QSOs.
- Provide guidance on correct radio operation and QSO etiquette.

Exploring the World of Amateur Radio

Waves of Connection: Exploring the World of Ham Radio - Workshop

Group Members:

- Not specified (participants will register for the event)

Event Overview:

- **Name of the Event:** Waves of Connection: Exploring the World of Ham Radio
- **Number of Participants:** 15 people
- **Level of Experience:** No prior experience with ham radio (complete beginners)
- **Duration:** 1 day (Field Day)
- **Location/Space Needed:**
 - Outdoor area, preferably on a hill or elevated location for better signal transmission.
 - Tables and chairs for participants.
 - Shade (from tents, trees, or portable canopies) for comfort.

Food:

- **Meals:** Organize a picnic-style lunch.

- Provide sandwiches, salads, fruit, snacks, and drinks.
- Ensure that any dietary restrictions are considered (vegetarian, gluten-free, etc.).

Budget:

- **Do you need money for the event?** Yes.
 - Estimated costs for food, materials, and equipment.
 - **How to cover costs:**
 - Charge a small participation fee.
 - Seek sponsorship from local radio clubs or societies.

Materials and Equipment Needed:

- Portable ham radios for communication exercises.
- Morse code cheat sheets and devices (e.g., practice oscillators).
- Maps or software for tracking DX (long-distance) contacts.
- Chairs, tables, and shaded areas for comfort.
- Whiteboards or other presentation materials for teaching.
- Sunscreen, hats, and water stations (to keep participants hydrated and protected from the sun).

Organizer's Preparations:

- Secure all required equipment and materials in advance (radios, Morse devices, tables, etc.).
- Set up a registration process for participants to manage attendance.
- Create a detailed schedule and timeline for the day's activities.
- Coordinate with any guest speakers or ham radio experts who will share insights.
- Ensure all setup, including tables, chairs, and radios, is ready before participants arrive.

What Participants Need to Bring:

- Comfortable clothing and shoes suitable for outdoor activities.
- Paper and pens for taking notes during sessions.
- Sunscreen, hats, and sunglasses for sun protection.
- Enthusiasm and curiosity for learning about ham radio!

Workshop Content:

Welcome and Icebreaker:

1. Introduction:

- Welcome participants and introduce the event organizers.
- Share the day's schedule, goals, and what participants can expect to learn.

2. Icebreaker Activity:

- Fun, engaging activity to get participants comfortable with each other and set a positive tone for the day.
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Introduction to Ham Radio:

1. What is Ham Radio?:

- Explain the basics of ham radio and its importance in global communication.
- Highlight stories of how ham radio has contributed to emergency situations and public service.

2. Ham Radio's Role in the Modern World:

- Discuss how ham radio is used for international communication, emergency coordination, and space communication (satellites).
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Basics of Radio Waves:

1. Interactive Session:

- Explain radio wave properties in a simple, easy-to-understand way (e.g., frequency, wavelength, propagation).
 - Demonstrate how different frequencies work and the possibilities (e.g., bouncing signals off the ionosphere, satellite communication).
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Communication Techniques:

1. Ham Radio Protocols:

- Introduce basic ham radio communication protocols (e.g., calling CQ, using call signs, signal reports).

2. Hands-on Practice:

- Let participants practice using portable ham radios, under supervision, to simulate real QSOs (radio contacts).
 - Provide simple scripts or prompts to guide beginners through their first radio exchanges.
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Short Morse Code Exploration:

1. Introduction to Morse Code:

- Teach participants the basics of Morse code and its history in ham radio.
- Demonstrate simple Morse code patterns for letters and numbers (e.g., SOS, common letters like E and T).

2. Morse Code Practice:

- Participants try sending and receiving basic Morse code using practice oscillators or straight keys.
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Outdoor Picnic Lunch:

1. Picnic Lunch:

- Enjoy a relaxed, picnic-style lunch where participants can socialize and discuss their morning activities.
 - A good time to chat about personal experiences or any early impressions of ham radio.
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Expert Talk (Guest Speaker):

1. Guest Speaker:

- Invite a seasoned ham radio operator to talk about their experiences in the hobby.
 - The speaker can share stories of long-distance contacts (DX), public service, or unique aspects of ham radio (e.g., satellite communication, contests, etc.).
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Q&A and Sharing Session:

1. Discussion:

- Open the floor for participants to share their thoughts, questions, or concerns about ham radio.
- Encourage them to discuss what they've learned and any lingering questions.

2. Next Steps:

- Provide information on how participants can continue learning about ham radio and how to get their license.
 - Offer resources such as websites, books, or local clubs they can join to further explore the hobby.
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Closing Remarks:

1. **Recap:**

- Summarize the key takeaways from the workshop.
- Reinforce the excitement and possibilities of ham radio as a hobby.

2. **Thank You:**

- Thank participants, guest speakers, and any contributors.
 - Encourage participants to stay in touch and consider pursuing their ham radio license.
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Learning Objectives:

- Introduce participants to the world of ham radio in a fun, hands-on environment.
- Teach the basics of radio communication, radio waves, and Morse code.
- Spark curiosity and interest in the hobby by providing a welcoming, interactive experience.
- Equip participants with knowledge and resources to pursue their ham radio license.

Live & Listening

Live and Listening - Ham Radio Workshop for Kids

Group Members:

- Kira
- Lucía
- Dzestina
- Sam
- Diego

Event Overview:

- **Name of the Event:** Live and Listening
- **Number of Participants:** 12 kids (aged 7-12)
- **Level of Experience:** No prior knowledge of ham radio, but all participants speak English.
- **Duration:** Half a day (approximately 4-5 hours)
- **Location/Space Needed:**
 - A local club house with a ham radio station or a room where a station can be set up.
 - Create a "club room vibe" to keep the atmosphere friendly and engaging.
 - Comfortable seating and spaces for creative activities, like making QSL cards.

Food:

- **Meals:**
 - Provide snacks like pizza, sweets, and drinks (coffee for adults, juice for kids).

- Serve snacks when energy levels start dropping, to keep participants engaged and create a "party vibe."

Budget:

- **Do you need money for the event?** Yes.
 - **What for:** Food and snacks (pizza, sweets, drinks).
 - **Funding Source:** Use the club fund for food and materials.
 - **Additional Materials:** Walkie-talkies (HTs) for hands-on practice.

Materials and Equipment Needed:

- A working ham radio station.
- Handheld radios (HTs) for kids to practice with.
- Vertical/straight Morse keys and electronic keyers for CW practice.
- QSL Cards or plain paper for kids to design their own QSL cards.
- Colour pencils, markers, and writing materials for creating QSL cards.
- Stationery for note-taking and participating in activities.

Organizer's Preparations:

- Coordinate with club members to schedule on-air contacts (Rx) from the station during the event.
- Ensure the radio station and all equipment are working properly (debugging, if necessary).
- Prepare blank QSL cards or materials for kids to design their own.
- Set up the station for interviews, and coordinate with club members to be on standby for on-air conversations with the kids.
- Prepare the room to feel comfortable and kid-friendly.

What Participants Need to Bring:

- Stationery (pens, pencils, etc.).
- Enthusiasm and curiosity!

Workshop Content:

1. Introduction (15 mins):

- Welcome the kids and introduce them to ham radio in simple terms.
- Explain what ham radio is and why it's exciting. Highlight how people use it to communicate across the world, even in emergencies.
- Briefly go over the day's schedule and activities.

2. ICAO Phonetic Alphabet (20 mins):

- Teach the kids the **ICAO Phonetic Alphabet** using fun examples.
- Have them practice saying their names using the ICAO alphabet.
- Activity: Let them introduce themselves on-air using the phonetic alphabet.

3. How to Say Your Name & Callsign in ICAO (20 mins):

- Teach kids how to say a basic callsign using the phonetic alphabet.
- Practice calling out a mock callsign over the station or handheld radio (HT).

4. Prepare QSL Cards (30 mins):

- Explain what a **QSL card** is and why it's important in ham radio.
- Let the kids design and create their own QSL cards using paper, markers, and colour pencils.
- Encourage creativity in their designs and have fun with it!

5. Interview with Club Members (30 mins):

- Schedule club members to be available on the air to speak with the kids.
- Have the kids prepare simple interview questions for club members:
 - Callsign: _____
 - Date/time: _____

- o Name: _____
- o QTH (location): _____
- o WX (weather): _____
- o Why do you like ham radio? _____
- o What is your favorite part of ham radio? _____
- o What is your most embarrassing moment in ham radio? _____
- o Tell me about a friend you made in ham radio. _____

6. Hands-On Communication with HTs (25 mins):

- Let the kids try **handheld radios (HTs)** to communicate with each other using what they've learned.
- Guide them through a simple **off-air QSO** using proper radio etiquette.

7. Introduction to CW (Morse Code) (25 mins):

- Teach the basics of **Morse Code (CW)**, explaining how it was used for long-distance communication.
- Practice sending simple messages like **SOS** and **CQ** using vertical or straight keys.
- Let the kids practice with Morse code oscillators or keyers to try out basic letters and phrases.

8. Picnic Break (30 mins):

- Take a break for snacks and drinks (pizza, sweets, and juice).
- Use this time to socialize and chat about what they've learned so far.

9. Exchange QSL Cards (15 mins):

- Have the kids exchange their personalized QSL cards with each other or with the club members they spoke to during the interviews.
- Celebrate their accomplishments by discussing their designs and radio conversations.

10. Wrap-Up & Follow-Up Event Planning (15 mins):

- Recap the key takeaways of the day and encourage the kids to explore ham radio further.
- Mention upcoming events or workshops where they can continue learning about ham radio.
- Thank the participants for their enthusiasm and participation, and invite them to a potential follow-up event.

Learning Objectives:

- Get kids excited about ham radio by introducing them to the basics of communication and radio technology in a fun, hands-on way.
- Teach the ICAO phonetic alphabet and how to make a basic call using radio protocols.
- Show them how to use handheld radios and Morse code to communicate.
- Engage them creatively with QSL card design and real on-air interviews with experienced operators.
- Spark their curiosity to continue exploring ham radio as a hobby or future pursuit.

Completing a QSO in every mode on 5 bands

Completing a QSO in Every Mode on 5 Bands - Workshop for Beginners

Group Members:

- Lili (HA2LY)
- Zoli (HA0BZ)
- Amar (E70AW)
- Ljuba (YU5EEA)
- Bastien (ON4BCY)

Event Overview:

- **Name of the Event:** Completing a QSO in Every Mode, in at least 5 Bands (CW is optional)
- **Number of Participants:** 5-10 people
- **Level of Experience:** Beginner (participants have just obtained their licenses)
- **Duration:** 1-2 hours
- **Location/Space Needed:**
 - A single shack with a radio station setup.
 - A computer with logging software and digital mode software.
 - The space should accommodate all participants comfortably for hands-on radio operation.

Food:

- **Meals:** Light refreshments like water, soda, and snacks (chips, fruits) to keep participants energized during the session.

Budget:

- **Do you need money for the event?**
 - No significant costs are required beyond basic refreshments.
 - Use existing club resources for the shack, radios, and software.

Materials and Equipment Needed:

- A working **ham radio shack** that supports different modes:
 - **SSB (Single Sideband)** for voice QSOs.
 - **CW (Morse Code)** (optional) for those who want to practice.
 - **Digital modes** like FT8 or PSK31, which will require a computer and digital mode software.
- **Paper and pens** for participants to take notes or log contacts manually if necessary.
- **Stopwatch app** (to time QSOs for practice and efficiency).

Organizer's Preparations:

- **Prepare the shack:** Ensure all equipment (radio, antennas, computer) is set up and tested before the event begins.
- **Software setup:**
 - Check that the **logging software** is installed and configured properly.
 - Verify that the **digital mode software** is working, such as WSJT-X or fldigi.
- Test the radio station on all planned bands (at least 5) to ensure proper operation during the workshop.

What Participants Need to Bring:

- A positive attitude and willingness to learn.
- No additional materials are required, as all necessary equipment will be provided.

Workshop Content:

1. Introduction to QSOs Across Multiple Modes and Bands (15 mins):

- **Explanation of Modes:**
 - **SSB (Voice):** Introduction to making voice contacts over the radio, highlighting proper etiquette and procedures.
 - **CW (Morse Code - Optional):** Brief introduction to CW for those interested, though it's not mandatory for the workshop.
 - **Digital Modes:** Explanation of digital modes like FT8, including how to set up and log digital contacts using the computer.
- **Band Overview:**
 - Explain the characteristics of different bands (e.g., 40m, 20m, 15m) and why operating on multiple bands can increase the range of contacts.

2. Hands-on Activity: Completing a QSO in Every Mode (60-75 mins):

- **Objective:** Each participant will attempt to complete a QSO in at least 3 modes (SSB, digital, CW optional) on 5 different bands.
- **Process:**
 - Participants take turns operating the station.
 - Start with **SSB (voice mode):**
 - The instructor will guide the first participant in making their QSO, explaining proper call signs, signal reports, and logging procedures.
 - Move to **Digital Mode:**
 - The next participant will operate on digital mode (e.g., FT8) using the computer.
 - Guide them through the steps of selecting the band, initiating a QSO, and logging it using the software.
 - **Optional CW (Morse Code):**
 - If participants are interested, let them try making a simple CW QSO. This part is optional for those unfamiliar with Morse Code.
- **Band Changes:**
 - After each successful QSO, switch to a different band and repeat the process, allowing participants to gain experience on multiple bands.

3. Timed QSO Challenge (Optional - 10-15 mins):

- For those who complete their QSOs quickly, organize a **timed challenge** to see who can complete a contact the fastest while maintaining proper procedure.
- Use the stopwatch app to track the time it takes for participants to complete a QSO on a specific mode.

4. Recap and Q&A (10-15 mins):

- **Review Key Points:**
 - Discuss the different modes and what participants learned about operating on different bands.
 - Provide feedback on their QSOs, including any areas for improvement in signal reports, callsign usage, or logging.
- **Q&A Session:**
 - Open the floor for questions, addressing any concerns or clarifications participants may have about operating on multiple modes and bands.

5. Conclusion and Next Steps:

- Encourage participants to continue practicing QSOs in different modes and bands on their own time.
- Suggest further resources or events, such as field days or contests, where they can put their skills to the test in a real-world setting.

Learning Objectives:

- Teach participants how to complete a QSO using different modes (SSB, digital, and optionally CW).
- Provide hands-on experience in operating across multiple bands.
- Ensure participants are comfortable using logging software and operating both voice and digital modes.
- Help participants gain confidence in making QSOs as beginner ham radio operators.