

Warning: You must be fully prepared for an online ham radio test

Practice! It is **your responsibility to be fully prepared** since you will be taking the time of volunteers and a time slot from other candidates. Be sure you are **consistently scoring above an 85%** on practice tests.

Know the material! You should be able to complete the exam within 15 minutes. Most questions are short and simple concepts. You either know them or you don't. We allocate 20 minutes per person from set-up to finish.

Practice Sites: We recommend either HamStudy.org, a free site with lots of tips, or ARRL Exam Review for Ham Radio™, a free site from the national ham radio group that you may want to join. **One Exam per Session:** Due to the difficulty of administering exams online one person at a time, you may normally take only ONE exam per session, unless you have prearranged for multiple exams with the exam team. You must have studied, practiced, and are scoring passing grades for the exams you want to take. Email us in advance.

Certificate of Successful Completion of Exam (CSCE): The Exam Manager will send you a CSCE that includes your digital signature that you will keep for your records when you pass any element.

FCC UNIVERSAL LICENSING SYSTEM (ULS)

Exam Application: Within a couple days after you make an appointment for an exam, the exam team will send you an email with a **LINK to YOUR specific exam session** where you will fill out an exam application (an electronic VEC Form 605).

Federal Registration Number (FRN): If you do not have an FRN, get an FRN ahead of time by visiting the FCC's Registration page and clicking "Register for an FRN." This number will be used to uniquely identify you in all transactions with the FCC. You will need your SSN# to apply for an FRN. An instructional video https://www.fcc.gov/rofrn provides step-by-step instructions on how to establish an account.

Email Address: "Applicants are strongly encouraged to provide an email address on their license application(s), which will trigger the electronic issuance of an official copy of their license(s) to the email provided upon application grant." – FCC statement

Privacy Information: Please know that getting a ham radio license will make your name and address become public information when the new license is issued. An alternative address, such as a PO Box, would be acceptable. See details here: http://www.arrl.org/fcc-licensee-privacy. Social security numbers, phone numbers, and email addresses are never published.

Basic Qualification Question: Applicants are required to answer the FCC basic qualification question (felony question). If an applicant answers YES, they must submit the required

documentation directly to FCC within 14 days as outlined in these

instructions http://www.arrl.org/fcc-qualification-question. The candidate should not communicate any information or documents to the Volunteer Examiner team or the VEC.

FCC Enforcement Advisory: "Amateur and Personal Radio Services Licensees and Operators may not use radio equipment to commit or facilitate criminal acts."

"Individuals using radios in the Amateur or Personal Radio Services in this manner may be subject to severe penalties, including significant fines, seizure of the offending equipment, and, in some cases, criminal prosecution."

Download the complete FCC Enforcement Advisory – PUBLIC NOTICE – Federal Communications Commission.

WHAT YOU NEED TO PREPARE

Exam Application: FIRST: You "register" for an exam.

Exam Fee: SECOND: Pay the non-refundable \$15 exam fee electronically via credit card, Stripe, or Paypal. Do this **after you fill out the Exam Application (above)**. The fee will be forwarded to the ARRL VEC along with your exam scores and application.

U.S. PHOTO ID: ONE legal PHOTO ID will need to be shown on camera to the VE Team.

Adults must show a U.S. or state-issued driver's license, non-driver state ID, or U.S. passport. Under-18 students may show one of the above items, or the student shows a school ID or birth certificate, and a legal guardian presents a photo ID. All ID's must be actual physical ID cards. We will not accept digital ID's or other facsimiles of an ID.

Parental Consent: For children under age 13, a parent must download and complete this COPPA Parental Consent Formand email it to the address on the COPPA form, and parent will stay in the room during a child's exam.

Clear your exam table of ALL items within reach or view.

PREPARE YOUR EXAM ROOM:

Clear the Exam Room of any non-exam materials that could could aid in taking the exam, such as papers, notes, posters, computer screens, calculators, watches. Many people just use a bathroom to simplify everything. You may not be in a vehicle, outdoors, or in a public space. Private library rooms are OK. TVs must be unplugged or covered with a sheet.

Sit at a table or flat, sturdy surface so that your computer and smartphone can be solidly arranged without moving or falling over. **Do not sit on a bed** or movable chairs.

Clear your exam table of ALL items within reach or view that would raise suspicion, such as papers, sticky notes, electronic items, monitors, headphones, food, drinks, and anything unnecessary for the exam (see photo).

NO Virtual Backgrounds or Blinds are allowed; we must see the entire room.

Warn family members not to enter the room during the exam. If someone enters, the exam must be voided.

No other people or pets allowed in the exam room or vicinity, except a registered service dog.

PREPARE YOUR COMPUTER:

You may use a computer calculator app. Put it on the left. Adjust the browser into a tall narrow rectangle and center it between the calculator and Zoom images.

You must have a working laptop computer with **built-in web cam**, microphone, and **reliable Internet** service (no VPN, no Hot Spots). Must have Windows 10 or higher or a Macbook.

You may **NOT use any kind of tablet, iPad, or any Chromebook**. They won't work. Note: certain versions of Linux may not work.

Remove ALL audio devices, headphones, earbuds, smartwatches, HATS, **blue tooth mice**, secondary monitors or keyboards, and anything that could be considered suspicious and unnecessary for the exam.

Disable chat, alerts, **blue tooth** devices, **virtual screens**, VPN, pop-up apps.

NO EXTERNAL MOUSE OR KEYBOARD is allowed to be connected to a laptop. You will press the **A, B, C, and D keys** to answer a question and automatically advance to the next one. You may also use the RIGHT/LEFT ARROW KEYS on your KEYBOARD to advance or go back through the questions.

TEST your browser. Be sure it is **NOT full screen** and **fits as shown in the photo**, then **close it**. **A Calculator App** may optionally be on the LEFT side of your screen during the exam. **Load it in advance**.

Download Zoom on both computer and phone. Use this link to TEST them. **Zoom must run as** an **APPLICATION**.It cannot be in a browser.

Right before your exam we will send you a link to join Zoom on BOTH the computer and phone.

Name your computer in your Zoom profile BEFORE you go into the Zoom waiting room. **EXAMPLE: "Jane Doe computer"**

Practice the **SHARE YOUR SCREEN** option of Zoom. Practice with a friend.

Practice minimizing the **ZOOM DISPLAY BOXES** so they don't block your browser or calculator.

Prepare a way to prop up the phone to view the computer screen and keyboard from the SIDE. Like this!

PREPARE YOUR SMART PHONE:

Internet-connected cell phone with **built-in camera** is required.

Phone must be charged or plugged in.

Download Zoom on both computer and phone and use this link to TEST them.

Right before your exam we will send you a link to join Zoom on BOTH the computer and phone.

DO NOT TOUCH YOUR PHONE when the exam team brings it in. WAIT FOR

INSTRUCTIONS. We need to **CANCEL AUDIO on the cell phone** so it won't cause audio feedback. "Auto-join Audio" must be OFF. "Do-Not-Disturb" must be ON.

Learn how to REVERSE VIDEO from "selfie" view to room view and how to hold the camera in horizontal orientation. You will use the camera to **scan the room**, the computer, and your hands for security compliance, then use the camera to observe you during the session.

Prepare a way to PROP UP THE PHONE to see the computer from a SIDE VIEW HORIZONTALLY during the exam.

EXAM DAY PROCEDURES

PREPARE 30 Minutes Before Exam Time:

REVIEW ALL RULES and correctly prepare your exam area, computer, and phone. (Especially about NO WATCHES, NO HATS, DON'T TOUCH YOUR PHONE WHEN IT JOINS, etc.)

HAVE ID READY TO SHOW. **NO OTHER PAPERS** no PIN, no FRN – you do not need anything else!

NAME YOUR COMPUTER and PHONE in your Zoom App profile BEFORE entering the waiting room so the Exam Manager knows which is which. **EXAMPLE: "Jane Doe computer" and "Jane Doe phone"**

ZOOM: Queue up in the ZOOM waiting room BOTH your computer and smart phone using the link we sent you in an email. (Check spam filter if you don't see the email. If you can't find it, you can try **THIS LINK**.)

QUIT ALL APPLICATIONS except Zoom and (optionally) the on-screen calculator app.

DO NOT TOUCH YOUR PHONE when we bring it into the session until we **CANCEL AUDIO** so it won't cause feedback.

FOLLOW DIRECTIONS and **DO NOT INTERRUPT THE EXAMINER!** It causes Zoom to mute the speaker so you will miss instructions.