The document is intended to convey best practices for fully-remote examinations using ExamTools. VECs and VE Teams should modify them as needed and incorporate into their own documentation as required.

Examinee Guidebook v. 1.0

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Session requirements:

1. The examinee should meet the following requirements:
   a. Have a valid email address.
   b. Must be over 13 years of age at the time of the exam.
      i. Contact support@examtools.org if you need to register someone under the age of 13.
   c. Cannot be a citizen of the EU.
   d. Cannot be taking the exam while in the EU.
   e. Should be a US resident with the expectation to earn their amateur radio license for active use in the US. Due to overwhelming demand, these exams are not currently intended for overseas persons to get their US licenses.
   f. Expressly consent to the data, audio, video, and screen-share recording of the fully-remote exam session, all of which may be retained at least 15 months for test integrity audits, review, and training.
2. A laptop or desktop computer, with Chrome web browser & webcam.
   a. Webcam must clearly show the examinee's entire face & be usable for reviewing identification documents. (Recommend 1080p webcam, minimum 720p)
   b. Webcam must be centered on the screen.
   c. Webcam must be movable (such as integrated to a laptop or external wired webcam) for the VE (Volunteer Examiner) Team to inspect the exam space.
   d. Only a single monitor may be used. If you use multiple monitors, it is recommended to unplug them before the exam. The VE Team will ask to verify the other monitors are unplugged or turned off.
   e. At the start of your exam session, you may need a way to show the VEs your screen, computer, and working space. This can be accomplished by one of the following:
      i. A second device may be used to perform the exam room walkthrough for the VEs at the start of the session, but will likely need to be turned off and stowed during the exam.

        ii.   A large physical mirror (at least 8x10 inches).
3. A stable broadband internet connection, of at least 3Mbps download and upload.
    a. Wired connections preferred, but Wi-Fi is okay.
    b. Avoid use of mobile internet plans, as they can be unstable.
    c. Test your internet speed at https://www.speedtest.net/ and/or https://fast.com
4. Hands-free speaker & microphone setup:
    a. Built-in to the computer is best.
    b. Headphones & headsets are NOT allowed for examinees.
    c. Microphone must be on & audible to the VE Team throughout the exam session.
5. Optional:
    a. Blank piece of paper and pen or pencil for doing calculations.
    b. Calculator (if applicable). A calculator built into the operating system is recommended, but it must be opened & shown cleared-out before the exam begins. Displaying the calculator and ExamTools browser window to be side-by-side is advised. Advanced calculators must be cleared. If the calculator cannot be cleared to the satisfaction of the VE Team, it may not be used.
6. A quiet space, with a clear desk or table that can be kept that way for the entire session. The following circumstances will immediately invalidate your exam:
    a. Another person walking into the exam space, being visible and/or audible.
    b. Obvious examinee distractions from any source (including phones, watches, pets, standing up, leaving your chair, etc.)
    c. Consistently looking away from the exam screen.
    d. Any other suspicious circumstances, as determined by the VE Team.

Register for the session:

1. Go to https://hamstudy.org/sessions and select your exam session.
    a. Register for the session and carefully follow all prompts.
    b. Pay special attention to any additional session requirements.
        i. Many VE Teams require additional scheduling or registration for their particular sessions outside the ExamTools software.
    c. If applicable, render payment for the exam based on the specific VEC's fee.
    d. After successful registration, you will receive a confirmation email including a 4 digit pin. This pin will be required at the time of your exam.
2. Test out your computer, webcam, and microphone system with the specific video conferencing program required for your exam session.
3. Ensure you have the appropriate forms of identification as required by the VEC that is hosting your session. This is typically 2 forms of government-issued ID, one with a photo.

Before the session:

1. Be sure to study! You should be regularly passing practice exams at hamstudy.org

2. Ensure all updates to your computer are completed the day before the exam.
   a. For example: [3 Ways to Update Windows](#) or [Update the software on your Mac](#)
3. Ensure your Chrome web browser has the latest updates:
   a. [Update Google Chrome - Android - Google Chrome Help](#)
4. In order to minimize any factors which could invalidate your exam's integrity, the following are recommended:
   a. A completely empty and enclosed room, free of clutter, with all doors & windows closed (For example: a clean bathroom, dining room, bedroom, or library study room. You may also consider renting a study room or meeting room at your local library or school for this purpose).
   b. Remove all objectionable materials from the space. This includes, but is not limited to, posters, flags, signs, etc., and is at the sole discretion of the VE Team.
   c. The space you are in should be entirely free of any electronic devices (leave your cell phone, smart watch, smart glasses, Fitbit, tablets, other computers, security cameras, radios, etc. in another room & turned off)
   d. The computer you are using for the exam should have all programs closed, notifications disabled, and other background services turned off, except for the video conference & Chrome browser open to https://ExamTools.org/
   e. Consider scheduling your exam for a time of day with minimal distractions (e.g. at night when the kids are in bed and the neighbors aren't walking around).
5. Be sure to test your audio and video setup to ensure everything is working.
   a. If others are using the same internet connection (especially on Wi-Fi), inform them to avoid streaming video or downloading large files throughout the exam.
   b. Ensure your internet connection is strong and reliable (if necessary, have others sharing your network reduce their usage during the exam). A wired connection is best; Wi-Fi can be potentially unstable.
   c. If your connection drops or the quality degrades significantly, your exam may be immediately terminated and invalidated at the sole discretion of the VE Team.

Taking your exam:

1. Log into your exam's video conference using the link provided by your VE Team.
   a. Be sure to have the 4 digit pin that was emailed to you during registration from https://ExamTools.org/ available.
2. Ensure you are 100% focused during the entire exam session.
3. Any distractions or anomalies could be cause to void the exam at the sole discretion of the VE Team. Anomalies include, but are not limited to:
   a. Notable distraction by the examinee, such as eyes not remaining on the exam and/or wandering around the room, or any noises.
   b. Appearing to reference or use unauthorized materials (e.g. looking at cell phone, even just the lock screen, changing windows on computer, etc.)
   c. Another person entering the exam space (on camera, physically, or audibly)
   d. Examinee getting up or leaving the room during the exam.

4. The VEs will ask you to move your camera around to check the room, exam table, writing paper, and any other items using both your primary camera and secondary viewing device (webcam, phone, tablet, or mirror).
   a. You may be asked to put things away, on the floor, close doors, windows, or otherwise.
   b. You will be asked to share your entire screen, with your start bar, menu bar, and/or dock visible, and demonstrate no inactive window is hidden away from the active and maximized browser window.
   c. At any time during the session, you may be asked to move your camera around for the VE Team to perform an additional check.
5. Depending on the specific system used by the VE Team, you may need to authorize remote control of your computer for them to control the exam session.
6. While taking the exam, the VEs will be on mute and have their cameras turned off to avoid any distractions to you. Remember, they will still be monitoring your session.
   a. Your camera and microphone must remain active throughout the session.
7. If you have any questions during the exam, simply ask them verbally, so the VE Team may address any technical concerns. They cannot answer any questions related to the exam material until after the exam is completed.
8. When you have completed the exam (and have double-checked your answers, if desired), press the button to notify the VE Team.
9. Your exam will be graded, with results shown on the screen.

After completion of your exam:

1. If you received a passing score on your exam:
   a. Depending on your VE Team, you may be allowed to take the next higher level exam(s). For example, if you pass your Technician exam, you may be allowed to take the General & Extra exams at no additional cost.
   b. The VE Team will complete your CSCE and Form 605, copies of which will be made available to you digitally. You will need to sign both forms digitally before your application can be submitted to the FCC.
   c. The FCC ULS database will be updated with your new callsign and/or license upgrade(s) by the VEC (this typically happens within one week): https://wireless2.fcc.gov/UlsApp/UlsSearch/searchLicense.jsp
   d. You may also receive an email from examtools.org with your new callsign.
2. If you failed your exam:
   a. You may be allowed to review your exam, depending on the specific policies of the VEC.
   b. You may choose to register for another exam session in the future.