W5YI Volunteer Examiner's Manual
2024.1

A guide covering what a Volunteer Examiner needs to know to examine applicants under the W5YI VE Program for all amateur radio licenses.

Administering examinations in the amateur Radio Service is not difficult, but there are certain things you must know. This manual will cover even the most special situations.

This guide will explain the policies and procedures used in the W5YI VE Program. W5YI believes it is important that Volunteer Examiners are completely familiar with the rules and regulations of the VEC/VE System.

Preface

For 70 years the US government prepared and administered amateur exams. However, due to budgetary constraints and personnel cutbacks, the FCC discontinued examination operations. Congress passed legislation in 1982 which allowed volunteer amateur radio operators to prepare and administer amateur Radio Service examinations. The amateur community maintains the question pools used for all amateur license exams. The FCC no longer administers amateur radio examinations of any type.

The FCC created a volunteer system of exam administration. Organizations referred to as Volunteer Examiner Coordinators (VECs) act as administrative liaisons (or coordinators) between the FCC and the Volunteer Examiners (VEs) who administer the tests. The FCC directs the entire amateur Radio testing program through 14 VEC organizations.

Any qualified General, Advanced or Extra Class radio amateur may participate as a VE ([§97.509(b)](#)). All VEs must be approved or "accredited" by a Volunteer Examiner Coordinator ([§97.521](#)). Only VEC accredited amateurs having a higher class license than an applicant may administer examinations, with the exception of the Amateur Extra, who may administer all three license class examinations.

Amateur exams are administered by teams of three or more VEs either in-person or remotely. The exam team forwards the results along with the appropriate application forms, license copies and attachments to the VEC. The VEC reviews the applications for completeness and authenticity. The VEC then submits the information electronically to the FCC Universal Licensing System (ULS) and, assuming all is in order and applicable fees are paid, the FCC grants a license.

W5YI Licensing Service, hereafter referred to as W5YI, coordinates US amateur exams across the nation, and US possessions. W5YI was the first nationwide VEC. The FCC currently permits any VEC to conduct exams anywhere.

W5YI is committed to a simple, yet effective VEC/VE mechanism while adhering to the rules set forth by the FCC. We have eight principles designed to minimize the administrative burden and maximize the participation of our VEs:

1. Simple, streamlined procedures
2. Widespread availability
3. Timely VE accreditation and eligibility to test
4. Easy exam administration
5. Simple expense reimbursement
6. Fast application processing by W5YI
7. Well publicized availability
8. Integrity of the testing and licensing process

Credits

This document is the product of many hours of work by a devoted group of people.

- AA7HW, Herb Weiner
- K5EMB, Liz Brown
- KT1ME, TJ Williams
- N2YIC, Mitch Berger
- N5DYE, Tracy Dye
- W5MDB, Michael Brown
- W6QA, Tony Miller
- WB5QNG, Allan Batteiger
- WT9V, Michael Masterson

1.0 Introduction to the VEC/VE System

This manual will provide Volunteer Examiners with the information needed to properly administer exams in the amateur radio service under the W5YI VE program and FCC Rules.

1.1 The Volunteer Examiner Coordinator (VEC)

The FCC has assigned VECs certain duties and responsibilities and has granted authority to:
- Recruit and accredit Volunteer Examiners and issue accreditation documents.
- Coordinate examination sessions with VEs.
- Inform VEs of changes to the examination process.
- Provide a source of amateur license testing materials for its VEs.
- Provide necessary test session forms, e.g., NCVEC Quick-Form 605s, Certificates of Successful Completion of Examination (CSCEs), Manifests of Applicants, etc.
- Collect and archive successful application forms, license copies, answer sheets, CSCEs and test results.
- Prepare and maintain records of all test sessions per FCC instructions.
- Screen, approve and forward successful applications for amateur licenses to the FCC.
- Resolve errors in NCVEC Quick-Form 605s made by applicants and/or Volunteer Examiners.
- Invalidate a test session and disaccredit Volunteer Examiners should the need arise.
- Assist in the development and/or revision of test pool questions.
- Evaluate test questions to ensure clarity and accuracy. Forward recommendations to the NCVEC's Question Pool Committee.
- Determine the amount of reimbursable expenses for each year.

1.2 Exam Teams and the Contact VE

Any group of three or more W5YI accredited VEs who administer an exam are considered a team. The team is led by the "Contact VE" or CVE. This person is also referred to in Part 97 Rules as the Session Manager. (§97.513). The CVE is responsible for maintaining test integrity, especially the security of the test materials and the conduct of the test session itself. Any communications between the team and W5YI will be through the CVE.

1.3 The role of Volunteer Examiners

Under the several VEC organizations, there are the thousands of accredited amateurs who make up the Volunteer Examiners of the VEC/VE System who are able to administer amateur radio examinations.

VEs must meet certain minimum criteria established by the FCC, and any additional criteria established by the VEC. Accreditation by one VEC does not automatically guarantee accreditation by another VEC; each entity is unique with different rules for accreditation.

W5YI accredits individuals through volunteer exam teams, requiring a VE candidate to be sponsored by an active W5YI CVE to become part of that testing team. However, a VE may participate on multiple teams.

2.0 W5YI Policies

W5YI has a number of policies that we expect VEs to uphold. W5YI believes that being a Volunteer Examiner is the highest calling in amateur radio, and expects accredited VEs to maintain a high standard of professionalism when conducting sessions.

2.1 Familiarity with FCC Part 97

The FCC rules concerning the Commission's Volunteer Examination program are detailed in Part 97, Subpart F. VEs and prospective VEs should make it a point to be completely familiar with the entire Part 97. An up-to-date copy of 47 CFR Part 97 Rules can be found on the Electronic Code of Federal Regulations website (https://www.ecfr.gov)

2.2 Rules for Volunteer Examiners

Although VECs must recruit and accredit Volunteer Examiners, they are under no obligation to accredit any particular amateur into their examining program (§ 97.525).

A W5YI VE candidate must advise W5YI if they have been denied acceptance into, or separated from, any other VEC testing program.

VEs, once accredited, may be separated from the program for any reason. W5YI decisions are final in any dispute without appeal. By accepting a VE appointment you agree to abide by W5YI decisions.

All VEs who certify NCVEC Quick-Form 605 applications are equally responsible for the integrity of the exam(s) (§ 97.509(i)).

VEs are required to participate in at least one session a year. Non-participation will result in the VE being marked as inactive. VEs must inform W5YI when they renew their licenses or change their callsign so that their contact info may be updated. Failure to do so will result in the VE being marked as inactive. VEs with inactive credentials can not participate in sessions.

VEs must safeguard the confidentiality of any non-public (not published in the ULS) information that they may be exposed to during the examination process.

2.3 Rules for Contact VEs and Teams

All accredited CVEs must update their contact information every two years, or upon renewal of their FCC license. Active CVEs will receive a new ID card with each renewal. CVEs are required to keep their teams' information up to date with W5YI, e.g., renewals, changes of call sign, emails, phone numbers, etc. If a CVE has not conducted any sessions for a period of two years, their CVE status will be marked as "inactive" and the CVE will have to contact the VEC Office with their intention to remain active or be dropped as a CVE.

CVEs must submit new VE applications of prospective team members. CVEs need to inform W5YI if any of their VEs decide to stop participating in VE sessions.

CVEs must not use the services of any VE whose past status is questionable or who has had their operator license suspended or revoked (§ 97.509(b)(4)). CVEs choose the members of their teams, and their sessions, they are not required to accept the services of any VE.

The CVE is expected to attend every test session administered by their testing team. If the CVE is unable to attend a session, the session may be conducted by another VE on the team provided the CVE has confidence in the VE's ability. The regular CVE's accreditation number must be shown on the session documents so the session may be associated with the regular CVE and appropriate testing team. A short note must be attached to indicate the reason for a CVE's absence. The CVE is responsible for any exam discrepancies. Only VEs that were actually at the session shall be listed on the VE manifest.

It is the responsibility of the CVE to ensure that the other VEs on their team are accredited with W5YI and that those credentials are up-to-date PRIOR to the session.

VE teams must agree to conduct four or more examination sessions annually. Teams are encouraged to make a public announcement of a test session's location and time.

2.4 Exam Fees and Expense Reimbursement

VEs may not be compensated for examination services but may be reimbursed for expenses (§97.527). In order to avoid any appearance of impropriety, don't joke about being paid for VE sessions. The FCC allows only one reimbursement amount which can't exceed the maximum allowed regardless of the number of elements passed. An amateur passing any number of test elements in a single exam session pays only one testing fee. Retesting because of failure of an element, however, requires an additional fee. Please see 2.8 Retesting.

2.4.1 Exam Fees

Teams collect one testing fee from each applicant, before the exam is administered, regardless of the number of elements that the applicant intends to pass. W5YI shares this exam fee with its VEs as they may have allowable expenses. W5YI does not require expense reports from teams. W5YI currently collects 50% of the exam fee for each applicant attending the session, leaving the team 50% of the exam fee per applicant for expenses. The fee may be collected in advance or at the time of testing.

Applicants must not be required to purchase license preparation material, participate in an instruction class for which a fee is charged, purchase a ticket to an event of any kind, join a club, or pay any other fee as a prerequisite to taking an amateur examination. One solution to paid event-oriented testing is to gather exam applicants outside the "admission fee required" area and escort them to and from the testing area. Conducting amateur exams in conjunction with hamfests is an excellent promotional tool and allows teams to test many applicants that normally would not be served.

2.4.1.1 Waiving Exam Fees

Teams are allowed to waive all or part of the exam fee for applicants that meet criteria established by the team, such as minors, students, club members, etc., as long as the team is consistent with these waivers. W5YI will still collect 50% of the exam fee per applicant from the team, remembering that multiple failed attempts are counted as extra applicants, so any fees waived would be absorbed by the Team.

2.4.1.2 Refunds of fees

If technical difficulties are present that prevent the successful conducting of an exam for an applicant, the fee shall be refunded to that applicant. Situations such as the applicant not being comfortable with a room scan in a remote exam, or having visual impairment and the team not being able to provide an acceptable accommodation are examples of cases where a refund is appropriate. An applicant who does not appear for their exam is not entitled to a refund, however the team may refund the applicant's fee if they wish to. W5YI does not charge the team for applicants who don't take an exam or have other business (renewals, etc).

2.4.2 Allowable Expenses

Expenses such as tablets, software, Zoom fees, telephone calls, pencils, room rentals, postage, test session promotion, printing, travel costs, supplies, and even food or refreshments for your testing session are all reimbursable out of the Team's portion of the exam fees collected.

2.4.3 W5YI Fee

The W5YI fee may be paid by credit/debit card, check, money order, or, though we don't recommend it, cash. If the VE team conducts exam sessions sponsored by a club, excess test fees may not be deposited in a ham club treasury. Any excess funds may only be used on test session related expenses.

Many VE teams open bank checking accounts into which they deposit all test fees. The W5YI portion of the fee is simply paid by debit card or check from that account. Other teams may pay the VEC share with a personal check from one of the examiners. A credit/debit card can be placed on file with the W5YI billing platform for fees to be paid to W5YI.

Payment of the W5YI fee is due when invoiced by W5YI and will be considered overdue after 14 days. If your account is overdue, sessions will not be processed until your account is made current.

2.5 Types of Exam Sessions

W5YI and ExamTools (exam administration software) are working together to provide tools to allow VEs to offer paperless sessions by computer. ExamTools allows VEs to print exams, grade exams, or give exams by computer or tablet using a browser. ExamTools can handle applicant registration and testing. ExamTools allows the CVE to generate manifests, NCVEC Quick-Form 605s and CSCEs. ExamTools also creates a file that allows W5YI to import a session quickly and accurately. W5YI strongly urges CVEs to use ExamTools to manage and submit test sessions to W5YI. One final advantage of ExamTools is the amount of *TIME* that is saved for VEs, and especially the CVE.

2.5.1 In-Person Testing with Paper

W5YI provides a method through ExamTools to generate written tests for CVEs at no cost. This method should be used to generate all exams as needed for a paper session. Each paper exam is unique but must be used only once for any one applicant. At a minimum, W5YI suggests generating at least three different versions of tests for each license class for use in the actual session. W5YI requires the CVE to periodically change exams, at least every 90 days, to help ensure exam integrity. All printed tests must be stored by the CVE in a secure, locked location.

It is very important that the contents of tests are not disclosed to anyone. W5YI requires that applicants sitting next to each other be given a different version of the test. The CVE must keep track of tests failed so that a different examination will be administered to an applicant during subsequent test sessions (§97.509(f)).

Concerns about pre-printed or copied written examinations exist. However, computer-generated exams are unique and pose no integrity problem if used properly and new exams are regularly generated.

The initial set of forms, and instructions on how to print exam materials, are sent at no cost to the CVE.

If a team holds an in person paper session and three W5YI accredited VEs are not available for some reason, a VE currently accredited under another VEC program may be used. The CVE must attach a photocopy of their current accreditation document, amateur license, and a copy of a completed W5YI-VE application to the test session documents or the exams will be invalidated and all NCVEC Quick-Form 605 applications will be returned to the VE team without action.

2.5.2 In-Person Testing with Tablets or Laptops

If you have access to the internet, applicants can use a laptop or tablet to take exams. Tablets are preferred because it is relatively easy to "lock them down" so applicants can't access any unapproved material during the test. Applicants log into to the ExamTools website and take the exam via a browser.

2.5.3 Remote Testing

Combined with Zoom or a similar video conferencing system, ExamTools allows VEs to give exams remotely. During the video session, the VEs will verify the applicant identity and observe the applicant taking the test. The one main difference is you must have four VEs present to administer a remote exam. This ensures that in the event that a VE's connection fails, there are still at least the required minimum of three VEs present; if there are fewer than three VEs present, the applicant's test would have to be voided and a new test started once there are enough VEs on the call. Testing sessions must be recorded with all VE and applicant cameras active. (VE audio should be muted while applicants are testing; applicant audio should remain active at all times.)

2.6 Testing Persons with a Disability

VEs may take steps they deem advisable to administer tests to a person with a disability while taking into consideration applicant limitations. For example, tests may be given orally (or dictated). If giving a test to someone with vision impairment, select the option to print a test that contains no figures. It may be advisable to test a person with a disability separately. Since a VE team may hold an exam session for just one person, exams can even be held in the applicant's home as long as at least 3 VEs are present. Any needed additional equipment, such as tactile or audible transducers, must be supplied by the applicant.

2.7 Retesting

There is no waiting period to retake a failed examination with W5YI. At the option of the VE team, this may be accomplished one or more times at the same test session. If the applicant requests additional exams, it is up to the exam team, not the applicant, to decide if a retest will be given.

NOTE: An applicant may **not** be given an examination identical to one previously failed (§97.509(f)).

Applicants immediately retaking failed examinations must pay another fee since a retest is considered another applicant in the test session. The second test fee, like the first, is good for as many exam elements as the applicant can successfully pass.

For example, an applicant is charged a fee for taking Element 2 and fails, but then requests a retest. If the VE team agrees that the applicant has a reasonable chance to pass another exam, a second exam fee is charged. This time the applicant passes Element 2 and then requests Element 3. The Element 3 exam is covered under the second test fee and is administered at no charge. If the applicant now fails Element 3, it will require another test fee to administer another Element 3 exam.

2.8 Examination Element Credit

W5YI will accept any reasonable evidence that an applicant was licensed as of a specific date. A copy of any evidence, not the original, should be attached to the NCVEC Quick-Form 605 application or emailed to W5YI. Other evidence or documentation may include (but is not limited to) a CSCE copy or original dated within the last 365 days, an old license copy, a page from a radio-amateur's Callbook, etc.

The exam team must make sure that copies of ALL documents used for element credit are included with the applicant's NCVEC Quick-Form 605 or emailed to W5YI as a PDF when conducting ExamTools exams. License copies of licenses in ULS are not needed by W5YI for a normal upgrade by testing.

2.9 Maintaining Examination Integrity

The VE plays a critical role in maintaining the integrity of the amateur service VE program. VEs also bear an important public relations responsibility. W5YI expects VEs to be "experts" on amateur testing and licensing.

W5YI will not accept/process any exam which we believe is not conducted in accord with high standards. W5YI has the authority to invalidate any session in which confidence is lacking. W5YI wants the reputation of the W5YI VE program to be "squeaky clean." Rumors and innuendo to the contrary can do nothing but damage the program and amateur testing in general.

W5YI trusts and depends on VEs to conduct exam sessions in a thoroughly professional manner. Being a VE is one of the highest callings in the amateur radio service.

The role of the VE is essential to the future of amateur radio. This is your opportunity to influence the caliber of the service and to repay ham radio for the enjoyment it has brought you over the years. It goes without saying that the quality of the person that enters the amateur ranks is directly proportional to the quality of the VE program. Every amateur has worked hard to obtain amateur operator status. Act accordingly.

Be suspicious of exam cheating at all times. It has happened during FCC administered test sessions and still occurs under the VEC/VE system. Be particularly watchful for fraudulent identities (a person taking the examination for someone else), micro-recorders, and fraudulent records—particularly amateur operator licenses and CSCEs. Safeguard all blank certificates and examination materials.

The worst possible situation for a VEC is one in which a VE team provides assistance for applicants to pass. It is very difficult to detect, but eventually the word gets out about "easy" test situations. W5YI will take firm measures to stop all instances of testing irregularities immediately. Unfortunately, multiple W5YI accredited VEs have had their accreditation revoked and/or suspended for abusing the trust placed in them to properly conduct examinations.

The rules require that a VEC report any suspected irregularities in the administering or taking of examinations to the FCC. Report wrongdoing to W5YI immediately, preferably in written form, so that it can be investigated. A number of complaints about the testing procedures of a specific team can mean that something is not being handled properly. W5YI has no alternative but to act on complaints to safeguard the integrity of the VE system.

W5YI holds CVEs particularly responsible for exam integrity. CVEs will be held personally accountable if there is any question of prior knowledge of test contents by applicants.

FCC rules are very specific about testing relatives (§97.509(d)). VE team members are forbidden from testing relatives. If absolutely necessary, computer generated exams may be allowed for testing of applicants related to team members, but the test must be generated by computer at the time of the exam, and witnessed and signed by 3 unrelated VE team members. The related VE must excuse themself from the session, and not participate in any way. In the case of a relative of the CVE, that relative must test with a completely different Team. The VEs should take whatever steps are necessary to preclude any appearance of testing irregularity in the generation, administration and grading of exams.

W5YI is counting on VEs not to violate the trust that W5YI has placed in VEs. W5YI will give every VE the benefit of the doubt. Accreditation as a W5YI VE is a simple, quick procedure. To retain this accreditation and especially to be a CVE requires that VEs be thoroughly respected members of the amateur community. Fair or not, W5YI will have no alternative but to act if VEs or a VE team become the object of controversy. More than once, W5YI has suspended testing by a VE team even though W5YI lacked concrete evidence of fraud. W5YI also reserves the right to arbitrarily disaccredit W5YI VEs who have been suspended or disaccredited by other VEC organizations.

W5YI will do everything in our power to enforce §97.509(e) and to have a VE's amateur radio license revoked and VE involvement publicized should you knowingly participate in a fraudulent

session.

W5YI is a non-profit as required by FCC. Non-profit status places severe restrictions on the allowed activities of Staff, Employees, and Volunteers working with or for the non-profit. All VE team activities are limited to testing and licensing related activities per our nonprofit statement of purpose as stated in our articles of incorporation:

"Specifically, the purpose for which the corporation is organized are for education relating exclusively to amateur radio, including but not limited to Amateur Radio License examination and call sign administration under· the auspices of and in assistance to the United States of America Federal Communication Commission and for the furthering the amateur radio service and the science of Radio."

Under the Internal Revenue Code, all section 501(c)(3) organizations are absolutely prohibited from directly or indirectly participating in, or intervening in, any political campaign on behalf of (or in opposition to) any candidate for elective public office, thus W5YI prohibits any political activity of its VEs even remotely related to the administration of exams, and prohibits the use of any applicant information for any such purposes.

2.10 Record Retention

The CVE *must* keep a paper or electronic image of all test results forwarded to the W5YI office until the original documentation is received and processed by W5YI. ***This means keep a copy the Manifest, passing NCVEC Quick-Form 605's, team copy of each CSCE, and passing answer sheets.*** The FCC requires that session records be retained by the VEC for at least fifteen months ([§97.519(b)(3)](#)). To comply with this mandate, W5YI requires the CVE to maintain copies of all session documents until the original is received in our office for processing. If copies are not retained, and should the session documents be lost in the mail, all applicants must be re-tested.

CVEs must be prepared to answer any questions that might arise concerning their sessions, and produce supporting documentation. Retention of session records is highly important to prevent applicants from having to be re-tested should session records be lost in transit to the W5YI office.

If a CVE conducts remote sessions, video recordings of the sessions must be retained by the CVE for at least 45 days.

2.11 Communicating with W5YI Licensing Services

Contact with the W5YI office may be by mail to the following address:

W5YI Licensing Services
P.O. Box 260916
Plano, TX 75026-0916

or by e-mail: vec@w5yi-vec.org

or by telephone: 972-412-5221

 W5YI will normally answer all emails within 24 hours on business days. The W5YI office is open during regular business hours, 8:00 AM CT to 4:00 PM CT, Monday through Friday.

 Always include the CVE's accreditation number, date, and the city and state of the exam session in any message concerning an exam. To inquire about an individual applicant, always include the applicant's FRN, date, and the city and state of the exam session.

3.0 The Exam Process

Exams may be conducted and graded in person or remotely. If the exam is in person, the preferred method is to use ExamTools, with applicants taking their exams on tablets or on paper with computer grading, or a combination of the two methods. It is possible to conduct fully paper-based tests, graded manually, but we suggest this be a last resort because of the extra time that it takes to process these exam sessions, and because it increases the chances of the team or W5YI making errors.

NOTE: W5YI strongly recommends the use of ExamTools for setup, administration and running exam sessions. ExamTools handles registration of applicants, all applicant paperwork (except evidence of prior exam credit), generates and grades exams, prepares CSCEs, NCVEC Quick-Form 605s and all the normal VEC documentation needed to complete a session. Electronic records eliminate transcription errors and electronic exams are processed much more quickly than paper exams. W5YI also recommends that VEs familiarize themselves with the original "written" process for exam session administration; it is indeed the foundation of the automated system.

ExamTools streamlines the entire process and virtually eliminates tedious paperwork. Exam sessions that are processed through ExamTools are typically processed by W5YI first thing in the morning of the next business day after the CVE uploads the files, and submitted to the FCC shortly thereafter.   Paper exams that are scanned and uploaded will be processed on a best-effort basis, usually within one day, and sessions that are *mailed in* will typically be processed by the next day after they are received.

3.1 Overall Exam Process

On the exam date, all team members will meet at the testing location for in-person exams or in an online conference.

For in person exams, the CVE is responsible for bringing the testing materials. Use a quiet, distraction-free room for exams. Exams for different license classes may be administered simultaneously.

3.1.1 Register Applicants

If using ExamTools, applicants may register before the exam, or they may register when they arrive at the exam location. Pre-registration simplifies and speeds the process when applicants arrive. In addition, ExamTools fills in the Manifest of Applicants and the NCVEC Quick-Form 605 for the VEs, thus further speeding the process along.

If not using ExamTools, the VEs must record the applicant's name, call sign (if any) and telephone number on the *Manifest of Applicants*.

For sessions not using ExamTools, applicants applying for an upgrade must provide a copy of their current active license for visual verification; alternatively the VEs may search ULS to verify the license status (ExamTools verifies license status in the ULS). If an applicant is claiming credit for a session that has not been processed by the FCC, they must provide a CSCE showing they have successfully passed the element(s) in question. ***Active license copies do not have to be retained or mailed to our VEC Office.***

Applicants with expired licenses may not operate an amateur station until ULS shows that they have an active license; a CSCE does not convey renewed privileges.

All VEs should be aware of §97.505 which details examination element credit. An amateur with a license that expired more than two years in the past must retake Element 2 and will receive a new station call sign.

All applicants are required to have an FCC Registration Number (FRN). Unlicensed applicants can create an account and obtain an FRN by visiting the FCC CORES webpage and following the instructions. Hams and those holding other FCC licenses (such as commercial or GMRS) can find their FRN on their license.

3.1.2 Complete NCVEC Quick-Form 605

If not using ExamTools, each applicant should fill out (*in CLEAR PRINT*) Section 1 of an NCVEC Quick-Form 605. This form is available from the W5YI office at a nominal cost for 50 or 100 copies. The NCVEC Quick-Form 605 may also be downloaded from the NCVEC webpage. If forms are printed locally, W5YI prefers buff or ivory color paper rather than white. Please note that this is a special form for amateur radio VE sessions and is not the same as the FCC Form 605, which cannot be used for VE sessions.

Perhaps the most important of all the administrative responsibilities is the proper completion of the NCVEC Quick-Form 605 application. The greatest cause of VE exam session errors and license delays by far is a defective NCVEC Quick-Form 605. See Appendix D for detailed instructions about NCVEC Quick-Form 605.

3.1.3 Administer the Exam

The VE Team must inspect the applicant's ID to verify the applicant's identity to their satisfaction. Preferably this would be a government-issued photo ID such as a state drivers license or passport. For new amateur licenses, the name must precisely match the ID, except that the middle initial is optional. If the applicant is upgrading, and the name on the amateur license doesn't exactly match the name on the ID, then the VE team must be convinced the license, individual and ID are all the same person. Exception: applicants under the age of 18 who do not have a government-issued photo ID can show a student ID, or a parent or guardian can present a government-issued photo ID and state that the applicant is their child and that the applicant is using their correct name. Although rare, some people have tried posing as other people to take an exam.

At an in-person session, have applicants sit as far from each other as is practical to avoid distracting each other and to preclude cheating. At a remote session, check the room, see 3.3.5 Preparing the Room.

If using computerized exams with ExamTools, each person will be given the appropriate exam on the electronic device. If using paper exams, make sure that each person is given the appropriate exam, see 2.6.1 In-Person Testing with Paper. Provide appropriate instructions about answering the exam questions, either on the electronic device, or by filling in the answer sheets, no talking to others, no books or study materials within the test area, and so on. Applicants must turn off their cell phones and other communication devices in person, or put them out of reach when testing remotely unless the device is being otherwise used by the exam team. Calculators (with memories and programming cleared) are allowed. ***The Exam Series # MUST be written at the top of every Answer Sheet (ExamTools will take care of this for computerized exams).***

Once a test has started, applicants cannot leave the room until all test materials have been turned over to the VE team; if an applicant leaves the area prematurely, the test must be voided. Be especially alert for "crib sheets" (scraps of paper with exam aids such as formulas), or any other form of cheating. ***All VEs are responsible for ensuring test session integrity.***

If an applicant is planning to take multiple elements, provide only one test element at a time. Exams must be taken in order; an applicant **must** pass lower level exam(s) prior to attempting a higher level exam. Grade one test before giving another. See 3.1.4 Grade the Exams. If the applicant passes, offer to administer the next level exam. If the applicant fails an element, the applicant may retake the exam using a different question set. See 2.8 Retesting.

If VE team instructions are not followed, or any signs of cheating are witnessed, VEs are required to terminate the applicant's exam immediately (§97.509(c)). VEs should constantly watch applicants during the exam.

3.1.4 Grade the Exams

As each applicant finishes an exam, if the test was completed in ExamTools, the applicant clicks 'Grade Exam', a VE authorizes grading, and the test is graded immediately by the software. If grading a paper exam with GradeCam, a VE uses the GradeCam button on the ExamTools screen to take an image of the answer sheet, and the test is immediately graded by the computer. If the test is a manual paper exam, collect all papers, including any scratch paper, and remember that three VEs must grade the exam, passing scores are listed in §97.503. W5YI recommends that applicants leave the room or sit somewhere away from the exam team while exams are graded. When the results are in, mark them on the Manifest of Applicants and advise each applicant if they passed or failed. If the applicant asks which questions they missed, you may tell them the subelement and question number, such as 'T1E01'. Do not return answer sheets to the applicants.

VEs are the sole judges of the correctness of an applicant's answers. This is not a VEC responsibility. If an applicant provides an answer that does not agree with the answer key but all VEs certifying that applicant's exam agree that the response was correct, collectively the VEs have the authority to credit the answer as correct. Typographical errors are possible that may invalidate correct answers indicated in the question pool. Final authority has been given to the VEs, not the VEC, to maintain test integrity. In the event that VEs need to exercise this authority on a computer graded exam, ExamTools provides a feature to manually enter an exam score. The VE team must document any scoring that disagrees with the question pool and provide that documentation to W5YI along with other session documents.

3.1.5 Certify the NCVEC Quick-Form 605s

When using ExamTools, signing the NCVEC Quick-Form 605 and and CSCE are both handled at the same time by each VE entering their password into the system and one of the VEs emailing (via ExamTools) the CSCE to the applicant. This accomplishes this and the next section in one step. If not using ExamTools, then certifying the NCVEC Quick-Form 605s and CSCEs are two separate steps.

After an applicant has completed all their exams, review all NCVEC Quick-Form 605s for accuracy and completeness. ***Make sure that the applicant has provided their FRN, email address, and answered the Basic Qualification Question on the NCVEC Quick-Form 605, and written their name, the date, and the Exam Series # at the top of their Answer Sheet(s).*** If the applicant passed their exam(s), check the correct box for the license earned. Three members of the VE team with appropriate classes of license must certify Section 2 of NCVEC Quick-Form 605 (§97.509(i)). This means that all three certifying VEs are equally responsible for the accuracy of the scores, the credibility of the exam session and its paperwork, even if there were other VEs assisting with the examinations. It is the certifying VEs, not just the CVE, who are the responsible parties. For more information about NCVEC Quick-Form 605 please see Appendix D.

If the applicant did not pass all elements necessary to upgrade, the exam team should fill out Section 2, checking the box "NO NEW LICENSE OR UPGRADE WAS EARNED" and return the form to the applicant without filling in the VE details.

3.1.6 Issue the CSCE

As mentioned above, separately dealing with the CSCE is not necessary with ExamTools conducted exams.

Applicants who pass one or more test elements or receive exam element credit which earns a new or upgraded license receive a Certificate of Successful Completion of Examination (CSCE) indicating the element(s) passed and the license class earned (§97.509(i)). The VEs certifying the CSCE must be the same ones who certify the NCVEC Quick-Form 605.

VEs should use the current W5YI 3-part carbonless CSCE form. VE teams are not permitted to create their own CSCEs, however for the time being they may print CSCEs from the official PDF if they are out of 3-part forms. For security reasons it is very important that all 3 copies be accounted for if any CSCE is voided or destroyed.

Give the white original copy to the successful applicant. Advise the applicant to always retain the original and a copy of all CSCEs in the event they later need to prove a previously passed test element.

A CSCE serves as evidence of credit for an exam at a subsequent exam session and is valid for 365 days from the date of issue (§97.505(b)).

VEs of any VEC organization are required to accept valid original CSCEs issued by any VEC. Each Certificate issued must be signed by three VEs.

3.1.7 Application Fees

Don't forget to remind NEW and renewing applicants to log into the FCC CORES login page to pay the mandatory $35 FCC Application Fee (§1.1102(c)) within 10 calendar days. The applicant will receive an email from the FCC with instructions on how to pay the fee.

However, the applicant does not have to wait for the FCC email. They would just simply go to the site https://apps.fcc.gov/cores/paymentFrnLogin.do and enter their FRN and password to pay the fee. This must be done on a computer, ***not*** a cell phone or tablet anytime after W5YI processes the session and uploads it to the FCC, typically this can be done by the end of the next business day.

If the fee is not paid within within 10 calendar days from the date W5YI submitted the application, the FCC will dismiss the application for non-payment and the applicant will not receive a callsign.

If the applicant fails to pay the FCC fee and needs their application to be resubmitted, please submit by email to vec@w5yi-vec.org the Applicant's FRN, City, State, and date of the Session they attended. W5YI will submit the application for a 2nd time at no charge. If the application has to be submitted for a 3rd time, the applicant will need to pay $14 directly to the W5YI office. Note that there may be a significant delay before W5YI is able to resubmit the application as it often takes an additional 8 days for the FCC to clear out the dismissed application.

3.1.8 Manifest of Applicants

The Manifest of Applicants is used to document names, call signs and telephone numbers of every applicant in a test session. It also includes those upgrading, renewing, or updating their info without taking an exam. The form documents exams attempted and results.

The Manifest also lists the names, call signs and accreditation numbers of all VEs who assisted in the session. Contact the W5YI office for copies of the form. ExamTools generates the Manifest of Applicants automatically upon finalizing the session.

3.1.9 Prepare the Session Package

All VEs are responsible for the session paperwork! Fortunately, with ExamTools, the session paperwork is simple to do; the CVE clicks "Finish Session", and the paperwork is completed. Print the "Final Forms" PDF and download the W5YI export file.

If you're not using ExamTools, re-count the successful applications. Check all the tallied numbers

on all Manifest of Applicants sheets and make sure that all summed numbers are accurate.

If you don't have a credit card on file with the VEC Office, paper clip a check made out to W5YI to the front of the Manifest for the amount of the test fee calculated. The *Total Applicants* line on the Manifest is multiplied by 50% of the current exam fee.

Recheck the NCVEC Quick-Form 605s. Is section 2 properly checked with the correct class of license? Have all three VEs signed the form? Is the VEC, date and location filled in? See Appendix D for more details.

If an applicant upgrades or is given credit for a former license, staple all the credit documents (if any) for each applicant. Include a copy of any current license, and a copy of any CSCEs related to the credit. Mark the Manifest with "C" in the appropriate Element box the applicant is getting credit for.

DOUBLE-CHECK the information on the NCVEC Quick-Form 605 and make certain that all required information (see 3.1.5 Certify the NCVEC Quick-Form 605s) *BEFORE* **submitting to W5YI.**

Paper clip the pink copy of the CSCE to the front of the NCVEC Quick-Form 605 and all answer sheets for each *passed exam* to the back. ***Do not send a NCVEC Quick-Form 605 application unless an FCC license is to be issued.*** The VEC Office does not need paperwork for "failed" applicants; however, the CVE is required to keep the failed exam with their copy of the Session for future reference should it be needed.

Except in cases in which applicants earn an upgrade based on exam element credit, applications for new or upgraded amateur licenses submitted without applicant-written answer sheets will be placed on hold without VEC/FCC action until the paperwork is received in the VEC Office and the issue is resolved.

3.1.10 Send the Results to the VEC Office

When using ExamTools, all standard 'paperwork' is contained in two files, "Final Forms" and the "W5YI" download (.pdf file & .dat file). Upload ***BOTH*** files to the W5YI Dropbox. Additionally, place any supporting documents (eg. for element credit) in the W5YI Dropbox along with the .pdf & .dat files and send an email to vec@w5yi-org.org with an explanation.

If you conducted a non-ExamTools session, send the following forms to W5YI:

● The completed NCVEC Quick-Form 605s for PASSING applicants only
● The pink VEC copy of the CSCEs
● All passing answer sheets with Exam Series # indicated at the top
● Copies of any expired operator licenses or CSCEs used for element credit
● Manifest of Applicants
● Payment for the W5YI portion of the exam fees

As soon as possible after the session, all forms and documents should be mailed First Class or sent via UPS to the W5YI office, see 2.11 Communicating with W5YI.

It is W5YI policy that session results and documents be forwarded to the W5YI office within 10 days of the session date. If for some reason there is a delay in the mailing of session results, the CVE should contact the W5YI office and advise of the delay. This rule applies even if the data is electronically transmitted to the W5YI office.

Do not send the original white copy of the CSCEs to W5YI. Applicants should retain the team copy of their CSCE as permanent proof of exam completion; the team retains the yellow team copy. Only the pink copy goes to W5YI. See 3.4 CSCEs and Operating Authority.

3.1.11 Record Retention

Copies of all papers associated with a session must be retained by the CVE until it is ***confirmed that the W5YI has processed the session paperwork and you have ensured that all applicants received their new license or upgrade.*** Be certain to protect all testing materials against disclosure.

In addition, the CVE must keep a record of tests that an applicant has failed in order to ensure that the applicant won't be administered the same test should they return for another attempt (**§97.509(f)**).

3.2 Using ExamTools for In-person or Remote Exams

Whether conducting an exam in person or or remotely with ExamTools, the process is the same. CVEs create a session on https://exam.tools, which publishes the session on the HamStudy website https://hamstudy.org/sessions. Applicants register for the session and complete their application online. When the session is in progress, applicants log in to the ExamTools website to take an exam and grading takes almost no time.

Complete instructions about how to use ExamTools are available in the VE Documentation linked from the ExamTools website.

3.2.1 In person with tablets.

The preferred method of conducting ExamTools sessions is with tablets; many teams have decided to use the Amazon Fire HD 8 tablets, because they are a good size, have very clear screens, and can be obtained for as little as $20 if one watches for fairly frequent sales.

W5YI requires using tablets which are "locked down" to prevent applicants from accessing any resources that may allow them to obtain answers. Applicants log in, enter the team identifier, a PIN, review registration information for accuracy and begin testing. At the end of the test, applicants click "Grade Exam" and a VE authorizes the system to grade. If the applicant passes, they can either finish and sign forms, or take the next level exam.

3.2.2 Paper GradeCam session

Exams may be conducted in a mixed fashion, where applicants register using ExamTools but take exams on paper. ExamTools allows CVEs to print exams and answer sheets. VEs can grade answer sheets using the GradeCam™ feature included with ExamTools. Visit the ExamTools website for complete instructions about GradeCam. Exam results are submitted electronically similar to fully remote exams.

3.2.3 Hybrid session

Sessions may be conducted with a mixture of GradeCam paper exams and tablet exams.

3.3 Remote Exams

When conducting remote exams, W5YI recommends using *Zoom* for video conferencing, but VEs may use other systems. Zoom allows applicants to share the screen of their computer, tablet or phone, and permits VEs to monitor both the applicant's actions and computer screen simultaneously.

Free accounts with Zoom and other vendors typically limit the number of attendees and the length of a meeting, making it unsuitable for remote testing. CVEs should set up a paid subscription with the conferencing company.

Zoom is a very rich application. It's beyond the scope of this Manual to teach how to use every feature. Fortunately, Zoom offers many tutorials. Please visit the learn Zoom website for the basics of

Zoom. Before attempting to conduct remote exams, you should be trained with a team that is experienced in conducting remote exam sessions because we have specific requirements in the way Zoom is used for remote exams.

3.3.1 Exam protocols

There are strict rules and protocols for maintaining the integrity of the testing environment. For the applicant, non-compliance requires the VE team to end the exam immediately. Each CVE should publish detailed requirements that may be specific to their session and make them available to all applicants, e.g. via a website.

3.3.2 Minimum Technical Requirements for VEs

- VEs must have a working computer or laptop with a webcam, microphone, and speaker. A headset with a boom mic is highly recommended.
- The computer must be connected to the internet with a reliable connection.
- VEs must download, install and test Zoom (or preferred client software) on their computer.
- The computer should be plugged in and not running on battery.
- VEs may use more than one monitor. Some VEs prefer to have the video conference running on one monitor while ExamTools is running on another. Some VEs even use a separate computer or tablet running ExamTools as a second display.
- VEs should be in a location with good lighting and without a distracting background. Avoid bright lights behind you as this will cause your image to be too dark.
- Make sure the VE's room is quiet and free of distractions.
- Always test the VE camera, microphone and speaker before the session begins.

3.3.3 Session Etiquette

- Be on time. The exam proper has a specific start time, but VEs should start the video conference early before the applicants arrive to introduce all VEs involved.
- VE cameras must remain on throughout the exam.
- Mute VE microphones unless you need to speak.
- Because the applicant shares his or her screen, VEs can see how applicants answer each question. Since the applicant can see all VEs, VEs must not react to the answers. Not only is this distracting, it may also lead the applicant to change an answer. It is recommended that VEs keep the shared screen fairly small so VEs are not tempted to react while still being able to monitor the applicant's screen to ensure that they remain engaged with the exam.
- Be careful when using chat that messages are not sent to 'Everyone'; the applicant could see those messages.
- Do not eat on camera when applicants are present.

3.3.4 Minimum Technical Requirements for Applicants

- Applicants must have a working desktop or laptop computer, tablet or phone with a webcam, microphone and speaker (no headphones are allowed).
- The computer must be connected to the internet with a reliable connection.
- Applicants must download and test Zoom (or preferred client software) on their device.
- The device should be plugged in or fully-charged.
- Applicants must have only one screen or monitor active during the session. Remove or cover any additional monitors or take a laptop into a different room.
- A cell phone or tablet may be necessary if the applicant's webcam won't focus on their ID or if a webcam is fixed in place and can't be used to scan the room. The second device would also need

to have Zoom installed.
- Virtual backgrounds are not permitted. Blurred backgrounds are not permitted.

3.3.5 Preparing the Room

- Applicants should make sure they are not interrupted during the exam.
- Other people may not be in the room. If testing a minor, an adult may remain in the room but have no contact with the applicant, and should be seated behind the applicant and remain on camera.
- Applicants should clear the testing area of all non-exam materials, notes, books, posters, computer screens, or anything that could aid in taking the exam.
- Applicants should clear desks and floors of all items within reach or view that would raise suspicion, such as papers, sticky notes, electronic items, and indeed anything not necessary for the exam. **Specifically, applicants are not allowed to use earbuds or headsets as they prevent us from hearing everything the applicant hears.**
- If the applicant's internet service is unstable and they are using WiFi, ask them to change position or move to another room closer to the router, or to connect using ethernet.

3.3.6 Conducting an Applicant's Exam

As mentioned earlier, applicants use *HamStudy* to locate and sign up for a session, and complete all application paperwork online. Once registered, HamStudy will issue a *personal identification number* (PIN) for the applicant. When directed during the exam session, applicants log in to ExamTools to take an exam.

A VE should be chosen to lead and instruct the applicant on how to use ExamTools and the video conferencing system. We discourage the use of a "script" while guiding applicants because it is easy to focus on the script, and not remain aware of what the applicant is doing.

During a remote session, the CVE or a designated VE greets applicants and guides them through the exam process. This person should be knowledgeable about computers and have a thorough working knowledge of both ExamTools and Zoom or other conferencing software. Remember, if something goes wrong with the applicant's computer, we become tech support.

Before the applicant enters the room, remind the VEs that their cameras are on at all times and the applicant can see them.

Either prior to or when the applicant joins the meeting, start recording and continue recording at least until the applicant leaves the session; however, it is not mandatory to record the applicant's ID.

Greet each applicant and guide them through the exam process, and grade their exams when they are finished. A list of points to cover are in Appendix E. Some VEs will make themselves a reminder list and put it on a sticky note attached to their monitor, for ease of reference while still remaining aware of what the applicant is doing while they are guiding the applicant.

If the applicant fails, then the session is concluded. W5YI requires VEs to sign for failed online applications. Applicants can retake the element provided they pay an additional fee.

Successful applicants will review the NCVEC Quick-Form 605 and their CSCE, then 'sign' their paperwork. VEs will use ExamTools to electronically sign the NCVEC Quick-Form 605s and CSCEs. The CVE or their designee will direct ExamTools to send applicants a copy of their CSCE by email.

Once all applicants have been processed and all VEs have signed, the CVE will verify the VE roster and then finish the exam session. The CVE will upload the completed documents to W5YI. W5YI will compile and upload the session to the FCC. Turnaround is extremely fast with most applicant information being submitted to the FCC the morning of the next business day.

3.3.7 Breakout Rooms

Zoom and other conferencing platforms allow CVEs to create one or more "breakout rooms" during a session. If there are many applicants and a sufficient number of VEs, several applicants can be tested at the same time. As explained earlier, CVEs must make sure there are at least 4 VEs in each room.

If using breakout rooms, CVEs should appoint one VE to each room to manage the room. The CVE (meeting host) should also grant recording permission to a VE in each room.

3.4 CSCEs and Operating Authority

The CSCE is not a license or permit. It is simply an acknowledgment that the holder has passed certain exam elements. This document covers both the "instant upgrade" and "written credit" needs of the Volunteer Examiner program.

Applicants who pass their first license requirement (new hams) are issued a CSCE, but must be advised that they cannot transmit on the amateur airwaves until they actually receive a call sign from the FCC—that is, a license grant appears in the FCC database. This also applies to formerly licensed amateurs who have let their licenses expire.

If a currently licensed amateur passes and earns a license upgrade, the CSCE serves as evidence that the applicant is authorized by § 97.9(b) to operate on a temporary basis with the rights and privileges of the higher operating class for up to 365 days while waiting for the upgraded license.

VEs must advise every applicant that when temporarily operating outside the privileges of the previous license that the applicant must append a two letter identifier (listed in §97.119(f)) to their call sign preceded by either the slant mark (/) when using a telegraphy or digital mode, or the words, "temporary, stroke, or slash" when using a voice mode. No special identifier is required when operating within the privileges of the previous license.

Appendix A: Question Pools

In 1986, the FCC granted responsibility for maintenance of the written examination questions to the National Conference of VECs (NCVEC). This group represents all VEC organizations.

The NCVEC appoints a Question Pool Committee (QPC) to review, revise and approve all question pools according to a schedule. All VEC organizations and their VEs use identical question pools as required by §97.523.

There are three question pools: Technician, General and Amateur Extra Class. VEs should check the W5YI VE News web page or the NCVEC website for the latest updates to the question pool schedules or changes to the question pools that would affect examinations.

Revision Schedule

The QPC revises the three question pools on a rotating 4-year schedule, with old exams expiring on June 30 every four years, and new exams becoming valid at midnight UTC on July 1. New question pools are published several months before taking effect. This allows publishers adequate time to write, distribute and sell study materials and gives the amateur community time to review and submit feedback, which can result in questions being clarified or removed. The 4-year schedule for the question pools is:

Technician	Element 2	2022, 2026, 2030, 2034, etc.
General	Element 3	2023, 2027, 2031, 2035, etc.
Amateur Extra	Element 4	2020, 2024, 2028, 2032, etc.

VEs must be sure they are using the current question pools when giving exams. If VEs administer an out-of-date examination, they must re-administer a valid exam to the applicant at no charge. ***Always double-check the Exam Series # of the exams you are giving to make sure they are from the CURRENT Question Pool.***

Numbering System

The QPC has developed a five-character numbering system to systematically identify every examination question in every question pool. For example: **G1A01**

The first character identifies the license class of the question pool.

T = Technician; G = General; E = Amateur Extra

The second character is the subelement number. For example:

1 = Commission's Rules

2 = Operating Procedures

3 = Radio Wave Propagation

4 = Amateur Radio Practices

5 = Electrical Principles

6 = Circuit Components

7 = Practical Circuits

8 = Signals and Emissions

9 = Antennas and Feedlines

0 = Safety

The third character is always a letter of the alphabet, and refers to the syllabus group of the question, as specified in the syllabus for the question pool. There are always as many subjects (or syllabus groups) within a subelement as there are questions from the subelement on an amateur examination.

For example, if the examination is to contain nine questions from a given subelement, then there will also be nine syllabus groups of questions designated with a sequential letter in the subelement. These nine groups are designated: A through I.

The fourth and fifth characters are the sequential numbers within the syllabus group. Two characters are always used, even for numbers that are normally a single digit. (A zero is used as the "tens" digit for the numbers 1 through 9.) The FCC rules require that a question pool contain at least ten times the number of questions as will be used on a single examination. While the "ten times" rule applies only to the entire question pool, the QPC applies it to each sub-element and even to each syllabus grouping as well. Thus each group has at least ten questions and usually more to allow for future deleted questions caused by changes in technology or FCC rules.

A complete list of the current pools can be found on NCVEC website for download and review. There are 35 questions each on Element 2 and 3 exams, and 50 questions on Element 4 exams.

Making Your Own Written Exams

§97.507 allows session managers to design their own written tests. Some of the reasons that session managers may wish to design their own tests are:

- To accommodate visually impaired examinees. However, since all teams must now use ExamTools to generate exams, and ExamTools has the ability to generate exams without diagrams, this reason no longer applies.
- To generate exams that are more difficult or easier than the randomly generated exams, or that emphasize different material from the randomly generated exams, because they believe that the randomly generated exams are too easy or too difficult for their candidates to pass, or emphasize the wrong material.

The fairest exams are those that are randomly generated. A team that designs their own exams to make them easier or more difficult than randomly generated exams jeopardizes the integrity of the testing and licensing process, one of the W5YI principles enumerated in the Preface. Furthermore, teams that design exams that intentionally omit questions from the question pool risk violating the QPC principle that each group from each subelement should contain at least ten questions. Even if W5YI were to require that every custom-designed exam be approved in advance by W5YI (which they do not have the resources to do), it would be impossible to verify that the exam meets the quality criteria established by the QPC unless W5YI also approved in advance the methodology used by the team to select the questions.

For this reason, W5YI does not permit teams to design their own exams.

Appendix B: FCC Call Sign System

All first-time and previously-licensed amateurs whose two-year call sign grace period has expired will receive a new call sign. This call sign will be systematically issued from the alphabetized group appropriate for the examinee's license class. When all sequential call signs are allocated within a group, call signs are assigned from the next lower group.

Upgrading amateurs who elect to receive a new call sign will receive a sequential call sign at no cost from the appropriate call sign group. For complete information about call signs, see the Amateur Call Sign Systems page at the FCC.

Since 1996, licensed amateur radio operators may select a call sign of their choice. The key word is "licensed." Although the Vanity Call Sign System is completely separate from the VEC System, W5YI believes it important that VEs advise examinees about its existence.

A licensee requests a vanity call using the ULS License Manager. The applicant can list up to 25 calls in order of preference; the FCC will choose the first available call from the list. The applicant's license class determines the allowable formats of the vanity call. Vanity calls must be selected from a group that coincides with the applicant's license class or a lower license class.

Amateur Extra Class licensees may select Group A, B, C or D format station call signs. Advanced Class licensees may select Group B, C or D call signs. General and Technician Class licensees may select Group C or D format call signs. And Novice Class licensees may select only Group D (2 by 3) format call signs.

The W5YI offers a service to licensees who wish to apply for a vanity call sign. Visit the w5yi-vec.org page or call for more information.

Appendix C: Distributing Study Materials and Teaching Classes

Volunteer Examiners may distribute license preparation materials to applicants with or without a profit. Volunteer Examiners may also teach license preparation classes, with or without a fee, and participate in license examinations at the completion of the course. Three VEs are still required and all Part 97 Rules must be followed.

Under no circumstances should an applicant be required to purchase study materials or attend an instruction class for which a fee is charged as a prerequisite to taking a license examination. The only fee that an applicant may be charged is the examination fee established by W5YI in effect at the time of the exam.

Appendix D: NCVEC Quick-Form 605 (July 2022)

Section 1 (Filled out by the applicant in blue or black ink)

All applications are compared against the FCC's database before a license is granted. Upgrading applicants can expect long delays if their applications are rejected because they do not match up with a previously submitted and approved application. Illegible handwriting causes many applications to be rejected by the VEC.

Name: Applicants should carefully **print** their name, last name first, followed by any suffix (Jr, Sr, etc.), followed by first name and optionally a single middle initial. *Mr, Mrs, Ms, Rev, Dr, MD, PhD, etc. prefix or suffix are not allowed by the FCC. The name must be the same as the name on their legal government issued ID.*

Mailing address: Applicants must list a US mailing address where the US Postal Service can deliver mail. It is not necessary that the applicant operate an amateur station at or even live at this address. It may be a post office box, general delivery, rural route or APO or FPO (US military in foreign country) address. Use 2-letter state codes (including AE, AP, or AA) and either a 5 or 9 digit ZIP code.

Applicants residing in foreign countries *must* show a US mailing address. Foreign nationals are permitted to hold US amateur radio licenses and call signs as long as they provide a US mailing address. They need not live at this address; it is merely an address where they may receive mail. They **must** provide this address independently of the VE team. In other words, foreign nationals may not simply use one of the VE team's addresses; they must have their US address established before coming to the VE

team for an exam.

Email Address: The FCC *requires* a valid email address.

Station Call Sign: This is the applicant's current call sign if applicable. Leave it blank if the applicant is not licensed.

FCC Registration Number: All applicants *must* enter their FRN. The VEC cannot process applications missing an FRN.

Daytime Telephone Number: The VEC office likes to have the applicant's daytime number on file in the event that we need to contact the applicant for additional information. They may choose to omit it; if they do, ask them if you can record it on the manifest which won't go into the FCC ULS record.

Basic Qualification Question (BQQ): This field is required**.** If the answer to the BQQ is "YES," VEs may administer a test, however the applicant should be informed that W5YI will be in touch by email with further instructions. More information is on the back of NCVEC Quick-Form 605. ***Do not inquire about the details of the applicant's situation. Do not request or accept the required documents that the applicant will have to provide to the FCC.***

I hereby apply for (Type of Application): The applicant checks the appropriate boxes.

☐ EXAMINATION for a new license grant

☐ EXAMINATION for upgrade of my license class

Applicants will either have no amateur license and will be applying for a new license, or will have an existing license and will be applying for an upgrade, or will be requesting an update to their contact information or renewal of their license. Those with no license should check "EXAMINATION for a new license" and those with a license who are upgrading should check "EXAMINATION for upgrade." Applicants for a license upgrade will have the same expiration date as their current license, unless they are in their renewal window and request renewal.

☐ CHANGE my name on my license to my new name

☐ CHANGE my mailing address to above address

Licensed applicants requesting a change of name (which requires additional documentation be supplied to the FCC) or mailing address should check the appropriate boxes.

☐ Applicants whose license grant expires within 90 days should check "RENEWAL of my license grant". ***Upgrading applicants who are expired but within the 2 year grace period MUST renew the license BEFORE the upgrade can be processed.***

☐ CHANGE my station call sign systematically

New Technician and General Class applicants residing in the continental US are initially assigned 2 by 3 call signs in strict alphabetical order. A 2 by 3 call sign contains two prefix letters, a radio district number, and three suffix letters; KA7XYZ is an example.

Applicants who upgrade to Extra Class are initially assigned a 2 by 2 call. All 1 by 2 and 2 by 1 format call signs have been allocated and can only be obtained through the Vanity System.

When all call signs within a group are assigned, call signs from the next lower group are then issued.

Important: A call sign will not be changed unless the applicant checks the box *AND* initials in the space provided (initialing is not applicable when using ExamTools). ***If both are not completed, the callsign will remain unchanged.***

Signature and date: Applicants must read and certify the general statements contained above the signature line including that "I have read and will comply with Section 97.13(c) of the Commission's Rules regarding radiofrequency (RF) radiation safety and the amateur service section of OST/OET

Bulletin No. 65". The applicant's name on the first line of the form must match the signature.

Persons with a disability who are unable to sign their name must have their "mark" witnessed. The witness should also sign on the signature line. W5YI does not accept a "Power of Attorney" authorization.

The "Date Signed" will ordinarily be the same as the day of the test session.

Section 2 (Filled out by all VEs)

The VE team uses this section to certify the successful completion of examinations. Depending upon the elements the applicant either passed by exam or for which credit was proven, check the appropriate box for "TECHNICIAN", "GENERAL", or "AMATEUR EXTRA."

If the examinee did not qualify for a new or upgraded license, check the box "NO NEW LICENSE OR UPGRADE WAS EARNED".

Date of Examination Session: Enter the examination session date in MM-DD-YY format (02-05-00).

Exam session location: Enter the city and state (or other geographical area including the country if outside of the US) of the test site.

VEC Organization: You must enter "W5YI".

VE receipt date: Leave this line blank. This box is used by W5YI to date-stamp the NCVEC Quick-Form 605.

Certification Section: This is the most important section of the NCVEC Quick-Form 605. Using blue or black ink, each accredited Volunteer Examiner must print his or her name and call sign, and sign and date in the appropriate place. VE accreditation numbers should be entered next to each name. Rubber stamps of signatures will not be accepted.

Appendix E: Points to cover when guiding Remote Exams

- Check the applicant's ID.
- Check the room, a slow 360 pan around the room about eye level, looking for posters, whiteboards, notes, other people, anything that looks like it might help with the exam. Things to the side or behind the applicant are less important than what's on the desk or immediately in front of them.
- Tell the applicant how to share their screen, for example: "At the bottom of your Zoom window, there's a green 'Share Screen' button, please select and click the blue 'Share' button in the lower right corner of the window that pops up". If they are on a Mac, they may need to open System Preferences and allow Zoom permission to record the screen.
- Verify the applicant doesn't have other programs running besides Zoom and a calculator. Verify that the calculator history and memory are cleared.
- Ask the applicant to open a web browser and go to examtools.org (exam.tools confuses some people).
- Ask the applicant to click on 'JOIN EXAM SESSION'.
- Inform the applicant of the team identifier and their PIN and ask the applicant to click 'join session'.
- Ask the applicant to verify the information on their screen then have the applicant click to start the appropriate exam.
- Give a *brief* overview of the test process, eg: "We suggest you minimize the Zoom window, then you will see '35(/50) remaining' in the upper right corner, that will count down as you answer questions and when you have answered all the questions it will turn into a 'Grade Exam' button;

when you're ready for us to grade your exam, press that button. You may answer the questions by pressing A/B/C/D on your keyboard or by clicking with your mouse; if you use your mouse, you have to scroll, just like any other web page, and finally, if you see any diagrams, you can click on them to zoom in; click again to shrink them and go on answering questions. Any questions about the exam process? Ok, we're going to mute our microphones so we don't disturb you, good luck".   We suggest keeping the instructions brief to avoid overloading the applicant with too much unnecessary detail when they're starting an exam. If you see the applicant acting confused with the exam process, a VE should unmute and offer assistance, if needed.

- Grade the exam after the applicant presses 'Grade Exam'.
- If the applicant passes, and if there is sufficient time, ask if the applicant is ready to pass the next exam, eg: "Have you studied for, and are you prepared to pass the General class/Amateur Extra class exam?"   If they have studied and are ready to pass, have them start the next exam. Otherwise, tell them to press the "Finish and sign forms" button, then Finish and Sign. (The CVE has the option to require candidates to inform the CVE at the time of registration if the candidate wishes to take multiple exam elements, so that the CVE can ensure that there is sufficient time.)
- Guide the applicant through reviewing the NCVEC Quick-Form 605 and CSCE. Ask the applicant to check over the forms and make sure everything is correct. Encourage the applicant to verify everything on the forms; people do make typos and mistakes filling out the forms, and this is the opportunity to catch those errors.
- Instruct the applicant to type their name on the line and sign in the box using the applicant's mouse, touchpad or touchscreen.
- Have the applicant click 'Sign Documents', and then Logout.
- Ask the applicant to click the red "Stop Share" button that's probably at the top of their screen.
- Inform the applicant that their application will be submitted to W5YI which should process it on the next business day and submit it to the FCC. If the applicant is applying for a new license, inform them that the FCC will send a notice to pay the fee, and that the license should be issued the morning after the applicant pays the fee (if they pay during business hours). If they are upgrading, advise the applicant the upgrade should be posted the next business day.
- Ask the applicant if they have any further questions, offer congratulations, and let them know how to leave the meeting, by pressing the red "Leave" button, or the blue "Leave Room" button if in a breakout room, then select "Leave Meeting".
- If the applicant fails the exam, and the VE team isn't going to allow a retest, have the applicant stop screen sharing before talking to them further; this way they can see who is talking.

Appendix F: Change Log

2024.1 Revisions

- Clarified confidentiality of PII ([2.2](#)) ([2.9](#))

2024.0 Revisions

- Changed "W5YI-VEC" to W5YI.
- Made clear that if a CVE has someone else run their session for them, that the CVE is not entered on the manifest. ([2.3](#))
- Removed old 2.2 mailed copies of part 97 and this manual.
- Invoices are considered due upon receipt and past due after 14 days. ([2.4.3](#))
- Clarified allowable scope of activities ([2.9](#))

2023 Revisions

- Updated W5YI address, email, and phone number. ([2.11](#))
- Allow informing applicants which question they missed (T1E01, etc). ([3.1.4](#))
- Reduced video retention period to 45 days. ([2.10](#))