



**ENGINEER
CERTIFICATION
PROGRAM**

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Section 1: General Information and Elections.

CN – US OPERATION

Canadian National Railway owns the following railroads in the US, which are jointly operated under the identification CN:

Illinois Central Railroad
Wisconsin Central Ltd.
Grand Trunk Western Railroad
Duluth, Missabe & Iron Range Railway
Elgin, Joliet & Eastern Railway
Chicago, Central & Pacific Railroad
Duluth, Winnipeg, & Pacific Railroad
Bessemer & Lake Erie Railroad
Cedar River Railroad
Fox Valley & Western Railroad
Sault Ste. Marie Bridge Company
Pittsburgh & Conneaut Dock Company

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A. Election to train 240.103(b)(1):

CN accepts the responsibility to educate previously untrained persons to be qualified engineers and/or remote control operators (RCO). The training program is described in Section 5 of this document and will be delivered by CN personnel or outside contractors.

B. Classes of Service 240.107(b):

Locomotive engineers or remote control operators must be certified in the appropriate class of service in order to operate a locomotive. Engineers must have a locomotive engineer certificate and remote control operators must have an RCO certificate in their possession while operating a locomotive and must display that certificate when requested by a company officer or FRA representative. CN will issue certificates for the following classes of service:

1. **Train Service Engineer.** Train service locomotive engineers are permitted to operate locomotives with or without cars in yard or road service.

2. **Remote Control Operator.** Remote Control Operator may work with equipment by means of a stationary or portable controller. This equipment will be used in gathering and distribution of freight and/or equipment that is typically required of yard, road switcher, and during the loading and unloading of bulk commodities at Conneaut, Ohio and Escanaba, Michigan.
3. **Mechanical Engineer.** Mechanical Engineers are employees of the Mechanical Department, who may operate as follows:
 - Move locomotive consists outside of Blue Signal areas
 - Move cars of supplies inside mechanical facilities
 - Move cars inside repair facilities

Supervisory Mechanical Engineers may operate as indicated above plus:

- Rerail cars or engines outside Blue Flag limits or Yard Limits
- Switch freight cars

Mechanical Engineers are restricted to operating at speeds not to exceed Restricted Speed, and under normal circumstances except when rerailling cars or locomotives, may not operate on a main track outside of Yard Limits.

4. **Yard Engineer.** Yard Engineer is the designation for locomotive engineers who are qualified to operate in terminal areas only, and not in over-the-road service. Yard Engineers are primarily transportation supervisors who were not locomotive engineers before being promoted, and who have not received the training required to be Train Service Engineers. P&C Dock utilizes Yard Engineers to shove cuts of cars for loading/unloading. They may also be other locomotive engineers who no longer have the skills required to be Train Service Engineers. Yard Engineers are restricted to operating at speeds not to exceed Restricted Speed.
5. **Student Engineer.** Certified Student Engineers may operate locomotives under the close supervision of a certified locomotive engineer and will be governed by the limitations of that class of service.
6. **Student Remote Control Operator.** Certified Student Remote Control Operators may operate a portable controller under the close supervision of a certified Remote Control Operator.

For those individuals qualified in two categories, certificates will be issued to reflect both Train Service Engineer/Remote Control Operator and Yard Engineer/Remote Control Operator.

Section 2: Selection of Supervisors of Locomotive Engineers

Contact Person: Kevin Brockman

A. Designating Supervisors 240.105.

The following procedure will be used for designating supervisors of locomotive engineers:

Only certified locomotive engineers or remote control operators will be considered for qualification as "Designated Supervisor of Locomotive Engineers" (DSLE). Candidates will receive instruction on the requirements of Part 240 and the CN engineer certification program. The instruction must be administered by a current DSLE, who will provide the candidate with a current copy of 49 CFR Part 240 and the CN Engineer Certification Program.

Candidates must pass a 25-question multiple-choice examination covering the engineer certification regulation. A minimum score of 90% is required.

The Program Administrator will determine if the candidate meets the requirements of 240.105(b). In making the determination, consideration will be given to the candidate's train handling knowledge and skill level, and written examination score.

If the above requirements have been satisfied, the candidate will be designated as a supervisor of locomotive engineers. The name of the newly designated supervisor will be added to the written document required by 240.221(a).

B. Qualifying Designated Supervisors of Locomotive Engineers on Territory. 240.105(a)

Designated Supervisors of Locomotive Engineers (DSLE) will be required to make a sufficient number of qualifying trips over the territory to effectively instruct and evaluate the engineers. The DSLE must also pass a written examination on the operating instructions and physical characteristics of the territory pertaining to track speeds, methods of operation, timetable special instructions, and any other unique peculiarities of that territory. If the DSLE has not performed duty on the particular territory within one year, he/she must requalify on the territory. The examination required under this section will be placed in the DSLE's file and retained according to 240.215(d).

Section 3: Training Persons Previously Certified.

Contact Person: Kevin Brockman

A. Continuing Education 240.123(b)

CN will provide continuing education for previously certified locomotive engineers and remote control operators to ensure they maintain the necessary knowledge and skill concerning personal safety, operating rules, mechanical condition of equipment, methods of safe train handling (including familiarity with physical characteristics), and relevant Federal Safety Rules. On-going education will occur throughout the 36-month certification period at various locations, and will incorporate classroom-style and on-site training and testing. Curriculum content will be revised at least once prior to beginning a new re-certification cycle to ensure that employees receive a progressive continuing education.

Locomotive Engineers and Remote Control Operators are required to attend a recertification class during the 36-month certification period. Instruction and discussion with the engineer or operator includes:

- Personal Safety
- Operating Rules
- Mechanical Inspection of Equipment
- Train Handling
- Code of Federal Regulations

A written examination is administered prior to completion of the class; passing score of 85% must be attained. The examination for Train Service Engineers will not be less than 100 questions; Mechanical Engineers, Yard Engineers, and Remote Control Operators not be less than 50 questions. Skills Rides performed on simulator must attain a passing score of 80%.

In addition to the mandatory formal training listed above, locomotive engineers and remote control operators will also receive training in the form of:

- Safety Meetings
- Remedial training if determined they are deficient in any area
- Posted instructions – Operating Bulletins and Bulletin Notices
- Post accident or incident remedial training
- Supervisors of Locomotive Engineers riding with the Engineer/RCO in addition to Annual Monitoring Ride

B. Territory Qualification.

Locomotive engineers must be familiar with the physical characteristics of the territory over which they are required to operate. CN certified engineers are territory qualified if they have operated over the territory as: a train service engineer; a student engineer under the direct supervision of an engineer instructor; or a trainman as follows:

- Previous 12 months when speed is greater than 50 MPH.
- Previous 36 months when speed is between 20 MPH and 50 MPH.

EXCEPTIONS: On heavy grades; Steelton Hill on the Superior Subdivision, Proctor Hill on the Missabe Subdivision, Mintac Hill on the Mintac Subdivision, L'Anse on the Marquette Subdivision and Two Harbors Hill on the Iron Range Subdivision, they must observe the territory every 12 months.

Engineers who have never been qualified on a territory must operate with an engineer pilot who is qualified on the territory. If the certified engineer is re-qualifying on territory he/she was previously qualified to operate over, the pilot may be a trainman on board the controlling locomotive who is assigned strictly as a pilot.

A Supervisor of Locomotive Engineers will determine the number of familiarization trips needed and will conclude when and if an engineer is qualified. Except for minimal joint operations, foreign line certified engineers must be qualified on CN US Operating Rules (USOR) before operating without a pilot.

Unless the average grade is greater than 1% over 3 continuous miles, a pilot is not required when:

- Operating on track other than main track or,
- The maximum distance to be traveled is 1 mile or less or,
- The maximum speed for any operation on the track does not exceed 20 MPH or,
- Operating rules require every movement to proceed prepared to stop within one half of the range of vision of the locomotive engineer.

C. Addressing Changes.

When the need arises for training in the area of new technology or new operating rules, the training will occur in the form of safety and improvement classes. These types of classes are conducted at various locations and times across the system until the information has reached the affected engineers. This training can be either voluntary or mandatory, depending upon the safety sensitivity of the subject matter, and may be delivered in any form of training medium.

Operating Bulletins and Bulletin Notices are used to communicate rule changes, changes in physical plant affecting train operation, and other matters such as new or changed operating practices or safety policies. Engineers and RCOs are required to read these at the beginning of each tour of duty.

D. Methods for Familiarizing Locomotive Engineers with New Territory, Newly Acquired Rail Line(s), or Re-Opening Long Unused Routes.

In situations where there is no available means to afford locomotive engineers the opportunity to obtain the operating skills and physical characteristics knowledge of a section of track, i.e. train operations are nonexistent, the railroad elects to use hy-rail equipment or lite locomotives as the engineer's vehicle to initially observe and experience the physical characteristics of the new territory. Following this initial training, the engineer will be tested on the operating instructions and physical characteristics of the territory. Prior to the engineer's first solo operation of a train over the territory, the engineer will be qualified by a DSLE, who is qualified and tested on the territory as outlined in 49 CFR 240.127.

Section 4: Testing and Evaluating Persons Previously Certified.

Contact Person: Kevin Brockman

A. Written Knowledge Examination 240.125.

Closed book multiple choice examinations are used to ensure that engineers are knowledgeable in the areas of personal safety, operating rules and practices, mechanical condition of equipment, train handling methods as they relate to physical characteristics of the railroad, and federal safety rules. These examinations are administered at the conclusion of the triennial recertification training described in Section 3.

Questions for the examinations are taken from the CN US Operating Rules (USOR), Safety Rules and Recommended Practices for Transportation Employees (L.I.F.E.), Timetable and Special Instructions, and the US Hazmat Handling Instructions/DOT Emergency Response Guidebook. 85% is the minimum passing score. The examination for Train Service Engineers has a minimum of 100 questions. Mechanical Engineers, Yard Engineers, and Remote Control Operators receive examinations with a minimum of 50 questions.

Engineers/RCOs who fail a written knowledge test will not be allowed to operate a locomotive until they achieve a passing score during a reexamination. Two additional opportunities to take the test will be offered. No examination can be taken more than one time in a calendar day.

B. Skills Performance Examination 240.127.

Skills Performance Examinations will be performed either on a Locomotive Simulator or on a train ride.

1. **Simulator:** Each Train Service Engineer will receive a skills performance examination in conjunction with the triennial recertification training described in Section 3. When performed on the Locomotive Simulator, the examination run is approximately one hour in length. The engineer must make the run alone and without assistance. A designated supervisor of locomotive engineers supervises the program. A minimum score of 80% is required to pass the simulator skills performance examination.

Prior to making a run, each engineer will participate in an orientation session relating to the operation of the locomotive simulator and the associated graphic displays. Additionally, each engineer will receive the following information relating to the run: Track profile, train consist information, timetable and special instructions, track warrants and speed restrictions as required.

- a. Examination scenarios monitor compliance with:
 - CN US Operating Rules
 - CN Air Brake and Train Handling Rules
 - Written directives including Timetable, Operating Bulletin, Track Authority, and General Bulletin Order.
- b. All examination scenarios have:
 - Block signals that display less than a Clear indication.
 - At least one permanent condition specified by timetable that requires affirmative response by the locomotive engineer.
 - At least one temporary restriction specified by General Bulletin Order or Track Authority that restricts or stops train movement because of track conditions, structures, men or equipment working
- c. Alternate events include:
 - Diverging route movements

- Unanticipated stop conditions
- Movement at Restricted Speed
- Equipment inspection practices
- Operating practices, including securing equipment, recharging air brake system, and air brake tests.

d. Deductions are made for the following:

- **Operating Rules - 20 points.**
 1. Speeds of 3mph to 10mph above authorized speed
- **In-train-forces – 35 points.**
 1. Steady state Draft of 205,000lbs to 220,000lbs
 2. Steady state Buff of 190,000lbs to 210,000lbs
 3. Run out force of 150,000lbs to 180,000lbs
 4. Run in force of 150,000lbs to 180,000lbs
- **Train Brake rules – 35 points.**
 1. Emergency brake application to stop train
 2. Automatic Brake release before exhaust stops
 3. Automatic Brake release in critical speed range
 4. Independent Brake applied above authorized speed
 5. Stretch braking in throttle 7 or above
- **Locomotive rules – 10 points.**
 1. Insufficient time allowed between Idle and Set-Up for Dynamic Braking

e. Failure results whenever an engineer:

- Fails to control the train in accordance with a Stop signal indication
- Exceeds the maximum authorized speed by at least 10 MPH
- Fails to comply with the requirements to move at restricted speed
- Occupies a main track without authority
- Allows peak in-train-forces to equal or exceed 300,000 pounds

2. **Train Ride:** The performance skills of certified engineers may be examined while they are at the controls of the type of train they would normally operate in the most demanding territory. A designated supervisor of locomotive engineers must conduct the examination on the segment of railroad where the engineer normally operates for a minimum of two hours or 50 miles for Train Service Engineers. A minimum of 30 minutes is required for Mechanical Engineers, and one hour minimum for Yard Engineers and Remote Control Operators.

A minimum score of 80% is required to pass the skills performance examination. Engineers who fail the examination will not be allowed to operate a locomotive except under the direct supervision of another engineer, until they achieve a passing score during a reexamination. The engineer certificate must not be demoted to student status nor reclassified to a more restrictive class of engineer. A second test will be given within 7 days of the first test or at the completion of any prescribed remedial training. If a second test failure occurs, the engineer will be sent written notification that the railroad intends to deny the engineer certification.

C. Hearing and Vision Acuity 240.121.

Engineers and RCOs will have their hearing and vision acuity checked prior to certification or recertification. Candidates who do not meet the threshold(s) required in 240.121 will be referred to CN Medical Department.

If the Medical Department concludes that, despite not meeting the threshold(s), the candidate has the ability to safely operate a locomotive, they will be certified subject to any restrictions the director determines in writing to be necessary.

Section 5: Training, Testing, and Evaluating Persons not Previously Certified.

Contact Person: Kevin Brockman

A. Train Service Engineers

The Locomotive Engineer Training Program is approximately 24 weeks long and includes approximately 3 weeks of formal classroom training, and 2 weeks of final examination and evaluation. The on-the-job training portion may be shortened for engineers hired with previous experience, and lengthened for those trainees who require more time for territory specific qualification. The skill performance component of the training allows students to experience all types of train operation. The majority of the training will be in road service.

The following describes the program:

Whenever possible, trainees will spend two weeks prior to the beginning of formal training with a locomotive engineer in road operations. The intent is to familiarize the trainee with the locomotive engineer's perspective with locomotive and train handling operations.

Formal training begins with the students attending three weeks of classroom training. Instruction will include lecture and simulator exercises.

The first section is focused on Air Brake and Train Handling Rules. Instruction addresses the operation of locomotive and freight car air brake systems, required air brake tests, train handling rules and procedures, train handling methods, and basic track train dynamics. Hazardous material handling is also covered and includes train placement restrictions and emergency response procedures. The second section is focused on railroad operating rules and includes Safety Rules, CN US Operating Rules, Timetable and Special Instructions. Quizzes and/or examinations will be part of this training to measure progress and provide students with feedback.

During this session students will participate in training on a Locomotive Simulator. The simulator exercises will place the student at the controls of a variety of trains operating over different territories. This instruction provides an introduction to many operating conditions that may be encountered during actual operation.

In the next phase of training, students will return to their training assignment location for approximately 15 weeks of On-the-Job Training (OJT) under the direct supervision of a certified train service engineer. The length of time spent in on-the-job training may vary slightly depending on the type of territory and operation the student is required to learn, plus the experience and abilities of the student.

During the OJT portion of engineer training, a designated supervisor of locomotive engineers will ride with the student at least once during each six- week period. This also will be done to monitor the student's progress, and provide feedback and additional instruction to the student.

Students return to the classroom for a final two weeks of training and review. Training includes basic operation and minor troubleshooting of locomotives with emphasis placed on proper inspection and reporting procedures. A final written examination on this material is administered at the conclusion.

A written examination covering the operating rules and air brake and train handling rules will be administered during the week. The examination consists of at least 200 multiple-choice questions, with a minimum score of 90% required to pass. Questions for the examination are from the Safety Rules, Operating Rules, Air Brake & Train Handling Rules, Timetable and Special Instructions, Instructions for Handling Hazardous Materials, and the DOT Emergency Response Guidebook.

The remainder of the training is dedicated to skills performance, which are conducted on the Locomotive Simulator. Final skills performance examinations consist of two separate runs, each one with a different train and over a different portion of track. Each of the examination runs is approximately one hour in length and a minimum composite score of 80% is required. The student engineer must make the run alone and without assistance.

Prior to making each examination run, the student will make a practice run of the examination scenario. However, the signal indications, speed restrictions, track authority and general bulletin order information will not be the same as the examination run. Additionally, each student will receive the following information relating to the run: Track Profile, Train Consist information, Timetable and Special Instructions, and Track Authorities and General Bulletin Orders as required.

Students return to their seniority district for final territory familiarization. This portion of the program is to ensure that students are qualified on all territories where they will be expected to perform service as a certified engineer.

Familiarization trips are made under the direction of a certified train service engineer. A local Supervisor of Locomotive Engineers determines final qualification.

All examinations will be geared toward developing a student's understanding of the rules application rather than straight memorization. Each examination will increase in difficulty and will probe for deeper understanding.

Student failing either the written or performance examination will be given a second opportunity no longer than 60 days from the first attempt. Students failing the second attempt will fail the program and will no longer be entitled to progress toward the position of locomotive engineer. Students successfully passing both written and performance examinations, and who are otherwise eligible, will be certified as train service engineers.

B. Mechanical Engineers

After selection, Union Mechanical Engineer students will attend two days of formal training; Supervisory Mechanical Engineers will attend five days of formal training, covering the following subjects:

- Introduction to Locomotive Equipment
- Introduction to Air Brakes
- Trouble Shooting
- Introduction to the movement of locomotives
- Operating and Personal Safety Rules
- Required testing

The skills performance portion includes operation of CN locomotives with emphasis placed on proper inspection and reporting procedures as well as multiple unit set-up and operation.

At the completion of the training, the student will be given a written examination consisting of not less than 50 multiple-choice questions. A minimum score of 90% is required to successfully pass the examination. A Designated Supervisor of Locomotive Engineers will conduct a skills performance examination while the student is actively engaged in the operation of a locomotive. The supervisor will make a determination based on compliance with safety and operating rules, train handling rules, and federal safety rules.

Students failing either the written examination or performance examination will be given a second opportunity within 30 days of the first attempt. Students failing the second attempt will no longer be entitled to progress toward the position of Mechanical Engineer.

C. Yard Engineers

The training program for Yard Engineer is approximately three weeks long. The first two weeks will be in the classroom, covering operating rules, air brakes, and switching operations, including dog catching of road trains, with much of the training conducted utilizing a locomotive simulator. Freight car air brake systems and the basic operation and minor troubleshooting of CN locomotives with an emphasis placed on proper inspection and reporting procedures. A final examination on this material is administered at the conclusion, with a minimum score of 90% required to pass. Candidates must pass the written examination before proceeding to the OJT portion of their training.

For the next week, the candidates will perform on-the-job training in actual yard switching operations. This will be conducted under the supervision of the local Supervisor of Locomotive Engineers and instructor engineers.

After completing the OJT portion of training, the candidates will be required to do a skills performance ride with a Supervisor of Locomotive Engineers.

D. Remote Control Operators

A comprehensive program of classroom and on-site training will be provided for persons seeking qualification as Remote Control Operator. Instruction will include lecture, field exercises, and a final operating and written examination. The Program Administrator will maintain appropriate records on each candidate's training.

Selected candidates, who were not previously certified locomotive engineers, will participate in the following Remote Control Training program.

Week 1: Classroom and on-site training, including use of actual remote control equipment and Remote Control Simulator. The classroom training will include the following subjects:

Operating Rules and Safety procedures
Controls of the operating control unit (OCU)

Demonstration of equipment set up, including:

- control stand,
- electrical control panel, and
- OCU equipment.

Testing procedures, including the Tilt Safety Feature and the Alerter Time-Out Feature
Returning equipment to manual mode
Yard Switching/Train Handling
Daily Inspection of Locomotives

Field training includes the following:

- Setting up equipment for Remote Control
- Testing Remote Control Equipment
- Moving using the speed selector.
- Stopping using the speed selector.
- Emergency brake applications.
- Coupling.
- Charging train brake systems.

- Transferring operator control (pitch and catch).
- Setting Equipment for Manual Control
- Securing Backpacks

Each participant will operate the remote controlled locomotive in different configurations beginning with proficiency in operating a light locomotive, and concluding with proficiency in more demanding types of circumstances.

A written multiple-choice-examination will be administered during the training. Participants are required to obtain a passing score of 90%. Anyone failing to obtain a passing score will not be permitted to operate a remote control locomotive pending a successful re-examination. Re-testing may not occur until at least the next calendar day. Candidates will also participate in a final pass/fail remote control examination. This examination will be of sufficient length to effectively evaluate the person's ability while operating a remote control locomotive. Re-testing may not occur until at least the next calendar day.

Week 2: Candidates will participate in on-the-job training. This training will place the candidates in actual switching situations that are similar to or more demanding than those in which they will be working. This portion of training will be no less than 40 hours in length. The instructor will determine that the student is proficient in all items listed in the Remote Control Operator Checklist and Evaluation. Each item will be indicated on the day(s) in which it was observed. A Designated Supervisor of Locomotive Engineers will observe the candidates on the last day of the training for at least one hour, and if they possess the required skills, will be issued a certificate for remote control operation.

For candidates who are certified locomotive engineers, the training will be 3 days in length. Approximately one half day will be spent in the classroom, with the remainder in field operations. Training will concentrate on the set-up and operation of the remote control equipment. A written multiple-choice examination will be administered during the training. Participants are required to obtain a passing score of 90%. Anyone failing to obtain a passing score will not be permitted to operate a remote control locomotive pending a successful re-examination. A Designated Supervisor of Locomotive Engineers will observe the candidates on the last day of the training for at least one hour, and if they possess the required skills, will be issued a certificate for remote control operation.

Remote Control Operation at Conneaut, Ohio does not utilize portable controllers. Remote locomotives are operated from loading/unloading towers. Training at Conneaut is specialized to include this type of operation.

Section 6: Monitoring Operational Performance by Certified Engineers.

Contact Person: Kevin Brockman

A. Monitoring Operational Performance 240.129.

CN will perform the annual performance monitoring of its locomotive engineers and remote control operators in accordance with the following:

1. **Annual Observation**-Each certified Train Service, Mechanical Engineer, Yard Engineer, and Remote Control Operator will be monitored by a Designated Supervisor of Locomotive Engineers at least once during each calendar year. A skills performance examination as described in Sections 4 and 5 will satisfy the annual observation requirement for that calendar year. A minimum score of 80% is required to pass the examination. Engineers who fail will not have their engineer certificate demoted to student status nor reclassified to a more restrictive class of engineer. A second test will be given within 7 days of the first test or at the completion of any prescribed remedial training. If a second test failure occurs, the engineer will be required to complete fifteen (15) days of remedial OJT training with a certified locomotive engineer which may also include classroom instruction.

Certified engineers and Remote Control Operators who do not receive an annual performance monitoring because of being furloughed or leave of absence, etc. will receive their monitoring within 30 days of returning to service.

A Locomotive Engineer or an RCO who is actively working, but is not on a position that operates a locomotive, must receive an annual performance monitoring during each calendar year.

The annual observation will be completed by one of the following methods:

- a. **Train Ride.** A Designated Supervisor of Locomotive Engineers will accompany an engineer/RCO while at the controls of the type of train normally operated. The DSLE must document observations on a Monitoring/Skills Performance Report form and return the form to the Assistant Program Administrator. The supervisor must inform the engineer of his/her overall performance and explain any needed action the engineer must take to correct deficiencies. The supervisor must then sign the certification card and note the date of the operational ride. Train rides will be administered throughout the entire calendar year.

The minimum duration of an operational performance check ride for a train service engineer is two hours or 50 miles during which the engineer is actively engaged in train or locomotive operation.

Mechanical Engineers must be observed for a minimum of 30 minutes, and Yard Engineers and Remote Control Operators will be observed for a minimum of one hour.

- b. **Locomotive Simulator.** A Locomotive Simulator may be used instead of a monitoring check ride to satisfy the annual performance-monitoring requirement. The evaluation run, supervised by a Designated Supervisor of Locomotive Engineers, will be approximately one hour in length.

Prior to making a run, each engineer will participate in an orientation session relating to locomotive simulator operations and the associated graphic displays. Additionally, each engineer will receive the following information relating to the run: track profile, train consist information, timetable and special instructions, and track warrants and general bulletin orders as required.

After successful completion of the run, the supervisor must sign the engineer's certification card and note the date of the simulator evaluation.

- c. **Event Recorder.** Analysis of event recorder data may be used instead of a monitoring check ride to satisfy the annual performance monitoring requirement. A Designated Supervisor of Locomotive Engineers will analyze an engineer's entire trip or tour of duty and record the results on a Monitoring/Skills Performance Report. A copy of the Monitoring/Skills Performance Report must be forwarded to the Assistant Program Administrator. A copy of the report must also be sent to the engineer with an explanation of any needed action the engineer must take to correct deficiencies. Arrangement must then be made to make the required entry on the engineer's certification card within 30 days. This method will only be used when a Train Ride or Simulator Run cannot be made.
2. **Unannounced Operating Rules Compliance Tests.** The required unannounced rules compliance tests will be administered through the CN Efficiency Testing Program on file with FRA.

Employees performing service as certified locomotive engineers and remote control operators will be given at least one unannounced test per calendar year. The test will require that the locomotive engineer stop the train or engine in response to a specified condition. Efficiency Tests will be conducted at random around the clock and without notice to the engineer being tested. Test results will not be recorded on the engineer's certificate but will be maintained in computer data available for FRA inspection. Employees failing a qualifying stop test will have their certificate suspended pending a formal hearing. Efficiency tests not requiring certification suspension will be handled through a verbal or written feedback to the employee and will include any remedial action if necessary. This will include, but is not limited to, positive feedback, corrective coaching, remedial training, formal discipline, etc.

Section 7: Procedures for Routine Administration of the Engineer Certification Program.

Contact Person: Kevin Brockman

A. General criteria for eligibility based on prior safety conduct - 240.109.

CN will evaluate the prior safety conduct of any person being considered for qualification as a locomotive engineer or remote control operator. Consideration will be given to relevant date from: CN records, any other railroad formerly employing the person, and any governmental agency with pertinent motor vehicle driving records.

If it is determined that the candidate does not meet the eligibility requirements of 240.115, 240.117, or 240.119, they will be considered ineligible.

1. **Prior safety conduct as a motor vehicle operator - 240.115.** Motor vehicle driving records will be obtained and evaluated for incidents described in 240.115. If the records indicate an incident(s) occurred within the time specified, the candidate will be referred to the EAP counselor. The counselor must advise the Program Administrator of the results of the EAP evaluation as it relates to certification eligibility.
2. **Operating rules compliance - 240.117.** An evaluation of operating rules compliance will be made by reviewing a candidates work record. If the candidate was previously employed by another railroad, they must take the necessary action to cause the former railroad to provide a copy of his/her work record.
3. **Substance abuse disorders - 240.119.** Employees who are determined to have active substance abuse disorders will not be certified as locomotive engineers.

B. Determinations required as a prerequisite to certification - 240.203.

Certification candidates must meet the requirements of this program in order to be certified or recertified.

C. Time limitations for making determinations - 240.217. Certification requirements must be met within the time frames set forth in 240.217 as follows:

Safety conduct record	366 days
Hearing and Vision acuity	366 days (24 months for students)
Written Knowledge Exam	366 days
Skills Performance Test	366 days
Reliance on another railroad	36 months
Issue certificate within	30 days of a decision to certify

The Program Administrator, Assistant Program Administrator, or a representative, will verify that the necessary determinations have been made within the time frames before concluding that the candidate is qualified.

D. Denial of certification - 240.219. When information is discovered which forms a basis for denying certification, the candidate will be advised utilizing **NOTICE OF PENDING DENIAL OF CERTIFICATION** form. The candidate will be given an opportunity to respond. If certification is subsequently denied, the candidate will be notified in writing within 10 days of that decision.

E. Reliance on qualification determinations by another railroad - 240.225.

CN may rely on qualification determinations made by another railroad subject to the provisions of 240.225 and 240.217(c)(2). An engineer/RCO certified by another railroad who is subsequently employed by CN must successfully complete recertification training as described in Section 3 and testing described in Section 4. The new engineer/RCO will not be allowed to operate in other than student status until these conditions are met and a CN certificate is issued for the appropriate class of service.

F. Training previously uncertified engineers or certified engineers whose certificate has expired.

Previously uncertified engineers with extensive operating experience or previously certified engineers who have had their certificate expire, will be required to satisfy all the components for certification. Following the applicable prior safety conduct evaluations and hearing and visual acuity examination, the individual will be issued a student certificate. The individual will then be required to complete a period of on-the-job training and territorial familiarization. The length of this training will be based on the evaluation of a DSLE, who will take into account the individual's past operating experience and the unique characteristics of the territory in which they will operate. Prior to issuance of a certificate, the individual will be trained and tested according to the procedures specified in Sections 3 and 4.

G. Requirements for joint operations territory - 240.229. CN will keep on file a listing of certified engineers for purposes of joint operations as required by 240.221. The listing will be updated at least annually.

H. Replacement of certificates - 240.301.

A lost, stolen, or mutilated certificate will be replaced after verification that the certification is still valid in accordance with 240.201, 240.217, and 240.307. The Supervisor of Locomotive Engineers will issue a temporary certificate, good for 10 days. The Assistant Program Administrator will issue a replacement certificate and distribute by U. S. Mail. In the event a certificate is lost during a tour of duty and a DSLE is not available to issue a replacement certificate the locomotive engineer will be required to inform his/her supervisor of the loss, and the locomotive engineer will be allowed to complete his tour of duty. The locomotive engineer prior to next tour of duty must obtain a replacement certificate.

I. Revocation of certification - 240.307. A review of an engineer's/RCO's certification will be initiated promptly upon any occurrence of conduct described in 240.117(e). Certification will be suspended pending a hearing which will be consolidated with the formal investigation required by the collective bargaining agreements. An engineer who chooses to waive his/her right to a formal investigation will also be allowed to waive the hearing required by 240.307.

J. Pilots who are not certified engineers – 240.231(b). The prospective pilot candidate will be given an appropriate number of qualifying trips over the territory to assure sufficient familiarization with the territory. Additionally, the pilot will be interviewed, evaluated, and given a written examination by a DSLE, who is qualified on the territory to ensure that the pilot is knowledgeable on the operating instructions and physical characteristics of the territory. The test will be retained in the employee's file.

K. RCOs who are not working with Remote Control. Remote Control Operators who are no longer working with Remote Control, because of change in operation must have their certificates retrieved and retained by the SLE for the territory, and their status changed in Remote Control file from Active to Inactive. Inform the employee that this is not a certificate revocation, and if the operation changes while their certificate is still valid, it will be returned to them. The SLE must retain the dates that a certificate is retrieved and then returned, and reported to the Program Administrator.

Appendix A: CN Engineer Certification Suspension and Revocation Policy

49 CFR Part 240 Section 240.117 requires railroads to examine incidents in which locomotive engineers/remote control operators may have violated safety rules or procedures intended to ensure the safe operation of trains.

The regulation requires that engineers/RCOs who have demonstrated a failure to comply with railroad rules and practices as described in part 240.117 paragraph (e)(1) through (6) have their certification revoked per part 240.117(c).

Certification will be revoked for violations described in part 240.117(e)(1) through (5) as follows:

1. First violation, revocation will be for one month (30 days).
2. Two separate violations within 24 months of each other, revocation will be for six months.
3. More than two violations in any consecutive 36 month interval, revocation will be for one year.
4. Four separate incidents within 36 months, revocation will be for three years.

Railroads have the discretion to reduce the one month, six month, or one year revocations in half. If this is done: (1) The denial or revocation of certification in accordance with the provisions of paragraph (g)(3) of this section is for a period of one year or less; (2) Certification was denied or revoked for reasons other than noncompliance with 219.101 of this chapter; (3) The person must be evaluated by a Supervisor of Locomotive Engineers and determined to have received adequate remedial training; (4) The person must successfully complete any mandatory program of training or retraining, if that was determined to be necessary by the railroad prior to return to service; (5) At least one half of the pertinent period of ineligibility specified in paragraph (g)(3) of this section has elapsed.

NOTE: Incidents involving part 240.117(e)(6) deal with alcohol and drug rules and have different periods of ineligibility. The requirements for handling these violations are covered later in this policy.

If a single incident involves more than one of the specified rule violations, that incident will be treated as a single violation for the purpose of revocation. The regulation also requires that each railroad establish its criteria for revocation based upon operating rules and the conduct described in part 240.117(e)(1) through (6).

The following are the guidelines for identifying conduct, which requires the revocation of a certificate:

1. STOP SIGNAL

240.117(e)(1) Failure to control a locomotive or train in accordance with a signal indication, excluding a hand or radio signal indication or a switch, that requires a complete stop before passing it. EXAMPLES:

- a. Active Stop signals, e.g. block or interlocking signals which require a complete stop before passing.
- b. Passive Stop signals e.g. red track signs, blue signals, stop signs or gates which require a complete stop before passing.

When an engineer is dependent upon other crew members to direct the movement, such as shoving in response to hand signals or radio transmissions, failure to stop as directed will not be considered for suspension or revocation.

2. TRAIN SPEED

240.117(e)(2) Failure to adhere to limitations concerning train speed when the speed at which the train was operated exceeds the maximum authorized limits by at least 10 miles per hour. Where restricted speed is in effect, railroads shall consider only those violations of the conditional clause of restricted speed rules (i.e. the clause that requires stopping within one half of the locomotive engineer's range of vision), or the operational equivalent thereof, which cause reportable accidents or incidents under part 225 of this chapter, as instances of failure to adhere to this section:

- a. Speeding as described above is a violation. Maximum authorized speed is defined as the maximum allowable speed a train or engine is authorized to operate for a given operating situation. For example:

Maximum authorized speed is 50 MPH; 60 MPH or higher is a violation.

Maximum speed specified in the timetable is 60 MPH, and GBO item requires movement at 30 MPH; 30 MPH is the maximum authorized speed for that situation. 40 MPH or higher is a violation.

Maximum speed specified in the timetable is 60 MPH, and restricted speed is required by rule or signal indication; 20 MPH is the maximum authorized speed. 30 MPH or higher is a violation.

- b. Violations of "A speed that allows stopping within half the range of vision" as required by USOR Rule 518 (Movement at Restricted Speed) and Rule 520 (Movement on Non-Main Track), which result in FRA reportable accidents or incidents under 49 CFR Part 225. For example:

Failure to stop short of train, engine, railroad car, roadway workers or equipment fouling the track, stop signal, or a switch or derail lined improperly, resulting in property damage exceeding the FRA reporting threshold or a personal injury is a violation.

- c. Violations of any one of the other provisions of part 240.117(e) while operating at restricted speed are subject to revocation. For example:

A person operating a locomotive at restricted speed could be found to have violated 240.117(e)(1) if he or she failed to stop at a signal that required a complete stop before passing it; any reference to damage thresholds would not be applicable since the other provision of 240.117(e) was simultaneously violated.

3. AIR BRAKE TESTS

240.117(e)(3) Failure to adhere to procedures for the safe use of train or engine brakes when the procedures are required for compliance with the initial terminal, intermediate terminal or transfer train and yard test provisions of 49 CFR part 232.

Failure to perform the required Class I, Class II, Class III or Transfer Train air brake test as specified by CN Air Brake and Train Handling Rules is a violation.

Required locomotive air brake tests are not addressed in this regulation and will not be considered for suspension or revocation.

4. MAIN TRACK AUTHORITY

240.117(e)(4). Occupying the main track or a segment of main track without proper authority or permission.

For this regulation, main track means a track upon which the operation of trains is governed by one or more of the following methods of operation; timetable, mandatory directive, or signal indication. Mandatory directive does not include occupying a segment of track contrary to advisory information, such as that from a yardmaster or RTC relative to the use of non-controlled track.

Occupying the main track without authority is a violation. For example:

- Main track in Track Authority Outside CTC territory without a track authority;
- Any track in CTC without verbal authority of the control operator, Track Authority in CTC or a proceed signal indication,
- Controlled Yard Limits without an Movement Authority,
- Occupying the limits of Planned Work without the permission of the EIC.
- Occupying Joint Limits with an EIC without permission of the EIC, or
- Non-compliance with the requirement of Rule 529A to stop before entering a crossing equipped with automatic warning devices that are not operating.

5. TAMPERING WITH SAFETY DEVICES

240.117(e)(5) Failure to comply with prohibitions against tampering with locomotive mounted safety devices, or knowingly operating or permitting to be operated a train with an unauthorized disabled safety device in the controlling locomotive. (See 49 CFR part 218, subpart D and Appendix C to part 218).

Unless authorized, rendering a device inoperative or impairing the intended function of a locomotive mounted safety device is a violation. A locomotive mounted safety device includes: Event Recorders, alertors, deadman controls, and automatic train control equipment. Also included will be failure of a remote control operator to attach OCU with all four clips.

6. ALCOHOL AND DRUG

240.117(E)(6) Incidents of noncompliance with 219.101 of this chapter.

Part 219.101 reads in part:

- (a) Prohibitions. Except as provided in 219.103 (Prescribed and over-the-counter drugs)-
- (1) No employee may use or possess alcohol or any controlled substance while assigned by a railroad to perform covered service;
 - (2) No employee may report for covered service, or go on or remain on duty in covered service while:
 - (i) Under the influence or impaired by alcohol;
 - (ii) Having .04 percent or more alcohol in the blood; or
 - (iii) Under the influence of or impaired by any controlled substance.

An employee assigned to perform covered service who is caught using or is found to be in possession of alcohol or any controlled substance is in violation of 219.101.

An employee on duty in covered service who is subjected to a breathalyzer or blood test and the result of the test is determined to be positive for alcohol is in violation of 219.101.

The presence of a controlled substance in the bodily fluid does not necessarily indicate impairment. Therefore, for the purpose of revocation, an employee in covered service who tests positive for a controlled substance is in violation of 219.101 only if it can be determined that they were under the influence or impaired. If not, the employee is in violation of 219.102.

Noncompliance with 219.101 is a violation of 240.117(e)(6) and the first offense is a mandatory nine month revocation.

219.102 reads in part:

No employee who performs covered service may use a controlled substance at any time, whether on duty or off duty, except as permitted by 219.103 of this part (Prescribed and over-the-counter drugs).

Noncompliance with 219.102 is not a violation of 240.117(e)(6) and is therefore not a revocable offense. However, these violations must be tracked and the employee must be referred to the employee assistance counselor. The employee's certificate will be deemed suspended (not revoked) during evaluation and any required treatment. Different periods of ineligibility for subsequent violations are listed in 240.119(c)(4).

Noncompliance with 219.101 or 219.102 is a violation Rule G of the CN US Operating Rules and should be handled accordingly.

Nothing in the regulation prevents CN from assessing discipline for violations not listed in this policy. However, only conduct described in 240.117(e) may be considered for revocation. For example:

An engineer is determined to be in violation of 219.102. Discipline may be assessed for the violation of USOR Rule G, but the engineer's certificate cannot be revoked.

The maximum authorized speed is 45 MPH, and the train speed is determined to be 52 MPH. Discipline may be assessed, but the engineer's certificate cannot be revoked.

An engineer runs through a yard track switch, and there is no incident over the FRA Reporting threshold. Discipline may be assessed, but the engineer's certificate cannot be revoked.

This policy is to establish guidelines for identifying conduct, which constitutes the revocation of an engineer's certificate. Any instances in question should be directed to the Program Administrator, Assistant Program Administrator, or any CN Supervisor of Locomotive Engineers (SLE).