

TRAIN AND YARD EMPLOYEE WORK TASK REQUIREMENTS

1. Obtain information required for trip including train movement instructions, special notices, general orders, and train and engine information.
2. Receive, relay, and/or act upon oral or written instructions from Conductor, Dispatcher, Switch Foreman, Yardmaster, or other personnel, indicating which cars are to be switched and the track on which they are to be placed.
3. Read and understand book of rules, bulletins, train orders, waybills, placards, safety instructions, and other written or printed material.
4. Read track warrants, track bulletins, timetable schedules, track and speed restrictions, classifications of trains, and train precedence to ensure that these are being followed, and take any and all action necessary to ensure compliance.
5. Discuss or conduct job briefing with Locomotive Engineer and crew, compliance with track warrants, track bulletins, timetable schedules, track and speed restrictions, classification of trains, and train precedence.
6. Read and comply with train orders, signals, and railroad rules and regulations.
7. Record times of departures and arrivals at all destinations.
8. Repeat information heard from dispatcher over the radio.
9. Report results after observing condition of passing train.
10. Communicate with Locomotive Engineer, Dispatcher, and Customer Service Center during run and transmit information and/or instructions (in person or by electronic equipment) to other train crew members, dispatchers, mechanical personnel, and others.
11. Interpret, relay, and act upon hazardous materials placards.
12. Prepare required reports such as time slips, delay reports, accident reports, industry work orders, etc.
13. Verify wheel report to actual cars on train.
14. Add in cars that might be missing and/or delete cars not belonging.
15. Verify proper placement of hazardous materials.

16. Perform coupling of air and electrical connections between cars when making up trains.
17. Assemble cars into groups to be moved to road trains.
18. Make up freight and passenger trains.
19. Get on and off moving or stationary equipment while train is performing industrial, station, or yard switching to set or release hand brakes, or to perform other duties.
20. Ride moving car by hanging on grab iron or ladder, sometimes for extended periods of time.
21. Coordinate the proper movement of trains.
22. Operate various designs of track switches (e.g., puzzle, spring) and derails (e.g., handthrow, dual control or electric) to change the route of the engine or cars within yards or on the road.
23. Read switch list and oversee switching operations.
24. Perform flat and hump classification switching to properly group cars.
25. Carry and attach End of Train (EOT) device to last car of train.
26. Connect EOT to air brake system.
27. Check switch points to make sure switch is properly aligned.
28. Align drawbars by lifting, pulling, or pushing on the drawbar.
29. Pull pin-lifter rod to raise knuckle pin.
30. Pull on knuckle to open the knuckle for coupling.
31. Control movement using portable radio clearly and concisely, sometimes while on moving equipment.
32. Observe track conditions including broken rails, defective switches, track obstructions and weather-related problems.

33. Observe railroad right-of-way, passing trains, loading for shifted loads, defective blocking, spillage, etc.
34. Judge and control speed of cars being classified to avoid damage to lading.
35. Facilitate the handling and movement of train during severe weather, when disabled, or when stopped in an emergency.
36. Check for vehicular traffic at crossings.
37. Flag for vehicular traffic at crossings.
38. Spot cars for loading and unloading.
39. Collect tickets, fares, or passes from passengers.
40. Answer passengers questions concerning train rules and regulations and timetable schedules.
41. Announce names of train stations and terminals to passengers.
42. Assist passengers on and off train at stations or terminals.
43. Operate brake cut-out and bleeder valves.
44. Get on and off stationary equipment (e.g., cars, engines).
45. Provide protection to highway traffic at grade crossings as required.
46. Observe, interpret and relay hand or lantern signals and all other indications affecting movement of train such as wayside, radio, cab and whistle signals.
47. Conduct job briefing and give appropriate instructions to train and engine crew members.
48. Monitor the safety, conduct and performance of the train and engine crew members and passengers.
49. Supervise employees to ensure proper setting of brakes and loading of cars.
50. Instruct workers performing inspection and maintenance of cars and mechanical equipment during run to ensure train is operating efficiently and safely.

51. Remove or replace broken knuckles.
52. Carry replacement knuckle to location of broken knuckle to remove or replace broken knuckles.
53. Apply temperature stick to axle when necessary and interpret results.
54. Chain and set out cars with broken couplers.
55. Inspect train cars and all cars that are picked up during the trip before leaving the yard or when required (e.g., air hoses, angle cocks, knuckle coupling, hand brake, shifted loads, EOT and all running gear, wheels, axles, tracks, brake riggings).
56. Monitor readings from the End of Train (EOT) device to ensure the device is operating properly.
57. Inspect freight cars to ensure they are securely sealed.
58. Inspect rolling stock for defects and evidence of wear including wheels, journals, brake rigging, and safety appliances.
59. Inspect condition of lading for shifted loads, broken banding, defective blocking, and spillage.
60. Inspect air brake on cars with portable air gauge.
61. Inspect the condition of trains and equipment while stationary, sometimes involving walking the length of train to distances of more than a mile and frequently over uneven terrain.
62. Inspect air brake equipment.
63. Inspect and set temperature and pressure switches as instructed.
64. Issue train movement instructions with the purpose of conducting safe and efficient movements.
65. Monitor train inspection devices, such as Hot Box Detectors (HBD), Dragging Equipment Detectors (DED), etc., for indication of any irregularities.

66. Communicate clearly over the radio or by telephone with train crews, operators, dispatchers, yardmaster, and other personnel regarding train movements, as necessary.
67. Coordinate responses to unplanned events and emergency situations (e.g., deterioration of roadbed, operation without clearance, engine failure, adverse weather conditions, train derailment, train collision, etc.).
68. Report signaling and switching equipment failures to appropriate personnel.
69. Estimate train arrival times at particular stations.
70. Monitor and track weather conditions affecting the assigned territory.
71. Keep informed of any environmental conditions such as floods, storms, tornados, erosions, and earthquakes that affect planning for train movements.
72. Stay informed of General orders, Bulletin Orders, Division Notices, Timetable Special Instructions, and any other information relevant to train movements in the assigned territory.
73. Keep abreast of the physical characteristics of the territory: Grades, curvatures, track centers, switch, and other pertinent locations.
74. Keep abreast of physical characteristics surrounding specific mile posts, switches, and other pertinent locations.
75. Know the length of sidings.
76. Learn the restrictions on assigned tracks or territory.
77. Interpret any special instructions in effect in the territory.
78. Comply with the Rules of Transportation Department.
79. Apply the federal, state, and local regulations applicable to the hours of service, hazardous materials, etc.
80. Determine trains carrying hazardous materials.
81. Complete all required forms and reports on train movements.

82. Record the application and removal of blocking as required.
83. Complete all required forms and reports on usual occurrences (derailment, etc.).
84. Record train information (e.g., length, weight, number of cars, engines, symbols, train crew names, etc.).
85. Ensure that all cars are coupled, air hoses are coupled and inspected, and cars are still on the rail.
86. Perform Initial Terminal Airbrake Test as required by FRA, AAR, and company rules and regulations.
87. Inspect end-of-train device.
88. Apply knowledge of territory, including terrains, grades, curves, and grade crossings, in order to give prescribed warning signals and to otherwise operate train in a safe and satisfactory manner.
89. Determine speed of moving train particularly if speed indicator malfunctions.
90. Observe distances and speeds of vehicles approaching grade crossings.
91. Respond to unintentional emergency application of air brakes.
92. Perform air brake tests as required by federal brake law and company rules.
93. Ensure that crew is provided to set flag protection when necessary in front and rear of train.
94. Align track switches when necessary.
95. Apply and release hand brakes.
96. Verify accuracy of speed indicator at first opportunity during each run and at other times as required.
97. Operate telemetry equipment for cabooselless operations.
98. Pilot or supervise operation of trains or diesel-electric rail-detector cars when crew is unfamiliar with territory.

99. Monitor the position of switches aligned by crew.
100. Supervise employees to ensure proper setting of brakes as required.
101. Supervise the calling of signals.
102. Supervise that all flags and lights, used by employees for protection, are properly displayed and that all signals are proper.
103. Supervise the handling and movement of train when operated by trainee.
104. Ensure placement of certain loads in trains.
105. Examine bulletin notices, general orders and special instructions for train movement prior to run.
106. Synchronize watch with standard clock (or dispatcher) and with conductor to ensure correct time.
107. Confer with conductor or traffic control personnel by radio to give or receive information and to give instructions concerning stops, delays, or oncoming trains.
108. Notify proper authorities and prepare reports to explain accidents, unscheduled stops, or delays.
109. Perform pre-run (initial or terminal) and other air brake tests as required by federal power brake law and company rules.
110. Monitor track to detect obstructions and to anticipate operating problems as required by federal or company rules.
111. Review train consist giving physical make-up of train including weights, lengths, location of loads and empties, and cars requiring special handling.
112. Operate and align a switch.
113. Follow company safety rules and procedures (including lockout procedures) and standard safety practices.
114. Use personal safety apparel (e.g., goggles, gloves, hard hats, ear plugs, or protective clothing) and safety equipment, as necessary.

115. Rely on safety rules/experience in handling (lifting, moving, carrying, etc.) loads of over 50 pounds.
116. Take appropriate action when crew members or other personnel are engaged in unsafe practices or rule violations.
117. Take appropriate action when impending accidents or other emergency conditions exist.
118. Monitor situations at all times for fire, spill hazards, suspicious or unauthorized activity.
119. Alert others to unsafe conditions.
120. Ensure safe and efficient train operations.
121. Visually inspect equipment, processes, or material to detect malfunctions or need for adjustment.
122. Determine or monitor speed of train or equipment to assure compliance with rules.
123. Determine clearance between train and other trains, building, obstructions, or other equipment.
124. Provide on-the-job training to subordinates, coworkers, trainees or apprentices.
125. Assist coworkers in prioritizing their work load by informing them of job expectations.
126. Consciously set an example of how to approach work that provides a role model to coworkers.
127. Signal crew members for movement of the engine or train using lantern, hand and/or flag signals, or radio to indicate when to start, stop back, or set or release air brakes.
128. Signal Locomotive Engineer using radio, telephones, or hand signals.
129. Observe and communicate signals en route and call the attention of the engineer to conditions affecting the movement of the train.

130. Provide flag protection when required.
131. Ensure compliance and response to all signals and take corrective action if necessary.
132. Ensure that all signals and lights, used by employees for protection, are properly displayed and that all signals are properly used.
133. Respond to signals from appropriate persons (e.g., starting, stopping, slow).
134. Respond to and act upon wayside signals and cab signals, including light color signals, positions signals, torpedoes, flags and hot detectors.
135. Communicate wayside signals in a clear and audible manner to coworkers for verification of meaning to avoid errors in interpretation.
136. Interpret and respond to audio signals such as radio signals, failed equipment detectors and radio information.
137. Lift and carry objects or materials weighing up to 20 pounds.
138. Lift and carry objects weighing between 20 and 50 pounds.
139. Lift and carry objects weighing over 50 pounds.
140. Perform work activities that require making quick or repeated flexing movements (e.g., bending, stretching, twisting, reaching) with arms, legs, or body.
141. React and respond quickly when the appearance of a stimulus requires the initiation of an appropriate response (for example, responding to alarms or to sounds indicating machines are about to malfunction).
142. Climb stairs, ladders, scaffoldings, or other large structures.
143. Perform work activities that require bending, stooping, or crawling.
144. Remain standing or sitting for more than one half of every work day and/or for an extended period of time.
145. Read, assemble, inspect or do other similar activities that produce minor eyestrain.

146. Perform activities primarily involving the use of hands (e.g., holding, grasping, or turning).
147. Perform activities primarily involving the use of hands simultaneously when each hand is performing a different part of an operation.
148. Perform work activities that require coordinating gross hand movements with visual information (e.g., using gross eye-hand coordination to make gross adjustments to the position of machines, equipment, controls, etc.).
149. Perform work activities that require coordinating fine hand movements with visual information (e.g., using fine eye-hand coordination to make fine adjustments to parts, instrument settings, controls, etc.).
150. Engage in physical activities for extended periods of time.
151. Maintain balance while working in or around moving equipment, on uneven terrain, or on track ballast.
152. Judge distances or speeds.
153. Recognize audible signals and warnings (e.g., engine whistles, bells, sirens, and exploding torpedoes).
154. Recognize equipment sounds/noises associated with malfunctions or irregularities.
155. Distinguish colors displayed by signals and apparatus (e.g., lights, flags, reflectorized devices, and colored placards).

Locomotive Engineer Task Identification and Description of job Requirements

1. Primary Operating Tasks

A. Functions Involving Observational Skills

1. Determine trains carrying hazardous materials, and verify proper placement of hazardous materials.
2. Observe track conditions including broken rails, defective switches, defective signals, track obstructions and weather-related problems.
3. Observe railroad right-of-way, passing trains, loading for shifted loads, defective blocking, spillage, etc
4. Check for vehicular traffic at crossings.
5. Monitor the safety, conduct and performance of crew members.
6. Monitor readings from the End of Train (EOT) device to ensure the device is operating properly.
7. Monitor train inspection devices, such as Hot Box Detectors (HBD), Dragging Equipment Detectors, (DED), etc., for indication of any irregularities.
8. Monitor actual train movements against time schedules or time limits imposed.
9. Observe distances and speeds of vehicles at grade crossings.
10. Ensure that crew is provided to set flag protection when necessary.
11. Verify accuracy of speed indicator as required.
12. Pilot operation of trains when crew is unfamiliar with territory.
13. Monitor the readiness of the crew (e.g., safety glasses, hard toe boots).
14. Monitor the position of switches aligned by crew.
15. Supervise employees to ensure proper setting of brakes as required.
16. Supervise the calling of signals.

17. Supervise that all flags and lights, used by employees for protection, are properly displayed and that all signals are proper.
18. Supervise the handling and movement of train by trainee.
19. Supervise employees to ensure proper handling of wide loads.
20. Ensure placement of certain loads in trains.
21. Monitor track to detect obstructions and to anticipate operating problems as required by federal or company rules.
22. Inspect locomotive to detect damaged or defective equipment.
23. Review train consist giving physical makeup of train including weights, lengths, location of loads and empties, and cars requiring special handling.
24. Monitor situations at all times for fire, spill hazards, suspicious or unauthorized activity.
25. Ensure equipment is in safe operating condition before starting work.
26. Ensure safe access to and from work area, checking for potential obstacles and removing them as necessary.
27. Ensure that fellow employees utilize safety equipment, wear safety clothing and observe safety precautions and procedures in their work.
28. Visually inspect equipment to detect malfunctions or need for adjustment.
29. Inspect or listen for infrequent sounds such as warning alarms, horns, or bells, or detect changes in sounds in terms of loudness, pitch, rhythm, or duration.
30. Inspect or monitor for warning or emergency situations by visually identifying warning lights or flags, or changes in color, distance, brightness, speed or visual stimuli.
31. Inspect for unusual sounds or vibrations.
32. Inspect for gross changes in the location or relative position of equipment or objects.
33. Inspect for small changes in the location or relative position of equipment or objects.
34. Inspect for the presence of odors or smells associated with burning, overheating, or process malfunctions.
35. Inspect for small changes or differences in the appearance of objects.

36. Inspect for gross changes or differences in the appearance of objects.
37. Monitor multiple machines, equipment, or operations simultaneously.
38. Conduct tests and analyze test results to troubleshoot equipment.
39. Identify training needs for co-workers or trainees.
40. Interpret signals and indicators in the locomotive cab including air brake gauges, load indicators, and speed indicators.
41. Interpret and respond to audio signals such as radio signals, failed equipment detectors and radio information.
42. Detect vibration in equipment or machinery parts by feeling.
43. Recognize audible signals and warnings (e.g., engine whistles, bells, sirens, and exploding torpedoes).
44. Recognize equipment sounds/noises associated with malfunctions or irregularities.
45. Distinguish colors displayed by signals and apparatus (e.g., lights, flags, reflectorized devices and colored placards).

B. Functions Involving Communicating Skills

1. Receive, relay and/or act upon oral or written instructions From Conductor, Dispatcher, Switch foreman, Yardmaster, or other personnel, indicating which cars are to be switched and the track on which they are to be placed.
2. Discuss or conduct job briefing with train crew, compliance with track warrants, track bulletins, timetable schedules, track and speed restrictions, classification of trains, and train precedence.
3. Repeat information heard from dispatcher over the radio.
4. Report results after observing condition of passing train.
5. Communicate with train crew, Dispatcher, and Customer Service Center during run and transmit information and/or instructions (in person or by electronic equipment) to other train crew members, dispatchers, mechanical personnel, and other railroad employees.

6. Prepare required reports such as time slips, delay reports, accident report, industry work orders, etc.
7. Observe interpret and relay hand or lantern signals and all other indications affecting movement of train such as wayside, radio cab and whistle signals.
8. Conduct job briefing and give appropriate instructions to train and engine crew members.
9. Communicate clearly over the radio or by telephone with train crews, operators, dispatchers, yardmaster, and other personnel regarding train movements, as necessary.
10. Report equipment failures to appropriate personnel.
11. Complete all required forms and reports on train movements.
12. Report immediately to the proper authority any alleged violation of the rules and any irregularity relating to the movement of trains.
13. Review all orders, instructions, and authorities with the relieving locomotive engineer, and, when relieving locomotive engineer, make certain they are understood.
14. Complete all required forms and reports on unusual occurrences.
15. Show train movement instructions to crew members.
16. Confer with conductor or traffic control personnel by radio to give or receive information and to give instructions concerning stops, delays, or oncoming trains.
17. Notify proper authorities and prepare reports to explain accidents, unscheduled stops, or delays.
18. Prepare engine inspection and work report as required.
19. Explain technical information to personnel who do not have technical expertise in your area (e.g., what is being done on the job, why it is being done, and what the results mean).
20. Explain the nature of defective equipment or other problems to a supervisor.
21. Answer questions, give instructions, or provide other information in person or by telephone.
22. Explain details of services, methods, or policies.
23. Prepare failure descriptions, inspection reports and/or unusual occurrence reports for reference by others.
24. Document train arrivals and departures.

25. Compile reports such as mileage or track inspected, tests performed, repairs made, or equipment requiring replacement.
26. Advise other railroad personnel, and sometimes the general public, regarding track and signal/communication conditions.
27. Prepare brief written summaries to describe work status, repair, inspections, or problems encountered.
28. Write notes describing actions taken or providing other information for the benefit of the next person on the job.
29. Report to proper authorities where housekeeping activities need to be performed.
30. Respond to emergency calls from fire departments, emergency squads, or security patrols.
31. Write occasional safety reports as required.
32. Participate in safety meetings and discussions with co-workers.
33. Alert others to unsafe conditions.
34. Investigate and document the events, pertinent conditions and actions taken with regard to accidents or other safety issues.
35. Identify defective units and indicate necessary corrective action.
36. Report and take action to correct equipment breakdowns as quickly as possible.
37. Provide on-the-job training to co-workers, trainees or apprentices.
38. Evaluate the performance of trainees assigned to your job area.
39. Observe and communicate signals en route and call the attention of the train crew to conditions affecting the movement of the train.
40. Provide flag protection when required.
41. Ensure compliance and response to all signals and take corrective action if necessary.
42. Communicate wayside signals in a clear and audible manner to co-workers for verification of meaning to avoid errors in interpretation.

C. Functions Involving Information Gathering and Processing Skills

1. Obtain information required for trip including train movement instructions, special notices, general orders, and train and engine information.

2. Read and understand book of rules, bulletins, train orders, waybills, placards, safety instructions, and other written or printed material.
3. Read track warrants, track bulletins, timetable schedules, track and speed restrictions, classifications of trains, and train precedence to ensure that these are being followed, and take any and all action necessary to ensure compliance.
4. Read and comply with train orders, signals, and railroad rules and regulations.
5. Record times of departures and arrivals at all destinations.
6. Interpret, relay, and act upon hazardous materials placards.
7. Communicate with the designated supervisor and others concerning track maintenance work.
8. Verify the location of the trains through electronic or verbal means.
9. Ensure accuracy of dictated track warrants and track bulletins.
10. Receive track and time permits.
11. Stay informed of General Orders, Bulletin Orders, Division Notices, Timetable Special Instructions, and any other information relevant to train movements in the assigned territory.
12. Keep abreast of the physical characteristics of the territory: Grades, curvatures, track centers, switch and other pertinent locations.
13. Keep abreast of physical characteristics surrounding specific mile posts, switches and other pertinent locations.
14. Know the length of sidings.
15. Learn the restrictions on assigned tracks or territory.
16. Interpret any special instructions in effect in the territory.
17. Comply with the Rules of Transportation Department.
18. Apply the federal, state, and local regulations applicable to the hours of service, hazardous materials, etc.
19. Read, understand, and apply information pertinent to engineer activity (e.g., operating rules, special instructions, safety rules, etc.).
20. Maintain record of all authorities received.
21. Examine bulletin notices, general orders and special instructions for train movement prior to run.

22. Synchronize watch with standard clock(or dispatcher) and with conductor to ensure correct time.
23. Inspect locomotive for operational readiness before run to verify quantity of fuel, sand, water, flagging equipment, and other supplies, as required by federal and company rules.
24. Perform pre-run (initial or terminal) and other air brakes tests are required by federal power brake law and company rules.
25. Read and understand written technical training material such as textbooks or trade publications.
26. Read manufactures' manuals for technical information on equipment operation, troubleshooting procedures, equipment tolerances, and equipment capabilities.
27. Read and understand posted bulletins, memorandums, train movement instructions, regulations and rule book, tariffs, circulars, and/or other messages.
28. Read and understand basic information and data provide in rule books, timetables, and special instruction.
29. Read federal regulatory documents dealing with handling of hazardous material.
30. Read numerical tables.
31. Receive track, time, and direction information from dispatcher regarding train movements.
32. Obtain and maintain appropriate FRA certification.
33. Follow company rules and procedures and standard safety practices.
34. Implement safety and accident prevention programs.
35. Maintain a working knowledge of information regarding safety practices, such as emergency procedures or first aid.
36. Read and understand safety sign, labels or package content descriptions.

D. Functions Involving Exercising Judgement

1. Control movement using portable radio clearly and concisely.
2. Judge and control speed of cars being classified to avoid damage.
3. Facilitate the handling and movement of train during severe weather, when disabled, or when stopped in an emergency.
4. Spot cars for loading and unloading.

5. Get on and off stationary equipment (e.g., cars, engines).
6. Estimate train arrival times at particular stations.
7. Communicate with the Chief Train Dispatcher, train crews, block operators, and other appropriate personnel on weather conditions affecting train movements.
8. Apply knowledge of territory, including terrain, grades, curves, and grade crossing, in order to give prescribed warning signals and to otherwise operate train in a safe and satisfactory manner.
9. Determine speed of moving train particularly if speed indicator malfunctions.
10. Determine appropriate time to initiate brake or acceleration operations giving consideration to locomotive and train characteristics and to terrain and weather conditions.
11. Operate controls such as throttle and brakes to control speed of train.
12. Modify train handling techniques in response to problems, malfunctions, and changing conditions.
13. Respond to unintentional emergency application of air brakes.
14. Perform "hostler" function by operating locomotive between various shop locations, service tracks, and switching areas.
15. Operate locomotive to various station in roundhouses for maintenance and repair.
16. Operate locomotive between various shop locations, service tracks, and switching areas.
17. Comply with train movement instructions, train signals, and railroad rules and regulations to operate locomotive in an efficient manner following safety regulations and time schedule.
18. Operate locomotives as part of hostler operation.
19. Operate railroad/locomotive equipment.
20. Document trainee or employee performance problems, attendance, and complaints.
21. Use personal safety apparel (e.g., goggles, gloves, hard hats, ear plugs, or protective clothing) and safety equipment, as necessary.
22. Follow safe operating/work procedures when using equipment, material or processes.

23. Use safe, temporary methods and practices when standard equipment is not available or when emergency situation dictates action.
24. Work within the limitations of the equipment that is being used.
25. Take appropriate action in the event of equipment malfunctions.
26. Analyze jobs to determine safer and/or more efficient ways of performing the tasks.
27. Conduct job or work setting investigations and analyses to identify safety hazards.
28. Take appropriate action when crew members or other personnel are engaged in unsafe practices or rule violations.
29. Take appropriate action when impending accidents or other emergency conditions exist.
30. Respond appropriately to unusual conditions or circumstances.
31. Ensure safe and efficient train operations.
32. Monitor and maintain the continuous operation of processes by adjusting controls, pressures, or speed.
33. Determine or monitor speed of train or equipment to assure compliance with rules.
34. Determine clearance between train and other trains, buildings, obstructions, or other equipment.
35. Identify and select from a set of alternatives the most appropriate course of action to solve a problem based on available guidelines (e.g., policy, current procedures, etc).
36. Identify and select the most appropriate course of action to solve problems in cases where policy, current procedure, or past practice is not available.
37. Determine whether or not actions would endanger personnel.
38. Identify situations that are likely to develop into problems.
39. Develop familiarity with the operating requirement, specifications, and maintenance of equipment.
40. Sound whistle and ring bell as required.
41. Respond to signals from appropriate persons (e.g., starting, stopping, slow).
42. Respond to and act upon wayside signals and cab signals, including light color signals, position signals, torpedoes, flags and hot detectors.

43. Judge distances or speeds.
44. Perform work activities that require rapid coordination of visual information (e.g., terrain, track, and weather conditions) with the physical operation controls.

E. Functions Involving Physical Exertion

1. Lift and carry objects or materials weighing up to 20 pounds.
2. Perform work activities that require making quick or repeated flexing movements (e.g., bending, stretching, twisting, reaching) with arms, legs, or body.
3. React and respond quickly when the appearance of a stimulus requires the initiation of an appropriate response. (for example, responding to alarms or to sounds indicating machines are about to malfunction).
4. Climb stairs, ladders, or other large structures.
5. Repeat the same non-strenuous physical task or activity for an extended period of time (e.g., walking, placing, picking, pressing, etc.).
6. Remain standing or sitting for more than one half of every work day and/or for an extended period of time.
7. Read, inspect or do similar activities that produce minor eyestrain.
8. Perform activities involving the use of fingers (e.g., picking, pinching, pushing buttons, etc.).
9. Perform activities involving the use of hands (e.g., holding, grasping, or turning).
10. Perform activities involving the use of hands simultaneously when each hand is performing a different part of an operation.
11. Perform work activities that require coordinating gross hand movements with visual information (e.g., using gross eye hand coordination to make gross adjustments to the position of equipment, controls, etc.).
12. Perform work activities that require coordinations fine hand movements with visual information (e.g., using fine eye-hand coordination to make fine adjustments to instrument settings, control, etc.).
13. Perform work activities that require keeping the hands and arms in a steady, set position with minimal tremor (e.g., controlling or adjusting equipment when minimal hand and arm tremor is allowed).
14. Engage in physical activities for extended period of time.

- F. Task Associated With New or Developing Technology**
1. Operate telemetry equipment for cabooseless operations.
 2. Read and interpret information from computer monitors or computer printouts.
 3. Enter data into a computer.
 4. Mark, or sign identification, time, date, or other data on forms, computer output, or other items.
 5. Enter, transmit, or retrieve information via a computer terminal.
 6. Operate electronic equipment such as facsimile (FAX) machines.
 7. Operate programmable equipment such as on-board computers or wayside detectors.
 8. Operate communications equipment such as an intercom system, radio, or pager.
 9. Monitor conditions via one or more computer screens in computer-aided or processes.

II. Tasks Associated With Train Service Duties

- A. Accruing As A Result of Light Engine Movement.**
1. Operate various design of track switches (e.g., puzzle, spring) and derails (e.g., hand-thrown, dual control or electric) to change the route of the engine within yards or on the road.
 2. Check switch points to make sure switch is properly aligned.
 3. Align drawbars by lifting, pulling, or pushing on the drawbar.
 4. Pull pin-lifter rod to raise knuckle pin.
 5. Lift and carry objects weighing over 50 pounds relying on safety rules/experience in handling (lifting, moving, carrying, etc.) them.
 6. Maintain balance while working in or around moving equipment, on uneven terrain, or on track ballast.
- B. Physical Functions When Working As Conductor**
1. Add in cars that might be missing and/or delete cars not belonging.
 2. Assemble cars into groups to be moved to road trains.
 3. Make up freight and passenger trains.

4. Get on and off moving or stationary equipment while train is performing industrial, station, or yard switching to set release hand brakes or to perform other duties.
5. Ride moving car by hanging on grab irons or ladder, sometimes for extended period of time.
6. Perform flat and hump switching to properly group cars.
7. Carry and attach End of Train (EST) device to last car of train.
8. Connect EOT to air brake system.
9. Flag for vehicular traffic at crossings.
10. Operate brake cutout and bleeder valves.
11. Get on and off moving equipment (e.g., cars, engines).
12. Provide protection to highway traffic at grade crossings as required.
13. Remove or replace broken knuckles, weight up to 85 pounds.
14. Carry replacement knuckle to location of broken knuckle to remove or replace broken knuckles.
15. Chain and set out cars with broken couplers.
16. Inspect train cars and all cars that are picked up during the trip before leaving the yard or when required (e.g., air hoses, angle cocks, knuckle coupling, hand brake, shifted loads, EOT and all running gear, wheels, axles, tracks, brake riggings).
17. Inspect the condition of trains and equipment while stationary, sometimes involving walking the length of train to distances of more than a mile and frequently over uneven terrain.
18. Relay signs to engineer.

C. Supervisory Functions When Working As Conductor

1. Read switch list and oversee switching operations.
2. Supervise employees to ensure proper setting of hand brakes and loading of cars.
3. Arrange train pickup/setouts.
4. Determine which tasks should be performed, in what order, and what materials or information will be needed.
5. Coordinate the work of others, ensuring they understand the activities involved and following up to ensure activities are completed effectively.
6. Signal crew members for movement of the engine or train using lantern, hand and/or flag signals, or radio to indicate when to start, stop back, or set or release air brakes.

7. Signal locomotive engineer using radio, telephones, or hand signals.

D. Clerical Functions When Working As Conductor

1. Verify wheel report to actual cars on train.
2. Record setouts and pickups by train crews at industry sites.
3. Maintain records concerning deliveries, setouts and pickups made.

III. Mechanical Task Associated With Equipment Preparation and Inspection

A. Troubleshooting Functions

1. Apply temperature stick to axle when necessary and interpret results.
2. Diagnose malfunctions in diesel engines, air equipment, trucks, or other components to determine nature of problem and needed repair or replacement.
3. Troubleshoot pneumatic equipment such as air valves, flow control devices, air pressure switches, or gauges.
4. Troubleshoot mechanical or electro-mechanical equipment.
5. Troubleshoot replace electrical equipment such as relays, meters, switches, control devices, or programmable controls.
6. Troubleshoot electronic and microprocessor-based equipment including communications systems, control systems, or logic control.
7. Troubleshoot high voltage equipment such as circuit breakers, load breaker switches, or transformers.
8. Troubleshoot equipment such as supply hoses, fluid valves, flow control devices, or gauges.
9. Diagnose minor malfunctions, reset protective devices, and perform minor maintenance and servicing activities when maintenance personnel are not available.

B. Inspection Functions

1. Perform daily locomotive inspection in accordance with FRA regulations and at other intervals in accordance with company policy, normally on the service track, pit, or in the field.
2. Inspect interior cab components such as bells, windshield wipers, horns, seats, etc.

3. Inspect sand levels in locomotive, as necessary.
4. Inspect locomotive for any visibly or audible leaks in water, fuel, air, or oil lines.
5. Inspect fuel and pre-trip as required.
6. Inspect all safety appliances including hand holds, sill steps, grab iron, brake platforms, running boards, uncoupling levers, etc.
7. Inspect wheels to ensure that flange, rims, treads, plate, hub, axle, and bearing are in good repair.
8. Inspect friction journals bearing and wedge for proper lubrication and lubricate when necessary.
9. Inspect brake apparatus including brake shoes, beams, hangers, rods and associated equipment.
10. Inspect ensure all hand brakes are released, adjust brake piston travel, adjust and/or replace defective brake apparatus.
11. Inspect to ensure all angle cocks, cutout cocks, etc., are properly lined.
12. Inspect truck sides and truck bolsters for defects, cracks, etc.
13. Inspect all locomotive door to ensure they are properly secured and not defective.
14. Inspect car frames and car bodies for holes, cracks, and other defects.
15. Inspect locomotive to make sure it is properly supplied.
16. Perform air brake tests as required by federal power brake law and company rules.
17. Check fluid levels on tools, machines, or equipment (hydraulic, lubricating, fuel, cooling, etc.).

C. Physical Function

1. Perform coupling of air and electrical connections between locomotives when making up engine consists.
2. Pull on knuckle to open the knuckle for coupling.
3. Service locomotives by adding oil, water, and sand, as required.
4. Connect or disconnect any wiring, coupling, or pipe connections necessary to couple equipment.
5. Hook up engine via air hose, set air for trailing and lead positions and ensure all valves are turned on.
6. Ensure that all cars are coupled, air hoses are coupled and inspected, and cars are still on the rail.
7. Perform Initial Terminal Air brake Test as required by FRA, AAR, and company rules and regulations.

8. Replace gaskets, air hose, etc., as required.
9. Start and stop engines by operating switches, valves, and circuit breakers in proper sequence.
10. Turn engines on the wye or turntable.
11. Drain water from cooling system as required.
12. Apply and release hand brakes.
13. Supply cabooses and locomotives with all necessary materials such as ice, drinking water, sanitary supplies, tools, and spare parts.
14. Sweep floor or walkway using large tools such as a broom or shovel.
15. Keep assigned work areas clean and orderly.
16. Lift and carry objects weighing between 20 and 50 pounds.
17. Perform work activities that require bending, stooping, or crawling.

IV. Physical Requirements

A. Statutory and Regulatory Requirements

1. FRA hearing requirement - average hearing loss in the better ear does not exceed 40 dB at 500 Hz, 1,000 Hz, and 2,000 Hz with or without the use of a hearing aid.
2. FRA vision requirements -
 - a. Either -
 - (1) distant visual acuity of at least 20/40 (Snellen) in each eye without corrective lenses; or
 - (2) distant visual acuity separately corrected to at least 20/40 (Snellen) with corrective lenses; and
 - (3) distant binocular acuity of at least 20/40 (snellen) in both eyes with or without corrective lenses.
 - b. And a field of vision of least 70 degrees in the horizontal meridian in each eye.
 - c. And the ability to recognize and distinguish between the colors of signals.