

Engineer and Conductor Training

Workforce Training Plan

The managers and employees who provide Train and Engine (T&E) service for Amtrak® follow a program developed over several decades in close partnership with the Federal Railroad Administration (FRA) and in collaboration with the labor organizations. Incorporating a layered approach to training and oversight, Amtrak's program meets all required federal standards and exceeds many of them.

Initial Training

Both conductors and engineers are subject to a federally regulated training and certification process mandated by 49 Code of Federal Regulations (CFR) Parts 240 (Locomotive Engineer) and 242 (Conductors). Amtrak's vice president of Safety, Compliance and Training oversees an initial two-part program of classroom and on-the-job training designed to integrate classroom instruction with on-the-job experience. All T&E personnel training is based on a uniform curriculum developed by the System General Road Foreman's Office, and System Operating Practices. Classroom instruction includes learning activities designed to teach all safety critical job responsibilities.

The curriculum for engineer training includes instruction on:

- 49 CFR part 240 requirements
- Applicable Locomotive Operating and Maintenance Manuals
- Air brake and Training handling practices
- Operating Rules
- Amtrak Safety Manuals
- Equipment Orientation
- System General Road Foreman Notices

The curriculum for conductor training includes instruction on:

- 49 CFR part 242 requirements
- Emergency Preparedness Training
- Crew Resource Management
- Amtrak Service Standards Manual

- Equipment Orientation
- Operating Rules
- Amtrak Safety Manuals
- Air brake and Training handling practices
- Amtrak Corporate Policies

For both crafts, significant hands-on instruction is included in the curriculum. After successful completion of the training course, engineer and conductor trainees return to their crew bases to conduct on-the-job training (OJT) under the supervision of managers and certified instructors. After successful completion of a lengthy period of OJT (averaging 16-18 months for engineers), and successful completion of federally mandated certification standards, engineers and conductors are subject to a special testing regimen to ensure that their training and skill levels meet Amtrak's standards.

The table below illustrates some of the areas in which Amtrak's training and certification requirements exceed those stipulated by 49 CFR. Every employee working in T&E service must meet the standards stipulated in the table to be considered sufficiently trained for employment at Amtrak.

Selected Key Amtrak and FRA Training Requirements Compared	
FRA Requirement	Amtrak Requirement
Full recertification every 3 years	Amtrak engineers and conductors are required to attend annual training, in excess of the federal requirements
Full engineer physical examination every 3 years	Full annual physical examination for every engineer, including sleep apnea screening
Annual requirement for engineer proficiency evaluation, no route length specified	Proficiency evaluation twice per year
No special requirements for evaluation of newly promoted engineers	Newly promoted engineers evaluated monthly for their first year of service
No special requirements for download and evaluation of locomotive data recorders	Engineers receive a random download and evaluation of a data recorder quarterly
No special requirements for download and evaluation of inward-facing cameras	Where installed, inward-facing cameras are downloaded quarterly , and evaluated for conduct, cell phone use and occupancy requirement compliance
Does not require physical characteristics examination for Supervisors of Locomotive Engineers (SLE)	Requires all SLEs and trainmasters pass the same physical characteristics examination as engineers and conductors
No requirement for SLEs to be certified to oversee conductor work	Amtrak road foremen are required to maintain certification as engineers and conductors

Operating Efficiency Testing

To ensure T&E crews possess the required skill levels and are operating trains in a safe manner, Amtrak conducts several layers of efficiency testing to assess skill levels and performance. Amtrak's standards meet all the requirements for conductor and engineer testing required by 49 CFR, and in some cases, exceed it substantially. Efficiency testing is conducted by managers who are qualified as SLEs and trainmasters; both positions are required by Amtrak to meet certification requirements in excess of those mandated by the FRA, including qualification on the physical characteristics of the rail territory in which they work.

Engineers and conductors are subject to recurring testing by a qualified manager. All training is documented and stored in the Safety, Performance and Record Tracking Network (SPARTN). While the FRA requires that engineers demonstrate proficiency over a portion of the route that they work on an annual basis, Amtrak requires that a SLE ride with and evaluate each engineer twice annually. While FRA does not require it, Amtrak requires newly promoted engineers in their first full year of service to have an evaluation ride with a supervisor every month to monitor skills development and compliance until they have completed their first full year of service. Employees responsible for a major rule violation are also required to have monthly evaluation rides accompanied by an evaluator/trainer for a year, and supervisors are required to test these employees on each rule, or equivalent rule, for which they were disciplined.

In addition to this testing, engineers are subject to several additional types of evaluation. The electronic locomotive and cab car "event recorders" which capture locomotive speed, throttle setting, and brake application information are downloaded on a random basis. This is done annually for each engineer and is subjected to a thorough analysis to determine whether the train was operated in conformity with the operating rules, speed restrictions and train handling instructions.

Supervisors also download both outward-facing and (where installed) inward-facing cameras for each engineer on a random, quarterly basis to ensure that the employees are compliant with all safety rules, particularly those governing cell phone and electronic device use in the cab. The inward-facing camera records are also examined to ensure conformity with head-end occupancy requirements.

Recurring Training

In addition to efficiency testing, Amtrak conducts annual recurring training for T&E employees. This training is designed to ensure that Amtrak employees possess the necessary knowledge and skills to operate trains safely and effectively. All Amtrak engineers are trained annually on the



operating rules, and all conductors, engineers and assistant conductors are trained biennially on emergency preparedness as mandated by 49 CFR – but they are also subject to training requirements that greatly exceed the mandatory training minimums. Federal regulations require certification every three years, but Amtrak engineers, conductors and assistant conductors attend annual training, in excess of the federal requirements.

While the FRA requires only a hearing and vision test for engineers in every third year of service, all Amtrak engineers receive a full annual physical examination to ensure that they are healthy enough to perform their duties; this includes a sleep apnea screening.

Emergency Preparedness (PREPARE) Training

All Amtrak T&E crews receive PREPARE training biennially as part of their annual recurring training program. PREPARE is designed to equip crews to deal with potential emergency situations. The course defines a wide range of potential emergency situations and locations, and trains crew members to respond appropriately and as a team in the event of an emergency, with particular emphasis on communications procedures. In addition to classroom instruction, hands-on skills training is provided, using training aids such as rail cars, smoke generators and fire extinguishers. The course focuses on key areas, including:

- Rail equipment familiarization
- Situational awareness
- Passenger evacuation
- Coordination of functions/operations
- Emergency care

During PREPARE training, employees receive a complete familiarization with the rail equipment associated with their assigned areas of responsibility. This training extends to the level of familiarity required to conduct a successful evacuation, as well as the location, function, and operation and use of onboard emergency equipment.

Train and Engine Crew Quality Control Process

To ensure operating practices across the Amtrak system comply with all applicable rules, best practices are employed in T&E service, and managers are kept informed of the state of training and compliance, the office of Amtrak's vice president of Safety, Compliance and Training conducts periodic audits of specified segments of the Amtrak system. An auditing group staffed by



the Amtrak System Safety organization is charged with the conduct of audits, the preparation of the report and the briefing of the local management and the vice president of Safety, Compliance and Training and (where necessary) other Amtrak leaders.

During an audit, test data are recorded by the auditors in SPARTN, Amtrak's program for conducting and recording operational tests and inspections. An operational test or inspection is an auditor's observation of an employee's ability and willingness to correctly apply the rules pertaining to train operations. Auditors may perform operational tests and inspections on any applicable Operating Rule, Special Instruction, or Air Brake and Train Handling Instruction, or on one of the Roadway Worker Protection (RWP) or SOFA Safety Rules, Emergency Preparedness Procedures, or Mechanical department procedures. Strict compliance with the rules is essential to the safe and efficient operation of the railroad.

Instances of failure to meet Amtrak or FRA standards are documented in SPARTN and crews are subject to the range of appropriate measures, depending on the severity of the failure, from retraining and requalification all the way to termination. At the conclusion of each audit, the leadership of the organization is briefed on the audit and the performance of the organization. This allows for the effective identification of both individual skills training needs and potential systemic challenges. Audit results are then used by organizational managers to develop their training and evaluation plans.

Drug and Alcohol Plan

One of the most serious threats to employee health and safety is drug and alcohol misuse on the job. Employees who abuse these substances do more than just hurt themselves – they put everyone around them at risk, including fellow colleagues and customers. Amtrak's testing policy is very strongly supported by management and is backstopped by policies designed to help employees and managers prevent drug and alcohol abuse. Testing of regulated employees occurs randomly throughout each month.

Amtrak's drug and alcohol testing protocols exceed federal requirements on two fronts. First, the Federal Railroad Administration (FRA) currently requires that 25% of Hours-of-Service (HOS) employees (and 50% of Maintenance of Way (MOW) employees) are selected for random testing annually. The Amtrak testing rate currently stands at 60% for both groups. Effective January 1, 2018, Amtrak will increase its testing rate from 60% to 80% for both HOS and MOW employees.

In 2017, Amtrak reintroduced random testing for certain non-regulated groups. Effective January 1, 2018, for all non-federal testing events, Amtrak will use an expanded testing panel to include barbiturates, benzodiazepines, methadone and oxycodone, none of which are currently included



in the federal testing panel.

The knowledge that Amtrak's testing regimen is so strenuous contributes to a strong sense of deterrence, as employees understand that a random drug test in the course of the year is not just possible, but likely – and that this emphasis will only increase. Following a comprehensive review of Amtrak's Drug and Alcohol-Free Workplace Program, Amtrak identified opportunities and initiated a project to enrich drug and alcohol prevention, treatment, education, and deterrence programming. These efforts will help address the complicated drug and alcohol landscape including the national opioid epidemic and legalization of prescription and recreational marijuana in several states.

In January 2020, Amtrak adopted a zero tolerance for drug and alcohol levels greater than .020. Employees who test positive will be terminated.

