

Alaska Railroad Contractor Orientation and Roadway Worker Protection

Alaska Railroad Orientation Course and Roadway Worker Protection

Who is a roadway worker? Well you are if you are an employee of a railroad or a contractor to a railroad.

1. Naturally, we will be reading and discussing many definitions as we go through this program. Some definitions will be repeated as the course progresses. One of the most important definitions is Roadway Worker.
2. As you see - a contractor to a RR can be a RW.

(ROADWAY WORKER PROTECTION) EMPLOYEE IN CHARGE (EIC)

A roadway worker designated to provide On-Track Safety for one or more roadway work groups.

RWP SAFETY

(ROADWAY WORKER PROTECTION) EXCLUSIVE TRACK OCCUPANCY (ETO)

A method of establishing working limits on controlled track in which movement authority for trains and other equipment is restricted by the Train Dispatcher, placing track flags (ARSM Rule 43.2.3), or restricted by flagmen.

FOUL TIME

A method of establishing working limits on controlled track in which a roadway worker is notified by the Train Dispatcher that no trains or roadway machinery will operate within a specific segment of controlled track until the roadway worker reports clear of the track.

(ROADWAY WORKER PROTECTION) TRAIN APPROACH WARNING (TAW)

A method of establishing On-Track Safety by warning roadway workers of the approach of trains in enough time to move to or remain in facilities, or roadway machinery on or near track or with the potential of fouling a track a place of safety.

Safety Training/Job Briefing

WHAT IS FOULING A TRACK?

Within 4 feet or (20 feet for Contractors) of the field side of near running rail.

WHO IS A ROADWAY WORKER?

WHY IS ARRC TRAINING ITS EMPLOYEES/CONTRACTORS IN ROADWAY WORKER SAFETY??

- ✓ Required by Law - Federal Railroad Administration (FRA) 49 CFR 214(C)
- ✓ Retraining required annually
- ✓ Law Applies to Contractors to a Railroad who are or may be Roadway Workers
- ✓ Prevent Employees from being Struck by Trains or other On-Track Machinery

RESPONSIBILITY OF ROADWAY WORKERS EMPLOYEE IN CHARGE (EIC)

- ✓ Person responsible for the On-Track Safety of others.
- ✓ Must be qualified under the railroads operating rules and On-Track Safety program.
- ✓ Must be qualified on the physical characteristics of area in which working.

WATCHMAN/LOOKOUT

An employee who has been trained and qualified to provide warning to Roadway Workers of approaching trains or equipment.

ROADWAY MAINTENANCE MACHINE (RMM)

- ✓ Discuss tasks to be performed and safe means of accomplishment
- ✓ Identify the EIC and method of OTS
- ✓ Discuss the OTS method and appropriate details (i.e. designate places of safety, warning methods, etc.)

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ROADWAY WORKER SAFETY ON-TRACK SAFETY METHODS TRAIN APPROACH WARNING

- ✓ Equipped to provide warning
- ✓ Required to provide at least 15 second advanced warning to employees
- ✓ Responsible for identifying the place of safety-Assigned solely to watch for approaching trains/RMMs

TRAIN APPROACH WARNING

- ✓ Distinctive and clear
- ✓ Does not require looking in a particular direction
- ✓ Identified in Job Briefing by Watchman/Lookout

What is fouling the track?

Fouling the track is the location of a person or equipment that could be struck by a train or on-track equipment or in any case is within four feet of the field side of the nearest running rail.

1. Notice that this definition refers to the location of a person or equipment. Consider an off-track crawler crane sitting 20 feet away from the track, but with a boom that will reach 30 feet. Could the potential for fouling the track exist with this scenario. Sure the boom could easily foul the track although the machine is well beyond the 25 feet. Again this definition not only pertains to equipment but also any time that one places one's body within 4 feet of the near rail.
2. It is imperative that everyone understands before they foul the track, On Track Protection is required. If I am in fact going to be fouling the track, some form of on-track protection will need be established.
3. Some RR's have different distances (always more) than the 4 foot rule. You are governed by the rules of the particular RR on which working.
4. Some people used to think that fouling meant being on the track. It is quite clear under this definition that you don't have to be on the track to be fouling. Four feet is awful close especially when the train is doing 79 MPH. That train is covering 117 feet every second. By the time your mind reacts to actually seeing the train, you better step back because its here. But if you are only 4 feet away, you're in trouble.

Do you do any of these jobs?

Do you use equipment that has the potential to foul a track? I would bet that all of us in this room are, at least some of the time, Roadway Workers are subject to the RW protection regulations. What if we are only intermittently out on track, for example inspecting track for a suitable site to hold a training class to find track defects. Yes, this fulfills the definition of a roadway worker and would subject one to all the Roadway Worker requirements.

TRAIN APPROACH WARNING REVIEW OF KEY POINTS

- ✓ What other duties may be performed by an individual serving as a Watchman/Lookout?
- ✓ How do workers know where to go when warned of the approach of a train?
- ✓ How much advance warning must Watchmen/Lookouts provide the workers for whom they are providing protection?

INDIVIDUAL TRAIN DETECTION

- ✓ Procedure by which a lone worker acquires on-track safety by seeing approaching trains/on-track equipment and leaving the track prior to their arrival
- ✓ INDIVIDUAL TRAIN DETECTION LONE WORKER - RESTRICTIONS
- ✓ Perform routine inspections or minor correction work
- ✓ Works outside the limits of a manual interlocking, a controlled point, or a remotely controlled hump yard facility
- ✓ Able to clearly hear and see approaching trains/on-track equipment
- ✓ Not occupying a position or performing tasks that interfere with ability to lookout

INDIVIDUAL TRAIN DETECTION LONE WORKER ESTABLISHING WORKING LIMITS

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- ✓ Only a qualified RR EIC may establish, or have control over, working limits for the purpose of establishing On-Track Safety
- ✓ Only one RR EIC shall have control over working limits on any one given segment of track at a given time

WHEN ARE WORKING LIMITS REQUIRED?

The keys to making tracks within the working limits physically inaccessible to trains or equipment are:

1. Place a flagmen with instructions and capability to hold trains.
2. Line a switch or place a derail to prevent access. Secure switch or derail with an effective securing device.
3. Create a discontinuity in the rail that precludes passage of trains or engines into the working limits.
4. Establish working limits on the controlled track that connects directly with the inaccessible track, established by the employee-in-charge of the working limits on the inaccessible track.
5. Utilize a remotely controlled switch aligned to prevent movement and secured by the control operator, or any combination of the five above.

TYPES OF TRACK

1. Controlled Track
2. Movements made only under authority of train dispatcher or control operator
3. Non-controlled Track
4. Trains move freely under standard operating rule
5. No authority provided by dispatcher or control operator

SUMMARY TYPES OF WORKING LIMITS

- ✓ Controlled Track - Obtain exclusive use of length of track.
- ✓ Uncontrolled Track - Make section of track inaccessible to trains or use a combination of both methods.

Watchman/Lookout

A watchman/lookout is an employee who has been trained and qualified to provide warning to Roadway Workers of approaching trains or roadway maintenance equipment.

1. We will talk more about what a Watchman/Look is and his responsibilities shortly. The slide picture shows one form of signaling. The position of the signal indicates that a train is coming and it points to the designated place of safety designated in the job briefing.
2. Each RR might have different signals that are used by Watchman/Lookouts, so it is important to know the meaning given in that particular RR's OTS manual.

General Question: How do you handle new hires.

That's a lot of information to be given with everything else they have to be given and now you are adding something that they don't even understand. This is particularly prevalent where contractors hire people daily out of a union hall. Answer: For situations like this, the minimum a roadway worker has to have is:

- ✓ When is he fouling a track,
- ✓ Who is the employee-in-charge and
- ✓ Don't go there until he says that you can.

Again you could do the training mandated by the law, not very well, in a competent job briefing. Certainly is not a desirable situation, but it would suffice if done properly. There are training videos presently in the development stage that may help to do this as well.

Question: How will the FRA look at the documentation requirement associated with these brand new people? Somewhere even if it's a field note, it should be documented. Again the FRA HOPES THAT THE TRAINING IS MORE THAN A JOB BRIEFING.

Question: How are language barriers handled? However, the basic job briefing information has to be understood by all. If that means somebody translating into Spanish the EIC's instructions - so be it.. Some railroads are providing their OTS policies in Spanish, etc. Railroad signals, signs do not have to be in any language other than English.

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EXCLUSIVE TRACK OCCUPANCY (ETO)

One Means of Establishing Working Limits In Controlled Track

EXCLUSIVE TRACK OCCUPANCY

(Controlled Track)

- ✓ Working limits are placed under the control of only one RR EIC
- ✓ Working limits defined by physical features
- ✓ Trains and equipment moving through limits are under the direction of the EIC

TRAIN/EQUIPMENT MOVEMENTS MADE AS DIRECTED BY EIC:

- ✓ Trains and equipment must move at “restricted speed” if not given a higher speed by EIC
- ✓ Restricted speed requires trains and equipment to:
 - ✓ Stop with 1/2 range of vision
 - ✓ Not exceeding 20 mph
 - ✓ Other restrictions prescribed by operating rules

TYPES OF EXCLUSIVE TRACK OCCUPANCIES

(For a given segment of track and time frame)

- ✓ TWC (Track Warrant Control)
- ✓ Form B
- ✓ Flag Protection

FOUL TIME

Another Means of Establishing Working Limits In Controlled Track

Similar To ETO - Differs In That

No Train Movement Is Allowed

TRAIN COORDINATION

A method of establishing working limits on track on which a train holds exclusive authority to move whereby the crew of that train yields that authority to a RR EIC

TRAIN COORDINATION EXAMPLE

INACCESSIBLE TRACK

A method of establishing working limits on non-controlled track by physically preventing entry and movement of trains and equipment

INACCESSIBLE TRACK

- ✓ A flagman with instructions and capability to hold trains
- ✓ A switch or derail lined to prevent access and secured with an effective securing device
- ✓ A discontinuity in the rail that precludes passage of trains or engines into the working limits.
- ✓ Working limits on the controlled track that connects directly with the inaccessible track, established by the RR EIC of the working limits on the inaccessible track
- ✓ A remotely controlled switch aligned to prevent movement and secured by the control operator

INACCESSIBLE TRACK

A flagman with instructions and capability to hold trains and equipment.

Why are we doing this roadway worker training? Why haven't we done it in the past. Obviously, the law just went into effect in April of '97. The FRA has spent the past year helping railroads become acquainted with it. Now it's time to enforce it. Everyone has to become familiar with it.

1. The regulations were issued by FRA as Subpart C to 49 CFR (Code of Federal Regulations) 214 Railroad Workplace Safety. Effective 12/16/96
2. The law came about not because the FRA wished to increase their revenues from fines; but because too many railway employees were being struck and killed by trains and roadway equipment. We had safety rules that covered these situations - I.e., you will not be killed by a

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- train. But if somebody violated that rule, he still got killed. In an effort to combat that, these rules were developed by a committee of about 50 RR management & Labor leaders who jointly agreed they could & would abide by them. FRA adopted them, and they became law.
3. The law applies to any contractor who may be a roadway worker as well. As a contractor you have responsibilities defined by this law that mandate your employees be trained. Fines can be levied against employers & employees for failure to comply with these regulations. They can range from \$1,000 to \$10,000 per violation. The need to know and understand these regulations is a must!
 4. The railroad environment is a potentially dangerous environment. Anybody who's ever worked around a railroad knows that.. The bottom line - SAFETY & ACCIDENT PREVENTION!

Roadway workers under the regulation have responsibilities as well.

1. Each RW has a responsibility to comply with this part which is enforceable under the provisions of individual liability. In other words, the employee himself can be fined for failure to follow the RR's OTS rules.
2. A RW shall not foul a track except in the performance of duty, and only after determining it is safe to do so. The EIC of OTS should insure during the job briefing that all RW's in his RWG understand this. This always brings up the question of what if I'm simply crossing the tracks to get to my vehicle or the work area, do I need on-track safety. No, the railroad's regular safety rules cover that situation i.e., expect a train on any track in any direction at any time, never step into the foul without looking both ways, do not cross in front of moving trains, etc.. However, work performed, for example stooping down as I'm walking across to measure gage (a momentary action) would require On-track safety per the regulation. Another situation, two contractor employees are walking across the track, but they are carrying a 90 LB. bag of cement between them - do they require on-track safety. Yes because they are performing more than a walking function - they're working. That form of on-track safety may be nothing more than the foreman saying I'll be a lookout for you and if I say a train is coming clear the track over there. How about if I need to get my little John Deere Tilt Blade Dozer across your tracks at other than a crossing to do a little grading on the other side. Obviously this will require positive on-track protection because you're moving equipment within 4 feet of the track. Why? Well what if the dozer runs out of fuel half way across. The operator can jump off the machine, but what about our locomotive engineer when he smacks into it. If the machine is moved across at a crossing - that's a different story. Now a public way is being used and OTS is not required. How about I've been hired by the railroad to take photographs and I'm in the foul for just a few seconds. One must not foul the track unless some form of on-track safety is in place every second that they are out there. Could require nothing more than EIC saying I'll watch for you for those few seconds i.e., someone is assuming responsibility for your protection. What about the contractor who is bidding on a job. He's going to have to come out ahead of time to take some measurements. No contractual relationship between the contractor and railroad yet exists. Yet, most railroads would take the position that this contractor will need to be provided on-track safety. Although the contractual obligation does not yet exist, the contractor wants to be able to inspect the proposed work in order to secure a contractual obligation. Technically, Roadway Worker regulations are not applicable. But again, every railroad would want to apply their applicable safety rules to this situation and they would provide the required level of protection. If you don't solicit from the railroad protection, you are technically a trespasser.

On-Track Safety

The focal point of on-track safety hinges around one man or woman - the employee-in-charge known as the EIC. He is the person responsible for the on-track safety of the people under him. On-track safety won't exist unless he does his job.

1. The EIC will almost always be a RR employee, and later in the course we will discuss his responsibilities in more detail.
2. If a contractor will be performing work which may foul the track, it is imperative that all employees know who the EIC is, and not foul until the EIC conducts a proper job briefing (we will cover in detail later).

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3. Although the FRA does not actually define the term “EIC of OTP”, it is commonly used in the RR industry and the FRA regulations refer to this person as the “Roadway Worker designated to provide On-Track Safety”.
4. The EIC has some responsibilities. Before he can assume EIC duties, he must be qualified on the railroads operating rules, the railroads On-Track Safety procedures and the physical characteristics of the territory he is working on. Question say you attended a railroads on-track safety training program took the test as well as the test on their operating rules and successfully passed it. Would you be qualified to be an EIC. No you would have to demonstrate that you were familiar with all of the particular railroad peculiarities, i.e., where are the sidings, where are the mileposts, where are the control signals or control points, how do you read the timetable. Then you have to be familiar with the environmental characteristics peculiar to that territory I.e., the location of that noisy stamping factory or the location of that sharp curve, or perhaps there is a runway directly overhead 12 feet above you. Would it be important to know that. Or maybe this location is prone to instant development of fog. Perhaps it's clear one second, you turn and look back and you can't see 10 feet in front of you because the fog rolled in from the lake. Better know that if you are providing watchman/lookout protection for a crew. These are the physical characteristics of a territory. You have to know where situations may be dangerous.

Question: Must an EIC be a railway employee. In most cases yes. Unless you are qualified on the operating rules, the railway on-track safety procedures, the physical characteristics of the territory; plus the use of the railway's timetable, you can't be an EIC. Although technically, it's allowed under the regulations, most railroads are not going to permit it. Too much liability hanging out there.

What is a roadway maintenance machine?

It is a device powered by any means of energy other than hand power which is being used on or near railroad track for maintenance, repair, construction or inspection of track, bridges, roadway signal communications, or electric traction systems. Roadway maintenance machines may have road or rail wheels or may be stationary.

1. RMM's are devices with characteristics or uses that are unique to the RR environment. The term includes both on-track and off-track machines. A RMM need not have a position for the operator on the machine, nor need it have an operator at all.
2. Hand held power tools, or hand powered devices are excluded from this definition.
3. Some examples of RMM's - Crawler & wheel equipped tractors, backhoes, dozers, cranes, electric generators, air compressors, and many more.
4. Specific requirements for RMM and the rules that are applicable under RWP will be covered in detail later in this course.

The Standard

Paragraphs (a) and (b) establish the duty of notification by the employer and the reciprocal duty of communicating acknowledgment by the employee. These Sections essentially require a job briefing to inform all concerned of On-Track Safety methods at the beginning of each work period. The acknowledgment is an indication by the employee of understanding, or the opportunity to request explanation of any issues that are not understood.

Paragraph (c) requires that an employer designate at least one Roadway Worker to provide On-Track Safety while a group is working together. This designation can either be for a specific job or for a particular work situation. This Section is vital to the success of any On-Track Safety program because the mere presence of two or more persons together can be distracting for all persons involved. FRA believes that awareness will be enhanced and confusion limited by requiring railroads to formally designate a responsible person. This designation must be clearly understood by all group members in order to be effective. An individual, such as a foreman, may generally be designated to be responsible for his or her group, but if two groups are working together or Roadway Workers of different crafts are assisting one another, it is imperative that this formal designation be communicated to and understood by all affected employees.

On-Track Safety

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We have laid out an overview of what is On-Track Safety. Much of what we are going to cover are things that you need to know but won't apply yourself – but for your own safety you need to know. First let's talk about what working limits are. Any time you foul the track as a roadway worker, you must have some form of On-Track Safety. There are a number of different conditions that exist in the field. Depending on what you are doing, you can use different types of On-Track Safety. We talked about watchman/lookouts, Train Approach Warning, Lone Worker Individual Train Detection. These are different forms of On-Track Safety, but they do not establish working limits. There are many cases where the On-Track Safety provided doesn't warrant the need for establishing working limits. But any time that you are going to perform work that may require stopping or delaying trains – working limits must be established.

Categories

All forms of On-Track Safety can be separated into one of two distinct categories. Either we are doing something to keep trains away from us or we are doing something to keep us out of the way of a train. In the first method some physical means has to be used to hold the train back. A safe zone needs to be constructed that will keep the train out until we deem that it safe to for it to proceed through our "protected area".

In the later method, the train is totally unaffected by our presence. Nothing will interfere with the train as it traverses over a segment of track. Our on-track safety comes about because of the procedures that we have developed to detect the approaching train and to safely move to a place of safety before its arrival. As we discuss the various forms of On-track safety available to us this afternoon, examine each and determine whether we are attempting to keep trains away from us or are we keeping us out of the way of a train.

EIC as watchman/lookout

In some instances, the employee-in-charge may serve as a watchman/lookout or he may assign others to act in that capacity

A WATCHMAN/LOOKOUT is an Employee who has been annually trained and qualified to provide warning to Roadway Workers of approaching trains or on-track equipment. Qualification may require taking a written test or in other cases it may involve demonstrating proficiency in other ways. A Watchman/Lookout shall be properly equipped to provide visual and auditory warning such as whistle, air horn, white disk, red flag, lantern, fusee.

A Watchman/Lookout's sole duty is to look out for approaching trains/on-track equipment and provide at least 15 seconds warning to employees before the arrival of trains/on-track equipment.

He is also responsible for identifying the place of safety. When does he communicate what the place of safety is? He does this in the safety job briefing meeting.

Method of warning

When would the method of warning be imparted by the lookout. Yes, during the job briefing. The warning must be distinctive and clear, and therefore detectable despite background or distraction of work. If you were to find yourself next to a freeway, you would not want to use something that sounded like a car or truck horn. You might not want to use a referee's whistle.

The warning must not require looking in a particular direction. The exclusive use of a light would be out of the question because an equipment operator might be looking in another direction and he might not see it.

Before workers foul the track, the Watchman/Lookout must clearly communicate the method of warning to be used to indicate the approach of oncoming trains or on-track equipment.

Necessary equipment must be specified and supplied by the employer.

Speed Distance

How do you know when you need to be clear of that track? For example, a train at 50 mph would travel 1,100 feet in 15 seconds. A Roadway Work Group must be clear of the track when a train is 15 seconds

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away while moving at maximum authorized speed. What that means is you must be clear of the track in your designated place of safety when that train or piece of equipment is 1,100 feet away.

Some railroads may require a Watchman/Lookout, as well as, a Lone Worker, to complete and carry on-person a form with this information. What's the advantage of having this form and carrying it with you - even if you have to put an "X" or something like that on it? Answer: You verify that you have the appropriate information and that you have had a daily briefing. This forces you to do a job briefing covering the pertinent information. Incidentally, the regulation requires that a Lone Worker exercising Individual Train Detection have this form filled out and on his person. Thus they must do a mini-job briefing to help enforce their safety.

Emphasize again that watchmen/lookouts must have their people in the clear 15 seconds before train arrival. Lookouts must add in time to get their people's attention, get their tools out of the way and to actually move to the place of safety - plus 15 seconds. You don't wait until the train is 1,100 feet away to start getting in the clear.

The Example

This diagram provides an example of the use of a Watchman/Lookout to accomplish Train Approach Warning. Note that in this example, though not a common situation, an advance Watchman/Lookout has been established and positioned to address the presence of an existing obstruction. The work group is the shaded blue section in the center of the screen. There's a lookout immediately to the left of the group, but because of the building obstruction, he doesn't have the required sight distance - clear field of vision or perhaps he's not satisfied with it; thus necessitating the need for the advanced watchman. This is probably a borderline decision. It might be wise to establish working limits in this situation just because of the poor line of sight.

The determination that the gang must be clear before the train is 1100' from the gang is based on the fact that a train traveling 50 MPH will travel 1100 Ft. in 15 seconds. 50 MPH is the maximum authorized timetable speed for this location. The place of safety is identified in the bottom of the screen and the gang must be at that location when the train hits the 1,100 foot mark.

1. None. A Watchman/Lookout must devote full attention to detecting the approach of trains and communicating a warning to those being protected.
2. The Watchman/Lookout will identify the place of safety prior to workers fouling a track during the job safety briefing.
3. Watchmen/Lookouts must provide ample warning to allow workers to occupy a place of safety at least 15 seconds before the arrival of a train traveling at maximum allowable speed passes that location.
4. No. A Watchman/Lookout must be annually trained and qualified to provide warning to roadway workers. They must be properly equipped to provide visual and auditory warning such as whistle, air horn, white disk, red flag, lantern fusee. In addition, on some railroads they will be designated in writing by the employer and on all railroads will be identified as a Watchman/Lookout to members of the work group being protected. Stress some railroads may even take a stricter stance on this.
5. The Watchman/Lookout will, before the work group fouls a track, inform the members precisely what distinctive signal will be given to clearly signify that a train or on-track equipment is approaching. Each worker depending on train approach warning must maintain a position to allow receiving the warning from the Watchman/Lookout at all times. It becomes the watchman/lookouts responsibility to select a signal that is distinctive and can be received by everyone that he is protecting. Radios, by themselves are not permitted to be an exclusive means of communicating a signal from the watchman/lookout to get in the clear. However, the roadway worker has a responsibility to stay in a position that he can receive the signal. He must not wander so far down the track that he cannot hear the signal if an audible signal is being used.
6. Only activities that relate to routine inspection or minor work that will not affect the movement of trains may be performed under Train Approach Warning. Use of on-track equipment or off-track equipment that may foul the track does not permit the use of TAW.

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The last method of On-Track Safety (Keeping us away from trains) is Individual Train Detection. Individual train detection is a method of establishing on-track safety by which a lone worker acquires on-track safety by seeing approaching trains and leaving the track before they arrive. Obviously there is a lot of overlap with the other form of Train Approach Warning (Watchman/Lookout) except you are on your own.

Individual train detection is only used under strictly defined circumstances.

Restrictions

Restrictions applied to a lone worker desiring to use Individual Train Detection as his form of On-Track Safety

A lone worker is governed by the following restrictions:

- ✓ The lone worker must be performing routine inspection or minor correction work
- ✓ The lone worker must be outside the limits of a manual interlocking, a controlled point, or a remotely controlled hump yard facility.
- ✓ The lone worker must be able to hear and see approaching trains/on-track equipment without interference from noise, lights, precipitation, fog, passing trains or other physical conditions.
- ✓ The big restriction - A lone worker using ITD cannot use Power-operated equipment (I.e., no chainsaws, blowers, grinders, snow blowers, etc., nor can such equipment be operated within the hearing distances of a lone worker.
- ✓ A lone worker needs to participate in a job safety briefing. The way that is handled is they do it with a supervisor or another employee at the beginning of a shift. In this general job briefing done perhaps over the telephone, they will talk about their plans for the day, where they will be, what form of protection they will use, etc. It could also be done with employees from another work group even though they are not related to the work being performed. That will suffice unless some special situation should come up, whereupon a follow-up briefing would need to be performed.
- ✓ And finally the work performed cannot interfere with his ability to detect a train coming down the track. Working on curves or other conditions might make ITD inappropriate. Lone workers are entitled to another form of On-Track Safety by law if they desire. It is purely his decision as to whether ITD is appropriate for the work to be done. No supervisor is permitted to instruct a lone worker that he must use ITD.

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In the later method, the train is totally unaffected by our presence. Nothing will interfere with the train as it traverses over a segment of track. Our on-track safety comes about because of the procedures that we have developed to detect the approaching train and to safely move to a place of safety before its arrival. As we discuss the various forms of On-track safety available to us this afternoon, examine each and determine whether we are attempting to keep trains away from us or are we keeping us out of the way of a train.

The FRA added a couple of requirements to the process of creating working limits. For those following along with the regulations – this is coming out of 214.319. The first stipulation is that only a qualified roadway worker may establish or have control over the working limits for purposes of establishing On-Track Safety. It makes sense doesn't it?. We talked about qualification – who's qualified and what it takes to be qualified. Would anybody want to send their people out and trust their safety to anybody who was less than qualified? Certainly not.

The second stipulation is that only one roadway worker may be in control of working limits on any given segment of track at any one given point of time. And that is done to eliminate confusion when the roadway worker in charge is permitting train or equipment movement through the working limits. It's like when you have 10,000 foot soldiers in the army; but there is only one general. There can be only one roadway worker employee-in-charge whether that is the foreman or another roadway worker employee-in-charge of On-Track Safety. He is responsible for a given segment of track that cannot overlap with another person. So there can't be any confusion where one employee-in-charge is clearing trains through an area that overlaps with another segment of track that someone else has established working limits on.

When are working limits required? On-Track Safety is required every second that roadway workers foul the track. In some cases that will not require that working limits be established and in other cases the establishment of working limits will be a necessity. Working limits are required any time that it may be necessary to stop or delay approaching trains. Perhaps you are a contractor assisting in the renewal of a road crossing. Any action that will disturb the track structure or make the track structure unsafe for the safe passage of trains at timetable speeds, will require working limits. Working limits are required any time that roadway workers or roadway maintenance machines are unable to leave the track and get to a place of safety a minimum of 15 seconds prior to the arrival of the train operating at maximum permissible speed. For you contractors out there working along the track, we said working limits must not only be established any time your machinery may be fouling the track or the potential exists to foul the track.; but also any time your men and/or women employees may be fouling the track and are unable to safely clear the track in adequate time from approaching trains. Or, Working limits are required any time that you are unable because of physical conditions to detect the approach of trains or on-track equipment for any reason in adequate time to get to a place of safety. Physical conditions were touched on earlier. But read the regulations - the way its worded, it's a pretty all encompassing statement – for any reason if you are unable to detect the approach of a train or other equipment, working limits must be established. One point worth mentioning again, there are cases where working limits need not be established to possess on-track safety. However, the regulations specifically state that you are entitled to working limits if you are in some type of condition where the physical conditions do not permit you the ability to adequately protect yourself by using Train Approach Warning. Or if you're a Lone Worker using Individual Train Detection, you are entitled to a different type of protection than that established.

When we speak of establishing working limits, we will be providing you with several different means of doing so later this afternoon. But essentially railroad track can be classified into two categories.

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Controlled Track is track that is controlled by the control operator or dispatcher. In controlled track, no work can be performed that would disturb the track structure or make it unsafe for trains traveling at the maximum permissible speed unless permission is received from the train dispatcher or control operator. That permission (or authority) enables the creation of working limits.

Non-Controlled Track includes tracks such as industrial tracks, industrial leads, yard tracks and other than main tracks where trains move by rule (be able to stop within 1/2 range of vision or 20 MPH whichever is less - looking out for trains, engines, obstructions, broken rail, etc.) not by dispatcher authority. Because the ability to limit the movement of trains in non-controlled track does not exist through dispatcher or control operator authority, some other mechanism is needed to keep trains away from us (working limits) when we disturb the track or make it unsafe for trains operating at timetable speed. We'll be talking more about this in a minute.

Note: Some non-signaled railway main track is still classified as Non-controlled track. Railroads call this Yard Limits and trains operate at Restricted Speed. We'll also define that in a moment as well.

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The criteria used to establish working limits in controlled track is different than in non-controlled track. In controlled track working limits may be identified by one of several different identifiable points.

It could be a control signal with an aspect indicating stop. For all practical purposes we could call it a red signal.

Question: if you are looking at a control signal and you can see that it is red; are you on the right side of the signal. No you are outside of your working limits. That signal is there to stop the train.

Working limits can be defined by a station sign along the ROW that is the designated name of a station.

Generally, they are the name of a town. The authority for a train to move could be up to a station sign, so a station sign can be an identifiable point marking working limits.

It could be a milepost sign. People who are familiar with the railroad know that every mile is marked with a milepost sign. Thus that is an identifiable point.

We could use a switch where one track diverges onto another.

A red flag or a flagman. Those are all identifiable points that can be used to establish working limits on controlled track. For the most part these are all locations that the railroads operating rules will not allow a train to pass without proper authority. There may be other identifiable points that can be used to define the working limits. The only restriction is that they must be defined within the railroad's operating rules as a means of marking the working limits.

Some identifiable points that can be used to establish working limits on Non-controlled track include a switch, aligned to prevent access to the work limit that is secured either by a control operator or an effective securing device. An example could be where the employee-in-charge communicates with a

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control operator or dispatcher at a dual control switch machine and that operator or dispatcher locks or blocks that switch so that no one can throw that switch to get into the route where people are working. When we talk about locking that switch with an effective securing device, we are talking about applying a private lock to that switch or spiking the switch - making it so that someone on a train crew could not come up and not knowing where you are, open that switch and inadvertently get into where you are working with the train. A common sense way of looking at it would be the application of a private lock or doing something to the switch that would require the use of a tool to open the switch. For example spiking the closed switch point would require a claw bar to remove the spike or if a switch point clamp were applied it would require a wrench to deliberately open the switch in order to remove the clamp locknut. We may establish working limits in non-controlled track through the use of a derail secured with an effective securing device. A derail is a device that is designed to lay across the top of the head of the rail and to be secured with a private lock so that nobody can take that derail off. And if for some reason somebody kicks a cut of cars down a yard track or if for any reason a cut of cars is coming toward you, that cut of cars is going to ride up over the derail and derail the cars or train before they can get to you.

Working limits can be defined by securing exclusive use of the track in controlled track, making the track physically inaccessible to the safe passage of trains in non-controlled track, or using a combination of the two by limiting access to a segment of controlled track and thereby preventing access to a segment of non-controlled track.

The important thing is to look at the On-Track Safety rule objectively. Why is this rule here, why have working limits, why shouldn't we look for the loopholes to get out of applying the rule here if we can get out of it there. Again the regulations are written to protect you and your people to prevent them from getting hit by trains or equipment. Applying these rules not only provides safety but fulfills an ethical obligation to our employees as well – regardless of whether or not it is federally mandated.

Under Exclusive Track Occupancy trains and equipment may move through the working limits only as directed by the employee-in-charge. Such movements will be at Restricted Speed unless a higher speed is otherwise indicated by the employee-in-charge.

Ask Question: What's Restricted Speed? A simple explanation is to be able to stop in half the distance that the track is seen to be clear. This includes all the things that must be stopped short of including a red flag and of course cannot exceed 20 MPH, whichever is greater. So if a locomotive is traveling at Restricted Speed and his sight distance is 500 feet. He must be able to stop in Answer: At a speed that will permit him to stop in 250 feet. If he's going around a 3-degree curve, it might be almost walking speed. Restricted speed is a pretty common term on the railroad and it is a means of moving trains in yards and other locations other than in controlled track.

What are the common forms of Exclusive Track Occupancy? We have Permits. In Centralized Traffic Control Territory, we have Track and Time Permits. For example, we call the train dispatcher and tell him that this is Foreman Roe, I would like Track and Time on Track #1 between CP 105 and CP 110. If traffic will permit, the dispatcher answers OK Track and Time Permit 1300, 1-3-0-0, issued to Foreman Roe on Track #1 between CP 105 and CP 110 between 1:05 PM and 2:30 PM. And if Foreman Roe repeats it correctly the dispatcher issues OK and his initials. You are then authorized to occupy that track between those control signals governing CP 105 and CP 110, or between those switches or whatever the particular railroad's operating rules require. Track Permits in their various formats are utilized frequently for fouling the track for short periods of time, for movement of equipment and in situations where the work is not pre-planned.

Track Warrants operate in pretty much the same fashion. You are authorized to occupy a segment of track between two clearly identifiable points - between this milepost and that one or between this station and another. Essentially between any two clearly identifiable points identified in the operating rules.

Track Permits operate much like Track and Time Permits, except they are utilized in Absolute Block Signal System Territory under General Code of Operating Rules. Under NORAC, it's a Form D Line 2 and 3 in

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Absolute Block Signal System Territory or Direct Control System Territory . Under NS rules it's Track and Time in Traffic Control Territory or Remote Control Territory . Under CSX Rules, it's a Rule 704 Authority and under the Canadian Operating Rules, it's called a TOP (Train Order Permit).

Foul Time

Foul Time is another means of establishing working limits in controlled track. Foul Time is a new concept for most of the western railroads utilizing the General Code of Operating Rules, although it had been widely used by the NORAC railroads such as Conrail and Amtrak. Many roads limit its use to get authority to occupy the track segment between the absolute signals (the traffic signals governing movement through the interlocking) of an interlocking or a control point. The conventional forms of Exclusive Track occupancy such as a Track Permit or Track and Time do not apply inside the actual limits of a manual interlocking. Other railroads utilize Foul Time in addition to establishing working limits inside the limits of a manual interlocking, but to also to establish working limits outside the limits of a manual interlocking – similar to securing a track permit. It is usually restricted to locations where personnel may foul the track, but the track is not made unsafe for the safe passage of trains and equipment will not be fouling the track.

The last method of establishing working limits is through the use of Inaccessible Track. Trains and equipment can operate on Non-Controlled track without having first received specific authority to do so. Trains and equipment cannot be held clear of Non-Controlled track by simply withholding their movement authority. The Employee-in-Charge of the Working Limits must therefore render Non-Controlled track within Working Limits physically inaccessible to trains and equipment, other than those operating under the authority of that Roadway Worker (train coordination), by using one or more of the provisions of Inaccessible Track.

What is Inaccessible Track? It's a method of establishing working limits on non-controlled track by physically preventing entry and movement of trains and equipment.

If a work force is working in non-controlled track and if a train (other than one under the control of an EIC by train coordination) or car rolling freely would be able to physically enter the working limits without being derailed, sent down another track, or stopped by a flagman, the working limits have not been made inaccessible. How do we physically prevent entry and movement of trains and equipment?

The keys to making tracks within the working limits physically inaccessible to trains or equipment are:

1. Place a flagmen with instructions and capability to hold trains.
2. Line a switch or place a derail to prevent access. Secure switch or derail with an effective securing device.
3. Create a discontinuity in the rail that precludes passage of trains or engines into the working limits.
4. Establish working limits on the controlled track that connects directly with the inaccessible track, established by the employee-in-charge of the working limits on the inaccessible track.
5. Utilize a remotely controlled switch aligned to prevent movement and secured by the control operator, or any combination of the five above.

The first method of creating inaccessible track is to utilize a flagman with instructions and capability to hold trains and equipment. Here we got a maintenance gang that wants to replace ties on this non-controlled industrial track which comes off a switch on a controlled piece of main track. To make that track inaccessible flagmen could be posted at either end of the maintenance activity. If the spur track in this example ends and the Employee-in-Charge determines without a doubt that there are no trains beyond the Work Limits toward the end of track, then only the Flagman between the Work Limits and the switch is required. This can be applied to all the methods of Inaccessible Track.

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If the Inaccessible Track is in a yard where cars roll freely, a method other than Flagman must be used because a Flagman cannot stop freely rolling equipment unless he is at a manually operated facing point switch that can control entrance into the track.

Define a facing point switch. The switch in the example on the main track side is a facing point switch. The wheels of the train face the closed and open switch point. Coming off the industrial track, it is a trailing move. The route onto the closed point simply trails through. With the facing point switch, the flagman can positively direct movements onto another track away from the gang.

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Even though OTP has been provided properly, nothing is fail safe. Humans can and do make mistakes, so following this rule can give you additional protection. An "Old Timer" told me something you should never forget. He said that no matter how long you worked around live tracks, you should always "be nervous" and expect the unexpected! Forget that advice and you stand a good chance of getting killed. Be nervous, be looking all the time. It doesn't matter that you have this permit that says you can occupy the track. Train engineers can inadvertently run red signals. When that train barrels down the track upon you and you hold that permit up - well you're just dead right, that's all.

Audible warnings are to be sounded by trains prior to approaching roadway workers. The locomotive whistle is sounded and the bell is to be rung. These actions are not a substitute for other, prescribed on-track safety procedures.

Roadway workers must not rely on the locomotive engineer to sound bell and whistle to warn them to get in the clear.

Alaska Railroad Contractor Orientation and Roadway Worker Protection

Railroads are to have rules in place to provide notification to trains that roadway workers are on or about the track. Such notification may be in the form of portable whistle posts, train movement authorities or the wearing of high visibility clothing by roadway workers. Every railroad defines as a Roadway Worker responsibility the wearing of some type of visible clothing or safety apparatus. Contractors must also wear the approved type of clothing or safety gear designated by the railroad.

Note: Engine bell and whistle are required to be sounded upon approaching roadway workers even in no whistle banned communities. Federal law takes precedence.

1. No. The sounding of train whistles and bells are not a substitute for other prescribed on-track safety procedures.
2. Trains are provided notification that roadway workers are on or about the track through one or a combination of the following methods:
 - ✓ portable whistle boards
 - ✓ train movement authorities
 - ✓ wearing of high visibility clothing

However, roadway workers again have no real assurance that they will and must not rely on the locomotive engineer for their on-track safety.

The keys to making tracks within the working limits physically inaccessible to trains or equipment are:

1. Place a flagmen with instructions and capability to hold trains.
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3. Create a discontinuity in the rail that precludes passage of trains or engines into the working limits.
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5. Utilize a remotely controlled switch aligned to prevent movement and secured by the control operator, or any combination of the five above.

GENERAL SAFETY TOPICS

- ✓ Cardinal Rule of Railroad Safety
- ✓ Safety from adjacent tracks
- ✓ Returning to Foul Area after train passes
- ✓

CARDINAL RULE OF RAILROADING

Always expect a train to move on any track in either direction at anytime!

RETURNING TO THE FOUL AREA

Roadway workers will not return to the foul area after clearing the tracks until directed to do so by the EIC.

AUDIBLE WARNING FROM TRAINS

- ✓ Whistle to be sounded and bell rung when approaching roadway workers
- ✓ Not a substitute for other prescribed on-track safety procedures

Alaska Railroad Contractor Orientation and Roadway Worker Protection

AUDIBLE WARNING FROM TRAINS REVIEW OF KEY POINTS

- ✓ May a roadway work group use the whistle signals of approaching trains as their method of on-track safety?
- ✓ How do workers know that approaching train engineers will blow their whistle?

REQUIREMENTS FOR USING EQUIPMENT ON RR PROPERTY

- ✓ Crossing tracks with equipment must be at established grade crossings and be conducted with extreme caution.
- ✓ Equipment must not be left unattended with engine running. When left on railroad property, equipment must be left inoperable, secured to prevent unexpected movement, and must not impair sight distances.
- ✓ Equipment must be operated at a safe speed.
- ✓ All Contractor equipment equipped with lights will have lights on when operating on railroad property
- ✓ Any vehicle accidents/damage must be reported to railroad personnel.

SAFETY MEASURES WHEN WORKING ON RAILROAD PROPERTY

- ✓ Workers must not occupy rail cars, take refuge under rail cars, or cross between coupled railcars. Riding railroad equipment is prohibited unless authorized by railroad.
- ✓ No movement is to be made toward an approaching train. Crossing track in front of moving equipment is prohibited.
- ✓ Remain 25 feet from switches.
- ✓ Established routes must be used to access railroad property.
- ✓ Railroad vehicles always have the right-of-way.
- ✓ Workers are not to wear or use items that impair hearing or vision.
- ✓ Work in tunnels involves several key safety considerations. Always involve the railroad personnel in planning activities for tunnel work.

SAFETY MEASURES WHEN WORKING ON RAILROAD PROPERTY

Good housekeeping is a must and needs to be continued on a daily basis. Tools and materials must never be left close to tracks. Disposal of waste must take place in designated locations and in accordance with local regulations.

1. At night and over weekends, work areas must be left in a condition to protect railroad employees from any hazards.
2. Follow railroad requirements for use of radios. Never operate radios within 250' of blasting operations.
3. When required to work after normal working hours there must be at least two employees and any work in the foul area (within 25' of near running rail) must have a flagman or qualified watchman.
4. Water drainage from track areas must not be impaired.
5. Power lines are to be considered high voltage unless the utility owner verifies otherwise.

Alaska Railroad Contractor Orientation and Roadway Worker Protection

SAFETY MEASURES WHEN WORKING ON RAILROAD PROPERTY

1. Safeguards and safety signs must be kept in place and in good working condition. Workers must be familiar with Mile Post locations in case of emergency.
2. Report all personal injuries, property damage and emergencies or hazards noticed on passing trains to railroad personnel immediately.
3. Safety plans for hazardous operations must be approved by the railroad.
4. No contaminants are allowed to be discharged on RR property. Washing of equipment will be confined to designated containment areas. Captured fluids found to be contaminated will be disposed of properly.
5. Use of alcohol or controlled substances is prohibited. Possession of a deadly weapon is prohibited. Scuffling, horseplay and practical jokes will not be tolerated.
6. Open fires are prohibited unless a permit is obtained.

ALASKA RAILROAD SAFETY OTHER SAFETY TOPICS

GENERAL SAFETY RULES

- ✓ Protect yourself, your fellow employees, passengers and the public.
- ✓ Report dangerous conditions or unsafe practices to your supervisor. (Or any ARRC employee)
- ✓ If in doubt about the meaning of any rule or instruction, contact your supervisor for an explanation. (Or any ARRC employee)
- ✓ A job briefing must be conducted before beginning any work. The job briefing is complete only when each employee or contractor understands all procedures and instructions.

ALASKA RAILROAD SAFETY

20.1 SAFETY

Safety is the most important element in performing duties. Obeying the rules is essential to job safety and continued employment.

Each crew member must participate in a job briefing before beginning each work day. If the conditions or work plans change during that tour of duty, a job briefing to address those changes must be conducted.

ALASKA RAILROAD SAFETY

20.3 INSPECTING PASSING TRAINS

Divide the employees so that the passing train can be observed from both sides, if this can be done safely.

Observe the train closely for defects, unusual conditions, or dangerous conditions, such as:

- ✓ Hot Journals
- ✓ Sticking Brakes

20.3 INSPECTING PASSING TRAINS

- ✓ Dragging Brake Rigging

Alaska Railroad Contractor Orientation and Roadway Worker Protection

- ✓ Sliding Wheels
- ✓ Indications of Fire
- ✓ Shifting Loads
- ✓ Protruding Loads or Objects

ALASKA RAILROAD SAFETY

20.3 INSPECTING PASSING TRAINS

- ✓ Swinging Car Doors
- ✓ Failure to Display Headlights or Marker

If you notice such a condition, make every effort to notify the crew. If the train does not stop, notify the train dispatcher immediately.

GENERAL RULES AND REGULATIONS

21.1.1 Rules, Regulations, and Instructions

Safety Rules

- ✓ Have a copy of, be familiar with and comply with all safety rules issued in a separate book or in another form.

ALASKA RAILROAD SAFETY

GENERAL RULES AND REGULATIONS

21.3 Drugs and Alcohol

The use and possession of alcoholic beverages while on duty is prohibited. Employees must not have any measurable alcohol in their breath or in their bodily fluids when reporting for duty or while on duty

The use or possession of intoxicants, over-the-counter or prescription drugs, narcotics, controlled substances, or medication that may adversely affect safe performance is prohibited while on duty, except medication that is permitted by medical practitioner and used as prescribed. Employees must not have any prohibited substances in their bodily fluids when reporting for duty or while on duty.

ALASKA RAILROAD SAFETY

GENERAL RULES AND REGULATIONS

21.6 Appearance

When reporting for duty, be clean, neat, and appropriately clothed to perform your duties.

ALASKA RAILROAD SAFETY GENERAL RULES AND REGULATIONS

21.7 Respect of Railroad Company

Behave in such a way that the railroad will not be criticized for your actions.

Alaska Railroad Contractor Orientation and Roadway Worker Protection

21.17 Alert to train Movement

If you are:

- ✓ Fouling a track
- ✓ Crossing between or around the end of stationary equipment
- ✓ Getting on or off equipment

ALASKA RAILROAD SAFETY

GENERAL RULES AND REGULATIONS

21.17 Alert to train Movement

- ✓ Moving from under or between equipment
- ✓ Operating a switch expect the movement of trains, engines, cars, or other movable equipment at any time, on any track, and in either direction.

21.25 Using Tobacco

- ✓ When on duty, do not use tobacco when you are;
- ✓ Serving the public
- ✓ In or about passenger stations or passenger cars
- ✓ In any ARRC building or vehicle on designated non-smoking area
- ✓ Near flammable material that could catch on fire or explode.

PERSONAL PROTECTION EQUIPMENT

- ✓ Safety Glasses with side shields
- ✓ Lace-up, over the ankle safety-toed safety boots
- ✓ ANSI approved hardhat
- ✓ Orange safety vest with retro-reflective striping
- ✓ Do not wear the color red!

SLIPS, TRIPS AND FALLS

- ✓ Cross tracks quickly and in a perpendicular direction.
- ✓ Never walk or step on rails!
- ✓ Be aware that ballast is uneven, prone to shifting, and can hide sharp objects/nails/metal/glass and debris.
- ✓ Do not carry objects that block your view of the tracks or travel route.

PERMIT REQUIRED CONFINED SPACE

- ✓ A confined space is large enough to enter, has limited means for exit, and is not designed for continuous employee occupancy.
- ✓ A confined space requires a permit to enter when it contains or has the potential to contain a hazardous atmosphere, contains a material that has the potential for engulfing an entrant has an internal configuration such that an entrant could be trapped or asphyxiated or contains any other recognized serious safety or health hazard.

WATER SAFETY

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- ✓ ARRC employee/ Contractor working over or adjacent to water with a depth of four feet or more, or where the danger of drowning exists, will be provided and shall use personal flotation life vests.
- ✓ Whenever life vests are required, a throwable USCG approved life ring is required
- ✓ Employees using personal fall arrest systems need not wear life vests.

EXCAVATION

- ✓ All excavations must have a competent person in charge of the excavation; they need formal training and may be required to fill out an excavation permit.
- ✓ If the excavation is 5 feet deep or greater, a means of sloping or shoring must be employed.

FALL PROTECTION ON RAILROAD BRIDGES

Work on railroad bridges twelve feet or more above the ground or water surface, requires the use of a personal fall arrest system, fixed railing or safety net system unless the following conditions are met:

- ✓ the work to be performed is inspection only
- ✓ employee has been trained in fall protection, railroad safety and climbing techniques.

OPERATING TRACK CARS

Track Car. In this chapter, the term track car (or car) applies to the following equipment:

- ✓ Hi-rail
- ✓ Motor car
- ✓ Trailer

Any on-track roadway machine, such as:

- ✓ Locomotive cranes
- ✓ Tamper
- ✓ Ballast regulator

OPERATING TRACK CARS

Track Car Operator. in this chapter, the term track car operator (or operator) applies to the following employees:

- ✓ Operator of a track car
- ✓ Operator of equipment operating within 20 feet of a main track
- ✓ Supervisor of on-track operations
- ✓ Employee providing flag protection

OPERATING TRACK CARS

TRAIN COORDINATION

The sharing of the main track by an employee or work group where the TWC authority has been granted by the train dispatcher to another EIC.

OPERATING TRACK CARS

Alaska Railroad Contractor Orientation and Roadway Worker Protection

SHARED AUTHORITY

Occupancy of the main track by an employee or work group where the TWC authority has been granted by the train dispatcher to another EIC.

OPERATING TRACK CARS

JOINT AUTHORITY

Occupying the main track by more than one work group where each work group has been issued separate TWC authority by the dispatcher.

OPERATING TRACK CARS

MAIN TRACK AUTHORIZATION. In the chapter, the term authority is defined as:

- ✓ GCOR Rule 6.13 (Yard Limits)
- ✓ GCOR Rule 10.3 (Track and Time)
- ✓ GCOR Rule 14.1 (Authority to enter TWC Limits)

OPERATING TRACK CARS

MAIN TRACK AUTHORIZATION.

In the chapter, the term authority is defined as:

- ✓ GCOR Rule 15.2 (Protection by Track Bulletin Form B)
- ✓ GCOR Rule 58.4.2 (Foul Time)
- ✓ Special Instruction or General Order

OPERATING TRACK CARS

Track car operator must be qualified as follows:

1. Pass the required physical and rules examinations.
2. Have a valid Alaska driver's license.
3. Be familiar with the territory and the track car

OPERATING TRACK CARS

Follow these precautions when operating a track car:

1. You are responsible for the proper use, condition, and protection of the track car.
2. Take every precaution to operate the track car safely at all times.
3. Inspect the track car for defects before each use.
4. Before starting out, make sure that every rider understands what action everyone will take if the track car must be quickly evacuated or removed from the track.

Alaska Railroad Contractor Orientation and Roadway Worker Protection

OPERATING TRACK CARS

Follow these precautions when operating a track car:

1. If there are at least two employees in the track car, assign one employee to watch toward the rear.
2. If you are the only employee in the track car, face the direction of movement and occasionally look to the rear.
3. Complete the "Hy -Rail Safety Checklist" before starting.

OPERATING TRACK CARS

When preparing a track car for rail operation, the operator must inspect the guide wheels as follow:

Check for:

- ✓ Uneven or excessive wear of the guide wheels
- ✓ Guide wheel alignment
- ✓ Condition of safety pins and wearing parts

OPERATING TRACK CARS

When preparing a track car for rail operation, the operator must inspect the guide wheels as follow:

Check that the guide wheels and guide wheel assembly are in the proper alignment as follows:

- ✓ Lock the guide wheels in the on-rail position.
- ✓ Lock the steering wheel in the straight-ahead position.

NOTE: While the guide wheels are locked in the on-rail position, do not try to turn the steering wheel.

OPERATING TRACK CARS

When preparing a track car for rail operation, the operator must inspect the guide wheels as follow

With the car on a level or flat stretch of track (not elevated or on a curve), check that the guide wheel flanges clear the rail and do not ride up or bind on the rail.

Correct any defects before you place the vehicle in hi-rail service.

OPERATING TRACK CARS

Note: For the purpose of this rule, the track car operator is also considered a rider.

Follow these precautions when riding in a track car:

- ✓ Ride in a track car only as necessary to perform your duties.
- ✓ Do not ride on a push-car unless it is equipped as a man-haul.

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- ✓ Position yourself to prevent injury to yourself and others. Sit so that no part of your body extends outside the car.

OPERATING TRACK CARS

Follow these precautions when riding in a track car:

- ✓ Watch for obstructions, especially in flange ways at crossings, guardrails, frogs, and switches.
- ✓ Be awake, alert, orderly, and quiet. Do not obstruct the operator's view.

- ✓ Except in an emergency, do not get on or off a track car while it is moving.
- ✓ In case of an imminent collision, do not try to save the track car at the cost of your own safety or the safety of others.

OPERATING TRACK CARS

The employee receiving a warrant must have a copy of the track warrant, and each crew member must read and understand it. The copy must show the date, location, and name of the employee who copied it.

OPERATING TRACK CARS

Operate a track car at a safe speed as follows:

- ✓ Operate the track car at a speed that allows you to stop in less than one-half the range of vision.
- ✓ Consider the visibility, track conditions, weather, and anything else that might affect the car's safe operation.