

## **58 ON-TRACK SAFETY**

### **58.1 Introduction**

On-Track Safety (OTS) is a requirement for all roadway workers. Roadway Worker Protection (RWP) is a Federal regulation designed to protect roadway workers from hazards in the work place. The instructions in this rule meet FRA regulations for roadway worker protection.

The purpose of OTS is to prevent accidents and injuries from railroad cars, locomotives, and roadway machines striking roadway workers and machines.

### **58.2 Training for All Roadway Workers**

On-Track Safety training must be conducted annually for all roadway workers. In addition, any employee performing as a watchman, flagman, lone worker, machine operator, or employee in charge (EIC) must be qualified on the On-Track Safety procedures specific to that position.

#### **58.2.1 Contractors**

Contractors and other non-railroad employees who perform work foul of any track must be trained in the On-Track Safety Procedures. This training can occur at the work site in the form of a job briefing. Contractors or other non-railroad employees must not be allowed to foul a track unless:

- they have been properly trained in the On-Track Safety procedures
- **or**
- a railroad employee who is trained and qualified as a lookout, flagman, or EIC, is present at the work site or has provided for OTS.

### **58.3 Job Briefings**

A job briefing must be conducted before a roadway worker fouls any track. A job briefing is complete only when each roadway worker acknowledges understanding of the On-Track Safety procedures and instructions.

#### **58.3.1 Job Briefing for Roadway Work Groups**

The EIC must conduct a job briefing that includes all information related to On-Track Safety. This job briefing is given to every roadway worker who will foul the track. In addition to other safety issues, the On-Track Safety information must include:

- Identification of the EIC.
- Type of On-Track Safety provided.

Alaska Railroad  
On-Track Safety Document

- Track limits and time limits of track authority.
- Track(s) that may be fouled.
- On-Track Safety provided on adjacent tracks, if any.
- Procedure to arrange for On-Track Safety on other tracks.
- Method of warning when On-Track Safety is provided by a watchman/lookout.
- Designated place of safety where workers clear for trains.
- Designated work zone around machines.

The EIC must give a follow-up job briefing whenever:

- Working conditions or procedures change.
- Other workers enter the working limits

**or**

- On-Track Safety is changed, extended, or about to be released.

### **58.3.2 Job Briefing for Lone Workers**

Each lone worker must participate in a job briefing with their supervisor, or other employee, at the beginning of each shift. This job briefing must include:

- The lone worker's planned itinerary.
- The procedures that the worker intends to use to establish On-Track Safety.
- The lone worker must complete and carry a statement of On-Track Safety, ARRC Form 23-0123P. This form must be discarded after use.

**NOTE: If communication fails, conduct the job briefing as soon as communications are restored. If this occurs, the lone worker must still complete and carry a statement of On-Track Safety.**

## **58.4 On-Track Safety Procedures**

On-Track Safety can be provided for roadway workers by the following methods:

- Exclusive track occupancy (for Controlled Track)

Alaska Railroad  
On-Track Safety Document

- Track Warrant
  - Form B track bulletin
  - Track removed from service
  - Obstructed Track flags (ARSM Rule 43.2.3)
  - Track and Time Permit
  - Foul time
  - Inaccessible track (for Non-Controlled Track)
  - Individual train detection (ITD) (for Non-Controlled Track)
  - Train approach warning (TAW) (for Non-Controlled Track)
- or**
- Flag protection

The EIC of the roadway work group or the lone worker determines the type of On-Track Safety to be used. The type of On-Track Safety selected must comply with the provisions of this chapter, as well as with:

- GCOR Rules and ARSM Rules
- Timetable Special Instructions
- General Orders
- Other Instructions

#### **58.4.1 Controlled Track**

Exclusive track occupancy may be used to establish working limits on controlled track by the use of one of the following:

- Track Warrant
- Track Bulletin Form B
- Track removed from service
- Obstructed Track flags
- Track and Time Permit
- Foul Time

A. In TWC territory, working limits may be established by Track Warrant. If TW authority is joint, another form of OTS (such as a flagman) must be provided within the overlapping limits if work is to be performed. When a roadway worker is sharing or coordinating TW authority with another roadway worker or train, it is considered Exclusive Track Occupancy (ETO).

B. Working Limits established by Track Bulletin Form B:  
When working limits are established by Track Bulletin Form B, the following applies:

- Track Bulletin Form B must be confirmed by Dispatcher.
- Track Bulletin Form B must have STOP in STOP column.
- Red flags must be displayed at each end of the limits

(See ARSM Rule 43.7.1 Requesting Track Bulletin Form B)

C. Working Limits established by track removed from service:

Alaska Railroad  
On-Track Safety Document

1. Notify the Train Dispatcher to place the specified track out of service.
2. After confirming with the Train Dispatcher that track is out of service, place red flags to protect the track.

D. Working limits established by obstructed track flags:

To establish On-Track Safety using obstructed track flags:

1. Place Flags as required by ARSM Rule 43.2.3.
2. Place torpedoes required by ARSM Rule 43.5 and 43.6.2.

E. Track and Time:

F. Working limits established by foul time:

1. Advise the Train Dispatcher of the portion of track that must be fouled giving exact identifiable points and duration.
2. Before granting foul time, the train dispatcher will withhold authority to that portion of track for all trains and other on-track equipment.
3. Train Dispatcher will repeat the requested information and employee is to listen for correctness and verify with train dispatcher that it is correct before foul time is effective.
4. Roadway worker must report clear to the train dispatcher when foul time is no longer needed.

#### **58.4.2 Non-Controlled Track**

When working limits are established on non-controlled track by making the track physically inaccessible to trains and other on-track equipment it is called inaccessible track. Inaccessible track may be used to establish working limits on adjacent non-controlled tracks when it is necessary to foul adjacent tracks.

The roadway worker establishes working limits on non-controlled track by any of the following methods:

- Line a switch or derail to prevent access to the working limits. The switch or derail must be tagged or marked and secured by an effective securing device.
- Place a flagman to hold all trains and roadway machinery clear of the working limits.
- Establish working limits on controlled track that connects directly with the inaccessible

Alaska Railroad  
On-Track Safety Document

track.

**or**

- Remove a rail to prevent movement into the working limits.

**NOTE: AA locks may be used as a locking device under the provisions of RWP. If an AA lock is used, it is not necessary to tag the switch or derail.**

### **58.4.3 Individual Train Detection (ITD)**

Individual train detection (ITD) is a form of On-Track Safety that can be used *only* by lone workers. A lone worker has the right to use On-Track Safety procedures other than ITD if the lone worker feels the situation requires it. ITD can be used to provide On-Track Safety only if all the following conditions are met:

- The lone worker is trained and qualified to use ITD.
- Only routine inspection or minor repair is being performed. The lone worker may not occupy any position or engage in any activity that would interfere with the ability to detect the approach of trains or equipment in either direction.
- The lone worker can visually detect the approach of trains or equipment moving at maximum speed and can move to a place of safety at least 15 seconds before their arrival.

**NOTE: The place of safety must not be on a track unless working limits have been established on that track.**

- No power-operated tools or machines are in use.
- The lone worker's ability to hear and see approaching trains and equipment is not impaired by:
  - Background noise.
  - Lights.
  - Inclement weather (rain, snow, fog, etc.).
  - Passing Trains
- or**
- Other physical conditions.
- The lone worker has completed a written Statement of On-Track Safety, ARRC Form 23-0123P. When using ITD, the lone worker must produce the completed Statement of On-Track Safety upon request. This form must be discarded after use.

### **58.4.4 Train Approach Warning (TAW)**

When roadway workers foul a track outside working limits, watchmen can provide On-Track Safety using train approach warning (TAW). TAW may be used to provide OTS when all the following conditions have been met:

- Each watchman is trained, qualified, designated, and equipped to provide TAW.

## Alaska Railroad On-Track Safety Document

- A watchman can give warning of approaching train or roadway machinery in time to allow each roadway worker to move to a previously arranged place of safety at least 15 seconds before the arrival of the train or roadway machinery.
- Each roadway worker is in a position to receive the watchman's warning.
- Watchmen must devote their entire attention to detecting approaching trains or roadway machinery to provide warning to the roadway workers.
  - Watchmen may not be assigned other duties while functioning as a lookout.
  - Watchmen must remain at their lookout position until the EIC either determines that protection is no longer necessary or sends another watchman to relieve them.

**NOTE: The EIC may provide TAW by acting as the watchman as long as the EIC is not performing other duties.**

- The watchman's method of communicating a warning is distinctive and can be clearly understood regardless of noise or work distraction. The method can consist of:
  - Giving a specific signal while sounding an audible warning.
  - Verbally communicating by radio or other means
  - or**
  - Touching the roadway worker(s).

TAW can be used only to protect roadway workers and *may not* be used to protect track that is unsafe for train movement or to protect equipment occupying or fouling the track.

### 58.4.5 Flag Protection

Flag protection provided by flagmen can be used to establish OTS on any controlled or non-controlled track. When flagging on controlled track, GCOR Rule 6.19 applies.

### 58.4.6 Train Coordination

“Train Coordination” may be used to establish working limits between trains and roadway workers

To establish working limits with a train:

- Train must be stopped and in view
- Train must not have joint authority
- Job Briefing will be held between train service employees and roadway workers before effecting Coordination in accordance with ARSM 58.3., Job Briefing for Roadway Work Groups
- Train service employees will not permit their authority to be restricted or released while coordinating with roadway worker(s).

Alaska Railroad  
On-Track Safety Document

- Roadway worker will not operate behind the marker of a directionally authorized train
- Roadway worker must release the track back to the train service employees as soon as the roadway worker(s) are clear of the track.

(Also see GCOR Rule 6.3.1 Train Coordination)

### **58.4.7 Sharing Authority**

To establish working limits with another roadway worker:

- The EIC must not have joint authority
- The EIC must not protect more than four additional work groups
- A Job Briefing must be held prior to coordinating in accordance with ARSM 58.3., Job Briefing for Roadway Work Groups
- The EIC will advise about authority-type and any limitations
- The EIC must write the name of the sharing employee on the prescribed form
- The sharing employee will repeat this information to the EIC
- When the sharing employee clears the limits, the EIC must be notified and the EIC must write the time cleared on the prescribed form
- The EIC must not permit the authority to be restricted or released while coordinating with other roadway workers

## **58.5 On-Track Safety on Adjacent Tracks**

On-Track Safety can be established on adjacent tracks as outlined in Rule 58.4, On-Track Safety Procedures. Use the following table to provide protection for employees or equipment fouling adjacent tracks.

## **58.6 Audible Warning From Trains**

Trains must sound locomotive whistle and ring bell when approaching roadway workers on or near the track, regardless of local whistle prohibitions.

To give trains advance notice of roadway workers on or near the track, each roadway worker fouling the track must wear company approved reflectorized striping on their hard hat.

## **58.7 Operating and Working Near Roadway Machines**

Roadway workers who operate or work near roadway machines must comply with the following instructions:

- On-Track Safety procedures outlined in ARSM Rule 58.4.
- Chapter 42, Operating Track Cars.

### **58.7.1 Operating Roadway Machines Safely**

Operators of roadway machines must follow these instructions to operate their machines safely:

1. Keep the operator's manual, which includes instructions for safe operation, with each machine.
2. If there is a question about the safe operation of the machine, ask your supervisor.
3. Comply with the rules in ARSM Chapter 42, Operating Track Cars, and any applicable Engineering Bulletins or other instructions.

### **58.7.2 Moving Roadway Machines Within Working Limits**

Operators of roadway machines must do the following:

1. When encountering a red flag, stop at the red flag. Do not proceed beyond the red flag until authorized by the EIC of the working limits.
2. When working limits are occupied by other employees or equipment, do not exceed 20 MPH unless the EIC of the working limits authorizes a higher speed. This requirement is in addition to the requirement of being able to stop in less than half the range of vision.
3. If no red flag is displayed for working limits established by Form B Track Bulletin, roadway machinery must stop because "STOP" is required in the "STOP" column of the Form B Territory. Permission to enter the limits must be obtained from the EIC before entering the working limits.

### **58.7.3 Work Zone Around Machines**

#### **A. Roadway Workers**

Roadway workers must not enter a machine's work zone without first communicating with the operator to establish safe work procedures.

Unless a different work zone is established in the job briefing, the work zone extends from a point 15 feet in front of the machine to a point 15 feet behind the machine.

**Note: Some machines, such as cranes and ballast regulators, also require lateral or side clearance to ensure the safety of all roadway workers.**

#### **B. Roadway Machine Operators**

Roadway machine operators must follow these requirements when operating around roadway workers:

1. If the machine is equipped with a horn or backup alarm, sound the horn (3 short

Alaska Railroad  
On-Track Safety Document

blasts) or ensure the alarm is sounding before making a reverse move.

2. If a move must be made of more than 15 feet, make sure the way is clear before making the move.
3. Do not go nearer than 15 feet to any roadway worker fouling the track without first communicating with the roadway worker.

#### **58.7.4 Safe Working Distance Between Machines**

Unless a different distance is specified in the job briefing, keep at least 50 feet between roadway machines while working.

#### **58.7.5 Safe Traveling Distance Between Machines**

Keep at least 500 feet between roadway machines while traveling. See ARSM Rule 42.17, Following Trains and Other Track Cars.

**EXCEPTION: When roadway machines need to “bunch up” to move over highway crossings, keep at least 50 feet between the machines.**

When slowing down or stopping, comply with ARSM Rule 42.17, Following Trains and Other Track Cars.

#### **58.7.6 Tying Up Machines**

Follow the requirements in ARSM Rule 42.20, Protecting Unattended Track Cars. In addition, follow these procedures to ensure safety:

1. Secure all brakes, booms, locks and hooks.
2. Dismount the machine on the field side of the track, away from live traffic.

**EXCEPTION: If the track is between live tracks, dismount off the side designated in the job briefing.**

3. Stand beside the roadway machine and direct following machine(s) to a stop.
4. Do not go between machines until all machines have come to a stop or the EIC has given permission.

### **58.8 Right to Challenge On-Track Safety**

The Alaska Railroad Corporation and each roadway worker share joint responsibility for ensuring

Alaska Railroad  
On-Track Safety Document

that On-Track Safety is provided.

### **58.8.1 Responsibilities of the Alaska Railroad Corporation**

The Alaska Railroad Corporation must:

1. Provide proper training of every roadway worker as outlined in ARSM Rule 58.2.
2. Guarantee each employee the absolute right to challenge, in good faith, whether the On-Track Safety procedures to be applied at the job site comply with ARRC rules. Each employee has the right to remain clear of the track until the challenge is resolved.
3. Follow the procedure outlined in ARSM Rule 58.8.3 to resolve challenges promptly and equitably.

### **58.8.2 Responsibilities of the Roadway Worker**

Each roadway worker has the following responsibilities:

1. Follow ARRC On-Track Safety procedures.
2. Avoid fouling a track except when necessary to perform your duties.
3. Before fouling a track, determine that On-Track Safety is being provided.

**NOTE: A roadway worker or roadway machine is considered to be fouling a track when within 4 feet of the nearest rail.**

4. Refuse a directive to violate an On-Track Safety rule and promptly notify a supervisor when the safety provisions to be applied at the job site do not comply with ARRC rules.

### **58.8.3 Resolving Challenges to On-Track Safety Procedures**

Follow this procedure to resolve an On-Track Safety Challenge:

1. The roadway worker informs the employee in charge that they do not believe that the protection afforded roadway workers complies with ARRC On-Track Safety procedures.

**NOTE: Employees will not be subject to punishment for making a good faith challenge to On-Track Safety procedures.**

2. The employee in charge reviews the On-Track Safety procedures with the employee to verify that the proper procedures have been applied.
3. If the employee making the challenge is still not satisfied that the On-Track Safety Procedures comply with ARRC rules, the employee in charge contacts the next level

Alaska Railroad  
On-Track Safety Document

supervisor.

4. The next level supervisor reviews the On-Track Safety Procedures and determines whether the On-Track Safety procedures are being properly applied.
  - If the next level supervisor determines that the On-Track Safety procedures are not being properly applied, the employee in charge modifies the On-Track Safety procedures to ensure proper protection of employees.
  - If the next level supervisor determines that On-Track Safety procedures are being properly applied, the challenging employee must perform the assigned duty. If the employee still refuses to perform the assigned duty, this activity may result in disciplinary action.
5. A designated manager will regularly review written documentation of all challenges made to the next level supervisor. A union representative will be invited to review these challenges with the designated manager.
6. Any recommendations for changes in ARRC On-Track Safety procedures resulting from the designated manager's review will be forwarded to the appropriate Vice President.

## **58.9 On-Track Safety Program Documentation**

Follow these requirements:

1. If you are a roadway worker, have access to a copy of this chapter of the Safety Rules.
2. If you are a qualified employee, keep information contained in this chapter of the ARSM available for use on the job.

## **58.10 Glossary of Terms**

These definitions apply only to the provisions of On-Track Safety.

### **Adjacent Tracks**

Two or more tracks with track centers spaced less than 25 feet apart.

### **Controlled Track**

Track upon which the rules require that all movements of trains must be authorized by the Train Dispatcher.

### **Employee In Charge (EIC)**

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

Alaska Railroad  
On-Track Safety Document

### **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.

### **Flagman**

An **employee** designated to direct or restrict the movement of trains beyond a point on a track as a method of providing On-Track Safety for roadway workers. The flagman is engaged solely in performing that function.

### **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.

### **Fouling a Track**

Placement of an individual or a piece of equipment in such proximity to a track that the individual or equipment could be struck by a moving train or on-track equipment, or in any case is within 4 feet of the field side of the near running rail.

### **Inaccessible Track**

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

### **Individual Train Detection (ITD)**

Procedure by which a lone worker acquires On-Track Safety by seeing or hearing approaching trains or roadway machinery and leaving the track before they arrive.

### **Lone Worker**

An individual roadway worker who is not receiving On-Track Safety by another roadway worker, who is not a member of a roadway work group, and who is not engaged in a common task with another roadway worker.

### **Non-Controlled Track**

Track upon which trains are permitted by railroad rule or special instruction to move without receiving authorization.

### **On-Track Safety (OTS)**

A state of freedom from the danger of being struck by a moving train or equipment, provided

## Alaska Railroad On-Track Safety Document

by operating and safety rules that govern track occupancy by personnel, trains, and on-track equipment.

### **Roadway Machine**

A machine used on or near the track for maintenance, repair, construction, or inspection of track, bridges, roadway, signal, communications, or electric traction systems. Roadway machines may be on-track or off-track or both. The machines include hy-rails, motor cars, roadway machines, work equipment, and other forms of track cars.

### **Roadway Work Group**

Two or more roadway workers organized to work together on a common task.

### **Roadway Worker**

Any employee of a railroad, or of a contractor to a railroad, whose duties include inspection, construction, maintenance, or repair of railroad track, bridges, roadway, signal and communication systems, electric traction systems, roadway facilities, or roadway machinery on or near track or with the potential of fouling a track.

### **Train Approach Warning (TAW)**

A method of establishing On-Track Safety by warning roadway workers of the approach of trains in enough time for them to move to or remain in a place of safety.

### **Watchman/Lookout**

An employee designated to provide warning to roadway workers of approaching trains or on-track equipment.

### **Working Limits**

A segment of track with definite boundaries upon which trains, engines, and roadway machines may move only as authorized by the roadway worker having control over that defined segment of track. Working limits may be established through exclusive track occupancy, foul time, or inaccessible track.

### **Work Zone**

The area around a roadway machine that must not be entered without first communicating with the operator to establish safe work procedures.