

# PRAIRIE DOG CENTRAL RAILWAY



## GENERAL OPERATING INSTRUCTIONS

The following General Operating Instructions are effective May 1, 2012 and supersede those issued May 1, 2011:

### **CANADIAN RAIL OPERATING RULES (CROR)**

Operations on the PDC include engine whistle signals not provided for in the current CROR, but which were contained in the Uniform Code Of Operating Rules (UCOR) Revision Of 1962.

1. The following Engine Whistle Signals apply to all PDC operations, and are in addition to those contained in the CROR:

#### **SOUND INDICATION**

- (a)        — — —  
  
              Release brakes.  
              Proceed.
- (b)        —————  
  
              One mile from  
              station stops.

2. The following abbreviations will apply to all PDC operations, and are in addition to the CROR requirements:

#### **ABBREVIATION DEFINITION**

- (a) W  
  
              Water

### **SAFE OPERATING PRACTICES**

Safe Operating Practices must be adhered to by all Society members:

#### **1. CREWS**

- (a) The minimum crew consists are as follows:
  - i) Passenger operations with diesel – 1 Locomotive Engineer and 1 – Head end Trainman / 1 Conductor
  - ii) Passenger operations with steam – 1 Locomotive Engineer, 1 Fireman and 1 Conductor
  - iii) Freight operations up to 19 cars – 1 Locomotive Engineer and 1 Conductor/ Trainman
  - iv) Freight operations with 20+ cars – 1 Locomotive Engineer, 1 Conductor and 1 Trainman
- (b) An Apprentice Trainman or Fireman can form part of the complete qualified crew for purposes of instruction under proper direction, as part of the Society's ongoing training programs.
- (c) No one, other than a holder of a valid "A" Card, is permitted to operate main line switches. This specifically includes all switches between mileage 9 and Warren, but does not include the switches within our Shop area.

- (d) Under the direction of a qualified Locomotive Engineer, a non-"A" Card Society trainee is permitted to assist with switching movements ONLY WITHIN OUR SHOP AREA, and only when a locomotive is being moved WITHOUT cars attached to it. These movements must only be made using hand signals, and the Locomotive Engineer must know who is directly involved with such movements prior to commencing the movement.
- (e) Whenever any switching movements are made, a minimum of two members (including one qualified Locomotive Engineer) must conduct such switching movements. This includes moving No. 3 from the shop with another locomotive.
- (f) Qualified operating crew members must not request a non-"A" Card Society member to assist with train or engine movements other than as described under Item (d) above.
- (g) All operating crew personnel must have in their possession their current C.R.O.R. wallet-sized qualification certificate as well as their current medical card when they are acting in an operating capacity.

## **2. SAFETY APPLIANCES AND OPERATING PRACTICES**

- (a) All derails on our shop tracks must always be set for derailing unless switching over them is being conducted. After switching has been completed, derails are to be restored to the derailing position and locked.
- (b) Safety appliances and features on our motive power and rolling stock must always be in operative condition, sealed and must not be rendered inoperative unless the device(s) is under repair or under the authority of the General Manager.
- (c) A manually-activated alarm bell has been installed at the North end of the Shop. The purpose of this bell is to alert people to be on the lookout for equipment moving in and out of the Shop during switching operations.

The effectiveness of this bell is greatly reduced if the bell is turned on and left on while the switch crew is performing work elsewhere because people will hear the bell ringing continuously, see no movements in the vicinity and become complacent.

This poses a safety hazard for when switching is actually performed since the sound of the bell will not be associated with any danger of moving equipment.

When switching is to be performed, a member of the crew will activate the bell ONLY WHEN AND DURING switching in and out of the Shop.

## **3. RADIOS**

- (a) No one, other than a holder of a valid "A" Card, is permitted to operate railway radios except in an emergency.
- (b) When portable radios are not in use, they are to be placed in the battery charging stands in the Crew Office.

### **(c) USE OF THE RADIO IN SWITCHING OPERATIONS**

The steel walls of the shop can interfere with radio transmissions. Because of this, whenever a crew member is required to direct a movement from within the shop, **THE MOVEMENT MUST BE MADE USING HAND SIGNALS.**

For example, when putting the train away at the end of the operating day, it is necessary for a crew member to be on the ground inside the shop. Radio must not be used by the crew in directing this part of the movement because of the potential for transmission failure. When the movement is being made and the entire train is outside approaching the shop door, radio may be used owing to curvature. The changeover to hand signals by the crew member controlling the movement must be communicated directly to the Locomotive Engineer. When conditions require, the Second Engineer should work on the ground to relay hand signals.

#### **4. CUTTING OFF EQUIPMENT AFTER STATION STOP**

Prior to a crew member making the cut after arrival at either Warren or Inkster Junction, the crew member making the cut must first confirm directly with the Locomotive Engineer that a full set brake pipe reduction has been made.

The procedure as per the CN G.O.I. Item 7.2(k) is:

*“Whenever a locomotive is detached from equipment, the angle cock on the equipment left must be fully opened and the air brakes applied in full service or emergency. If left in full service, the angle cock must not be closed until the full service application is completed. The angle cock must then be opened slowly and left in the full opened position.”*

#### **5. SWITCHING**

When coupling or uncoupling cars, the train crew must ask for and receive confirmation from the locomotive engineer that Three Point Protection has been provided **BEFORE** the train crew member moves between the cars to couple or uncouple air brake hoses.

After coupling or uncoupling the air hoses, the train crew member must then release the protection back to the locomotive engineer before any movements are made.

Three Point Protection is provided when the locomotive engineer:

- a. Has fully applied the independent brake;
- b. Has placed the generator field switch in the “OFF” position; and,
- c. Has placed the reverser in “NEUTRAL” position.

#### **6. SWITCHING – INKSTER JUNCTION SHOP**

Most operations require the use of all five (5) coaches which are stored inside the Shop on the two storage tracks.

Within the Shop, the coaches are stored within tight clearances next to rolling stock and locomotives under repairs. This equipment cannot be moved and often may be supported by jacks or may have scaffolding or other work equipment placed next to it.

The danger of bumping into this equipment exists when switching is performed inside the Shop storage tracks when handling more than three (3) cars at a time because of delays in giving or responding to hand signals as well as slack action.

When making up the train at the start of an operation, the back portion of the train is to be set over on to the straight part of the North lead. A full set brake is to be applied and the locomotive is to be cut off. The remaining portion of the train is to be pulled by the locomotive only from the Shop storage track and doubled over to the coaches on the North lead.

At the end of the operating day, the coaches are to be shoved to rest in the Shop in two separate moves.

First, the entire train is to be shoved down the North yard lead and stopped. A full set brake is to be applied. The first portion of the train is to be cut off and shoved to rest in the Shop and a full set brake applied. The last portion of the train is then to be shoved to rest inside the Shop a full set brake applied.

## **7. WARREN and GROSSE ISLE-CAB VISITS DURING LAYOVER**

After the locomotive has been turned and has returned to the train during the layover at Warren and Grosse Isle, a member of the crew must always be in the cab when passengers come for a visit. The crew member may be part of the engine crew, train crew or the porter crew. This is to ensure that cab visitors do not tamper with any of the locomotive controls, the bell or the whistle.

## **8. EQUIPMENT CONFIGURATION**

For steam operations only, our passenger train equipment configuration should always have Combination Coach #103 immediately behind the locomotive. The reason for this is to provide a safety buffer zone between the passengers and the head end of the train. Therefore, under daytime operations, Combination Coach #103 should always be taken and turned on the wye with locomotive No. 3.

However, under extenuating circumstances during daytime operations, the Conductor and the Locomotive Engineer may determine it necessary to dispense with the need to turn Combination Coach #103 on the wye with the locomotive.

When evening charters are operated requiring the use of our train interior lights, the electrical generators must be placed on Combination Coach #103's outside platform, as well as in the vestibule of Coach #107. Because of this, it is not necessary to turn Combination Coach #103 on the wye with the locomotive for evening charters.

## **AIR BRAKE RULES**

The completion of Shop Track tests on locomotives and air brake tests on all trains before departure is required under the Canadian Rail Operating Rules (C.R.O.R.).

Schedules A & B are the documents that record these required tests. Schedule A is the record of the train air brake tests. Schedule B is the record of the Shop Track tests on the locomotive. Conductors are responsible, therefore, to record in the Trip Ticket book on each operating day in the "Air Tests" section that the requirements of Schedule A were completed.

Schedule B forms are to be completed by Locomotive Engineers on each operating day, and signed by both Locomotive Engineers. These forms are found in a binder called "Locomotive Engineers Manual" which is found in #4138 in a document holder on the back cab wall.

Schedule B requirements are:

1. Ensure that hand brake is released.
2. With the deadman pedal depressed, release the Independent brake. All pistons should release.
3. Apply a full set brake with the Automatic brake valve. All pistons should apply.
4. Bail off brakes with Independent brake valve in release position. All pistons should release.
5. Put generator field switch (on Engineer's control stand) DOWN and ensure that the reverser is in neutral. With 10 lbs. Independent brake pipe pressure, put the throttle in Run 3. Place Automatic brake valve in emergency position. The engine should return to idle and the brakes apply. Put the Automatic brake valve to Suppression, return the throttle to Idle position, and recover the PC.
6. Put generator field switch (on Engineer's control stand) DOWN and ensure that the reverser is in neutral. With 10 lbs. Independent brake pipe pressure, put the throttle in Run 3 with deadman pedal depressed. Release deadman pedal. The PC should go off and the engine should return to idle. Put the Automatic brake valve to Suppression, return the throttle to Idle position, and recover the PC.
7. When the P.C. is recovered, put the Automatic brake valve to Release position with the Independent brake valve fully applied.
8. Check the following:
  - i) Headlights front and rear.
  - ii) Headlight control to "Single Unit" and headlight breakers up on both the control stand and electrical panel.
  - iii) Check the bell.
  - iv) Check horn (make sure valve behind control stand is cut in).

Schedule A requirements are that an Air Brake Test must be completed as follows:

Schedule B requirements are:

1. Ensure that hand brake is released.
2. Ensure that all air brake hoses in the train consist are coupled.
3. Charge the system to standard pressure of 70 psi as determined by the air pressure gauge on the back-up hose at the rear of the train.
4. Request a full service brake pipe reduction of 25 psi from the Locomotive Engineer.
5. A member of the crew must inspect every car to ensure that brakes are applied.
6. Request a brake release from the Locomotive Engineer.
7. A member of the crew must inspect every car to ensure that brakes have released.

## **PASSENGER EVACUATION**

It is important that both the Conductor and Locomotive Engineer be advised as quickly as possible of the nature of any emergency that may make it necessary to evacuate the train.

This is of prime importance so that the Conductor can decide whether an evacuation is necessary and so the Locomotive Engineer can bring the train to a stop at a location where evacuation can safely take place.

If there has been a derailment and the cars remain upright, it is very likely that the safest place for the passengers is in the car. However, if the car is on its side and/or in a dangerous location then it may be necessary to evacuate the car.

In the event that it becomes necessary to evacuate passengers from the train because of conditions which threaten their safety or well-being, the method of evacuation chosen must offer maximum passenger safety and minimum passenger inconvenience.

The evacuation procedures are:

- Remain calm.
- Notify other employees that a serious situation exists by using the words "*IMMEDIATE ASSISTANCE*" and give the specific location.
- The Conductor will coordinate the evacuation.
- When a decision has been made to evacuate the passengers, the Conductor will make an announcement.
- All announcements should be made slowly and distinctly in a manner which will dispel anxiety.
- All employees not otherwise engaged will then direct their efforts towards the detrainment of passengers.
- If speed of evacuation is essential, passengers should be advised to leave their belongings on the train.
- Particular attention must be given to assisting handicapped persons, the elderly and women with children. Crew members assisting with the evacuation should enlist the assistance of other passengers to help these people detrain.
- Passengers should be advised to stay well clear of adjacent tracks and off the railway right-of-way.
- In order of preference, the three alternatives to evacuating a car are:
  1. Through an end door to the safety of another car.
  2. Through the vestibule door and off the train.
  3. Through a window.

