

FRIENDS OF THE COOPERSVILLE & MARNE RAILWAY

OPERATING PROCEDURES AND POLICIES

CONTENTS - Revision #23

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INTRODUCTION

The Friends of the Coopersville and Marne Railway is the not for profit operating arm of the Coopersville and Marne Railway. When used herein, FOCMR is the Friends of the Coopersville and Marne Railway.

Publications Governing Operations

Each crew member will be provided with a copy of the Friends of the Coopersville & Marne Railway Operations Manual (in either printed or electronic form) should be familiar with the contents.

Copies of the Operations Manual will also be available for reference at these locations:

- Engine house
- Locomotive 7014
- Locomotive 7209
- Station house ticket office
- Spring Lake Building
- car containing PA system microphone (usually #7002)
- Locomotive 3049

In addition to the Operations Manual, each crew member must be familiar with the contents of the following:

General Orders as defined in the General Operating Rules

- Issued by the General Manager.

Operations Bulletins

- Issued by the Operating Department Supervisor, as needed.

Conditions not covered by these publications demand the exercise of sound judgment to maintain safety, efficiency, and economy.

Following Instructions

1. At the start of a day, train crews are to follow any special instructions given by the Mechanical Department, the Maintenance of Way Department, or the General Manager.
2. When a run begins, the Conductor is in charge of the train and gives instructions as appropriate.

GUIDELINES FOR CREW MEMBERS

Vintage Operation

Our railroad has locomotives that were built during the 1950's and 1970's. These engines pull cars that were still used in regular service during that period, originally constructed during the 1920's. This can provide added interest and appeal for our passengers.

We present ourselves as a vintage railroad, and we operate as railroads operated during the 1950's as much as it is practical to do so.

There are two important aspects to our vintage operation for crew members:

1. Wearing appropriate clothing. (See Clothing for Crew Members – Page 10)
2. Using hand signals whenever practical. (See Signals – Page 7)

Safety

Safety is of primary importance. We want to have fun while operating trains, but we must be careful and professional.

Appearance

All crew members are to have a neat personal appearance and good grooming. We all represent C&M to our customers and to the public.

Human Relations

Being considerate and helpful to each other and to our customers will make each train operation a pleasant experience.

All crew members should make our customers feel welcome and be willing to answer questions about our operations and equipment.

Training

Crew members must complete the training required for each position and be qualified for each position before being placed on the schedule. Crew members who demonstrate a lack of skill in any area will be asked to complete additional training before being scheduled for subsequent trains.

FRIENDS OF THE COOPERSVILLE AND MARNE RAILWAY COMPANY

DIRECTION STATEMENT

OUR MISSION

To preserve and to promote vintage railroading in Western Michigan

OUR OBJECTIVES

1. To provide our passengers a vintage railroad experience
2. To entertain our passengers by educating them about railroading and railroad history, with certain theme trains also being offered
3. To accommodate passengers of various age groups and physical abilities
4. To preserve and maintain equipment, structures, and right-of-way with historical accuracy
5. To work cooperatively with agencies and companies along our right-of-way
6. To operate in a fiscally responsible manner in order to maintain the railway
7. To obtain income from freight operations and leases, ticket sales and donations
8. To provide an enjoyable experience for our volunteers

OUR VALUES

Safety

Professionalism

Effective Training

Open Communications

Effective Management

Unity Within Diversity

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SIGNALS

The Coopersville & Marne Railway does not utilize a trackside signaling system. All train operations are authorized and controlled by written train orders and/or clearance forms.

Signals and Their Use

All signals used on the Coopersville & Marne Railway will be in accordance with the rules contained in the General Operating Rules Section of the Complete Operations Manual.

Hand Signals include signals given with a flag, lamp, or fuse.

Brakeman should use hand signals when close to the engine and in view of engineer.

Examples are:

- Bringing the engine from the engine house to the train (consist) or back to the engine house
- Coupling or uncoupling cars next to the engine
- Doing runaround movements with the engine

Radio may be used instead of hand and lantern signals to convey information when the use of such signals is not practical.

Examples are:

- Doing air brake tests
- Spotting individual coaches when servicing the train
- Special communication with engineer or other crew members

The engine horn is not to be sounded in Coopersville at the following grade crossings, unless an emergency exists:

- Main Street
- Eastmanville Street
- First Street
- East Street (after 9:00 PM)

If an emergency situation arises which would require the use of the horn, then it should be sounded without delay.

The engine bell is not to be run excessively during night hours in Coopersville. Engineers should use good judgment, keeping in mind that FRA Operating Rule 18 is still in effect and must be complied with.

RADIO RULES AND PROCEDURES

In addition to the railroad radio rules found in the General Operating Rules section of the complete operations manual, the following radio procedures are in effect on the Coopersville & Marne Railway.

General

- Keep antenna clear of anything that will interfere with the signal.
- Brakeman use chest pack or lapel mounted microphone to keep both hands free.
- Conductor keep antenna clear of body when transmitting from inside coach when using lapel microphone.
- To transmit, press button, count to two, then speak clearly. Do not shout as this will overdrive the transmitter and garble your message.
- Turn off radio and return to charger after use. Make sure the charger is on and red or amber (not fully charged) light is showing and indicating that the unit is correctly seated in the charger.
- Use care – do not pick the radio up by holding the antenna, microphone, or cord.

Proper Words and Phrase

- Communicating with the Engineer.
 - To go ahead: say, “Ahead 7014”
 - To back up: say, “Back up 7014”
 - Normal stop: say, “That will do 7014”
 - Quick stop: say, “Stop! Stop! Stop!”

Move short distance or while coupling:

Say, “Ahead easy 7014”

Say, “Back up easy 7014”

Note: “Ahead” and “Back” are determined individually by engine/locomotive as follows:

#7014 – Ahead is in the direction of the long hood and the back is in the direction of the cab of the locomotive. #7014 also has the letter F on the front end.

#3049 and #7209 are Center Cab engines with equal length hoods - The front end is designated by the letter F on the side of the locomotive near the front.

Identification of Transmissions

- All transmissions are to be identified as follows:

“C&M Conductor to 7014” “C&M Brakeman to 7014” C&M station to Conductor. If more than one conductor or brakeman is on duty use last name when transmitting. For example:

“C&M Conductor Smith or C&M Brakeman Jones to 7014”.

Acknowledge Transmissions

Crew members will acknowledge receipt of all transmissions directed to them or their station.

When receiving a transmission, repeat it to the transmitting party unless the communication related to yard switching operating, or is general in nature and does not contain instructions affecting the safety of a railroad operation.

If conversation is concluded, say, “**C&M 7014 Out**”, “**C&M Conductor Out**”, ***C&M Station Out**”, etc.

- Crew members should use “**C&M**” to identify the Coopersville & Marne Railway, per FCC regulations

Priorities For Radio Use

1. Emergencies
2. Crew communications for train movements
3. All other

CLOTHING FOR CREW MEMBERS

All train crew members are to wear the clothing listed below, for two reasons:

1. Our clothing is to be appropriate for a period of time – the 1950's – which we are representing as a vintage railroad operation.
2. Our clothing is to clearly identify us as crew members. If there is an emergency or there are questions, passengers know immediately who to go to.

Engineer and Brakeman

For warm weather

- Jeans or overalls
- Railroad cap – striped or solid color with C&M patch (not baseball type cap)
- Blue work shirt – short or long sleeve – preferably denim
- Work boots that protect the ankles and have steel toes
- Sturdy work gloves (primarily engineer and brakeman)

For cool/cold weather

- Add a warm jacket and warm cap that can be worn under your logo railroad hat

Conductor

For warm weather

- Dark trousers
- White shirt
- Dark necktie (optional in hot weather)
- Black shoes – dress or semi-dress type
- Conductor cap with badge
- Black or Navy jacket and vest (optional)

For cool/cold weather

- Add a suit jacket which matches the trousers
- Add a matching vest (optional)
- Add an appropriate overcoat or jacket

Trainman

- Same as conductor, except the matching suit jacket, vest, and cap with badge are optional

All Crew Members

- Name badge with C&M logo

EMERGENCY PROCEDURES

If there is a medical emergency or other emergency on board a train, proceed as follows:

The conductor is to do the following:

1. Notify the other crew members by radio.
2. Notify the passengers by making an announcement on the public address system. If there is a medical emergency, ask any passengers with medical training to report to the conductor.
3. Call the 911 dispatcher with the cellular phone:

Give the dispatcher the following information

(a) Train location

Include DOT number of nearest crossing as found in the Timetable.

(b) Nature of the emergency

Determine with the 911 dispatcher the appropriate location for the train and the emergency personnel to meet.

Keep an open line to the 911 dispatcher until the emergency personnel arrive on the scene.

Other crew members are to do the following:

Engineer

- Notify the station by radio if this is a regularly scheduled run and there are people at the station.
- Maintain radio contact with the station if appropriate.
- Assist the conductor as needed.

Brakeman, Trainman, Trainees, Car Hosts

- Assist the conductor as needed.

After the emergency is over, the conductor is to fill out a detailed written report of the incident.

INSTRUCTIONS FOR CONDUCTOR

Responsibilities

- being in charge of the operation of the train during a run
- being a customer relations and public relations representative for the FOC&M Railway
- determining the train consist
- inspecting the interior of the train
- seeing that the train is serviced prior to operation and after operation
- preparing, completing, and filing the forms needed for each run
- conducting crew safety meetings
- boarding, monitoring, and unloading passengers
- giving instructions for moving or stopping the train during runs
- making announcements to passengers

General Procedures

Generator

- Work with the brakeman to follow generator startup and shutdown instructions, including checking oil level. The conductor is responsible to insure that the internal breaker boxes are configured properly. As of 2023, determine which circuit breakers need to be “on” or “off” by following this legend:
 - Switch On/Off as required (white background)
 - Main Disconnect On/Off per generator start up procedure (blue background)
 - Switch Always ON (green background)
 - Switch Always OFF (red background)
- All furnaces and AC circuit breakers will always be “on” because they will be controlled by thermostats. Cars 1 - 5 have identical non-programable thermostats. Use these to control heating and cooling/air conditioning.
- CAR 5 only – this coach is equipped with 2 service panels that should remain closed at all times, unless an urgent situation requires attention. 3-way switches at each end of the coach control all required lighting. Thermostats at each end of the coach control the two separate HVAC units.

Boarding and Detraining Passengers

- Keep vestibule trap doors closed when no crew members are present, to prevent unauthorized boarding or detraining of passengers.
- Place a step stool on the platform at each set of steps used.
- Have a crew member or other volunteer at each set of steps used.

P A System

- Check the ALL CALL system when preparing for each run, to determine if the speakers are working in each car and that the volume level is appropriate. Have another crew member assist.

Riding The Point

- Ride the point when cars are being shoved east or west during servicing.

Charters

- Safety talk – give to passengers on the return trip of each charter run.
- History talk – give to groups for whom this is appropriate.

Customer Relations and Public Relations

- Comment Cards (if available) – see “Comment Cards” – Page 39.
- Complaints about seat assignment, service, trains, etc...which you cannot resolve should be referred to the General Manager.
- Suggestions and ideas

Document these items and forward them to the General Manager

Announcements to Passengers

Prior to Leaving Coopersville

1. Welcome aboard The Friends of the Coopersville and Marne Railway vintage train.
2. Please remain seated while the train is moving, unless going to the restroom.
3. Windows in non airconditioned cars can be opened (warm weather) but must have a fastener in place or a stick to hold them up. The Conductor will assist with opening windows.
4. There are restrooms on the train. They are located (give locations).
5. We ask that there be no smoking anywhere on the train.
6. Our round trip to Marne will take approximately 1 and ¼ hours.
7. If you have questions or problems, please contact the conductor.

After making announcements, give radio instructions to the engineer to proceed.

After Arriving at Marne

1. We have arrived at Marne, which is our eastbound destination.
2. While we are here, the crew will run the locomotive around the train, using the track beside us, and couple onto the rear of the train. Be sure to wave to the engineer and the brakeman as they go by.

3. We will be here about 10 minutes. You can walk around inside the train and you must remain on the train. I will announce our time to leave.
Also give detraining announcement when appropriate
- See “Detraining Passengers at Marne” – Page 39.

When the brake test has been completed, ask the passengers to return to their seats.

When leaving Marne, Comment Card announcement (if available) – see “Comment Cards”– P.39

Prior to Arriving at Coopersville

1. We will soon be back to the station at Coopersville
2. Please remain seated until the train has stopped and we announce that is it time to detrain.
Please remember to look around your seats for your personal belongings. When you detrain please watch your step and use the handrails.

For Summer Trains, Great Train Robberies, Murder Mystery, and Pumpkin Trains – say:
We invite you to visit the merchants of Coopersville.

3. We welcome your comments and suggestions about our train.
4. On behalf of our crew and the Friends of the Coopersville and Marne Railway, I would like to thank you for riding with us today. I hope you will come back, and please tell your friends about our trains.

When the train is stopped and after the engineer has given you the ALL STOP it will be safe to unload, notify the passengers and again ask them to “watch your step and use the handrails”.

Procedures for Running Between Coopersville and Marne

Preparing for a Run

- Report to the Spring Lake Building two (2) hours prior to departure time.

Pick up a radio which has a belt clip and a lapel microphone. Turn radio on.

- Pick up the cellular phone and turn it on.
- Read posted bulletins and instructions.
- Assemble the forms needed on a clip board and prepare as appropriate:

Clearance Brake Test Time Report Trip Report

Once the consist is at the station you should receive a manifest from the ticket office. Return the manifest to the ticket office with actual head count after the last run of the day.

On the Time Report, include first initial and last name of crew members.

- Conduct a radio check with the other crew members.
- Conduct a crew meeting after the locomotive is brought out of the engine house:
 - Engineer, brakeman, trainman, and trainees are to attend the meeting.
 - Inform the crew of the train consist.
 - Give a copy of the Clearance Form to the engineer.
 - Review Operating Bulletins and any special instructions on the Clearance Form.
 - Compare and synchronize watches if needed.

Switching and Preparing the Train

- Be available to assist the brakeman and engineer in switching if needed.
- Ride the locomotive to the station, where the consist ordinarily is located.
- Unlock the consist and retrieve any manifests from the ticket office.
- After checking for clearance around the passenger cars give brakeman permission to tie on when he brings the locomotive to the cars.
- Have train moved to service area – observe cold weather operation
- Prepare the passenger cars for operation:
 - Unlock the cars as needed and inspect interiors for cleanliness, supplies, and safety.
 - Assist brakeman in starting the generator, after oil level has been checked.
 - Start furnaces and heaters or open some windows, as appropriate.
 - Charge toilets
 - Check the operation of the PA system, with help from another crew member.

- For Charters

Request the assistance of other crew members as needed.

Supervise the arrival, unloading, and parking of vehicles.

Identify the person in charge of each group and introduce yourself.

Greet passengers and board them according to your car assignments.

For regular scheduled runs

Greet passengers, visit with them as time permits, and board them.

For theme trains

Coordinate with the General Manager or other designated person regarding entertainers, refreshments, and persons to assist with passengers.

Coopersville To Marne

Going to Marne

- Verify that all passengers are on board, checking with station to assure that the lobby is clear.
- Make “Prior To Leaving Coopersville” announcements.
- Close trap and doors at end of each car.
- Check open windows to see that proper fasteners are in place.
- Give the engineer the highball.
- On charter runs and scheduled runs – Hand out and punch tickets, visit with passengers.

At Marne

- Follow detraining procedure when appropriate
- Make “After Arrival in Marne” announcements after train has stopped.
- Monitor the runaround operation and coupling of locomotive to rear of train.
- Respond to the brakeman by radio when notified that the brake test is completed.
- Announce that the train is ready to leave, and it is time to return to seats.
- Give the engineer the highball.

Returning to Coopersville

- Distribute and collect comment cards (if available).
- Visit with passengers
- Make “Prior To Arriving at Coopersville” announcements when locomotive has crossed East Street.
- Open traps and doors in preparation for passenger detraining.

At Coopersville

If there will be one or more additional runs:

- Keep passengers on board until locomotive had been uncoupled. The Engineer has give you an ALL STOP on the radio.
- Assist passengers with detraining.
- Assist passengers with boarding for the next run.
- After checking to make sure the passenger cars are clear on passengers, give the brakeman permission to tie on when he brings the locomotive to the cars.
- Stop passenger boarding while the locomotive is being tied one.
- Proceed with the next run according to schedule and procedures.

If there are no additional runs:

- Assist passengers with detraining.
 - Notify the brakeman when all passengers are clear and the train can be moved.
 - Ride train to the servicing area, observe Cold Weather Operation as needed in servicing activities.
 - Ride the train back to the station.
- Servicing Coach Restroom facilities

SERVICING RESTROOMS BY CONDUCTOR STARTING 2023

CONDUCTOR COLD WEATHER (in station before first run)	CONSIST STAYS AT STATION Typically for Santa Trains
Make sure toilet dump valve is closed.	
Pour one white (2.5 gal) container of water into toilet.	Do not trust gauge, Gauge only in (T).
Operate flush button or use foot pump for several seconds. If flushing action is good, do not add more water; if not, add a little water until flushing action is good.	(T) is electric, (P) = foot pump
Check for adequate hand sanitizer.	
Check for adequate paper towels and toilet paper	
Check that the overall restroom is ready for customers	
CONDUCTOR COLD WEATHER (after last run)	CONSIST MOVES TO SERVICE AREA Typically for Santa Trains
Clean toilet, if necessary, before doing these procedures.	
Open toilet dump valve after Brakeman says "yes", leave dump valve open.	
After sewage is dumped, verify with brakeman that the outside dump valve has been closed.	
Pour 1/3 gallon of antifreeze (1 gal bottle) down toilet.	
Close toilet dump valve.	
Pour rest of antifreeze down toilet.	
Give Brakeman all bottles, whether full or empty (if left on consist, both water & antifreeze could freeze into slush)	
CONDUCTOR WARM WEATHER (in station before first run)	CONSIST STAYS AT STATION Typically overhead water tanks are full
Verify that toilet and sink are working properly.	
Check for adequate supplies.	Towels, Toilet paper, Hand soap.
Check that the overall restroom is ready for customers	
CONDUCTOR WARM WEATHER (after last run)	CONSIST MOVES TO SERVICE AREA Typically overhead water tanks are filled
Keep sink faucets closed.	
Keep water drain valve under/next to sink closed.	Car 4 drain valve is the outside fill valve.
Keep toilet charge valve closed.	Valve is under sink or next to toilet
Open toilet dump valve, when empty, close dump valve	
Open toilet charge valve, charge toilet, use gauge only as a guide, flush toilet to determine when charged, close toilet charge valve, tell Brakeman charge is completed	Valve is under sink or next to toilet
CONDUCTOR Removing Water from All Cars because of Freezing Weather	
1. "OPEN" all faucets in all cars.	
2. "OPEN" drain valves in Cars 1,2,3,5 and leave "OPEN".	Drain valves are under/next to sinks.
3. Car 4 drain valve is the outside fill valve.	Brakeman is responsible for Car 4.
NOTES	
1. For Car 1 (7001), Car 2 (7002), Car 3 (7003), Car 4 (7010), Car 5 (HCP); all sinks and water storage tanks drain onto tracks (grey water).	
2. All toilets except Car 4 drain into holding tanks (black water). Car 4 does not have a holding tank but is piped to a dump valve fitting.	
3. Toilet types - Thetford (T) in cars 1,2,3,5 and Polyjohn (P) in car 4.	
4. Both inside and outside dump valves should always remain closed, except when "dumping". This prevents dirt from entering the system and protects the rubber seals.	

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Completing A Run

- At the station, work with the brakeman to see that at least one hand brake is set after locomotive is uncoupled.
- Close windows, turn off lights, and work with the Brakeman to turn off generator as appropriate.
- Do not pull pin and allow windows to drop, this can break the glass.
- Observe Cold Weather Operation as needed.
- Close traps and lock doors.
- Ride the locomotive back to the Spring Lake Building
- Remind the engineer, brakeman, trainman, and trainees to come to the Spring Lake Building for the crew meeting.
- At the Spring Lake Building
 - (a) Complete and file all trip forms
 - (b) Turn off radio and return it to the charger.
 - (c) Conduct a crew meeting:
 - Review the run. Identify any rule or procedure violating noted and improvements as needed. Ask each crew member to do the same.
 - Give positive comments about what has gone well and encourage other crew members to do the same.
 - Review the Comment Cards with crew. All cards are to be returned to the ticket office.
 - If there is a conductor trainee, give comments and enter appropriate information on the training sheet.
 - If there are other trainees or a qualifying or requalifying run, coordinate with the engineer and brakeman in completing forms.
 - (e) Turn off cellular phone and return it to the charger.
 - (f) Turn off lights and lock the door if last person to leave.

INSTRUCTIONS FOR ENGINEER

Responsibilities

- Making pre-trip and post-trip inspections of the locomotive
- Preparing and completing the necessary paperwork
- Doing locomotive startup and shutdown
- Operating the locomotive during switching and train movements
- Attending crew meetings and assisting the conductor as requested
- Notifying the Mechanical Department Supervisor of defects or problems Joe Bowden (616) 540-9459

General Procedures

- Move the locomotive only when signaled by the brakeman or conductor.
- Make sure Three Step Protection is in effect and notify the brakeman before he/she goes to connect air hoses (See Page 38 – Three Step Protection).
- Use moderation in operating the throttle, avoid unnecessarily rapid acceleration of the locomotive, to conserve fuel.
- When running between Coopersville and Marne, take steps to remain in transition, once attained.
- Verify with the brakeman the position of switches being used.
- Ring the engine bell approaching and passing Eastmanville Street, First Street, and pedestrian walk east of City Hall. Stop short of walk if view is impeded by rail cars. k.
- View the track ahead whenever moving the locomotive, looking for objects on or near the track, and looking for track defects.
- Stretch slack on brakeman's signal, after coupling, to assure coupling is made.
- Pull Field Generator Switch and reverser out, and set hand brake whenever leaving the locomotive cab remember to lock all cab door, per FRA regulation. Upon returning to the cab, release the hand brake push the Field Generator Switch in and replace the reverser handle, wait 30 to 60 seconds before attempting to move the locomotive.

Locomotive Headlight

Westbound move back to Coopersville – after you shut off the front headlight, you must remember to turn it back on when arriving at the Coopersville Station. The button must be returned in for the headlight to work properly.

Rocker Arm Switch – position carefully to avoid arcing on the switch.

Locomotive left standing for twenty (20) minutes or more – turn off both front and rear headlights.

Flagging Equipment

At least six (6) five (5) minute fuses and one (1) red/orange flag are to be carried on the locomotive. The flag is used for flagging crossings, per Federal Regulations.

Locomotive 7014 Startup and Shutdown Instructions

STARTUP

1. Determine that all electrical switches or buttons are in the out or off position
2. Place the battery knife switch into the “closed” position.
3. Place the control button into the “in” position.
4. # Check cylinder test valves:
 - a. Open all cylinder test valves 3 complete turns.
 - b. Push and hold in start button 3 to 8 seconds and release.
 - c. If no moisture is observed, close valve finger tight. Start engine normally.
If a spray of water is observed, engine must not be started. Call Mechanical for help.
5. Place the fuel pump button into the “in” position.
6. Make sure the engine over speed handle and governor shut down button are properly set.
7. Check fuel flow in the filter sight glass.
8. Take the throttle out of the shut down position and place it into the idle position.
9. Push and hold the start button until the engine starts, then release the start button.
10. Check the ground relay and reset if necessary.
11. Check cooling water level at the sight glass.
12. Move locomotive from engine house after water temperature gauge shows 110 degrees and air pressure is built up.
13. Drain moisture from dirt collector, both main reservoir tanks, and air compressor.
14. After 20 minutes – check engine oil, governor oil, and air compressor oil levels.
15. Do not make additional movements outside engine house until water temperature gauge shows 125 degrees.
16. Prepare first part of Engineer’s Trip Report later, while cars are being serviced.

NOTE If engine is low on fluids, fuel or will not start, call Maintenance Supervisor Joe Bowden at (616) 540-9459.

Locomotive 7014 Shutdown Instructions

SHUTDOWN

1. Set the hand brake
2. Place the throttle in the “shut down” position.
3. Remove the reverser handle.
4. Place the control, Generator Field, and Fuel Pump buttons in the “out” position.
5. Turn off all lights, radio, and accessories.
6. Close the heater valve, to avoid wasting energy.
7. Place the battery knife switch into the “open” position.
8. Verify hoses have been connected to locomotive and “Hot Start” is on.
9. Place wheel chock under rear truck, to the front of either wheel.

Locomotive 3049 Startup and Shutdown Instructions

STARTUP

1. Check water level, both engines. Filler neck on top near either headlight.

Water must
cover plates.

2. Check engine oil, both engines. Dipstick on side of either engine.

3. Place battery knife switch in “closed” position.

4. Place control breaker in “closed” position (located on control stand).

5. Check that throttle is in idle and reverser lever is in center position.
6. Close Engine #1 switch on panel (near volt gauge).
7. Push Engine #1 START button and hold until engine is firing regularly.
8. To start Engine #2 repeat steps 6 and 7 using Engine #2 switch and start button.
9. Idle engine(s) until temperature is within operating range of 140-160 degrees and air

pressure is 90-100 PSI.

10. Make ground inspection, check fuel oil level.

11. Drain moisture from dirt collector, both main reservoir tanks, and air compressor.

12. Check air brake operation.

13. Release hand brake, left side of cab near door.

SHUTDOWN

1. Close throttle and apply independent brake.

2. Open Engine #1 and Engine #2 switches to shut down engines.

3. Place all switches, and levers in off, open, or neutral positions.

4. Open battery knife switch.

5. Apply hand brake.

6. Lock windows and doors.

7. Drain moisture from dirt collector, both main reservoir tanks, and air compressor

Locomotive 3049 Startup and Shutdown Instructions

STARTUP

1. Check water level, both engines. Filler neck on top near either headlight.

Water must cover plates.

2. Check engine oil, both engines. Dipstick on side of either engine.

3. Place battery knife switch in “closed” position.

4. Place control breaker in “closed” position (located on control stand).

5. Check that throttle is in idle and reverser lever is in center position.
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7. Push Engine #1 START button and hold until engine is firing regularly.
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9. Idle engine(s) until temperature is within operating range of 140-160 degrees and air

pressure is 90-100 PSI.

10. Make ground inspection, check fuel oil level.

11. Drain moisture from dirt collector, both main reservoir tanks, and air compressor.

12. Check air brake operation.

13. Release hand brake, left side of cab near door.

SHUTDOWN

1. Close throttle and apply independent brake.

2. Open Engine #1 and Engine #2 switches to shut down engines.
3. Place all switches, and levers in off, open, or neutral positions.
4. Open battery knife switch.
5. Apply hand brake.
6. Lock windows and doors.
7. Drain moisture from dirt collector, both main reservoir tanks, and air compressor

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STARTUP

1. Check water level, both engines. Filler neck on top near either headlight. Water must cover plates.
2. Check engine oil, both engines. Dipstick on side of either engine.
3. Place battery knife switch in “closed” position.

4. Place control breaker in “closed” position (located on control stand).
5. Check that throttle is in idle and reverser lever is in center position.
6. Close Engine #1 switch on panel (near volt gauge).
7. Push Engine #1 START button and hold until engine is firing regularly.
8. To start Engine #2 repeat steps 6 and 7 using Engine #2 switch and start button.
9. Idle engine(s) until temperature is within operating range of 140-160 degrees and air pressure is 90-100 PSI.
10. Make ground inspection, check fuel oil level.
11. Drain moisture from dirt collector, both main reservoir tanks, and air compressor.
12. Check air brake operation.
13. Release hand brake, left side of cab near door.

SHUTDOWN

1. Close throttle and apply independent brake.
2. Open Engine #1 and Engine #2 switches to shut down engines.
3. Place all switches, and levers in off, open, or neutral positions.
4. Open battery knife switch.
5. Apply hand brake.
6. Lock windows and doors.
7. Drain moisture from dirt collector, both main reservoir tanks, and air compressor.

JOB AID FOR 125 TON LOCOMOTIVE

No.1 Engine Startup:

1. In the engine control cabinet close the battery knife switch.
2. On the control console, switch the control power switch to "On".
3. Check that the engine compartment is free of personnel or equipment.
4. Ensure that the reverser (directional) lever is in "Neutral".
5. On the control console, switch the No.1 engine power to "On".
6. On the engine control cabinet observe the No. 1 engine Caterpillar EMS display for:
 - A. All lights flashing while the ECM performs a self-diagnosis.
 - B. All lights off when the ECM has completed the self-diagnosis.
 - C. The LCD display is showing a blank screen.

CAUTION

If the engine fails to start within 30 seconds, release the start button and wait for at least 2 minutes to allow the starting motor to cool before attempting to start the engine again. Not allowing the starter motor to cool will shorten the starter motor life and cause it to fail.

7. After the ECM has finished the self-diagnosis, which should take approximately 10 seconds, push and hold the "#1 Engine Start" button to crank the engine over.

NOTE: The diagnostic light will come on for five seconds when the diesel engine is first started. This is a normal test procedure and not a fault indication.

8. After the engine has started, check that all the display lights are off and no faults are indicated.

No.2 Engine Startup:

1. On the control console, switch the No. 2 engine power switch to "On".
2. On the engine control cabinet, observe the No. 2 engine Caterpillar EMS display for:
 - A. All lights flashing while the ECM performs a self-diagnosis.
 - B. All lights off when the ECM has completed the self-diagnosis.
 - C. The LDC display showing a blank screen.
3. After the ECM has finished the self-diagnosis, which should take approximately 10 seconds, push and hold the "#2 Engine Start" button to crank the engine over.
4. After the engine has started, check that all EMS display lights are off and no faults indicated.

Engine Shut Down:

1. Place the throttle lever in the idle position.
2. Place the reverser (direction) handle in the neutral position.
3. Place the loco brake valve in the "applied" position.
4. Switch the generator field switch to "Off".
5. After both engines idle for five minutes to cool down the turbos and engine oil:
 - A. Switch the No. 1 Engine Run switch to "Off".
 - B. Switch the No. 2 Engine Run switch to "Off".

NOTE: Do not leave these switches in the "Run" position with the engines not running.

6. After the engines have stopped rotation, switch the control power switch to "Off".

NOTE: Do not shut off the control power and open the battery knife switch until the engines have come to a complete stop. Not doing so will cause damage to the alternators and electrical equipment.

7. Open the battery knife switch.
8. Set the hand brake.

Procedures for Running between Coopersville and Marne

Preparing for a Run

- Report to the engine house two (2) hours prior to the scheduled departure time.
- Make sure that Hot Start System hoses are disconnected from the locomotive and that the dust caps are installed.
- Remove chock from under rear truck after verifying hand brake is set. Open engine house door.
- Make pre-trip inspection of locomotive and prepare necessary paperwork.
- Start locomotive, following the locomotive startup instructions.
- Move the locomotive outside the engine house on brakeman's signal, as soon as possible, no later than one half hour after crew arrival time.
- Attend crew meeting in Spring Lake Building. Coordinate with conductor.

Switching and Preparing the Train

- Move the locomotive to the station, with crew aboard.
- Proceed with the movements needed to assemble and/or couple to the consist
- Perform Initial Terminal Brake Test when consist is ready, as follows:

Charge, Test, and Inspect Brake System

- Monitor air gauges as locomotive charges the train line and air brake system.
- When air brake system is charged to required air pressure notify brakeman.
- On brakeman's signal, perform Initial Terminal Air Brake Test in accordance with the following:
 1. Make 20 pound reduction on equalizer gauge.
Observe the equalizing reservoir hand to ensure the desired reduction is made.
 2. After the desired reduction is reached and the brake valve has been lapped, make a leakage test.
Observe the hand on the brake pipe pressure gauge for any leakage. (Brake pipe leakage must not exceed five (5) pounds per minute.)

The brakeman shall determine that angle cocks are properly positioned, that brakes are applied on each car, that piston travel is correct, that brake rigging does not bind or foul, and that all parts of the brake equipment are properly secured.

3. Receive signal from the brakeman for release of the air brakes.
The brakeman will inspect each brake to see that all have been released.
4. Receive verification from the brakeman that the air test is completed.
On brakeman's signal, move the train to the servicing area and return to station.

Coopersville to Marne

Going to Marne

- Leave Coopersville on proper signal or permission from the conductor.
- Verify with the brakeman the position of the switches.
- Approach and proceed over road crossings with caution.
- Sound horn and bell in accordance with applicable rules.

At Marne

- Stop train as instructed by conductor – see “Detraining Passengers at Marne” – Page 39.
- Make 20 pound brake reduction before detaching locomotive from train.
- Run around train, recouple to west end of train and charge air brake system.
- Perform application and release test of train air brakes as follows:
 - When train air brake system is charged to required pressure, a 20 pound brake pipe reduction must be made and it must be determined that the brakes on the rear car apply and release.
 - Brakeman notify conductor when test is complete.
 - On signal from conductor, train may depart from Marne.

Marne to Coopersville

- Verify with the brakeman the position of switches.
- Approach and proceed over road crossings with caution.
- Sound horn and bell in accordance with applicable rules.

At Coopersville

If there will be one or more additional runs:

- Give the conductor an ALL STOP over the radio when engine is clear of the consist.
- Run the engine around the train, as guided by the brakeman.
- Perform air brake test.
- Proceed on the next run when signaled by conductor.

If there are no additional runs:

- Give the conductor an ALL STOP over the radio as soon as the train has stopped.
- Move the train to the servicing area and make movements necessary.
- Return train to station, spot consist and uncouple as signaled by the brakeman.

Complete a Run

- Return locomotive to the Spring Lake Building with crew aboard.
- Place locomotive in the engine house and shut down per shut down instructions.
- Complete second part of Locomotive Inspection Report and file on clipboard.
- Enter hours in log book.
- Turn out lights and secure engine house if you are the last person to leave.
- Go to the Spring Lake Building for crew meeting, including recording information for a trainee, if any, or coordinating with the Conductor or training or qualifying information.

INSTRUCTIONS FOR BRAKEMAN

Responsibilities

- assisting the engineer in startup and shutdown
- guiding the engineer in switching movements by means of hand signals or radio
- changing switch positions
- coupling and uncoupling cars
- monitoring or flagging road crossings
- performing brake tests, also setting and releasing hand brakes
- inspecting the train before each run
- assisting the engineer during train operations
- attending crew meetings and assisting the conductor as requested
- servicing water tanks and sewage holding tanks
- starting and shutting down generator(s) in cooperation with the conductor (see p. 37)

General Procedures

Switching Movements of Locomotive and Cars

- Position yourself on the right front or right rear of locomotive or car, depending upon the direction of movement, in full view of the engineer.
- Use hand signals, unless radio is more appropriate for the situation.
- Flag road crossings according to the Time Table, using an orange flag.

Switches

- Check the position of each switch before proceeding through it, and verify with the engineer by radio.
- Place switch lock or hook in the hasp after throwing a switch. IF not returning soon, and there is a lock, lock the switch.
- Check switch points for correct position after throwing a switch.
- Give signals from the engineer's side of the equipment, placing yourself in full view of the engineer.

Brakes

Hand Brakes

- Check for hand brakes and release them before moving equipment.
- Set hand brake when uncoupling equipment to be left standing.

Air Brakes

- Open an angle cock slowly when placing air in the train line.
- Perform a Terminal Brake Test before a train departs on its initial run.
- Perform a brake test after re-coupling a train during a run.
- Use air gauge and look at brakes on read of car to confirm release.

Procedures For Running Between Coopersville And Marne

Preparing For A Run

- Report to the engine house two (2) hours prior to the scheduled departure time.
- Place your equipment bag in the locomotive cab.
- Read bulletins and instructions posted on the bulletin board.
- Pick up a radio which has a belt clip and a lapel microphone. You must be able to keep both hands free, so do not attempt to carry a radio.
- Disconnect the Hot Start System hoses from the locomotive, as follows:
 1. Turn off Coolant Control Switch on right side of control panel.
 2. Disconnect the two hoses from the locomotive and hang on hooks provided.
 3. Put dust covers in place on the locomotive.
- Conduct a radio check with the conductor.
- Conduct a radio check with the engineer, after the locomotive has been started.
- Signal the engineer to bring the locomotive out of the engine house – as early as possible – no later than one half hour after crews arrival time.
- Close the overhead door to the engine house, being sure to wait for the motor to stop running. Turn off the lights, and secure the crew door.
- Attend crew meeting in the Spring Lake Building. Coordinate with the conductor.

Switching and Preparing The Train

- Signal the engineer to move the locomotive to the station, with conductor aboard.
- Check to see that the angle cock at the west end of the consist is open.
- **FRA Regulations prohibit leaving a cut of cars standing unattended with angle cocks closed at both ends.**
- When coupling the locomotive to the east end of the consist, do the following:
 - o Open the angle cock on the car, then make the coupling.
 - o Request engineer to do 3-Step Protection and place the automatic brake valve in the lap position. After acknowledgement, connect air hoses.
 - o Open the angle cock on the locomotive slowly.
 - o Proceed to the west end of the consist, and close the angle cock.
 - o Request engineer to place the automatic brake valve in the running position.
 - o Proceed with the ***Initial Terminal Brake Test***. Leave 3-Step Protection in place until the test is completed.
- Performing switching at the appropriate time, if needed, to develop the train consist.
- When uncoupling cars, be sure that all electrical cables, audio cables, and safety chains are disconnected.
- Check diesel generator oil level before starting – add oil if needed.

Initial Terminal Brake Test

1. The Brakeman must determine that brake pipe pressure at the rear of the train matches that in the locomotive, within fifteen (15) pounds of the feed valve setting. The hand-held air gauge or the caboose air gauge may be used.
2. Call for a set and check that the rear end pressure drops twenty (20) pounds.
3. Walk north side of the train, making sure that the brakes are set. Also check for loose brake shoes or rigging, position of holding tank valves and covers, etc.
4. After reaching the locomotive, request a release. Walk the south side of the train making sure that brakes are released. Also check for loose brake shoes or rigging, loose electrical connections, etc.
5. It is not necessary to walk both sides of the train on the set and/or release.
6. Inform the conductor when the test has successfully been completed, and go to the conductor to sign the Brake Test Form.

Switching And Preparing The Train - Continued

- Move the train to the servicing area. Shove all the way west – service going east.
- Fill or top off water tanks on cars being used.
- Move train back to station, spotting cars at the appropriate place.

Coopersville to Marne

Going to Marne

Flag the 1st Street crossing. When returning to the locomotive, mount the right front or right rear step.

Ride in the locomotive cab, on the left side seat, and do the following:

- View the track ahead, looking for objects of persons on or near the track, also looking for track defects.
- Check the position of switches and verify with the engineer.
- Monitor road crossings, to assist the engineer.

At Marne

- Take hand held air gauge with you when leaving the locomotive cab.
- Put air gauge on the vestibule deck of coach to be cut off.
- Upon signal from the engineer for a 20lb set, close the angle cock on the locomotive.
- Cut off the locomotive, using the locomotive cut lever. DO NOT close the car angle cock.
- Walk to the right front of the locomotive and ride on the right front steps to the east switch, as to remain in the view of the Engineer.
- Close the knuckle on the rear of the locomotive before lining switch for run around.
- Perform run around, doing coupling as described – Steps a, b, c.
- Go to east end of train. Close the angle cock. Ask engineer to place automatic brake valve in running position. Attach hand held gauge, and do set and release air test.
- Detach air gauge, notify conductor of successful brake test, return to locomotive.

Marne to Coopersville

Returning to Coopersville

Ride in the locomotive cab as on the trip to Marne.

At Coopersville

If there will be one or more additional runs:

- Uncouple the locomotive and DO NOT close the car angle cock.
- Perform run around. Ask conductor for permission to couple to consist.
- Couple to consist as described by steps a, b, and c in previous section.
- Perform an air brake test, using hand held air gauge or caboose air gauge.
- Inform the conductor of a successful brake test, and return the control of the train to him.
- Proceed on the next run according to schedule.

If there are no additional runs:

- Determine from the conductor that all passengers are clear and it is safe to move the train.
- Move train to the servicing area. Service going west.
- Empty holding tanks, and fill or drain water tanks – depending on the season.,
- Move the train back to the station, spotting the west end close to shore power post. The post is located between the main line and the station siding.

Completing A Run

- Uncouple cars and leave angle cock on car OPEN
- Set at least one hand brake.
- Turn off the generator. Assist the conductor as needed.
- Move locomotive to the engine house when conductor is ready and is on board.
- Open the engine house doors, guide the locomotive inside.
- Connect the Hot Start System hoses to the locomotive, as follows:
 1. Remove the dust covers.
 2. Connect the hoses securely to the proper connections.
 3. Turn on the Coolant Control Switch.
- Enter hours in the log book here or in the Spring Lake Building.
- Collect equipment bag and other possessions.
- Turn off the light and lock the crew door if you are the last person to leave.
- Go to the Spring Lake Building for the crew meeting, including recording information for a trainee, if any, and coordinating with the Conductor on the training or qualifying information.
- Turn off the radio and place it in the charger. Turn the charger on if all crew radios have been placed.

Servicing Restrooms

SERVICING RESTROOMS BY BRAKEMAN STARTING 2023

BRAKEMAN COLD WEATHER (in station before first run)	CONSIST STAYS AT STATION Typically for Santa Trains
While Engine is heating to operating temperature inside garage, place full white (2.5 gal) water containers onto engine's platform, place one container for each restroom per day (EX. 1 day X 5 restrooms = 5 containers)	These containers will be filled during the previous week. Only take containers required for the day. Other containers are for tomorrow.
While doing the above, place full antifreeze (1.0 gal) containers onto engine's platform, place one container for each restroom per day (EX. 1 day X 5 restrooms = 5 containers)	These containers will be filled during the previous week. Only take containers required for the day. Other containers are for tomorrow.
When Engine moves to east end of consist, deliver water and antifreeze containers to Conductor as the engine passes by the cars. Discuss with Conductor where the delivery point is.	
Make sure each outside dump valve is still closed.	
BRAKEMAN COLD WEATHER (after last run)	CONSIST MOVES TO SERVICE AREA Typically for Santa Trains
Connect sewer hose, open dump valve, tell Conductor to open toilet dump valve, when empty, remove sewer hose, close dump valve and notify the conductor that the valve is closed.	
Gather all white jugs and antifreeze containers (empty or full) from Conductor, return all containers to engine garage.	
BRAKEMAN WARM WEATHER (after last run)	CONSIST MOVES TO SERVICE AREA Typically overhead water tanks are filled
Connect sewer hose, open dump valve, tell Conductor to open toilet dump valve, when empty, remove sewer hose, close dump valve and notify the conductor that the valve is closed.	Car 4 does not have an active black tank, but has a separate dump valve.
Fill water tank, when Conductor says toilet is charged, continue to fill until it overflows.	Car 4 glad-hand valve must be open to receive water; valve must be turned off when tank is full, or all water will drain to ground.
BRAKEMAN Removing Water from All Cars because of Freezing Weather	
Do not load fresh water onto any car. Car 4 glad-hand valve to be left in "open " position.	
NOTES 1. For Car 1 (7001), Car 2 (7002), Car 3 (7003), Car 4 (7010), Car 5 (HCP); all sinks and water storage tanks drain onto tracks (grey water). 2. All toilets except Car 4 drain into holding tanks (black water). Car 4 does not have a holding tank but is piped to a dump valve fitting. 3. Toilet types - Thetford (T) in cars 1,2,3,5 and Polyjohn (P) in car 4. 4. Both inside and outside dump valves should always remain closed, except when "dumping". This prevents dirt from entering the system and protects the rubber seals.	

Updated March 17, 2023 by James Rahe

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INSTRUCTIONS FOR TRAINMAN

Responsibilities

- Being a customer relations and public relations representative for The Friends of the Coopersville and Marne Railroad.
- Helping to inspect and service the interior of the train
- Attending crew meetings
- Assisting with boarding, monitoring, and detrainning passengers

General Procedures

Boarding and Detrainning Passengers

- Place step stool on the platform at each set of steps used.

PA System

- Assist the Conductor to check the ALL CALL sound system, to determine that speakers are working in each car and that the volume level is appropriate.

Customer Relations and Public Relations

- Comment Cards (if available)– assist Conductor. See “Comment Cards” – Page 28.
 - Complaints about seat assignments, service, trains, etc. which you cannot resolve.
 - Suggestions and ideas
- Refer these items to the Conductor.

Brake Test

- Perform brake test at Marne if having been trained to do so, and the crew does not include a Rear Brakeman.

Procedures for Running between Coopersville and Marne

Preparing for a Run

- Report to the Spring Lake Building two (2) hours prior to departure time.
- Pick up a radio which has a belt clip and a lapel microphone. You must be able to keep both hands free, so do not attempt to carry a radio. Turn the radio on.
- Read posted bulletins and instructions.
- Conduct a radio check with other crew members.
- Attend Crew Meeting in the Spring Lake Building.

Preparing the Train

- Ride the engine to the station, where cars are located.
- Assist with starting heaters or opening windows, as appropriate.
- Assist in inspecting cars for cleanliness and supplies.
- Assist with charging toilets.
- Assist with checking PA System.
- Place one or more step stools on the platform for passengers
- Greet and board passengers.

Coopersville to Marne

Going to Marne

- Close traps and doors at end of each car.
- On charter runs – distribute and punch tickets, visit with passengers.
- On scheduled runs – distribute and punch tickets and visit with passengers.
- Monitor passenger safety (windows, staying seated).

At Marne

- Visit with passengers
- Conduct brake test, if trained to do so, and the crew does not include a Rear Brakeman.

Marne to Coopersville

Returning to Coopersville

- Distribute and collect Comment Cards (if available), as instructed by the conductor.
- Visit with passengers
- Monitor passengers safety (windows, staying seated)
- Open traps and doors in preparation for passenger detraining.

At Coopersville

If there will be one or more additional runs:

- Keep passengers on board until informed by the conductor that it is safe to detrain.
- Place step stools on the platform.
- Assist passengers with detraining.
- Assist with boarding for the next run.
- Stop passengers boarding while the locomotive is being tied on.
- Proceed with the next run according to procedures.

If there are no additional runs:

- Assist passengers with detraining.

Completing a Run

- Assist with closing windows and turning off heaters, as appropriate.
- Assist with dumping toilets.
- Place step stools inside cars.
- Close traps and doors.
- Ride the engine back to the Spring Lake Building.
- Attend Crew Meeting
- Enter hours in log book.
- Collect equipment bag and other possessions.
- Turn off radio and return it to the charger.
- Turn off lights and lock door if last person to leave.

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CONDUCTOR OR TRAINMAN – IN CASE OF AIR BRAKE FAILURE

AIR BRAKE CUTOUT INSTRUCTIONS

In case of air brake failure on a passenger car while a train is in route, it is necessary to cut out air brakes on that car.

The following procedure should be followed:

1. Determine the location of the cutout cock. The handle is located either in the brake pipe branch or at the brake cylinder and is painted white.
2. Close valve so the handle is in line with the pipe.
3. Bleed pressure from the reservoir.
4. Check brake piston and shoes to determine that brakes have fully released.
5. Move car in train only to nearest terminal for repair.
6. Conductor will make written report and notify the Mechanical Department.

PASSENGER SERVICE BACK-UP VALVE

A back-up valve is to be used on any back-up move necessary with passengers on board, per Federal Regulations.

A back-up valve unit is stored in locomotive 7014 on the front left side of the engine compartment.

The valve may only be used to dump air in an emergency application. It must not be used to slow the train in any way except to stop the train quickly.

Use extreme caution when backing train.

GENERATOR OPERATION

The generator on Car 7002 is to be operated from the ground only, as follows:

Starting the Generator

- In warm weather, just before doing Initial Terminal Brake Test.
- # In cold weather, just before leaving the station to service the consist.
 1. Unlock and open the generator cabinet.
 2. Check the generator oil. Add oil if necessary.

Oil is stored under the third seat in 7014 or under Conductor's desk in car 7002.

If any is used, notify Mechanical Department by recording on Conductor's Trip Report.
 3. Place generator disconnect handle in the off position.
 4. Turn toggle switch to LOCAL position.
 5. Hold the preheat button in for twenty (20) seconds, when outside temperature is 50 degrees F. or below.
 6. Push the start button. Release when engine starts.

#After the shore power is turned off and before going to generator power, the Conductor is to turn off the master circuit breaker in each car. This will minimize the initial load on the generator. When the generator power is turned on, he or she is to go from car to car and turn on the master breakers.
 7. Close and lock the generator cabinet door.
 8. Allow generator to warm up for 3 minutes.
 9. Contact the conductor for permission to disconnect shore power.
 10. Disconnect shore power from the consist.
 11. Hang cable on post.
 12. Insert interlock pin into shore power interlock switch and rotate 90 degrees.
 13. Remove key and lanyard form shore power interlock switch.
 14. Insert key into generator disconnect interlock switch.
 15. Rotate interlock pin 90 degrees and remove from switch.
 16. Place generator disconnect handle in the on position.
 17. Notify the conductor that the consist in on generator power.

Stopping the Generator:

1. Contact conductor for permission to disconnect generator power.
2. Place generator disconnect in the off position.
3. Allow the generator to run for 30 seconds in the off position.
4. Open the generator door, and turn the toggle switch to the REMOTE position.
5. Close and lock the generator door.
6. Insert interlock pin into disconnect interlock switch and rotate 90 degrees.
7. Remove key and lanyard form disconnect interlock switch.
8. Insert key into shore power interlock switch.
9. Rotate interlock pin 90 degrees and remove from switch.
10. Remove cable from post and connect to consist.
11. Notify conductor the consist is on shore power.

THREE STEP PROTECTION PLAN

Whenever a person goes between equipment, such as when connecting air hoses, he or she must ask the Engineer by radio for Three Step Protection. This does not apply when simply closing an angle cock or pulling a coupler pin.

The Engineer shall acknowledge the request and take the following steps.

1. Place the reverser in the neutral position.
2. Remove reverser handle from control stand.
3. Place the independent brake in the fully applied position.

The Engineer shall inform the person that the Three Step Protection has been applied.

When the person between the equipment is in the clear, he or she must inform the Engineer that the Three Step Protection may be released.

When conducting a brake test, keep protection in effect until test is completed.

DETRAINING PASSENGERS AT MARNE

An activity which has been very popular with our passengers is getting off the train at Marne to watch the locomotive couple onto the rear car or the caboose. People like to have something to do while the train sits in Marne, and this is an opportunity for them to learn – and for us to teach – something about railroad operations.

This activity is appropriate with a maximum passenger count of approximately fifty (50), it needs good weather, and is best suited for the following.

Regular Wednesday and Saturday trains, which usually have a lower passenger counts

Charter trains where the number and type of passengers is appropriate

This activity is never appropriate for Theme Trains, due to passenger counts and time constraints.

A gravel unloading area is located in Marne, south of the main line.

At the Crew Meeting prior to leaving Coopersville, the crew is to determine whether or not detraining at Marne is appropriate.

If detraining is appropriate, the following procedure is to be used:

1. The Engineer prepares to stop at the unloading area, awaiting Conductor's instructions.
2. The Conductor uses radio to spot the west end of Car 7002 at the unloading area.
3. After making the usual Marne announcement, the Conductor adds that passengers can detrain to watch the coupling at the west end, after the locomotive goes past on the siding.
4. The Conductor places a step stool and assists passengers off the train.
5. The Conductor keeps passengers on the south side of the main line, clear of the track.
Conductor also explains what is happening and answers questions
6. After the Brakeman makes the coupling, the Conductor assists passengers in re-boarding the train.

COMMENT CARDS

Comment Cards are used to gather information from our passengers. These cards tell us where our passengers come from, how they heard about our railroad, and what comments or suggestions they have about us and our service.

Conductors are to follow this procedure: (and are assisted by Trainmen when appropriate and if card are available)

1. After leaving Marne, announce that Comments Cards will be distributed and we would appreciate having them filled in.
2. Distribute Comment Cards, with pens and pencils for people needing them.
3. Collect cards prior to arriving in Coopersville.
4. The conductor will deliver the card to the ticket office at the end of the day's trains along with the manifest.

OPERATION OF ON-TRACK EQUIPMENT

DEFINITION – Flanged wheel equipment other than trains or engines used in inspection or maintenance of track other uses, including, but not limited to, track motor cars, cranes high rail trucks and derricks.

RULES

1. Operator of on-track equipment will be responsible for its safe movement.
2. Operator of on-track equipment must be qualified on these rules or be working under immediate (on the job) supervision of personnel who have been qualified on these rules.
3. Operator in charge must have fuses, a red flag by day and a red light at night, ready for immediate use.
4. On-track equipment when operating at night must display a white light to the front and a red light to the rear when so equipped.
5. On-track equipment must not exceed 10 MPH and must at all times be prepared to stop within one-half the range of vision. Speed must further be reduced as follows: 5 MPH through turnouts, over facing point switches and frogs, and over public grade crossings.
6. On-track equipment approaching a grade crossing must not enter the crossing until the way is known to be clear. Warning devices, where provided, must be sounded approaching or passing over public grade crossings.
7. On-track equipment must not follow nearer than 600 feet behind a train or engine moving on the main track.
8. Form W rules apply when trains or engines are to be operated and on-track equipment is to be operated on the main track between Coopersville and Marne. The Forman or operator in charge must obtain control from either:
 - a. Control station operator when control station is in service.
 - b. Operating Department Supervisor when station is not in use.
 - c. Conductor in charge of train operation in absence of control station operator or Operating Department Supervisor.

The operator in charge must know the movement is protected against conflicting train movements.

9. On the main line, on-track equipment must operate under Form W. A copy must be posted on the clip board in the Spring Lake Building. A copy of the Form W must be kept with the foreman in charge. FORM W's are in effect until cleared.
 - a. When NO trains or engines are scheduled to be operated, on-track equipment will have "EXCLUSIVE RIGHT OF TRACK" on the main track, between Coopersville and Marne.

The Track Department Supervisor or foreman in charge must know that no trains are scheduled to be operated before authorizing on-track equipment movement.
 - b. When on-track equipment is being operated under "EXCLUSIVE RIGHT OF TRACK RULES" east of Coopersville, the Foreman or operator in charge will place a red stop sign at Deer Creek, MP 172.28 (#)
 - c. Non-scheduled trains which may be called to operate east of Coopersville must not pass the red stop sign at Deer Creek, MP 172.28 (#), without permission from Foreman or operator in charge who placed the stop sign.
10. If more than one piece of equipment is being operated in the same limits, a proper understanding must be arranged between operators before movement is made.
11. When on-track equipment is operated under Rule 9, a completed copy of Form W must be placed on the Conductors Bulletin Board before departing from Coopersville.

COLD WEATHER OPERATION

October 1 – April 30

In cold weather particularly when there is snow, crews should report for duty earlier than two hours – 30 to 60 minutes, depending on conditions. The train is to be at the station for boarding at 20 minutes prior to departure time.

Before Servicing the Train

Conductor and Brakeman

1. Start generator (See Generator Operations – Page 37).
2. Turn on the field switch. Turn on master circuit breakers in each car.
3. Make sure blower switches on furnaces are on and outside propane tank valves are open. Light small propane heaters. Close restroom doors.

Servicing the Train

It is important for the Conductor and Brakeman to communicate when servicing the cars. Know when a toilet has been charged or when to dump.

Brakeman

1. Keep the outside holding tank valve open at all times.
2. After the Conductor says a toilet has been charged, the Brakeman should continue to fill the water tank for approximately three (3) minutes.
3. Drain water hose after watering cars.

Conductor

1. Close water valves and sink faucet in restroom.

During the Run – Conductor

1. Monitor heat in cars. The presence of passengers in the cars raises the temperature, and outside temperatures may rise.
Open windows if necessary.
2. Wipe windows with paper towels if they steam up.

Completing a Run

- | | |
|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Conductor | <ul style="list-style-type: none">- Wait to dump toilet until Brakeman has connected hose outside.- Open toilet fill valve, water drain valve, and skin faucet – <u>leave open</u>- # <u>Close</u> toilet dump valve after consist is back to station platform.- The dial on the restroom heaters should be left at the designated setting.- Close restroom door to keep heat from the restroom inside.- Turn off all circuits not marked with red. Turn off field switch. |
| Brakeman | <ul style="list-style-type: none">- Turn off generator- # Plug consist into shore power. |

Snow and Ice Conditions

The train crew needs to clear switches if necessary, using a broom and/or shovel located on the train. Also clear station platform, if the city crew has not done so.

Crossing flange ways should be cleared by MOW on Saturday. When this is not possible, crew members are to clear flange ways using tools to be kept on the locomotive.

If necessary, run the locomotive through each crossing before shoving cars through.

Apply ice melt to station platform if necessary.

Do not apply to car vestibules or steps, since this will cause corrosion.

Leaving the consist on the main will be done when the General Manager gives the instruction to do so – after the season begins.

POLICIES APPLYING TO OPERATING TRAINS

Physically Handicapped People

by FOC&M Board – 9/02

Physically handicapped passengers must come with support people to assist them.

Train crew members are not to lift physically handicapped passengers on or off our trains, because of the liability involved if there are injuries.

Tying On To Passenger Cars

by FOC&M Operating Dept. - 6/03

Brakeman is always to obtain permission from the Conductor before coupling onto the cars in the consist of a passenger train – in Marne as well as in Coopersville.

Cab Visits

by FOC&M Operating Dept. – 7/03

For safety reasons, the following will apply:

1. Cab tours by unsupervised children are not allowed
2. Cab visits on Theme Trains are not allowed, unless approved by the general manager or with prior arrangements.
3. Cab visits by one or two persons are permitted, when requested and time permits.
4. Engineers must use discretion in permitting cab visits.

Photographs

by FOC&M Operating Dept. – 7/03

For safety reasons, the following will apply:

1. Group pictures on the locomotive walkway are not allowed.
For such pictures, the group should stand on the ground next to the locomotive.
2. Photos of one or two persons on the lowest engine steps only are permitted.

Train Crew Work Requirements

by FOC&M Operating Dept. - 1/04

1. Train Crew volunteers are encouraged to work on trains as often as possible.
2. Train Crew volunteers are to work a minimum of six (6) days per operating season. These six days should be spread over the months of the season, so that crew people can keep informed of changes which take place.
3. There should be at least two (2) days worked in each position a person is qualified for, to remain familiar with each position.

The reasons for this policy are these:

- (a) Safety is an issue when people do not keep up their skills and stay familiar with operating requirements.
- (b) FOC&M is spending money to provide medical testing for train crew people, to meet FRA requirements.

Train Crew Age Requirements

by FOC&M Operating Dept. – 2/05

1. The minimum age for beginning training for Brakeman or Trainman is 18.
2. The minimum age for becoming an Engineer or a Conductor is 21.

Cab Rides

1. # Cab rides may be purchases by the general public for \$65.00. These are by reservation only, and must be cleared through the Crew Caller and/or General Manager.
There shall be at most two cab riders per run, and there shall be a maximum of four persons in the cab on any run.
2. Prospective volunteers may be assigned a cab ride as part of their training program.
3. Free cab rides may be granted to others, by invitation only, on charter runs, with the approval of the Crew Caller and/or General Manager. These riders shall be subject to the same restrictions listed in item 1.
4. Free cab rides may occasionally be granted to others on other runs, subject to the restrictions as listed in item 1.

NOTE: For all cab rides, the Brakeman is to occupy the left hand seat. Persons authorizing cab rides are to explain the seating restrictions.

Free Passes and Rides

by FOC&M Board – 9/02

1. Free passes, for advertising and publicity purposes, may be issues by the General Manager for any train. Such passes may be issued to volunteers for issuance to another party.
2. Stockholders shall be issued a pass for any regular train, excluding theme trains and the dinner train. Included shall be their spouse, children and grandchildren.
3. Volunteers and their immediate family may ride any regular train, charter, or theme train, at no cost. The ticket agent must be notified when riding.

In order to prevent distractions to the crew members, and in conformance with an FRA Emergence Order, the used of personal electronic devices, other than those issued by the railroad, is prohibited in the cab of a moving locomotive.

Use of such devices by a crew member of the ground within four (4) feet of a moving train or other on track equipment is prohibited.

Personal electronic devices mean any device capable of communicating remotely, such as a cell phone, personal digital assistant, or portable computer.

Personal electronic device must be turned off with any electronic earpieces removed while the train is moving, except that wireless communication devices may be used in an emergency, such as failure of radio communication.

