## **Tradewinds & Atlantic Railroad**



### Membership handbook

General policies for our members Stationmaster

Loading cars properly Riding instructions

Operations Conductor

Switches

**Hand Signals** 

Radio use

Flagging other trains

Engineer

Basic operation Whistle signals

### **GENERAL POLICIES FOR ALL MEMBERS**

Who we are: Legally we are a 501c3 not for profit volunteer organization formed to educate and entertain the public about railroads both full size and replicas. The railroad was formed in 1987 by a group of dedicated hobbyists. We gave our first public run in 1990.

<u>What we do:</u> Please remember that we are a railroad. We are not an amusement park ride for kids. This is a working railroad. We carry passengers and collect a fare for doing so. On workdays we also carry tools, lumber, and rock when needed. We are a real railroad and trains only smaller.

<u>How we do it:</u> Great customer service happens every minute, *even when no one seems to be looking*. At the Disney Parks, they call their employees Cast Members (CMs) and tell them they are "on stage" whenever they go into any area where their guests can **see** them or **hear** them. A customer's perception is a critical part of whether their experience is positive or negative. Every employee contributes to that perception, every minute, regardless of whether they are behind the counter, in train service, or a member of the staff. We are "on stage" for our passengers from the time we arrive until the time we leave. If we are grumpy they will see this. If you're grumpy, tired or not feeling well, We kindly, ask you to go home.

Our facilities: We maintain about 6,000 feet of 71/2" gauge track of which 2,600 feet is our mainline around the lake. Our car barn has thirteen tracks forty feet long for storage of trains and equipment. Near the barn, we have a fully motorized transfer table to facilitate movement of trains from the barn, or vehicles to the

track. We also have a motorized turn table and garden tracks for maintenance and exhibition of equipment. In addition we have a multiscale layout for operation of smaller G scale and O scale trains.

**<u>Bathrooms:</u>** The bathroom located in the station is for the use of members and guests only. The public must be instructed to use the bathrooms located next to the Clydesdale shelter across from Picnic Siding

<u>Horses</u>: The north side of Tradewinds Park was donated to Broward County by a horse-lover, and as such there are often horses near the track. Regrettably, these horses are often not very well trained and ridden by people that are not well trained in handling horses. Whether you are driving your vehicle near a horse or running a train, reduce speed to the absolute minimum and don't blow your horn or whistle. Try not to make sudden moves or noises that will startle the horse. A startled horse could easily injure its rider or bystanders, and possibly even damage a train. Horses must never be allowed to step on the tracks, as their hooves will damage the rail.

**Parking**: If you arrive for a workday, fun run, or other function when the public is not present, please feel free to park wherever is most convenient. Please do not park outside the fence at any time. Before 10 AM on public run days you may park between the fence and the yard. If you arrive after 10 AM when operations begin, please try not to pass through the driveway in front of the station. If you enter the park through the main park gate, please park along the road where the public parks.

<u>Never</u> attempt to drive anything with wheels over the tracks except at designated points. Even a lawnmower could cause severe damage to the track.

When walking near the track, try to avoid walking directly on the track or ballast. If you must step or walk on the track, step directly on the ties between the rails. If accompanying guests or public, ask them to not walk on the track. In particular, avoid disturbing the ballast. Children must be asked not to throw ballast at any time; it was put there for a reason and it is dangerous.

<u>Dress code</u>: We do not have a formal dress code, but remember we are "on <u>stage</u>" when the public is present. Let common sense be your guide. This is a railroad; consider the hazards when choosing your attire. Of course, the preferred attire is overalls and an engineer's cap, but second choice would be a TARR shirt and clean, long pants. Shoes should be of leather and have heavy soles when possible. Sandals are <u>never</u> acceptable from a safety standpoint. Short pants and other informal attire are not appropriate when the public is present.

<u>Gender:</u> In this manual the use of the masculine pronoun is used. We are proud to have members of all genders qualified in all areas of operation. The use of one pronoun is for expediency only.

## **STATIONMASTER**

THE PRIMARY ROLE OF THE STATIONMASTER IS TO ENSURE THE SAFETY OF ALL PEOPLE IN THE VICINITY OF THE STATION.

With safety always in mind, the role of the Stationmaster is divided into three areas.

- The station environment
- Movement of trains through the station
- Interacting with the public.

Each area will be covered separately below

#### STATION ENVIRONMENT

The following equipment should be at the platform before 10:00AM on public run days; a stool, ticket box, push broom and water hose. After 4:00 PM, all equipment should be safely stored. On Sat nights all equipment may be stored in the depot. After Sun., the stool and ticket box go to the depot; the rest goes to the barn.

Before arrival of the public, the platforms should be swept and any debris removed. An inspection of the structure should then be made. Track must be inspected for defects and debris. The water tank should be opened. Water hoses should be connected. A supply of paper towels is handy for spills.

During the day, keep an eye on the condition of the platform. Persuade the public to use litter baskets and to keep their belongings with them. In general keep the area neat and attractive.

At the end of operations, put everything away and again inspect the area. Report any problems to the Operations Committee.

#### **MOVEMENT OF TRAINS THROUGH THE STATION**

The Stationmaster controls all movements of trains through the station during public operating days. Trains should not pull into or depart the station without a signal from the Stationmaster. Trains that are waiting to enter the station may do so only upon signal from the Stationmaster. This is especially important if both station tracks are in use. All trains must use slow speed when in the station area. Slow speed is defined as half the distance required to stop the train short of another train, an obstruction or people on the track.

When a train is being loaded on an adjacent track, another train may not approach or pass that train. If a train crewmember needs relief, he will inform the Stationmaster who will obtain a replacement. This may necessitate another run before a replacement can be found. If a train crew decides to yard the train, they must inform the Stationmaster who will if necessary or possible find a replacement train. In any event, upon informing the stationmaster, the stationmaster will poll the waiting passengers to determine if anyone is waiting for that specific train. If so, the train crew will try to accommodate these requests. Of course in case of malfunction or emergency, the train will be taken out of service immediately.

When the train is safely loaded, the stationmaster will give the safety instructions and signal the conductor to proceed. The Stationmaster will give the train a running safety check upon departure.

# STATIONMASTERS, CONTINUED INTERACTING WITH THE PUBLIC

Passengers support our club with their donations. It is our responsibility to provide them with a safe, clean and pleasant atmosphere. While special situations may arise from time to time, it is the role of the Stationmaster or any other club member present to assist the public with their enjoyment of the railroad. It is especially important that the Stationmaster makes sure that parents mind their children at all times. No passenger may enter upon the loading platform or the tracks unless specifically told to do so by the Stationmaster or a club member who will assist these passengers. For passengers using strollers, wheel chairs or other bulky items an area near the unloading platform will be provided for their storage. The Club takes no responsibility for their safekeeping.

When a train has entered the station for passenger loading and has stopped, the Stationmaster will open the gate and collect tickets. The Stationmaster must know the safe capacity of each train and load accordingly. Their parent or guardian must hold Young children whose feet do not reach the foot rail, but the child must be seated on the seat, not on the adult's lap. An adult must accompany children under 11 years of age. Large or heavy people should be loaded as near to the center of a car as possible. After initial loading, the Stationmaster will inspect the seating arrangements and make adjustments. Specifically, passengers must not straddle between two cars. They must sit square on the seat, never sidesaddle. The car must be balanced meaning if there are only a few people on a car, they must sit between the trucks. Never must they sit over or past the truck bolsters if the load is light.

After properly loading the train, The Stationmaster will give the safety instructions to the passengers as follows:

- All passengers must keep their feet on the foot rails (or footrests in trains so equipped) at all times.
- Passengers must not rock from side to side.
- Passengers must not try to grab any object along the right of way
- If something is dropped, no attempt should be made to retrieve it. Rather the conductor should be told of the loss and its location. The next train will pick it up and return it.
- If a passenger intends to use a camera or camcorder on the trip, the stationmaster will inform him to not lean out over the car side to take a shot. If there is something specific he wants to take he will be invited to walk there for the shot. Selfie sticks and similar devices must never be used on moving trains.

During the safety instructions, members must not distract passengers by talking or taking pictures. The Stationmaster will then signal the conductor to proceed.

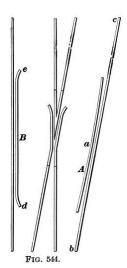
### OTHER THINGS TO KNOW

- 1. Expectant mothers cannot ride the trains. Signs are posted.
- 2. If a passenger wants to ride again, he must buy another ticket and stand on line again.
- 3. If passengers want to ride a specific train, have them step aside until it is available and load the waiting train.
- 4. If a group wants to ride together and there is not enough room on the train, have them step aside and continue loading the train.
- 5. On occasion, special birthday trains are run. They are part of the fun but be aware of them.
- 6. Passengers with special needs cannot always be accommodated. If the situation arises, determine if the passenger is capable of sitting on the train and understanding the instructions or if someone accompanies them.
- 7. At all times be friendly and encourage questions. If someone wants more information than you can give, call another member to assist you.
- 8. Sometimes a passenger will cut in line, try to enter the platform without a ticket or create a disturbance. Try to handle the situation firmly but politely. Explain the problem calmly, with respect and a smile. If that doesn't work, call for help.

## **OPERATIONS:**

## **SWITCHES**

Whether you call them switches or turnouts, we're talking about the things that direct trains to different tracks, not the ones that turn lights on and off. First, some definitions: **Frog:** The frog is a device by means of which the rail at the turnout curve crosses the rail of the main track. **Frog Number:** The number of a frog is the ratio of its length to its breadth, i.e., the quotient of its length divided by its breadth. **Points:** The pointed rails that select which way the wheels will go. **Guard Rails:** The rails with bent ends inside the regular rails serve to guide the wheels through the frog so they don't hit the point of the frog and derail. **Switch throw:** The lever and mechanism that moves the points.



All of our switches are **point-type**, as opposed to the more dangerous but easier to make stub type. The points are just that, pointed pieces of rail that serve as the devices that do the actual directing of the wheels. In addition, all of our points are spring-loaded, unlike most points on real railroads. This gives us the ability to run through a switch that is set incorrectly, as long as the equipment is heavy enough to overcome the springs. If it isn't heavy enough, or if there is debris in the points, a derailment will occur.

Because the points are physically forcing the wheels to change direction, there are huge forces placed on the rails and ties that make up a switch. Therefore, it is imperative that we maintain our switches as well as we possibly can. The area between the points and regular rails, underneath the throw bar and around the springs and switch throw must be kept clear of all debris so the points can move freely. The areas where the points slide must be kept clean and lubricated, preferably with graphite grease. **NEVER** use your

fingers to clean out debris between the points. If they are jammed in the wrong position they could spring back and cut your fingers. Use a stick, screwdriver, or pocketknife to clean around moving parts.

A "facing-point switch" means just that - if you are looking at the open, pointed ends of the points, you are looking at a facing-point switch. A trailing-point switch means the points are going away from you. If you are moving towards the 'points', remember this: "Gap left, go left. Gap right, go right. Gap on both sides, go on the ground." This means that the side where there is a gap between the points and the solid rail is the track you are lined for. If there is a "gap" in the switch, which is where the points aren't solidly against one rail or the other, you will "pick" the switch and go on the ground. Always check and re-check to see that the points are set right after you line the switch.

In general, engineers are expected to look ahead and see that switches are properly lined for their train. Mainline switches must be left set for the mainline at all times when passenger trains are operating.

### **POWER SWITCH POINTERS**

The station bypass switch is (for now) the only power-operated, signaled switch on the railroad. If the power has been turned on to the switch and the signal is operating, all the train crew needs to do to operate the switch is to throw the silver lever (on the black box by the crossing) towards the track they wish to travel. The switch will throw in a few seconds and a **green** signal will indicate that the switch is properly lined for the mainline or #1 track. A **yellow** signal indicates the switch is set for the station bypass, or #2 track. The signal **DOES NOT** in any way show if the track ahead is clear. If the signal stays **red**, try throwing the switch the other way and back again. If the signal still does not clear, **STOP** before passing the switch and check the points. There may be something in them or they might need oil or adjustment. If the signal still does not turn **green** and there is no gap in the points and no other obvious defect, proceed and report the problem. **DO NOT** pass a **red** signal when carrying passengers without stopping first!

If the switch is unlocked and thrown by hand it will not work automatically. <u>Unfortunately, there is no interlock to prevent operation of the switch while a train is passing over it. Because of this, train crews must exercise extreme caution that they don't move the operating lever while a train is passing over the switch.</u>

Remember, the signal is not intended to show whether the track is clear or not, only which way the switch is lined. Because of this, **engineers must be careful not to run into another train that is still fouling the switch.** 

## ON THE GROUND!

OK, so you went on the ground anyway. **First**, you need to make sure that trains approaching you are aware of the fact that they must stop (See **Flagging**). This is the responsibility of the conductor, and the engineer must also see to it if there is a danger of a train approaching from the front. Once this is tended to, rerail the equipment. You may need to call for help on this, but remember, **always keep your back straight and lift with your legs.** Once the equipment is back on the rails, see if you can identify what the problem was. Switch? Errant passenger? If you can see the problem, please report it right away. And if you can't see the problem and it happens again, please report it so a more detailed examination of the track can be made. However, improperly balanced loading causes most derailments.

### PASSENGER TRAINS

All trains carrying passengers on the TARR must have safety chains or drawbars between each car. Passengers may only be carried in cars designated for that purpose. Any car that has a high center-of-gravity or would trap a passenger's feet in the event of a derailment may not be used to carry passengers. For instance, a Pullman car with seats where the roof would be would have too high a center-of-gravity, and the car sides would trap the passenger's feet. This car may not be used to haul public passengers. It may be used to haul club members or without passengers. In the event of a derailment, if the passenger can put his feet on the ground they will not panic. If the car sides trap their feet, the passenger may panic and tip the car over.

## PASSENGER TRAINS, CONTINUED

Public-carrying passenger trains have priority over all other trains and operations. Every effort should be made to keep passenger trains moving without delay. This means making sure switches are properly lined, derailments promptly cleared, and waiting to enter the mainline from yard or siding until passenger trains have passed.

## HAND SIGNALS

Nothing is more basic than signals. No train may leave the station without the proper signal from the conductor, and by golly, if someone gives you a stop signal, you'd better stop. Let's see the three basic hand (or light) signals:



Hand moved up and down vertically

### **Move Forward**



Hand moved in a circle, from the elbow

## **Back Up**



Hand swung from side to side

STOP!

The more vigorously a hand signal is given the faster the action. Backup and go-ahead signals should only be taken from the conductor of your own train. However, a "STOP" signal given by <u>anyone</u> should be acted on immediately!

### Line the switch:

Hold your forearm vertically away from your body Swing your forearm in a "Y".

### **RADIO PROCEDURES**

Radios help add a great deal of professionalism and safety to our operations, but they are subject to misuse as well.

We use "FRS" type radios on a channel that gives us the best reception. These radios are available in many stores such as BestBuy, Radio Shack, and Wal-Mart, even grocery stores. Check with the stationmaster before you begin operating to see what channel we are using on any particular day. Engineers in particular should choose a radio (with headset or earphone if needed) that they are able to hear <u>at all times</u> over the noise of the locomotive. When purchasing a radio, be careful not to get a model that goes into "forced VOX" operation when the headset is plugged in. Also, be careful not to accidentally put your radio into VOX mode during operations. We try to keep on hand a small supply of radios for those who do not have their own. All conductors and engineers must have a radio during passenger-hauling operations.

Radios come with their own set of quirks, though. Of course, **please keep radio transmissions limited to railroad business**. Sometimes the radios break, and they can be expensive. So please be careful with them, and be sure that you turn them in at the end of the day. If there is something wrong with yours, don't just stick it back in the box; tag it with a note explaining the trouble you had.

One big problem we experience with the radios is people not identifying themselves when beginning to speak. Specify which train you are talking to. Say, "Train 5 ready to leave station" or "we are clear to leave the station". Otherwise another engineer might think you are talking to him and move a train that shouldn't be moved.

All conductors must carry whistles to be used only in an emergency situation. When blown it is used to immediately stop a train. The whistle may stop other trains in the area which is all right as the emergency may affect all traffic in the area. A whistle may not be used to signal for help as it will not be heard at a distance. Use your radio for help.

### **CONDUCTORS**

The conductor is the boss of the train. He uses his radio and hand signals to communicate with his engineer and other personnel on the railroad. He is responsible for the safety of his passengers while under way. If an unsafe situation occurs, he must notify his engineer to stop the train immediately. If it involves a passenger he must talk to him (them) firmly but politely about safe behavior. If it involves a derailment or other problem he must notify the stationmaster and ask for help if needed.

When at the unloading platform, the conductor will assist the passengers leaving the train and thank them for riding. When the platform is clear, he will radio the engineer to proceed into the station when signaled by the stationmaster.

## FLAGGING (WARNING) OTHER TRAINS

If a train has to stop on or fouling the mainline for any reason, it is the first duty of the conductor to make sure that any following trains are aware of the stopped train so they can stop without accident. This is called "flagging". You will have to get off the train and walk back a sufficient distance to make sure the following train has time to see you and stop. If there is a view block or a downgrade, you need to give more warning. At night, have a white light for giving signals. No matter what the reason for stopping, nothing is more important than making sure your train will not be hit by the following train. Make sure the next train is stopped before tending to whatever caused your train to stop.

## **ENGINEERS**

The basic task of the engineer is to safely and professionally operate the train at the direction of the conductor. The conductor is in charge of the train, so the engineer must <u>never</u> start the train without the conductor's OK. The most important thing about running the train is to remember to look ahead. It is very easy to become involved with the locomotive and not look ahead to check to see if switches are properly lined and the route is clear. Each engineer is expected to be able to hear the radio communications from his or her conductor at all times. Engineers shall check the track as they leave the station to see where other trains are.

## **BASIC LOCOMOTIVE SAFETY**

Some of the Diesel locomotives that belong to the club and to other members were built by E&S Lines of Ellenton, Florida. These locomotives are powered by a 5-hp Honda engine that powers a hydraulic pump, which in turn powers a hydraulic motor in between the axles on each truck. A chain connects the axles of each truck together so all wheels are powered.

Since these locomotives are fueled with gasoline, basic safety considerations must be observed. The engine must be shut off when fueling. The locomotive must be moved away from the public when fueling. Use only 89-octane gas in these engines; do not add oil to the gas.

One identifying characteristic of E&S locomotives is the hydraulic control handle sticking out of the rear of the body. In order to prevent an accident, **the engine must be shut off before you mount or dismount the train.** If you try to mount or dismount with the engine running you could accidentally hit the control and the locomotive will move, possibly causing injury to you or others. Additionally, the engine must be shut off whenever you attempt to rerail cars or otherwise work on or around the train.

<u>Never</u> try to stop a train by dragging your feet. It does nothing to slow the train, digs up the ballast, and you could be severely injured.

## WHISTLE OR HORN SIGNALS

When you use whistle or horn signals, you add an extra dimension of enjoyment for our passengers and help prepare them for starting and stopping, which increases safety. A "-" means a long blast, a • means a short blast. Just don't blow so much that it becomes annoying.

•	When moving, stop.
	Release brakes, proceed.
• • •	Back up.
- • • -	Approaching track workers
-	Approaching station.
	Approaching road crossing.
•••••	Emergency signal to alert people too close to the trains
	Call for orders, to enter station

### **PHOTOGRAPHY:**

Everyone likes a photo. Try to keep parents on the train in the station and not getting off to take photos. Same goes for family members not riding. No one should be standing in front of a train in the station waiting for them to get the photo to leave. No one should be past the crossing gate at the ticket area other than members. Good photo areas are by Pine Siding and the pump house coming into the station. Photos of children next to the train. DO NOT PUT ANY CHILD ON TOP OF ANY LOCOMOTIVE. They may stand next to the locomotive as long as they do not touch it. They are HOT. Placing a child in the engineers seat is also allowed as long as the locomotive is not running and just sitting there. Limit the blowing of the horn by children if there is a long line at the station.

#### **Equipment:**

Know your equipment. Know what it is capable of doing and pulling. Know how to operate it or ask for retraining on it. Not all equipment is heavy enough to go through a spring switch and will derail.

The following shall only be brought out on days which we are not that busy. Doodlebug, Trolley, and Pumpkin. They don't carry as many passengers and take just as long to load as a full sized train.