



## **KITSAP LIVE STEAMERS, Inc.**

### **CONDUCT of OPERATIONS**

OCTOBER 5, 2011 – Revised July 11, 2016

#### **KLS members are required to read and understand the Conduct of Operations**

The Kitsap Live Steamers, Inc. hereafter referred to as, KLS Conduct of Operations shall be available to all members. KLS will maintain copies of the latest Conduct of Operations, including changes, at the track and on the KLS website for member and visitor use.

[www.kitsaplivesteamers.org](http://www.kitsaplivesteamers.org)

#### **NON-RESPONSIBILITY**

KLS Inc, Its Officers, Directors, or Members shall not be held responsible for any loss or damage to locomotives, equipment, tools, other items, or personal effects utilized at the KLS facility or any of its sponsored events. However, Members and Guests are responsible for damage caused by them to the privately owned properties of others. All items utilized at these functions are the sole responsibility of the owner of such property.

## GENERAL POLICIES

### *All members are responsible for safe operation at KLS.*

Members shall maintain a courteous manner when communicating with the public as well as all members and guest.

Upon first entering the KLS facilities, each member shall sign the log located in the Thomson building. This includes private visits to facilities on unscheduled days.

Members bringing guests shall sign in their guests in the guest book and are responsible for assigning a guest badge, and Issuing a KLS Inc. Safety Summary Sheet to each guest, and the return of the guest badge when your guest depart KLS.

Members are responsible for their guests and must be in attendance at KLS **facilities** during their visit.

No alcohol, including beer, shall be consumed within the boundaries of the South Kitsap Regional Park. No person is allowed to work or operate equipment while under the influence of liquor or controlled substance.

**Safety First:** When you move a padlock, lock it back up. If you open any lock out on the track (gate, chain, water tap cover, etc.) when preparing to run or use the facilities, it is critical that the object be opened and that the lock is immediately secured and re-locked to prevent accidental closure, or vandals from closing and re-locking the object.

All individuals must be on the lookout for train movements and be aware of the hazards presented by such equipment including potential injury or death resulting from the improper riding, boarding or alighting from moving equipment. Individuals performing track maintenance must be particularly alert for oncoming trains and shall post KLS "slow order" flags on the mainline when working while trains are running. Additionally, the Station Master shall be advised of any "slow order" flags so that he/she can advise departing engineers.

Any person operating equipment at KLS on days when the public is present must be in possession of a current State driver's license. Persons unable to qualify for a drivers license due to age, health, eyesight, or other safety reasons, may not operate equipment at KLS unless express permission has been granted by the Board.

Also Refer To levels of Certification, Minimum Ages, and Qualification

# CERIFICATION of CONDUCTOR and ENGINEER

have Certification requires knowledge of the operating principals followed at the KLS facilities and the ability to identify problems and solutions during train operations. The KLS Board of Directors may require the Conduct of Operations to be retaken if consistent violations occurred and/or based on complaints from the public.

## Levels of Certification, Minimum Ages, and Qualification

**Conductor:** Completion of written Qualification. Must *previously have* completed 8 hours service as a KLS certified conductor or have 8 hours supervised training under a KLS certified conductor before taking the practical demonstration test.

12 years of age and older: The ability to pass the standard written KLS conductor's qualification and to satisfactorily demonstrate\* the ability to safely perform the duties of a conductor within the KLS conduct of operation.

11 years of age and younger: The ability to pass the standard written KLS conductor's qualification in the presence of an unbiased KLS Board member, and to satisfactorily demonstrate to that Board member the ability to perform the duties of a conductor within the KLS conduct of operation. An individual certified under this age provision is **not** authorized to work on a train carrying the public.

**Engineer I - non steam:** Holds Conductor Certification and completion of written Qualification. Must have *previously* completed either 8 hours service as KLS certified Engineer or *have* 4 hours supervised training under a KLS certified Engineer.

16 years of age and older: The ability to pass the standard written KLS Engineer I qualification and to satisfactorily demonstrate the ability to safely operate powered locomotives within the KLS conduct of operation.

15 years of age and younger: The ability to pass the standard written KLS Engineer's qualification in the presence of an unbiased KLS Board member and to satisfactorily demonstrate to an unbiased KLS Board member the ability to safely operate powered locomotives within the KLS conduct of operation. An individual certified under this age provision is **not** authorized to work on a train carrying the public.

## **Engineer (II) – Operation of KLS live steam Locomotives:**

Holds Engineer I certification.

Age restrictions as in Engineer (I). The ability to satisfactorily demonstrate the ability to safely operate a steam powered locomotive within the KLS conduct of operation.

*(\*The term “demonstrate” as applied in any level of certification includes both supervised training and an operational evaluation given by a qualified KLS member designated by the Vice President.)*

## **COMPOUND AND YARD OPERATIONS**

**Public Interest:** The public is welcome to view steaming bay operations. However, such viewing must be done in the company of a KLS member. A Tour badge shall be obtained from the depot and is required for access to the yard or steaming bays. Be courteous, emphasize safety, and answer their questions. Let them know that we are operating a small railroad, not a toy. **Limit of 6 per group**

## **YARD and FUEL SAFETY**

It is suggested that all private locomotives have a fire extinguisher on board each locomotive. Fire extinguishers are provided on KLS owned locomotives. If these are not present please notify the Superintendent of the day or the Motive Power Superintendent.

There shall be no fueling of equipment, or changing of propane cylinders within the confines of any building.

Fueling of all gasoline and diesel powered locomotives shall be performed in the yard with reasonable separation from any operating steam locomotive to prevent ignition of vapors. When fueling gasoline and diesel powered locomotives, it is recommended that *a minimum of 3* people are present:

- 1 Person for gas can,
- 1 Person to hold funnel,
- 1 Person with a fire extinguisher.

Steaming bay hoses shall be safely stored and the area shall be picked up and waste cans emptied into KLS trash containers and turned upside down upon completion of use of the steaming bay.

## **TRAIN OPERATIONS**

**All trains hauling the public shall carry a KLS certified engineer and a certified conductor with a red flag and whistle and approved operating radio.**

**All trains shall carry a red flag; an approved radio is highly recommended for safety purposes.**

**RADIOS** for communication are specified by the KLS Board.

KLS Locomotives will be used to haul passengers from 10 a.m. to 4 p.m. on official run days. The Milwaukee (SW1500) if not in use *can be used for training or run by certified engineers for training or pleasure purposes with the Superintendent's approval.*

KLS members may opt to use privately owned equipment to haul the public provided *both* the engineer and conductor are certified.

Uncertified KLS members and guests shall not operate KLS or private equipment, unless under the direct supervision of KLS certified engineer on public run days.

KLS reserve the right to refuse to carry anyone. KLS does not have to give a reason to refuse to carry anyone.

Members serving as Station Master, Superintendent, and *conductors on trains hauling the public* are to carry a personal whistle and an operating radio. It is recommended that headsets be utilized, as the operating noise makes transmissions difficult to hear.

Babes in arms are not permitted on any trains unless carried in a commercially available baby carrier. Note: back pack carriers are not acceptable carriers on KLS trains.

In ALL gondolas, children must be able to occupy a seat unaided; Gondolas are limited to a maximum of 3 passengers per car.

No smoking, food, drinks, or photography is allowed on trains. Special arrangements can be made for photography from moving trains. Photography is OK on a non-moving train in the station

**The station master shall load and provide the safety announcement for each train.**

**The engineer shall be responsible for the safe loading of his / her train.**

The conductor is responsible to ensure that passengers obey all safety rules and for warning or disciplining any misbehavior observed while in motion.

The engineer is responsible for the safe operation of the train and obeying all posted signs.

Standard instructions to passengers shall be posted so they can be read from the station platform and shall be given verbally prior to the train departing station as follows:

*"Passengers must stay seated until the train has stopped at the station, keep hands and arms in, do not to lean out from the cars, do not turn around or rock the cars; keep your feet in cars, or on the running boards, and do not reach out and touch things, otherwise a derailment may occur and you may get hurt."*

After assuring that the train is safely loaded and in the clear the station staff will notify the conductor by calling out "ALL ARE ABOARD". And The conductor will then give two blasts on a whistle or by other appropriate means of communication as the all clear for the engineer to proceed. The engineer shall respond by sounding two long blasts on the train's whistle prior to starting forward, or three whistle or horn blasts prior to reverse movements

Before entering the station area the engineer will sound one long blast to alert the station personnel.

At the end of the ride, the engineer will sound one short whistle or horn blast to signify that the train is stationary, and it is safe to unload passengers. When unloading is completed, the conductor will make sure all patrons are clear of the platform and then give two blasts on a whistle and or other appropriate means of communication to the engineer that it is ok to move the train. The engineer shall respond by sounding two long blasts on the train's whistle prior to starting forward, or three whistle or horn blasts prior to reverse movements.

**Track Direction:** Second Saturday running will normally be clockwise. Fourth Saturday running will normally be counter-clockwise. The KLS President, or the Superintendent of the day, may change the direction on the day of running.

**Train Makeup:** Safety chains or drawbars shall be fitted between all cars. Drawbars shall be safety pinned.

The public shall be carried only in, or on, cars that have been approved by KLS. Approval shall be at the discretion of the Vice President or his designee.

The KLS Milwaukee (SW 1500) consist shall be a maximum of 4 straddle cars without brakes. The KLS BNSF 2000 (Dash 8) consist shall be a maximum of 2 straddle cars with brakes and 2 straddle cars without brakes. The KLS Santa Fe F7 consist shall be a maximum of 4 straddle cars with or without brakes. KLS gondolas may carry up to 3

adults if the train brake system is fully operational; the limit is 2 adults per gondola if the train does not have operating brakes.

The maximum train length permitted at KLS is 52 feet from the rear of the engine through the last passenger car for all trains. It is recommended that passenger-carrying trains be limited to 5 cars.

Maximum speed on main lines may be limited by weather, work, or track conditions, but under no circumstances shall exceed 7 mph. Speed limit through the yard and station area is 3 mph until last car clears yard sign. KLS "slow order" flags placed by work crews require slowing to 3 mph until last car clears or slower as prudent and safe when approaching and until clear of a work area.

If derailed, assure that the locomotive is secured (off) and assess the condition of the passengers and the overall situation. The conductor shall advise the Superintendent via radio of the circumstances, location and request any necessary assistance, and notify the Superintendent when the train can once again proceed as other trains could be being held.

At all posted crossings two long, one short whistle shall be made when approaching and one long blast when passing the crossing. Locomotives without a horn or a whistle must stop at all crossings to ensure that the crossing is clear. Hazard signs are also posted on limited sight line curves and require one long and one short whistle. Also, when approaching any hazard (blind track, track work, bridge) a long and short warning whistle will be used for safety. When approaching station use one long whistle or horn and bell if available. After stopping in the station and setting the brakes use one short whistle to signal it is safe to unload.

Parking is not permitted on the main line

The mainline has the right-of-way. Comply with "stop" and "yield" signs.

Any track or switch problems or other unexpected difficulties in operating must be reported promptly to Superintendent of the day and or a KLS Officer.

The number of persons that may be carried in cars without brakes depends upon the braking ability of the locomotive and any cars equipped with operating brakes. This is a function of braking axle weight and other factors. Engineers must observe KLS train makeup, loading and should use conservative loading for private consist. Limit loads when track conditions (for example frost) warrant.

## WHISTLE and *HORN* SIGNALS

Each “●” means a short blast

Each “-” means a long blast

- - Release brakes, start forward

● Train stationary, brakes applied, Unload

●●● When stopped, back-up

- - ● - Approaching grade crossing

- Approaching station

- ● Warning whistle, hazard

● ● Answer for any signal

- - - - Return to train

## HAND and LANTERN SIGNALS

Move Forward

Up & down motion

Back up

Circular motion

Stop

Horizontal motion

## CONDUCTOR REGULATIONS

**All conductors on trains hauling the public shall carry a KLS approved radio.**

Only certified conductors may serve on trains pulling the public operated on KLS track on public run days.

On KLS trains the conductor shall ride behind the engineer, facing aft. On member trains the conductor may ride at the front or at the rear. If at the rear, he/she must have effective communication with the engineer via either a whistle or radio.

Conductors are instructed to stop the train and talk to the passenger if there are any attempts by the passenger to derail cars, the passenger will not keep feet on running boards, or keep hands in. Passengers that keep misbehaving shall be ejected. Minor children under the age of 18 years that are not with parents shall be escorted back to the station; for an escort call the superintendent.

For daylight running all conductors shall carry a red flag. During nighttime running the conductor shall carry a flashlight and each train shall have a white headlight and red tail light (FRED)

Members serving as conductor are to provide his or her own whistle.

Before leaving the station verify that you have satisfactory radio contact with the Superintendent and Station master.

For all stops away from the station the conductor shall warn following traffic using radio. Advise the Superintendent/Station Master of the problem so that trains may be held at the station. For stops of more than a brief moment, the conductor shall either take a red flag or flashlight 100 feet behind the train or arrange to have a passenger hold the flag/flashlight. The engineer shall recall the conductor/passenger by sounding four long blasts when it is safe to resume the trip. Note: Once the following train has stopped the conductor may return to the train to assist the engineer if required. The conductor of the last stationary train in a line shall flag.

For trains without a conductor the engineer is to stand back of train with a flag until help arrives or clip a flag to the rail 100ft back of train.

## **ENGINEER – I REGULATIONS**

The engineer is ultimately responsible for the safe operation of the train. The conductor or station staff will provide the safe loading, and safety briefing; the engineer should verify they have been performed before proceeding.

Only certified engineers (or uncertified engineers accompanied by and supervised by a certified engineer) may operate locomotives on KLS track on public run days.

No one should operate a locomotive on KLS facilities without at least one other knowledgeable person on-site. For many reasons of safety, DO NOT operate equipment *without another person present*.

Do not exit or board a gas powered or electric locomotive with the motor running, or with the ignition switch energized (electric). Shut the motor/power off prior to exiting after setting the brakes if so equipped. Properly secure a steam locomotive with the Johnson bar in neutral prior to exiting. Be especially cautious during passenger loading/unloading operations.

Before moving a *train*, verify that all safety items are present and that all required couplings and safety links are properly connected. Check fuel levels. It is prudent to have a fire extinguisher on board each locomotive. Comply with all Fuel Safety.

Perform a brake system test, when so equipped, when first moving the assembled train. Inspect the integrity of the train between runs when feasible.

Before leaving the station, verify that the conductor has satisfactory radio contact with the Superintendent and or Station Master.

***At all times and under all circumstances , included limited sight distances, the person who is operating or moving the piece of equipment is responsible for maintaining complete control of the train or equipment to stop in time to avoid an accident, or prevent a run a way situation. This includes train operations and movement of rolling stock, with or without motive power, in a safe manner to ensure the operation does not create a hazard to others. Any violation of this rule that causes personal injury or damage to other equipment will result in the immediate suspension of the member from operating any equipment within the KLS track or compound until the event can be investigated by the board and a determination of responsibility made. The board shall be responsible for determining the appropriate penalties, if any.***

## **STEAM ENGINEER**

**The following are for KLS steam Locomotive and Steam Locomotives in general**

The locomotive and boiler must comply with all requirements of Appendix II – Standards for Steam Locomotives.

Prior to firing the boiler verify the integrity of fuel lines, link couplings, other service lines and that adequate water is present. The throttle must be closed and the *Johnson bar* in neutral. Perform a general mechanical inspection.

When lighting the boiler assure you (and bystanders) are in a safe position. The boiler must be attended at all times by knowledgeable persons while it is under fire.

Before moving the locomotive, check that all safety valves lift below operating pressure. Verify that at least two independent water sources are operational. Check the water level in sight glass and, if so equipped, verify water level with tri cocks. Check the brake system for stopping.

Prior to moving, advise bystanders to be aware of impact of cylinder clearing.

Move out slowly and maintain complete control of the locomotive and cars at all times.

After making up train, inspect all drawbars/couplers, fuel and brake hoses. When running, check water level and fuels frequently. Check lubricator level. Oil motion as required.

Allowing the water level to fall below the bottom of the glass at any time constitutes an emergency and the fire must be immediately dropped. No attempt to add water to the boiler shall be made until the boiler has cooled and the indicated steam pressure is 0 psig. If you are obstructing movements call for assistance in having the locomotive/train pulled clear.

When shutting down fully close all oil or propane feed/supply valves. (Double check before storing locomotive.) For coal burners all residual coal/ash must be thoroughly extinguished and the residue safely disposed of.

All steam locomotives shall use mufflers when blowing down the boiler in the steaming bays or yard.

When clearing out cylinders, etc, by "running" on compressed air it is strongly suggested that the locomotive be positively restrained by means other than hand holding.

REV FEBRUARY 6, 2012

ENGINEER and CONDUCTOR

Private Locomotives may run with public passengers without a conductor under these conditions.

1. Conduct of Operations Rules Apply.
2. Certified Engineers only.
3. Age of riders at Engineers decision.
4. Maximum of 6 riders per straddle car.
5. Maximum of 2 riding cars.