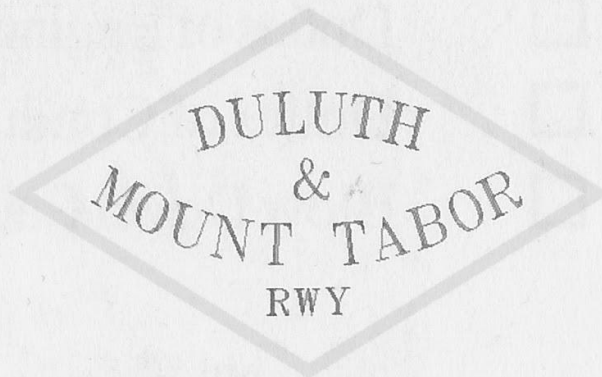
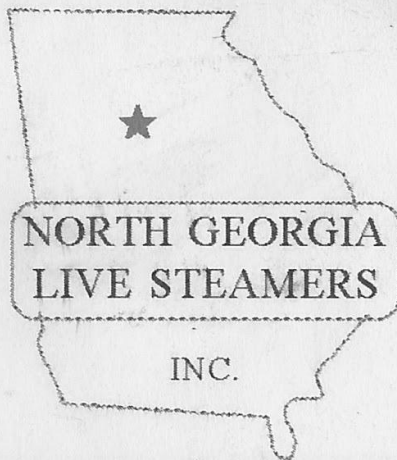
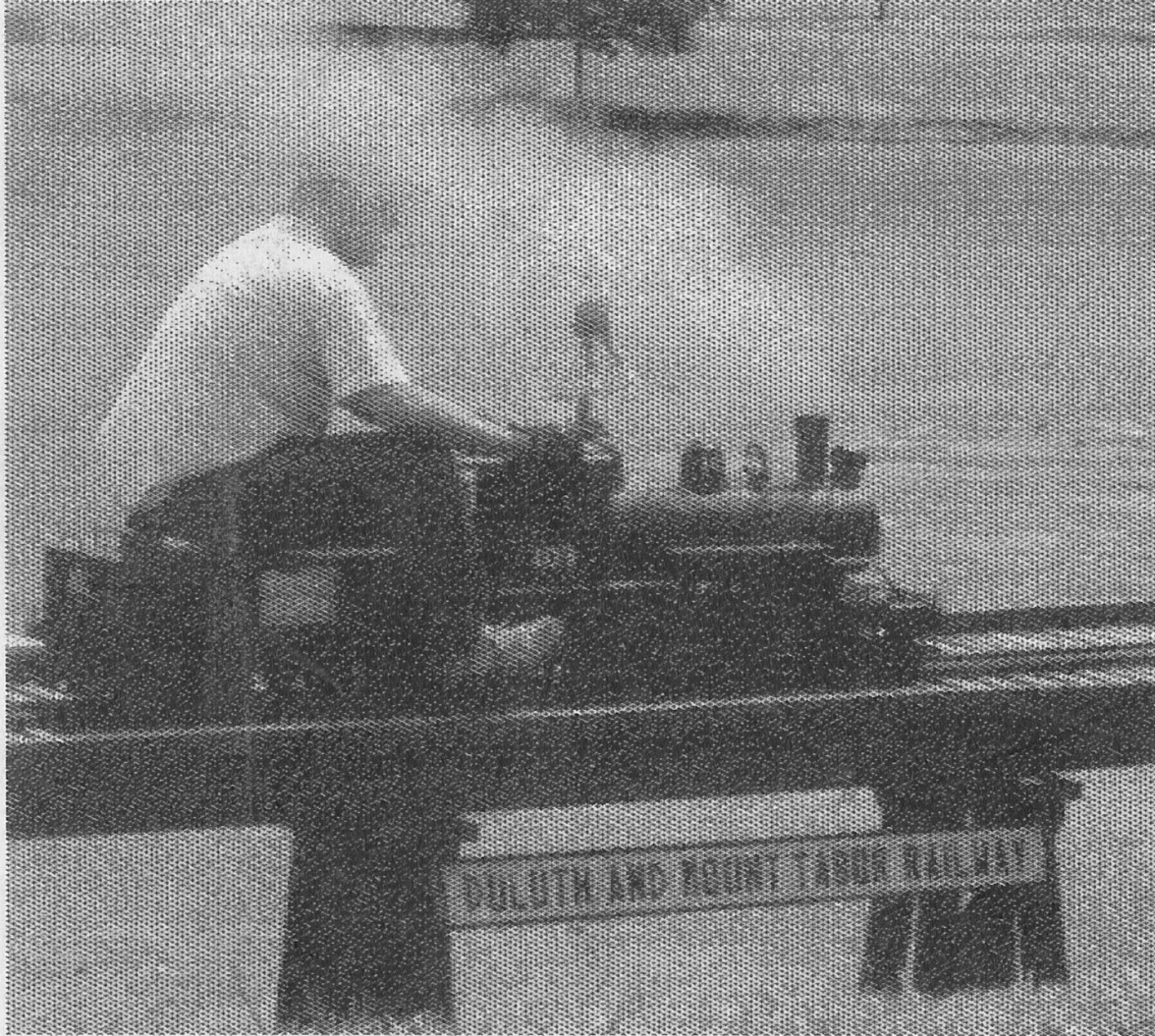


GUIDE BOOK

1995



ENGINEERS CHECK LIST

Operator/Engineer

- Boiler Inspection Certificate
- Two Safety Valves
- Safety Chains and/or Solid Drawbar
- Two Methods of Boiler Water Input
- Engine and Train Brakes
- Automatic Block Signal System
- Railroad Familiarity - Grades/Hazards
- Safety Rules
- Duties of Engineer
- Duties of Conductor
- Blow Down Caution

NGLS Member

Date

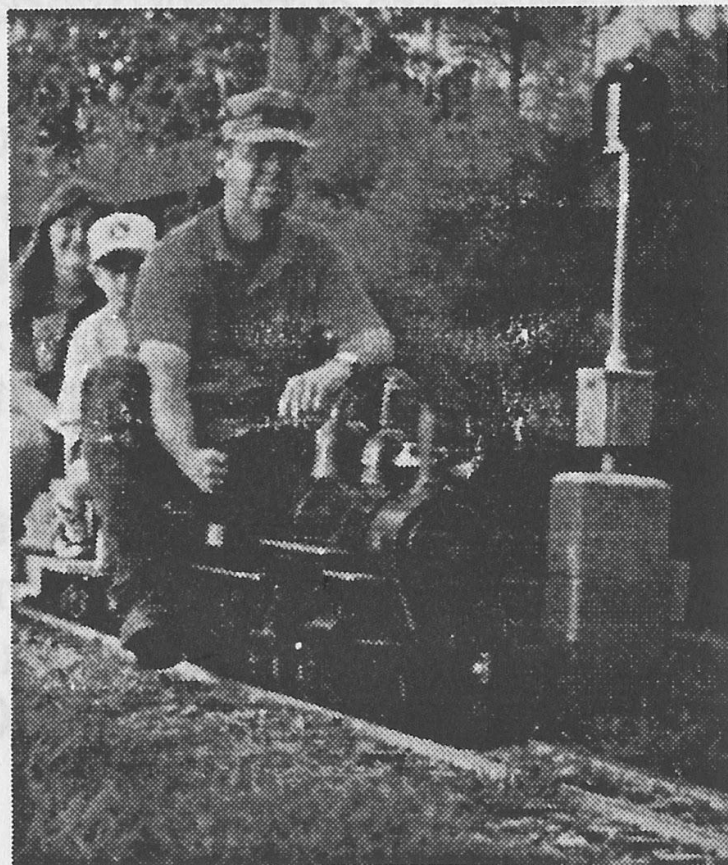
THE NORTH GEORGIA LIVE STEAMERS

The North Georgia Live Steamers (NGLS) is a nonprofit miniature railroad club that operates the 7 1/2" gauge Duluth & Mt. Tabor Railway. The club owns and maintains nearly a mile of track, a roster of 6 "passenger" cars and a recently acquired 5.5 hp Southern F-7 "Diesel".

Founded in 1973, NGLS provides a facility for area rail hobbyists who are interested in the construc-

tion and operation of scale steam engines, locomotives and railroad equipment built roughly to the scale of 1 1/2 inches to the foot.

Construc-
tion of the



Duluth & Mt. Tabor Railway began in 1978. The covered steaming bay was one of the first of its kind in the country and provides welcomed relief from the sun during the Georgia summer.

The engines and cars seen on Duluth & Mt. Tabor Railway are owned by and have been built by club members and represent a major financial and labor investment. The steam engines can take several years to build as most parts must be hand crafted. Many are coal fired and require up to an hour to develop the steam required to pull a load of passengers around the line.

Members of the North Georgia Live Steamers are currently working on several projects which will enhance the Duluth & Mt. Tabor Railway. These include the completion of a multi-level train storage facility, a 5 track switching yard (including a turntable), sidings on the Lake division, expansion of the signal system and covering the platform at Mt. Tabor station.

For additional information on the North Georgia Live Steamers or the Duluth & Mt. Tabor Railway ask any of our members or write NGLS, Box 1151, Duluth, GA 30136.



NGLS HISTORY

1973 - A group of four like minded men got together with the idea of starting a 7 1/2" gauge Live Steam club. A couple of years were spent looking for just the right location.

1976 - NRHS/Atlanta was approached with the idea of including a 7 1/2" gauge railroad as part of the Southeastern Railway Museum.

1978 - Final approval was negotiated with NRHS and construction began. Heavy grading had to be done to allow room for the engine yard, steaming bay, section house and parking. Steaming Bays 1-3, un-loading ramp and transfer table were first constructed. The covered steaming bay, we think a first for a US 7 1/2" gauge club, was the next addition as the sun seemed to be our worst enemy.

1983/84 - One of the members built and donated a portable steel track 10' sectioned, 2 basketball courts size, for use at charity fairs and promoting the NGLS to the public in various metro areas. The club had grown to 16-18 members, published a newsletter and gained non-profit corporate status in GA.

1985 - Track constructed to Magnolia Wye.

- 1986 - A section house was added and the lakeside loop completed with golden spike ceremony held at the trestle.
- 1987 - An engine was donated to NGLS by the Atlanta Historical Society, a Pacific, that had seen many years of use in the Atlanta area. Members are in the process of rebuilding it for use as the Club Engine. The Mountain Division track plan, which includes our tunnel, Horseshoe Curve cut and the high bridge made its way into our railroad's future.
- 1988 - Tunnel, approach track from the wye and the Mount Tabor shelf were the projects.
- 1989 - Saw very serious work at the cut.
- 1990 - The mountain division was completed and tied in at the North end of Magnolia Wye.
- 1991 - Mount Tabor station with siding, ash/water facilities and the first 5 blocks of the automatic signal system were completed.
- 1992 - A Howe Truss bridge, approach trackage and additional signal system blocks were installed.
- 1993 - The Bridge Line was completed to Pine Tree Junction as well as Car Yard grading.
- 1994 - The Gravel Spur track, two short trestles on the lower loop, a Windmill and trackage for our 50' steel storage boxcar were additions.
- 1995 - Acquired guest cabooses, purchased F-7 "Diesel", work on yard and access to storage boxcar.



THE BOILER INSPECTOR

Here is a recap of our NGLS and Georgia state boiler requirements:

- A. The NGLS requires an annual hydro test for which a club certificate will be issued. This alone allows operation of boilers on club premises in private only (*no public allowed on property*).
- B. For operation on club premises (*museum*) when the public is present, we are required to have a certificate and tag issued by the Georgia Department of Labor Inspectors.

Here is how these requirements apply.

Club Members.

Must comply with A & B above.

Visitors of Georgia Residency

The rules are as in A & B above.

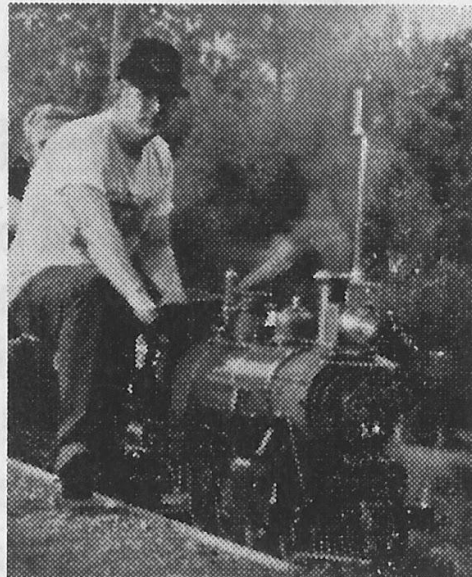
Out of State Visitors

1. *With another states' certificate.* Operation is allowed on public days for 7 days.
2. *With another clubs' hydro certificate.* Operation is allowed only as in A above.
3. *Without any hydrotest proof.* Will be tested by NGLS and given a club certificate.

Our regularly scheduled state certificates are issued in March and October.

This goes for all club boilers and out of state visitors.

Also, all certificates issued at in-between times will be renewed at the next regular session regardless of time remaining. It is preferred that club hydro and steam tests be done before the day of Georgia inspections.



Boiler Notes: Safety valves require annual inspection and cleaning also. This can be done yourself. Please disassemble the valve and wipe the seats -- checking for any debris accumulation. Wipe internal parts with a little steam oil and assemble. Try not to disturb the pressure settings. At the next steamup check to be sure the pressure release and reseal settings are correct. Also, the second value should be 5 to 10 PSI above the first. Valve settings should be swapped out every year or two to even out the wear.

Lastly, be sure that under normal forced operation that the valves do not allow more than 10% rise in pressure. If this is the case you must cut back on the size of the blower nozzles.



MECHANICAL RULES

BOILER SAFETY

a. Safety valves must be of sufficient size to prevent boiler pressure from rising more than 10 pounds above maximum set pressure when boiler is forced to maximum steaming capacity (if only one valve is present, it should perform as described above).

b. Two (2) methods of providing water to the boiler shall be provided.

c. An annual hydrostatic test shall be performed by the locomotive owner. A pressure equal to 1 1/2 times the working pressure shall be maintained for one minute.

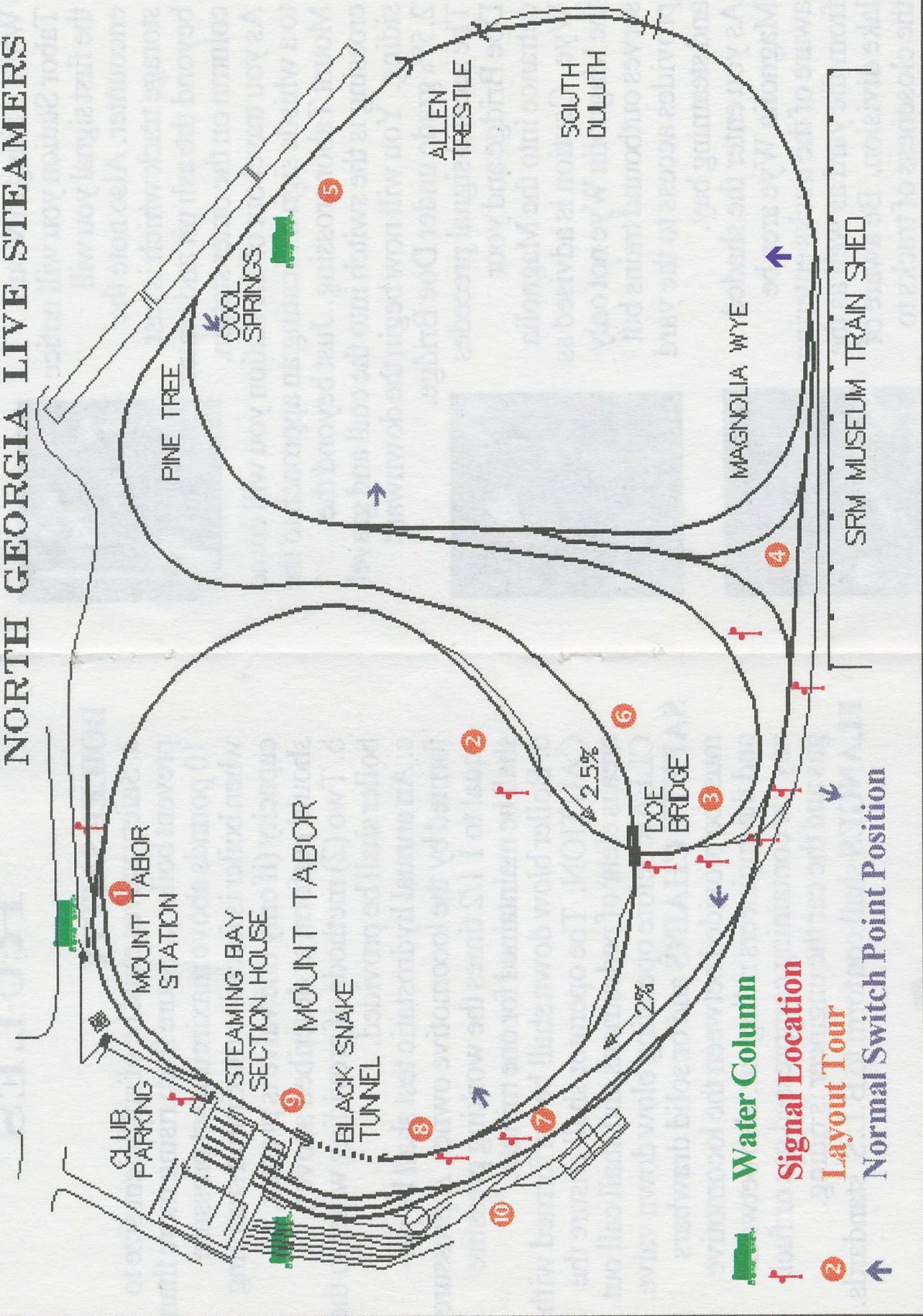
d. Boiler blow down shall be performed with CAUTION. The operator shall ensure the area is clear of pedestrians and shall call out CLEAR before operating blow down valve.

SAFETY CHAINS and or solid drawbars must be provided between the locomotive and the engineers riding car, also between any car containing compressed gas or fuel gas and the car the engineer is riding.

FLANGES shall conform to B.L.S. standards.



NORTH GEORGIA LIVE STEAMERS



LAYOUT TOUR

- ① While waiting in Mount Tabor Station you will notice the first signal you will encounter. Also note the storage track which is just beyond the ash pit and water column on the outer station.

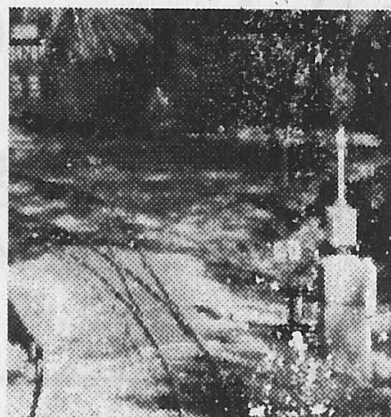


As you travel out of the station you will come to a whistle sign indicating an approach to the Mount Tabor crossing. Just beyond the crossing is the switch into the coal and gravel siding. You will now begin the downward 2.5% grade under Doe Bridge.

- ② The second signal precedes Doe Bridge and your entrance into the Magnolia Wye. Caution is advised as the Magnolia Wye not only serves outbound trains but provides access to the yard and steaming bay.



- ③ As you enter the shaded Magnolia Wye area be aware of the tracks entering from the yard as well as the lake division. Be aware of the closeness of tracks to



the NRHS's display sheds and the public. Be prepared to signal or stop.

- 4 Passing the SERM train shed you enter the un signaled portions of the Lake Division as it passes the banks of Lake Singleton.

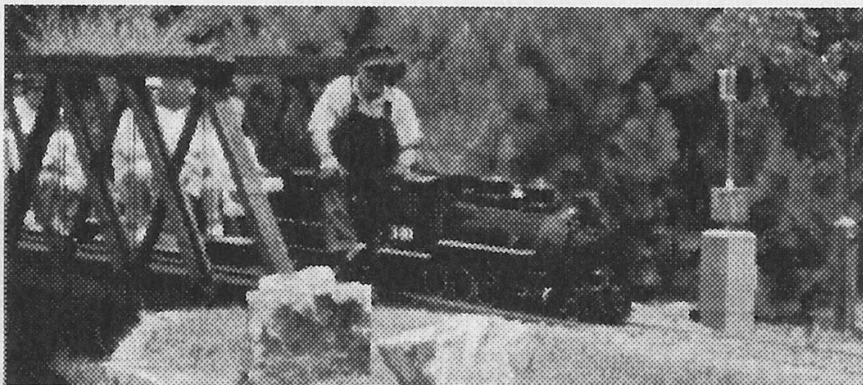


- 5 Climbing out of South Duluth you travel over the Allen trestle and past the water column at Cool Springs. The switch at Pine Tree



Junction can take you back to Magnolia Wye if you desire to return to the yard or steaming bays.

- 6 The climb up the side of Mt. Tabor is



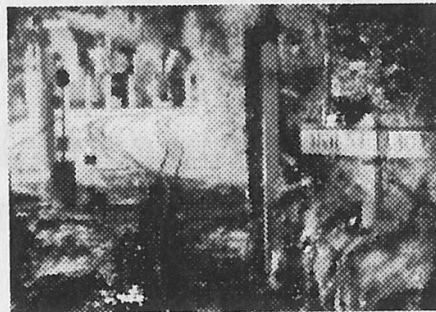
un signaled until just beyond Doe Bridge. Be prepared to wait for trains to clear the approach to Black Snake Tunnel.

⑦ After passing over Doe Bridge you will see the NGLS storage boxcar, the refurbished Norfolk & Western caboose that is available for club use and car yard. You will also notice the approach track coming directly from Magnolia Wye.

⑧ The Black Snake Tunnel is the beginning of a grade that takes you back into the station. Inside the tunnel you will find an advance signal which will only be lighted if you cannot proceed into the station. Just prior to exiting the tunnel you will find a switch button mounted on the right wall. Using this button will set the station switch if necessary.

⑨ Emerging from the tunnel your train passes the NGLS Steaming Bays and Section House. The Mount Tabor station master will determine which track you should use and set the switch and signal accordingly.

⑩ The end of the yard leading from the steaming bays is protected by a derailer. Please check that this is set properly before leaving the yard.



DUTIES OF THE ENGINEER

The engineer is responsible for the safe operation of all trains on the DMT. The engineer must:

1. Keep the train under control at all times and be prepared to stop. *Speed limit is 3 MPH when carrying the public.*
2. Demonstrate a working knowledge of the railroad. *Familiarize yourself with the signals, steep grades, blind curves, tunnel and station locations.*
3. Obey all signals. *Know signal locations and meanings.*
4. Do NOT stop in tunnel.
5. Maintain safe stopping distance.
6. Speed limit 3 MPH when descending grades and when backing an engine or train.
7. Check order board at the section house for Special Orders and Operating Direction.
8. Return all main line switches to marked position after use.
9. Notify the Trainmaster or Roadmaster of any defective signal or trackwork.

DUTIES OF THE CONDUCTOR

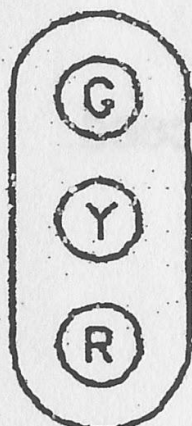
A conductor is required on all trains carrying passengers that have more than TWO passenger carrying cars. The conductor is responsible for safe operation of the train and should:

1. Know the safety rules posted at the station.
2. Help with passenger loading and unloading.
3. Occupy the last seat on the train.
4. Keep a sharp lookout for unruly passengers.
5. Protect the rear of the train when stopped.
6. Signal the engineer for emergency stops. *4 short blasts.*
7. Know WHISTLE and HAND signals.

SAFETY FIRST ON THE D&MT

- ✱ Obey the engineer or conductor.
- ✱ Keep feet on the floorboards.
- ✱ Keep hands & feet inside the train.
- ✱ No leaning or standing.
- ✱ Remain on the train until it stops and you are instructed to exit.
- ✱ Do not walk on the tracks.
- ✱ Never put anything on the tracks.
- ✱ Do not use cameras or video on trains.

AUTOMATIC BLOCK SIGNAL



GREEN - Proceed, clear block.

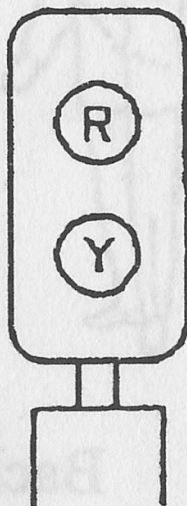
YELLOW - Approach, reduce speed, prepare to stop at next signal.

RED - Stop, block occupied.



RED - Turnout occupied or train not clear of adjacent track.

YELLOW - Reduce speed, take siding or diverging route.

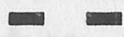


RED - Absolute STOP.

YELLOW - Proceed with caution.

DARK - Proceed.

WHISTLE SIGNALS



Release brakes. Proceed.



Apply brakes. Stop.



Reverse.

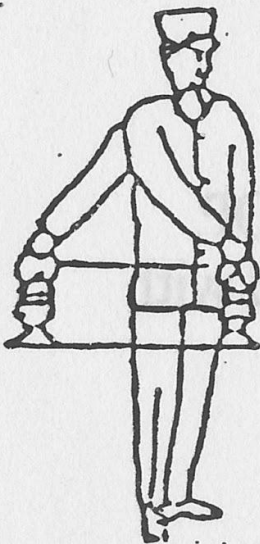


Approach tunnel or station.

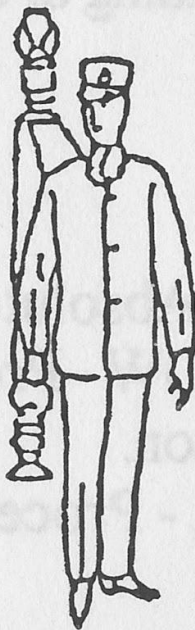


Emergency stop.

HAND SIGNALS



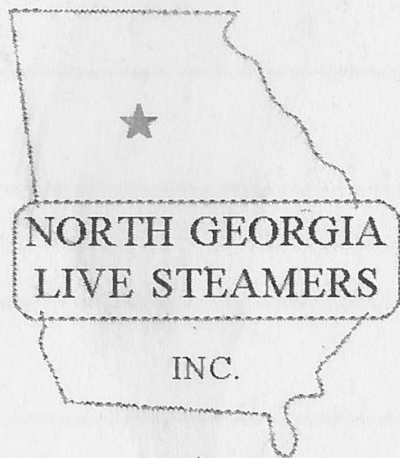
Stop



Proceed



Back



North Georgia Live Steamers
P.O. Box 1151, Duluth, GA 30136