

**MSM Operations Newsletter** 

Issue No. 24-2 May - 2024



## 2024 – INITIAL FEEDBACK

The start of the 2024 operating season is progressing well. We have 91 qualified operators with a handful of stragglers that due to various reasons have not but are expected to recertify shortly. In addition, there are 19 new volunteers in various stages of the new operator training program. The total number of volunteers including new operators will give us numbers comparable to prior years. The PCC car has been released into service earlier than initially planned and will be available for its season start on Memorial Day. In the Operating Changes and Updates sections below Karen (Kertzman) and I are emphasizing and clarifying new 2024 procedures that are important for all operators to understand and execute.

There are a couple of items that I would like to bring to your attention.

- Recertification training. We are winding down with our recertification exercises. As a reminder, all operators need to complete the recertification quiz and (at CHSL) POS training led by Rose Arends, and if a second-year operator or an operator with less than 10 hours in 2023, a check ride.
- As has been mentioned at the member meeting and in the latest edition of the "Currents", we are working to create a culture of safety and will focus on it through a number of activities and initiatives.
- Please familiarize yourself with both the Operating Rule Book and the Foreman's Checklists prior to
  operating, which can be viewed and downloaded from our website: <u>https://trolleyride.org/member-</u>
  resources/operations-documents/. As in the past, the recertification quiz provides specific references to the
  Rule Book, highlighting the importance of understanding the appropriate rule and its application.

As always, I want to express a deep appreciation on behalf of myself and the Museum's leadership for your ongoing commitment and dedication to providing a safe and entertaining environment for our volunteers and guests.

## SAFETY CULTURE - BRUCE GUSTAFSON/ JOHN DILLERY

We are doubling down on our commitment to ensure a safe work environment for our members, our guests, and the general public. Safety is everyone's responsibility. A common and essential principle is that if you see something – say something. If you see something that creates an immediate safety situation – you need to act. If it is not an immediate safety situation, report it to your foreman or, if sufficiently serious, report it to John Dillery (Safety Superintendent), Karen Kertzman (ESL Superintendent), or me, Bruce Gustafson (General Superintendent).

- MSM Safety Policy. The policy, which is being finalized, is organized around three themes:
  - 1. Prevention
  - 2. Incident recovery
  - 3. Protocols for specific activities (i.e., tower car operations)

Prevention.

- If you see something, say something
- Familiarize yourself with the current Operations Bulletins (available on our website and the bulleting board in the carbarns) and the Museum's operating rules and procedures as codified in the Sequence of Operations, Rule Book, and checklists.
- Checklists are posted in the carbarns
- First aid kits and fire extinguishers have been restocked, replaced, or recharged

Incident recovery.

- Know where the first aid kit and fire extinguishers are located
- Know who to contact in the event of an incident:
  - Foreman. If the foreman is not on the car use the (new) radio. If that does not work call the depot (CHSL the phone number is on the back of your operator license) or contact the foreman directly we are asking that the foreman put his/ her number on the top of the trip sheet.
  - 911. As appropriate call 911 (and then the foreman, superintendent). Know and report your location.

## **OPERATING CHANGES (CHSL) – BRUCE GUSTAFSON**

As we have discussed during the operator's meetings there are two significant changes to the operating procedures at Como-Harriet this year.

- 1. Crossing at 42<sup>nd</sup> Street. With a four-person crew, the streetcar should not stop when crossing 42<sup>nd</sup> Street. This requires the crossing guard to enter the street and stop traffic (actively controlling it) before the streetcar reaches the street. Once the traffic is under control the crossing guard should signal the operator to proceed.
  - The crossing guard is responsible for the crossing. <u>Only</u> the crossing guard can wave traffic through the intersection.
  - If there is a 3-person crew, the car must come to a complete stop at the intersection
- 2. Rear Door Loading of car no. 1300. In single car operation, we will load car 1300 from the rear door. As discussed in other forums, this is historically accurate and simplifies the internal signaling at the depot. Based on initial feedback, particularly on fuller loads, the following clarification is being provided.
  - Upon arrival at the depot, the conductor should announce that passengers will exit from the front of the car, check to make sure that it is safe to open the rear doors, and signal the motorman to open the rear doors for loading. The conductor should stand near the farebox to ensure tokens are deposited and, as appropriate, punch any passes. (NOTE: the ticket punch is located in the mini-cabinet below the rear farebox)
  - Once the rear doors are open, the motorman should open the front door, remove the key, and step onto the platform/ steps to assist passengers off the car.
  - After the last passenger has left the car, the motorman enters the car and prepares for the forward movement, based on the conductor's signals.

## **OPERATING UPDATES (ESL) – KAREN KERTZMAN**

The current SoO for DSR No. 78 is under review. The procedure for putting the car away following a shift is not clearly stated. The correct procedure is:

- Stop at the switch
- Throw the switch to enter car yard
- Move the trolley wheel from the main line wire to the yard wire, leaving it in the trailing position
- Move slowly through the switches, stopping at the yellow tie target
- Move the trolley wheel from the trailing to leading position
- Proceed slowly into the carbarn
- Stop at the yellow marking

### **New Hire Training – Bill Pekarna**

The MSM Training Department began on-car training sessions at CHSL the first week of April and during that month we conducted 41 (2-hour) new Operator/Trainee sessions. We have also been actively involved with Operator recertification and refresher training activities. There are currently nineteen new volunteers training for operations at CHSL and one for ESL. These trainees include a current Metro Transit Light Rail Operator, a talented musician and a volunteer from the Connecticut Trolley Museum! We are fortunate to have these and other talented people in our ranks and you will begin seeing them on our operational crews soon.

There are several operating techniques that we have been teaching new Operators in an effort to reduce errors and increase safety, and we want to pass them along to everyone. Partially because you will probably wonder, "why are they doing that?" but mostly because we think these are good techniques for anyone who may choose to add them to their repertoire. The first thing we insist upon is that when the Motorman leaves that position they ALWAYS take the reverser key with them, including when they do the end of line talk. Another thing we insist upon at the CHSL north platform is when the Conductor requests permission to proceed south-bound they MUST watch the Motorman reconfigure the front controls. This greatly reduces the risk of missing an air transfer or direction handle configuration error. Give it a try!

As a reminder to all Operators, if anyone would like a refresher session to sharpen your operational skills (none of us are perfect) you are encouraged to contact a member of the Training Department staff to schedule a session onboard the streetcar.

### SAFETY – EVERYONE'S RESPONSIBILITY – JOHN DILLERY

As a reminder before the season starts, listed below are several general reminders on safety.

- Humans have limited peripheral vision, so there could be potential hazards out of sight to your left or to your right when you are operating a streetcar. Make it a practice to know your limits of peripheral vision and move your eyes and head frequently while operating a streetcar to compensate for your vision limits. Don't be surprised by the unexpected.
- Before departing from any stop, be sure to check your rear vision mirrors last thing, or lacking mirrors, turn your head and look back to be sure no hazards lurk near the streetcar.

#### MECHANICAL UPDATE – DICK ZAWACKI

## **CHSL STREETCAR STATUS**

#### **TCRT 1300**

The car, which is the backbone of CHSL operations (regular service, special events, charters) is fully functional and available for its 2024 duties. All the annual scheduled maintenance checks, adjustments, and lubrication work were completed on the car earlier this spring in preparation for the start of the training season. Due to the priority needed for the PCC this off-season, no major improvements/upgrades were made to 1300.

## TCRT 322

Due to the tireless work of the CHSL Maintenance Crew, the PCC is operational and ready for revenue service. A major contribution came from Bill Wall of Shoreline Trolley Museum in the form of the torque arms we needed to replace the broken/damaged arms on both of the PCC's trucks. Each truck had to be removed from the car to

accomplish this work. Several other problems were found (broken ground straps, etc.) during this work and were repaired. Mark Digre found that the brake failure that caused last year's accident was due to intermittent operation of the generator contactor coil. This, combined with a loose battery cable, caused a loss of control power that led to the accident. We have also implemented a new emergency braking procedure for the PCC that requires no control power. Dennis Stephens has compiled an excellent presentation of the work done to repair the trucks. Mark Digre is in the process of doing the same thing for the electrical work done on the car to get it back in service.

Over the off-season, we coordinated with several other streetcar museums to salvage parts from a "PCC Graveyard" in Pennsylvania before the cars are sold for scrap. This may be one of the last opportunities for us to easily obtain replacement PCC parts. These parts are spares that will be kept for future maintenance needs.

#### **TCRT 1239**

Work continues to replicate the Baldwin #5 trucks that were originally under the car. To accommodate the work on 322, this rebuild is being done in the ready (i.e. cold) barn, which affects the work schedule. New journal bearings were cast by Windy Hill Foundry and look very good. They are being machined at CHSL to accept the axle bearings. We are looking for more scrap bronze to make additional castings. The new bull and pinion gears are in the process of being machined.

### **ESL STREETCAR STATUS**

#### **DSR 78**

The car has completed its scheduled annual maintenance checks and lubrication work in preparation for the 2024 operating season. The ESL Restoration Crew completed work on all the minor maintenance issues that remained from last season.

#### DSR 265

The last exterior top header board was recently installed to restore the car to its original profile. Several ESL Restoration Crew members started working extra days each week to move the project along. New wooden parts were fabricated to replace those that were destroyed or damaged at the rear of the car. Many of these parts were made using only the damaged remnants from the car. In all cases, these replacements are spliced to original parts to keep the car as historic as possible. The rear brake stand and motor control switches are now mounted in place. New control and replacement lighting wiring is in process. Windows are being refitted to operate in the widow openings in the rear vestibule. The rear vestibule floor has been refinished. Roof boards were finished with linseed oil in preparation for the roof canvas installation. At this time, it looks like the car will be ready for testing at some time in late summer.

#### MVPS (Winona) 10

After successfully completing its "maiden voyage" with a rebuilt motor on August 22, 2023, the car has resided in the cold storage barn due to the work needed on DSR 265. MVPS 10 will need some run-in time, adjustments, and fine tuning before it is ready to support the 2024 operating season. At this time, we do not have an estimate of when the car will return to service.

#### Mesaba 10

Additional clean out work was done on Mesaba 10 in preparation for starting some restoration work. Unfortunately, due to the priority of completing restoration work on DSR 265, work on Mesaba 10 is suspended for the foreseeable future. The long-term plan continues to be to restore sections of the car as a part of creating a display to show our patrons how our on-going restoration process happens.

## HUMANITY/SHIFT PLANNING UPDATE – JIM VAITKUNAS

**Humanity/Shift Planning (H/SP) Update.** The Humanity dashboard and content is basically unchanged from 2023. Here are some reminders on the "new" and legacy Shift Planning.

- Dashboard remains essentially the same.
- You'll still click on the *Shifts Available* button on the left side of your dashboard screen to sign-up for shifts.
- When you click on the "New" Shift Planning button on the top of your Humanity screen you now get a different screen. The default screen hopefully shows all qualified operating personnel, i.e. those who have successfully recertified. See the reminder below on the "New" Shift Planning screen and information.
- We strongly urge you to go to the old "legacy" ShiftPlanning which is on the far right of the top colored bar of
  the dashboard screen. Here, the *List View* will show the schedule for a day, week or month. A representative of
  Humanity has told us that their technicians are still working on the "New" Shift Planning and fixing bugs, so the
  legacy ShiftPlanning isn't going away any time soon. If you want to get a better look at the total schedule and
  especially who has signed up on a shift, the legacy Shift Planning is what you should use.
- Your profile page format is essentially unchanged. But we ask that you take a quick look at your profile and update it if necessary.

# SPECIAL EVENTS - PAT COSGROVE / KAREN KERTZMAN

Special events represent a significant portion of the Museum's operating revenue and venues to attract different categories of guests.

### CHSL

The special event calendar is very extensive. Called out below are events that are part of the Museum's outreach program to provide.

- American Sign Language. June 1, first shift. As part of the regular schedule, we will be including an ASL interpreter. We will evaluate this pilot to see if it is a viable addition to our ongoing schedule.
- All Aboard. The All Aboard program welcomes neurodiverse communities and their families and friends. We seek to provide riders of all neurologies and ages the opportunity to enjoy the streetcar rides. The events are set up outside the regular schedule and are set for Tuesday May 7, Sunday June 2, Tuesday July 2, Sunday September 8.

## ESL

- We are in discussion to partner with a non-profit operating Farmer's Market in Excelsior on Thursdays, starting in June.
- The first special event of the season is Storytime Trolley on June 20th. The theme is "Fun in the Sun", a favorite amongst the young riders.

## STREETCAR CLEANING

Streetcar cleaning is an essential element of the Museum's customer-facing presence. A dirty environment can create a bad experience for our customers. Once a month at both CHSL and ESL a group of dedicated volunteers cleans the cars and other areas accessed by our guests. Please consider volunteering for this event. If interested contact Louis Hoffman (CHSL) or Karen Kertzman (ESL).

## CHSL Dates are:

- May 25 (all dates start at 9a)
- June 28
- July 27
- August 24
- September 20

#### **OPERATIONS & SAFETY REMINDERS**

We are continuing to emphasize several critical operational and safety issues.

- Reverser Handle. Remember that whenever the motorman leaves their position at the front of the streetcar, even for a few seconds, they must remove the reverser handle and keep it with them until they either return to the motorman's position or give it to another operating person. This rule pertains to ALL streetcar operations including charters, maintenance operations, extra operations, etc. This rule will be incorporated into the next edition of MSM's rule book which will be issued sometime this summer.
- The conductor is expected to give a brief safety announcement at the start of every trip. If the conductor is unable to make the announcement, the motorman can do so.
- If workers are present on or near the tracks, the streetcar must not pass until signaled to do so by the workers.
- A rolling brake test is required every time the car changes direction.
  - Apply power. After a moment shut power off and apply brake slightly.
    - If an air pressure gauge is available as soon as the air pressure needle begins to move, release brake and apply power.
    - If an air pressure gauge is not available as soon as you hear air movement or begin to feel the effect of braking, release the brake and apply power.

## LOST TOKEN CONTEST (CHSL) - JOHN DILLERY

To celebrate the renovation of the Como-Harriet depot platform, we are conducting a contest to estimate the number of tokens recovered when the old wooden platform was removed. To enter the contest, a contestant must enter his/ her estimate of the tokens on an entry form in the depot. The contestant(s) giving the count closest to the actual count will win an Annual Streetcar Pass. Winner(s) will be announced at end of service Sunday June 16th (Fathers' Day).

As of May 5th, we have over 40 entries from our customers entering their guess as to how many streetcar tokens are in the sealed jar on the small table in the corner of the 42nd St. Depot.

CHSL crews can do much to make the contest a success by mentioning the contest briefly during your end of the line message, when conversing with waiting passengers and telling everyone that we found "hundreds" of the tokens. Some early entries are four digits or more long, but they are a wasted entry, so let's guide people a little, to be fair.

## **OPERATIONS BULLETINS IN EFFECT**

These ops and safety bulletins are also posted on MSM's website at: Operations Documents | Minnesota Streetcar Museum (trolleyride.org)

## Both Locations

## 24CE-1 - Cancellation of Operations Due to Excessive Heat

It is MSM policy operations will be cancelled when the heat index reaches a dangerous level. A shift should be cancelled if the heat index is 95 or greater, which is reflected by the green line in the heat/humidity chart below.

As with other weather-related cancellations the Foreman will decide to cancel a shift. They should check local weather conditions using websites such as NOAA or Weather Underground to get the latest heat index info.

When the Foreman cancels a shift due to heat, the procedures are the same as a rain cancellation. Foremen are responsible to:

#### CHSL:

- 1) call your crew
- 2) contact Rod Eaton or Ben Franke to post the cancellation to our website
- 3) if possible, place a sign in the depot door indicating the reason operations are cancelled

#### ESL:

- *1)* Call your crew
- 2) Call Karen or Jim Kertzman

When temperature and humidity rise, it is critical that volunteers drink plenty of water, slow down, and watch yourself and others for any signs of heat exhaustion.

Heat Safety H					leat Watch vs. Warning			Heat Index				During a Heat Wave				Heat Related Illnesses			
NWS Heat Index Temperature (°F)																			
		80	82	84	86	88	90	92	94	96	98	100	102	104	106	108	110		
Relative Humidity (%)	40	80	81	83	85	88	91	94	97	101	105	109	114	119	124	130	136		
	45	80	82	84	87	89	93	96	100	104	109	114	119	124	130	137			
	50	81	83	85	88	91	95	99	103	108	113	118	124	131	137				
	55	81	84	86	89	93	97	101	106	112	117	124	130	137					
	60	82	84	88	91	95	100	105	110	116	123	129	137						
	65	82	85	89	93	98	103	108	114	121	128	136							
	70	83	86	90	95	100	105	112	119	126	134								
	75	84	88	92	97	103	109	116	124	132									
	80	84	89	94	100	106	113	121	129										
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	90	86	91	98	105	113	122	131								no	RR		
	95	86	93	100	108	117	127										- J		
	100	87	95	103	112	121	132												
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#### CHSL

## 24C-1 - Slow Speed Through North Siding Switch

The switch stand at the north siding has been damaged. Although repairs have been made to allow the switch to operate, until further notice approach to and movement through the switch requires the following:

## Heading south

- 1. Visual confirmation of the proper alignment of the switch to the main
- 2. Speed through the switch must be at a dead slow pace

#### Heading north

1. Speed through the switch must be at dead slow pace

### • 24E-1 - Operation of All Streetcars in the Excelsior Carbarn Yard

The Foreman is the only crewmember authorized to operate a streetcar within the ESL carbarn yard. The ESL carbarn yard is defined as all track leading from the mainline switch into the yard lead with two left-hand switches, and all three yard tracks including the tracks inside the ESL carbarn. Track #1 is defined as the track nearest the ESL mainline with the other two tracks numbered 2 and 3 in a southward direction.

While operating a streetcar within the ESL carbarn yard, Foremen must observe the position of the switch points to ensure that the switch is correctly set for the track onto which the streetcar should go. After determining that the switch is set correctly, the streetcar can then proceed.

#### 24E-2 - Movement of DSR Car No. 265 in/out of the Car Barn

Extreme care must be taken when moving Duluth Street Railway (DSR) car no. 265 in or out of the car bar.

Movement to/from Track 1

- When leaving the carbarn on track 1 slowly proceed through the first frog to ensure that the trolley wheel goes through the frog successfully.
- When putting the car away the trolley wheel will follow the track 2 wire when going through the frog. To correct for this, the Foreman must STOP the car allowing the Conductor to MOVE THE TROLLEY WHEEL TO THE TRACK 1 wire. The crew should continue to monitor the car as it slowly moves toward the carbarn.

#### Movement to/from Track 2.

- It is necessary when leaving the carbarn on track 2 to STOP right before the Trolley wheel goes through the first frog (2 3') AND MOVE THE WHEEL TO THE TRACK 3 wire. Then slowly proceed forward and the wheel should go through the frog OK. IF this is not done the wheel WILL DEWIRE.
- When putting the car away the wheel will follow the track 3 wire when going through the same frog. STOP AND MOVE WHEEL TO TRACK 2 wire.

### 24E-3 - Required Air Brake Test When Leaving the Carbarn

To avoid potential loss of braking power after the departure from the car barn for the Water Street platform, it is required that the operator conduct rolling brake test to ensure the air brakes are functioning properly.

This step is in addition to the current requirements of conducting a rolling brake test when changing directions.

#### **ESL**