

THE FEVR FLASH

A PUBLICATION OF THE NEBRASKA RAILROAD MUSEUM

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BACK ISSUES:

Back issues of the FLASH and links to numerous railroad related sites may be viewed at www.FremontRailroad.com.

NOTE: YOU NEED TO HAVE NRM MEMBERSHIP TO CONTINUE RECEIVING THE FLASH.

BOARD OF DIRECTORS:

(Note: the following is not the official meeting report and only summarizes the activities. Only the approved meeting minutes sent to NRM members is the official report.)

The NRM Board of Directors met at the NRM Depot in Fremont on June 4, 2014 for the regular monthly meeting.

All BOD members except **Blackmore** were present.

The treasurer's report was approved.

Hunter (Mechanical Department) reported that paint was being stripped from the Lake Bluff (1101) excursion car in preparation for **painting**. It was suggested that the trailer mounted Gardner- Denver could be used for an air supply for sand blasting.

Love reported on the **inventory** of the museum artifacts.

There was discussion about the **relocation** of the museum to Nebraska City. This discussion included the eventual location and possible partnerships there. The importance of having a designated contact person representing NRM in all matters regarding the relocation is very important to avoid any misunderstandings.

President Fachman was **authorized** to sign a letter requesting the donation of some properties in Nebraska City for the establishment of a location for NRM.

There was discussion about filling some BOD **vacancies**. The NRM Constitution and Bylaws requires a membership in NRM/NRHS of one year before BOD election is possible. The Advisory Council, however, is the vehicle by which business oriented talent could be immediately added.

There was discussion about the value of membership in **NRHS** as a professional organization furthering the goals of

preservation, education, and providing for the future of the railroad avocation.

POSITIVE TRAIN CONTROL (PTC):

The intent of PTC is to take control of the **movement** of a train if the engineer cannot or will not do so. The idea is simple in concept but very complicated in implementation.

There are current applications in place, particularly in commuter railroads with their frequent station stops which invite rear end collisions. However, as in all things electrical and mechanical, increasing complexity brings more points of **failure**.

A tragic example of such a failure was the crash of a commuter train into a stopped unit at the Fort Totten Metro station (in Washington, DC), on June 22, 2009. The railroad there is electrically divided into blocks. Each **block**, when occupied by a train, is supposed to generate a signal that will slow or stop other train traffic automatically.

There was a block which did not generate the proper electrical signal and so a train which occupied only the block would **"disappear"** as far as the signal system was concerned.

The problem apparently existed after a track component was replaced and was **undetected** because it so happened that every time a train stopped at the Fort Totten station, a part of the train was in a block which was functioning properly and so a signal stopping or slowing other trains was operative.

On the occasion of the rear end collision, it so happened that a train stopped in a place where it was entirely in the malfunctioning block. As far as the signal system was concerned, the stopped train did not **exist**.

The operator of the train following the stopped one had her train under automatic control as usual on June 20, 2009. When she caught sight of the stopped unit around a curve, the application of emergency braking could not **stop** her train in time. The operator and eight others lost their lives and about 80 others were injured.

There followed a time of needed **changes** in the signal system.

The event which set in motion the current drive to **implement** PTC happened in Chatsworth, CA in 2008. On a line which shared use by both commuter service and Union Pacific freight trains, a

commuter operator leaving a station failed to notice a red signal light due to an **approaching** UP freight. Apparently his distraction was the use of a cell phone. The resulting head-on collision took his life and that of 24 commuter passengers.

One of the immediate results was the FRA's **banning** the use of all non-work related electronic communication devices.

(The Omaha World Herald had extensive coverage of the PTC situation in the June 13 issue with the following facts.)

The other far reaching effect was Congress's passage of the unfunded **Rail Safety Improvement Act of 2008** which is estimated to cost at least \$13 billion. About 60,000 miles of track need to be equipped with PTC and the intent is to have 40% of that track installed and operation by the end of 2015. The American Association of Railroads (AAR) states that goal will not be met.

Both Nebraska Senators Fischer and Johanns are **co-sponsoring** legislation which would extend the deadline beyond 2015.

One of the **barriers** to completion is the fact each of the 22,000 new trackside antennae must have a separate FCC license to operate and the estimated time needed to accomplish is two years. There are about 11,000 poles already in place and the FCC has granted permission for preliminary testing of these.

565 **Native** American tribes have the right of prior review of the radio tower sites and they have the right to review each application for cultural or historic connections. The railroads have contributed \$10 toward a tribal nations cultural fund.

If all of the installations had been in place in the period 2000 - 2010 it is estimated they would have prevented about **three** percent of all train accidents or 30 accidents.

A classic example where an accident would have been prevented was the case of the **head-on** collision between two UP freight trains at Goodwell, OK in June 2012. One of the trains continued on the main line instead of taking a siding apparently because that train's engineer mis-read the signal aspect.

It is calculated that the railroads' cost of PTC preventable accidents in the period would have **paid** for the installation of PTC.