FEVR FLASH

EASTERN NEBRASKA CHAPTER
NATIONAL RAILWAY HISTORICAL SOCIETY
1835 N. SOMERS, FREMONT, NE 68025 OCTOBER, 2002

POINTS OF CONTACT:

Eastern Nebraska Chapter and Fremont and Elkhorn Valley Railroad (FEVR) - (402-727-0615) - 1835 N. Somers, Fremont, NE 68025

Fremont Dinner Train (402-727-8321 or 1-800-942-7245) - 650 N. H St., Fremont, NE 68025

CORRECTION:

The telephone contact number for charter trips was erroneously indicated as 402-727-0625 in the September issue. The correct number is the **FEVR** office number: **402-727-0615**. An apology is extended for any inconvenience this may have caused.

TRAVEL:

Regular excursion travel ends at the end of October and will resume again in **May, 2003**. In the interim, depending upon weather and operating conditions, limited travel service will be offered on Sundays and on a charter basis. Though the historic excursion coaches are not provided with heating equipment, the caboose does have heating facilities and can be used year-around. This unit has a capacity of 22 passengers.

Contact the FEVR office regarding travel opportunities possible.

The Fremont Dinner Train, which offers fine dining and quality entertainment **continues** in operation with only a two-week absence in January. For information and reservations, contact the Fremont Dinner Train office.

SANTA CLAUS:

Plans are in progress for the annual Santa Claus train trips held in cooperation with the Fremont Dinner Train. These will be scheduled for the weeks in l**ate November** and **early December** with Santa providing Holiday cheer for young and old. Contact the **Fremont Dinner Train** office for updated information.

ELECTIONS:

The members of the Board of Directors for the **Chapte**r and **FEVR** hold office in one, two, and three year terms. Letters have been sent to members who are eligible for the one-year terms expiring at the **end of 2002.** Since Charter requirements mandate membership on the national level **(National Railway Historical Society - NRHS**) as well as membership at the local level- **Eastern Nebraska Chapter - ENC**) candidates must meet that qualification to take a Board position if elected. Election by membership will occur after the nomination process.

RAIL SCHOOL:

Each issue of this publication features information about railroads. This issue provides information about the **cross ties** on the right of way.

The railroad right of way has three essential components: the **steel rail** upon which the railcar wheels ride, the **cross ties** upon which the rails rest, and the **grade** which supports the ties.

Ties have **three** essential functions: maintaining **gauge**, **surface,** and **alignment**. **Gauge**, which is the distance between the rails, is undoubtedly the **most critical** function since the wheels will leave the rail at any speed if the distance exceeds limits, resulting in the railroad's worst fear- a derailment which can results in millions of dollars of loss. In the current Americas, the major **standard** is a distance of **4 feet, 81/2 inches-** a distance which can be traced back to Roman chariots in England. **Narrow gauge** lines, which typically operated in difficult terrain, had a distance of **3 feet**. Gauge distance variations allowed may vary from several inches for low speed tracks to no more than a fraction of an inch on high speed lines.

Surface, which is the **vertical** dimension, likewise may vary from several inches for low speed to no more than fractions of an inch on high speed . **Alignmen**t, the **sideways** dimension, has a similar variation allowed.

For most of the 170 years+ that railroads have operated in the United States, the **principal** material has been **wood.** Even today, according to the publication ***Railway Track and Structures***, (RT&S), **93-94%** of ties installed are wood. Millions are produced yearly, with RT&S reporting an increase in production of **2 millio**n in the past year! Properly treated, wood ties have a life span measured in decades, will accommodate a variety of fasteners to attach the rail, resist damage from a wheel off the rail, and enable the stone ballast to lock well into the tie to resist alignment changes. Wood ties are typically preserved with the use of creosote and therefore there are environmental concerns- particularly in the disposal of ties at the end of their life.

Concrete ties have recently been increasingly an alternative to wood. They obviously are not subject to decay and have cast in place points for rail attachment assuring correct gauge. However, they do not lock to ballast as well as wood and will shatter under the impact of a wheel running off the rail.

Steel ties are installed where a minimum vertical dimension is critical. This would be essential, for example, if a bridge structure were marginally high enough to allow passage of "double-stack" intermodal container trains.

Other ties materials sometime used are **"engineered wood", plastic,** and variations thereof. All the alternatives to wood typically have a higher initial cost but this may be offset in the long-term by reduced replacement and maintenance requirements.

The classic rail to tie fastener for wood has been the **steel spike**. For the alternative materials, other fasteners of a "clip" type are generally necessary and require different attaching techniques.