FEVR FLASH

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

THOMAS RETURNS:

Thomas, the friendly little engine, enjoyed his visit here in May so much that he decided to come again! So- mark your calendars for **May 30-June 1 and June 5-8, 2003.** If you missed out this year- here's your chance again. If you visited Thomas this year- he will be expecting to see you again! More details later.

MOTOR CAR VISITORS:

On Sunday, June 30, members of the **First Iowa Division- North American Rail Car Operators Association** operated 12 units from Hooper to near Fremont and return. They had previously visited other short-line railroads. The quality of their units was very impressive. (See photo this issue)

JULY EVENTS:

Motor car rides were offered for Hooper's July 4 celebration. In addition, the Prairie 2-6-0 steam engine being stored in Hooper was placed on display.

Nearly **700 passengers** were accommodated during the John C. Fremont Days, July 12,13, and 14.

Excursion charters included those for a school, a YMCA group, a church group, and a family reunion.

Nebraska Educational Television **(NETV)** visited to do filming for a future production.

APPRECIATION:

A message from **Shirley Angermund**, Eastern Nebraska Chapter President: " I would like to express my appreciation to all those members who volunteer their time, energy, and money to crew, work on the equipment, and all of the other duties that keep the railroad operating. **EACH AND EVERYONE IS IMPORTANT.** Without **YOU** there wouldn't be a Chapter or FEVR."

RAIL AND TIES:

Funds from a grant provided by the employer of one of the Chapter members were used to purchase a supply of high quality used ties. In addition, the salvage of rail donated by a local industry was completed.

TRAVEL:

Regular excursion travel continues with departures on **Saturdays** and **Sundays.** The Saturday trip to Nickerson is a round trip of about two and one-half hours with the option of a visit to the Nickerson antique shop. The Sunday trip of about 30 miles is three and one-half hours long with time to visit Hooper's historic main street. Trips board at the depot at **1 PM** and leave on the mainline at **1:30 PM.** Reservations for excursion trips recommended. Charters available- call the depot.

RAIL SCHOOL:

Each issue of this publication features information about railroads. Two inventions particularly have made the modern railroad possible: the automatic **Janney Coupler** (presented in the June issue) and the **air brake.**

Once locomotives began to move trains in the 1830's it immediately became obvious that there was a need to stop them. So rail cars were equipped with manual brake mechanisms operated appropriately by **"brakemen"**. When the train was to be stopped, the engineer gave whistle signals and the brakemen walked on top of the cars using handwheels to apply brakes.

The **dangers** of this procedure were great and the process was ineffective as trains grew longer and faster. The i**neffectiveness**, rather than loss of life and injury, was no doubt a greater motivation for improvement in the view of the classic railroad baron owners.

The idea of using the power of **compressed air**, which could be obtained from a pump on the locomotive, came into being. The engineer could then quickly control the brakes on the entire train without brakemen.

Early applications provided air **directly** to the train brakes for stopping. However, if the air line should **separate,** all braking would be lost.

It remained for a prolific inventor, **George Westinghouse**, to devise a process, now still in use, to overcome the separation problem. In this process, compressed air is piped through and **stored** in tanks on each car before the train leaves and is replenished as needed as the train travels. A clever valve on each car monitors the pressure on the train air line. To apply brakes, the pressure is **reduced** in the train line by the engineer and the stored air is used to apply the brakes. If the pressure reduction is very **sudden,** as in a separation, a very hard or **"emergency)** application occurs and the train is stopped in the shortest possible distance. For a long, heavy train, even this distance can be a half- mile.

Although the loss of braking if a separation occurs is not a problem in this scheme, the possibility of **using up** the stored air by poor braking techniques exists and does happen, causing a **"runaway"** train. The stored air cannot be built up again during brake application. Hence, the engineer must use skill when descending steep, long grades.

In **1869**, at the age of 22, Westinghouse organized the **Westinghouse Air Brake Company**- later known as **WABCO**. One of his first railroad "demos" involved an emergency stop due to a carriage on a crossing. Official railroad passengers were jostled, but the sale was completed!

Westinghouse, 1846-1914, had **361** patents to his credit covering many areas- including a-c electricity.

RAILSCENE: Members of the First Iowa Division-North American Rail Car Operators Association (NARCOA) leaving the rail in Hooper on Sunday morning, June 30, after traveling to Fremont and return.