FEVR FLASH

NEBRASKA RAILROAD MUSEUM 1835 N. SOMERS, FREMONT, NE 68025 APRIL, 2004

POINTS OF CONTACT:

Nebraska Railroad Museum and Fremont and Elkhorn Valley Railroad (FEVR) 1835 N. Somers, Fremont, NE 68025,(www.fremontrailroad.com), 402-727-0615 (office)

Fremont Dinner Train - 650 N. H St., Fremont, NE 68025

For excursion only- 402-727-0615 For Dinner Train only- 402-727-8321

(The Fremont Dinner Train is a separate business for which the FEVR provides motive power and trackage).

EXCURSION TRAVEL:

The excursion travel season begins on Sunday, May 9. (CORRECTION!

This was incorrectly reported as beginning May 8 in the March issue!)

Thereafter, trips will leave the depot at 1835 N. Somers every Saturday and Sunday with boarding time of 1:00 PM. Each round trip to Nickerson, Nebr. takes approximately three hours.

Saturday passengers have the option of shopping at the Nickerson antique store during the stop there. Excursion travel continues through October.

Fares are \$8.00 for adults, \$6.00 for children in the vintage coaches. Adults \$13.00, children \$8.00 in the air conditioned cars. Children under 3 years of age- no charge either travel mode. AAA cardholders receive a \$1.00 discount.

Charters with special rates are available for groups . School charter groups are available Wed- Thur- Friday in April and May and again in September and October.

Refreshments and souvenirs are available aboard the train.

BRAKEMAN TRAINING:

The training session held on March 28 provided the attendees both instruction and practice in the process of yard switching with safety the prime consideration. The session was conducted by Supervisor of Engineers **Jeff Blackmore** and several assistants.

The next step for new trainees is

a required number of trips under the supervision of qualified personnel.

TRACK SALVAGE:

Diligent efforts by Charles Egbers, Jerry Morris, and Lawrence Addelman have resulted in the salvage of 3000 feet of the approximately 4800 feet of track recently acquired west of Hooper. The right of way upon which the track is located will become part of the new Highway 275 construction due to begin this year. The salvage of the rest of the track and associated hardware is scheduled for completion by July 1.

UNIVERSITY RESEARCH:

The only direct contact with railroads for many persons is the needed but **frustrating** encounter at a highway crossing waiting for a train to clear the roadway. The frustration is magnified when there is **no indication** as to how long the crossing will be blocked. The anticipation of such a wait leads some to **gamble** trading a few minutes of earthly time for a very long time in eternity by trying to cross ahead of the train's arrival. The news of losing that gamble is all too frequent.

The railroad was very pleased to provide a testing opportunity to three University students developing a device indicating how long the train will be at the crossing. Three students enrolled at the **Peter Kiewit Institute** in Omaha in the Department of Computer and Electronics Engineering (a UNL program in Omaha) chose to develop a prototype for such a device as their Senior Thesis topic. Computer Engineering students Lisa Vanzago and Scott and Electronics Daren Student Engineering Clayton Vondrasek received funding assistance from a Class I railroad for detection of a train by using trackside instruments sensing the disturbance produced in the earth's magnetic field as it passes.

The device then calculates the speed and train length to produce a **display** for the motorist indicating how long the train will be in the crossing. Charles L. Sedlacek, Museum Board of Directors Vice-President and Professor in the University Department assisted and supervised the students in recent field tests during FEVR train trips.

The tests were successful and the students were very pleased as the project is their **final requirement** for graduation!

RAIL SCHOOL:

The last entry on rail traffic control discussed the track warrant method of allocating track rights to trains. This is the latest method of communicating information from a control center to train crews giving them authority to operate a train over a particular section of track. As in the previous methods of timetables and train orders, this method is indirect in the sense that it provides no actual indication of track occupancy by any kind of visible signal and hence the term "dark territory" for such track.

Very early in the development of railroads it was realized that some sort of **visual** signaling would be highly desirable. This need was initially answered by manual **semaphore** arm signals operated by personnel at stations and at "towers" located at junctions and at switching points.

The advent of electrical circuitry allowed the automation of signalling through the development of the "block" system using track circuits. Track is divided into segments or "blocks" and occupancy by a train in that segment results in various "aspects" displayed by trackside signals. If there is no train in a block a "clear" aspect is provided to an approaching train. If there is occupancy in a second block away from the train a "caution" aspect is displayed warning the crew that the next indication may require a stop. If there is a train in the immediate next block, a "stop" aspect will be displayed.

There were many variations of the exact method of providing these aspects on various railroads.



RAILSCENE: Field test - University Computer Engineering students Lisa Vanzago and Daren Scott monitoring the train detection magentometers for their Senior Thesis project as FEVR 1219 approaches (see article inside).