

## About HOTRAK

HOTRAK is an HO scale modular railroad club that integrates double- and single track modules into large free-form layouts. The layouts emphasize realistic train operations through the use of a Digital Command Control (DCC) system and car-card/waybill system.

HOTRAK has over 40 members from across the Ottawa, Eastern Ontario and Western Quebec. There is no requirement for members to build their own modules or purchase DCC equipment, locomotives or rolling stock.

We do require that our members have fun.

## Modules

A module is a 2x4 or 2x6 foot piece of layout built to club standards. Our standards specify the size and placement of mainline tracks and wiring for track power and LocoNet (as in Local Area Network). Modules are owned by club members.

## Putting the Modules Together

We get together about eight weekends a year in a large hall. On the Saturday morning, modules, tracks, track power, and LocoNet are connected in a predetermined plan. In about three hours, the layout is up, tested, rolling stock is in place and we are ready to roll. For the next 30 hours, until Sunday at 4 p.m., we run trains.

## Layout Size

Layouts involve over 66 modules, including over 40 industries, and a large freight yard. Our layouts can take almost any shape. At full size, we can completely fill a 40x60 foot hall.

## Controlling the Trains

The trains are controlled by a special computer system called Digital Command Control (DCC). The throttles send signals through the Local Area Network (LocoNet) to a special server (the Com-

mand Station), which relays the signals along the tracks to the locomotives. The locomotives have a special computer card, called a decoder, with a unique address. If the signal is for that locomotive address, the locomotive responds.

With DCC, we can run up to 122 locomotives at one time (but we don't). With DCC, we are not concerned with "block occupancy".



Photo by Don Douglas

## Where to Place the Cars

We use a car card and waybill system to deliver freight cars to the local industries. Each car has a "car card" that indicates the car number, type, length and commodity. A "waybill", which indicates the town and industry the freight car is to be delivered, is matched to the car card.

Freight trains are made up in the freight classification yard and are run from the yard to a series of destinations. Cars are set off and picked up along the way according to the orders on the waybills. We also run large long distance unit freight trains from one major point to another.

Passenger trains are run according to a series of timetables and indicate the station stops. Local trains follow a set route and stop at each station or flag stop. Intercity trains make only a few scheduled stops at more major stations. Excursions take people for a train ride and stop somewhere for a



Photo by Don Douglas

scenic photo opportunity. When you combine all of this activity, the railway can get pretty busy!

## Controlling Train Movements

A dispatcher controls all train movements on the mainline giving permission for trains to occupy sections of track en route to their planned destinations. All of this activity is coordinated by two-way radio through the dispatcher. There can be as many as a half dozen freight trains on the main line at any one time, along with freights switching industries and several passenger trains.

## Standards

HOTRAK follows NMRA standards for track, wheel, car weight and coupler height. Based on our experience, HOTRAK has developed its own club standards for module construction and wiring. We follow Digitrax DCC standards for command stations/boosters, LocoNet and throttles. Decoders must comply with NMRA standards. Details on our standards are available on our website.

## More Information

Ask any HOTRAK member in a green apron. But please let them listen to the Dispatcher when necessary.

Also visit our web site at [www.hotrak.ca](http://www.hotrak.ca).

For information on joining HOTRAK, see our web site to contact the Membership Coordinator.



OTTAWA VALLEY  
**HOTRAK**  
MODULAR RAILROAD  
CLUB

