



>> Where coal is king

The ever-evolving HO scale
West Island Model Railroad Club

By Rob Smith • Photos by Vincent Le



1 An Allegheny & Western RR RSD-4 shoves empty hoppers to the Hendricks tipple while, on the main line below, an A&W westbound freight grinds upgrade. Coal trains, coal mines, and related industries like steel making are at the heart of the West Valley Model Railroad Club's 50 x 66-foot HO layout.



Rather than cling to the past, the West Island Model Railroad Club embraces change as the best way to improve the railroad and members' enjoyment of it. Our new layout, the 50 x 66-foot HO scale Allegheny & Western, is an example of how you can teach an old club new tricks.

The layout's modern, walkaround design features Digital Command Control (DCC), radio communications, multiple staging yards, Centralized Traffic Control (CTC) signaling, and prototypical operating sessions. It's a far cry from the club's first layout - a 1947 "spaghetti bowl" of track with fixed DC cabs.

The West Island club has weathered four moves, built five layouts, hosted almost 100 open houses, and provided a great deal of enjoyment for members through its nearly six decades of operation. Located in the basement of a Farmingdale, N.Y., shopping center, the club has about 80 members. About half that number is very active in attending meetings, operating nights, and work sessions. Rarely does a month go by where we're not contemplating or implementing another improvement to the layout.

The current layout, begun in 1992, replaced a 19-year-old layout that had the membership frustrated. Tight-radius curves, bad track, deteriorating electrical wiring, fixed cabs where engineers watched their trains in a mirror on the

2 A westbound hopper train pulled by an A&W 2-6-6-6 passes an eastbound freight led by a pair of F7s at New Carrollton, Md. The Allegheny is a brass import owned by club member Galon Gouzoulakis, rebuilt and painted by member Mark Guiffre. It has a dual drive line and a pair of Soundtraxx sound decoders that allow separate control over each set of six driving wheels.

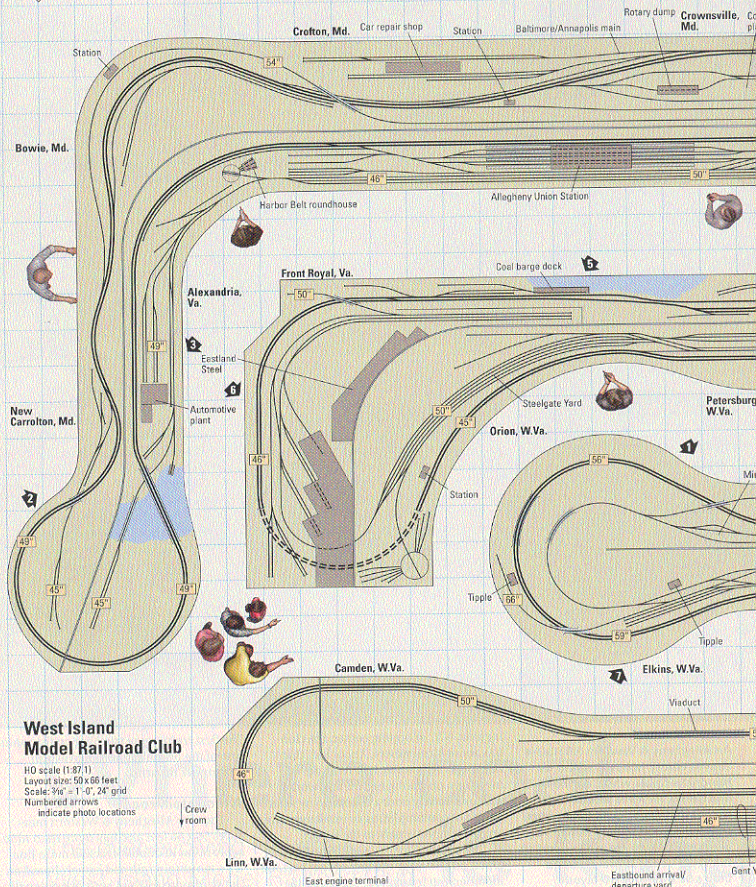
ceiling, and back-breaking duckunders all contributed to a feeling that starting over was our best course of action.

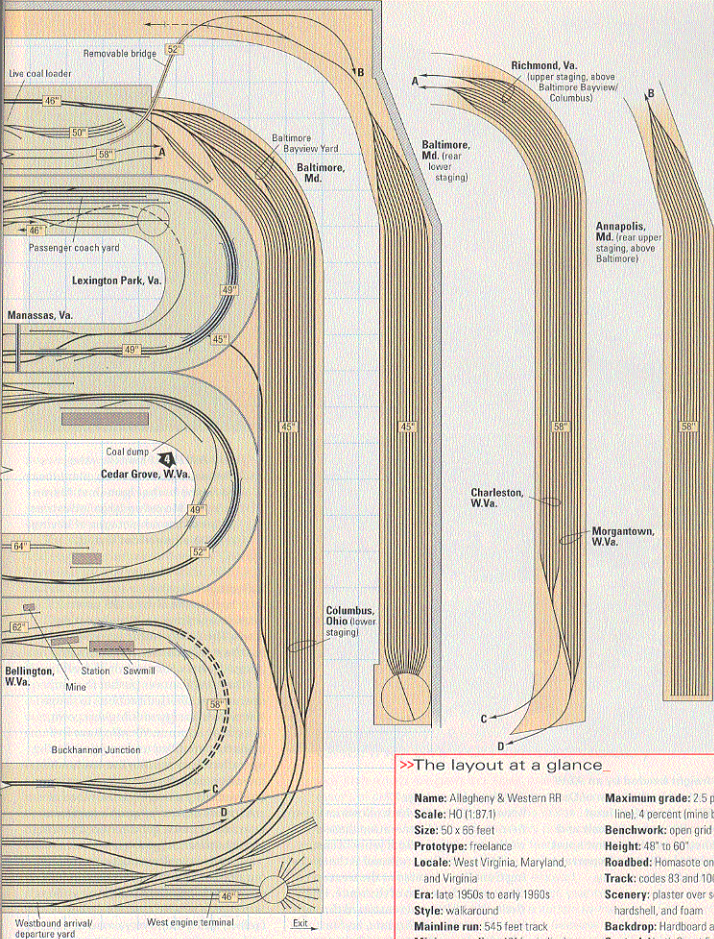
By keeping half the old layout intact through the beginning of the new layout's construction, club members could still run trains while waiting for operations to begin on the new layout. The first trains were running on the main line of the new Allegheny & Western within five months.

A mountain road

The new Allegheny & Western measures 50 x 66 feet and has more than nine scale miles of double-tracked main line. It's a mountain railroad loosely based on the Baltimore & Ohio, both operationally and geographically, with elements of the Chesapeake & Ohio. We model the era

Continued on page 80





>>The layout at a glance

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| Name: Allegheny & Western RR | Maximum grade: 2.5 percent (main line), 4 percent (mine branch) |
| Scale: HO (1:87.1) | Benchwork: open grid |
| Size: 50 x 66 feet | Height: 48" to 60" |
| Prototype: freelance | Roadbed: Homasote on splines |
| Locale: West Virginia, Maryland, and Virginia | Track: codes 83 and 100 flextrack |
| Era: late 1950s to early 1960s | Scenery: plaster over screen, hardshell, and foam |
| Style: walkaround | Backdrop: Hardboard and drywall |
| Mainline run: 545 feet track | Control: North Coast Engineering Digital Command Control |
| Minimum radius: 46" (main line) | |
| Minimum turnout: no. 6 | |



4 A local freight headed by an A&W AS-616 arrives in the town of Cedar Grove, W.Va., to switch local industries. It's passing a bait and tackle shop, a reminder that sport fishing and tourism are important parts of the local economy.

Continued from page 77
between 1950-65, which allows us to run first- and second-generation diesels while enjoying the final years of steam.

The heart of our railroad is the sprawling Gent Yard, located at the west end of the modeled portion of the route. From Gent, the A&W heads eastward through West Virginia and Virginia, and on into Maryland to end outside of Baltimore.

There are several branches along the line that serve a wide range of industries,

3 An A&W RS-11 switches the massive Ford Motor Co. plant located on the harbor branch at Alexandria, Va. Modeling large industries is one of the advantages of having a 3,300-square-foot layout.

including coal mines, a steel mill, and a busy harbor. We also model several interchange points with connecting roads. The A&W's traffic is largely coal, but the steel and coke industries are integral parts of the railroad's livelihood.

The A&W features pusher (helper) operations in both directions to shove trains over our layout's highest point, Allegheny Summit. We also have live loads that are filled and emptied during operation sessions. The live loads add intensity to the pusher operations, as inadvertently dumping a trainload of coal or ore makes for quite a mess (and guarantees much good-natured razzing of the hapless hogger).

There's extensive staging to support our regular operating sessions, as well as the 50-foot-long Gent freight classification yard, a sizable car-repair shop facility, and a major city passenger depot with extensive support services including Railway Express Agency, Post Office, baggage, and commissary functions. The



passenger terminal has its own coach yard and engine servicing area. We have an additional staging yard (reached by a removable bridge) where members can store their privately owned equipment.

The steel mill also has its own yard and engine terminal, as does the Garcia Terminal Ry. The mine branch, reaching Elkins, W.Va., has an extensive network of track serving five coal loadouts.

Club members have worked just as hard on creating impressive industries and scenic features, including a 10-foot-long, 3-foot-high concrete viaduct, an operating carnival, two working rotary dumpers, a 30-foot-long steel mill complex, a giant lift line, and even a small-town trolley line.

Learning from our past mistakes, we laid mainline curves that are broad enough to handle virtually any equipment, and we made sure to include plenty of industrial sidings to complement the developing operational scheme. To ensure that no aspect of the railroad lacked for attention, we formed committees to oversee equipment inspection, signaling, and electrical installations. We also established the position of superintendent to provide necessary day-to-day decision-making.

The operational pattern that emerged focused primarily on through freights

and unit trains, with much traffic produced by coal mining and the related industries of coke and steel-making. We then added passenger and local freight service to the mix.

Construction details

We used several techniques and materials to construct the benchwork, but one decision in particular has really paid off: We built a central wall of 2x4s to support the dividing scenic backdrops, then cantilevered the layout outward from that central point. This structure is incredibly strong and solid, with no annoying legs by the aisles.

5 Eastland Steel switcher no. 419 shoves a live coal load onto the working rotary dumper. Actual loading and unloading of coal, coke, and iron ore adds a lot of interest to the monthly A&W operating sessions.

The benchwork is primarily box-girder construction with spline subroadbed. For our landforms, plaster over screen and paper towels have given way to carved and shaped extruded-foam insulation board. Older scenes are regularly rehabilitated or replaced, which gives us a chance to try new techniques and

>>Sharing the fun of the hobby_

As the club began to feel comfortable with the experience and results of our operating sessions, we decided to inaugurate an Invitational Ops Session to extend the enjoyment of the railroad to out-of-town friends. The first invitational, in May 2003, saw the A&W play host to 30 operators, coming from as far away as Illinois. The invitational featured three sessions of three hours each. A revamped schedule of two sessions was completed in June 2004 and was likewise well-attended and much enjoyed.

The club holds a public open house each year running over the course of three or four adjacent weekends. We often entertain as many as 1,500 spectators during the annual open house weekends. Because so many changes are made to the layout from year-to-year, repeat guests frequently tell us that they get a kick out of discovering the new scenes added since their last visit. — R.S.



6 Eastland Steel at Front Royal, Va., is the largest on-line customer of the A&W. Here Eastland Steel switcher no. 417 spots cars at Eastland's building 24.

One recent project was the installation of NCE Switch-It accessory decoders to activate our Tortoise turnout motors eliminating once and for all the control panels that proved so inconvenient and maintenance intensive.

The next challenge facing the club is the completion of a CTC signal system, designed by a member who once worked as a Long Island RR signal engineer.

Decoders by the dozens

The 115 locomotives in the A&W fleet represent the steam-to-diesel transition years of the 1950s to the mid-1960s.

Most of the locomotives were converted to DCC by two members, Nick Guilfire and Rich Valente, but they gradually passed their techniques along, and now most members do their own DCC conversions.

Many locomotives have been fitted with sound decoders, and the members are adopting sound for their own engines at a rapid pace.

Diesels painted in a number of A&W schemes form the bulk of the roster, but more steam locomotives are starting to appear thanks to the proliferation of finely detailed and smooth-running models hitting the market.

Flexible operations

In 2000, the club decided to develop formal operation procedures and begin monthly operating sessions. There are about 25 regularly operating members and some 10 to 15 part-timers who make up the crews each month.

Through trains from staging yards representing the unmodeled sections of the A&W's system flow both east to Baltimore and west to the Ohio Valley. Twelve to fourteen through trains might traverse the layout in a single three-hour operating session. In addition, unit train of coal, coke, and ore are likely to be scheduled, along with one or more trains to and from each branch, five or six through passenger trains, a pair of commuter trains, and a few local freights to round out the traffic.



Member Jim Schweitzer (at left) briefs guest dispatcher Dave Metal on train traffic on the main line during the club's 2005 Operational Invitational day.

materials. Structures range from well-known kits and kitbashed variations to completely scratchbuilt complexes.

Most of the online industries are named after members – both past and present. Our deceased members are honored in the naming of bridges and large complexes.

We originally used DC cabs for our new layout, with panels that used push buttons and relays to assign blocks. However, the panels proved difficult to install and even harder to maintain. Despite a great deal of work on our DC block wiring, helper operations remained extremely difficult to implement, so the club began researching the options available to us with DCC.

The discussions lasted for several months, as members debated the feasibility of retaining DC operation along with the DCC (due mostly to the costs involved in converting locomotives), but when the vote was held the result was unanimous to convert. The process took four months but the fine-tuning is ongoing, as new products offer more convenience and reliability.

Today West Island is believed to be the largest club using North Coast Engineering's DCC system. We have eight power boosters, 19 power districts, and more than 110 decoder-equipped, club-owned locomotives.



All-in-all, as many as 32 trains may ply the A&W's rails in one session. The operating scheme is flexible, with suspension of operation of any of those branches or facilities possible (except Gent) in case of a low turnout.

The operations' plan also specifies a trainmaster to oversee the train movements and organize the personnel, a dispatcher to run the railroad, an engine hostler in Gent, and helper crews stationed on both sides of the mountain.

Trains are identified by a two-letter and single-digit code, such as "AY-1." The letters correspond to the names of the train's origination point and eventual destination. The numbers are sequential through the session and odd or even according to direction of travel.

There are 47 industrial destinations and 244 spots for freight cars on the layout's sidings. Routing is handled with a car-card-and-waybill system with cards having a rotating set of four destinations. Currently, only one of the four destinations is on the layout itself, keeping cars on the move in through trains and taking full advantage of our sizable fleet of freight cars (currently numbering over 1,500). The double-decked staging yard is

also double-ended, so "orbiters" (as we call the through trains) don't have to be restaged between sessions.

The A&W's staging areas include six "beyond-the-layout" destinations, and a pool of more than 500 freight cars is kept in use by the orbiters. This fleet ensures sufficient traffic to satisfy even the most voracious group of road crews.

Anyone can bid for any job on the railroad, except for the positions of trainmaster, dispatcher, and Gent yardmaster. Since the performance of these functions has such an impact on the flow of a session, newcomers must serve an apprenticeship with a qualified member before "soloing."

Originally, our communications were by a wired phone system, but it proved inconvenient, inflexible, and darned hard to hear when more than a couple of people were using it. The club therefore switched to radio communications using consumer Family Radio Service (FRS)-band handheld radios.

Never say "finished"

There's no end of projects looming on the horizon for the West Island Model Railroad Club. In addition to installing

7 The largest coal mine at Elkins, W.Va., is the Ogdenville Mine. An A&W 0-8-0 shoves a cut of hoppers under the tippie, while a mine worker loads a supply truck.

our signal system, work is under way to complete the cityscape surrounding Allegheny Union Station and to rehabilitate the valley beneath the Julius Kupcevic Memorial Viaduct. We've enlarged Gent Yard and added arrival and departure tracks, and a hump yard.

In the meantime, the superintendent manages the Herculean task of maintenance that keeps our 3,300-square-foot railroad running smoothly. The scenery committee moves around the layout, refreshing stale areas and adding new scenes to complement layout changes.

There's much work to be done, but we always have time to welcome visitors. If you'd like to stop by, visit our Web site (www.fortunecity.com/marina/custom-house/381/) for times, and directions. GMR

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