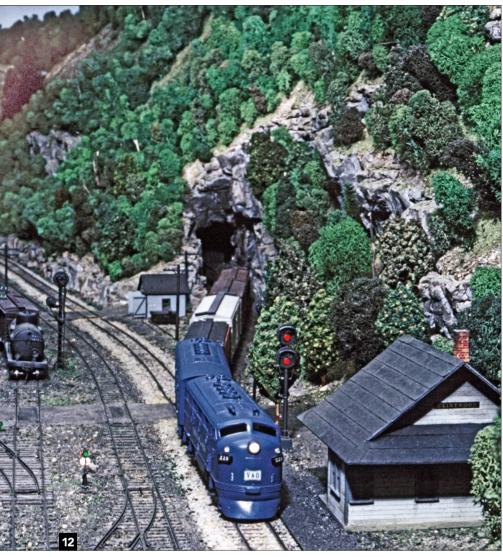
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A pair of aging V&O F7s are at full throttle as they shove hard against a bay-window caboose to help a hot westbound freight complete the climb to Sandy Summit.



The Durham Subdivision was the other end of the through two-track staging yard that also emerged at Blackstone as the Smith Sub. Here a westbound freight rolls off the Durham Sub's connection to Jim Paine's Durham & Southern in a photo taken in the late 1960s.

Blackstone and Clintwood now grew into a pair of stub-ended five-track staging yards nestled under the expanded main line in the new basement annex (see 2-2). After the annex expansion, one through staging track between Blackstone and Clintwood was retained.

Paperwork

Allen used many documents to convey his Beyond the Basement concept. These include system regional maps and schematics, organizational terms like naming divisions and subdivisions, extracts of the regularly updated headquarters-issued *Freight Train Procedures*, employee timetables,

rosters, and even public-relations-style calendars, Christmas cards (featuring Allen's artwork), and business cards.

Layout Design Special Interest Group (Idsig.org) founder Doug Gurin points out that Allen was quoted in the V&O series as stating that the V&O Through Freight Trains and Local Freight Trains Procedures, based on New York Central documents, 13, were more significant to the railroad's operations than the V&O timetable. Moreover, they were the very embodiment of his Beyond the Basement concept.

Each page of the procedures book listed a train's designation, beginning and end points, function, consist, and where it worked. Yardmasters and crews could refer to these guides if there were questions about how to block a train or what it did en route.

Allen was an early adopter of Doug Smith's waybill system. I won't spend time describing it here, as it has since been improved with the four-cycle waybills introduced by Old Line Graphics and now sold by Micro-Mark. But it's important to note that Allen understood from the outset that each car would need to have associated paperwork that routed it to a specific destination and then back to home rails again, be it on the V&O or a connecting foreign railroad. In the 1960s and for some time thereafter, Doug Smith's system was the best game in town. In its enhanced form, with a more prototypical appearance and the management of empty-car movements, it's still a good carforwarding system.

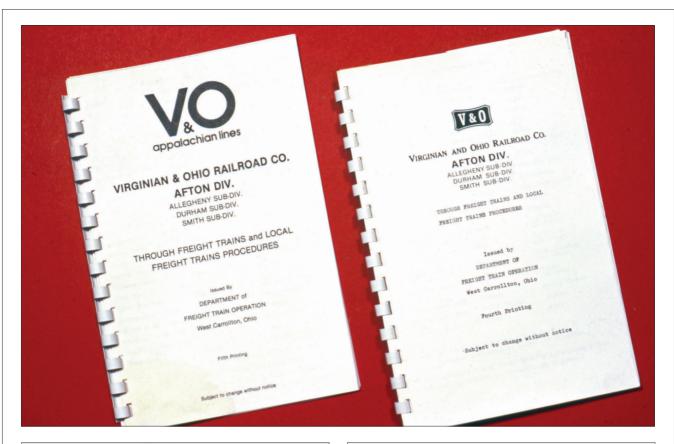
Lessons we can apply

Our model railroads do not exist as stand-alone entities. Ideally, they have physical, usually hidden, passively staged or actively fiddled connections with the rest of the rail network. That ensures a logical means for foreign-road cars to come onto and to leave our own railroads.

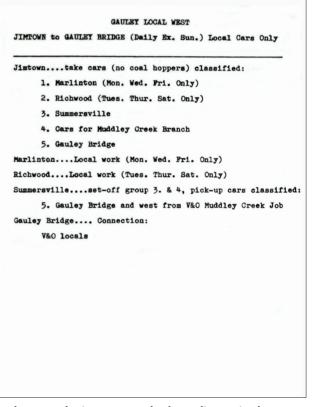
But everything needs to be orchestrated. Trains do not move randomly; each has a specific function, and the *Freight Trains Procedures* booklets ensured that everyone understood what V&O management expected of them.

Nor do cars move randomly; as on the prototype, Allen realized that waybills are a practical means to route them to specific consignees on or off the model railroad.

Movements cannot be planned without detailed system maps (the first step in planning any model railroad) and clear instructions about management expectations with regard to everything from caboose and motive power assignments to how often certain customers are switched. A railroad is a business, so a prototypebased model railroad is a model of a business. All of this falls under the heading of Beyond the Basement.



262 SUNRISE to MARTINSVILLE (Daily) FAST FREIGHT ONLY Sunrise take cars classified: 1. Jimtown (94 East and 1st. 97 West) 2. Chatham and A&O (southwest) 3. Martinsville D&S (South) Connection From: Allegheny Midland AJS-2 and HR-2 Jimtown....set-off group 1, pick-up cars classified: 2. Chatham and A&O (Southwest) 3. Martinsville D&S (South) Connection from: V&O No. 94 and No. 97 Connection for: V&O No. 94 (east) and No. 61 Chatham....set-off group 2, pick-up cars classified: Martinsville D&S (south) Connection: V&O Locals and A&O Martinsville (D&S) Connection: D&S (south)



Two versions of the *Freight Train Procedures* booklets (top) underscore the important role these directories have played on the V&O over the decades. Pages from the booklet show road and yard crews what is expected for Train 262 (left) and the Gauley Local (right).



The entire Mikado fleet was represented by no. 142, an Akane brass import, here flying white flags as it hustles through Clintwood, Va., toward Afton with an eastbound freight. Building a sizable roster of one locomotive type was problematic in the 1960s.



V&O steam

ack in the 1960s, I clearly recall that the cost of acquiring a sizable steam roster of brass imports was out of reach of most modelers. The selection of prototypes was limited, and few of them ran very well. Alternatively, the time required to build cast-metal kits based on equally limited prototypes could be better spent on other tasks. And none of them offered the performance we would expect from a model steam locomotive today.

It is therefore no surprise that the V&O's steam roster comprised only a few locomotives, and rarely more than one representative of each class and wheel arrangement. Most were brass imports: an Akane heavy Mikado, 1, a Pacific Fast Mail Sierra Mallet, 2, and two Tenshodo 0-8-0s, 3, for example. One could try to justify this by saying he was modeling steam's last hurrah, but a better idea was to "scrap" the steam fleet altogether and follow the prototype's lead by fully dieselizing the roster, which Allen did. Nice as it was to see a high-drivered Pacific on a local passenger train, 4, that isn't what caught our attention—it was the matched sets of Fs or FAs on coal drags that set the V&O apart and told us Allen had a handle on Appalachian coal railroading and was modeling everyday railroading, eschewing flash for substance.



USRA 0-8-0 no. 85, a Tenshodo brass import, often worked Afton Yard but here is out the main line switching the charcoal plant at Fullerton, Va. Like no. 1270, its coal bunker has extended sides.



A Pacific Fast Mail 2-6-6-0 Sierra Mallet-type articulated with the trailing truck removed looked rugged enough for Appalachian service with extended coal-bunker sides. It performed well in coal shifter and helper service. But no. 1270 (originally 170) was the only one on the V&O roster. Here it makes the official last steam run in December 1980.



One of the V&O's most appealing steam locomotives was high-drivered Pacific no. 101, here powering a westbound local passenger train up to Sandy Summit in the V&O's early years.



The Appalachian Lines and subsequent V&O railroads

A Virginian & Ohio Alco Century 424 teams up with an Allegheny Midland EMD GP38, both showing off the new Avant Garde Appalachian Lines paint schemes. The AL diesels were numbered according to their rated horsepower. Stephen Priest

The main purpose of this book is to discuss the 1960s and 1970s, when Allen showed us an enlightened path that scale model railroading would take from that point forward. But his innovative mind later suggested the Appalachian Lines merger and continued when the McClellands moved to a newly constructed home. And the spirit of the V&O continues unabated as an adjunct to Gerry Albers' sprawling Virginian Ry. in nearby Cincinnati. Let's therefore spend some time examining the Appalachian Lines, 1, and the features of the later iterations of the Virginian & Ohio.

The Appalachian Lines

Those who may think Allen's series of innovative ideas stopped in the 1970s should consider the advent of the merger of the V&O, Steve King's Virginia Midland, and my Allegheny Midland in the 1980s. It came about when Allen called me to express his concern that our three railroads were financially and geographically poorly positioned to compete alone with the likes of the Chessie System, enlarged Norfolk & Western, and the Family Lines. Perhaps we should consider merging them into our own system, he suggested.

"The Appalachian Lines!" I blurted out. He instantly agreed that was a plausible name choice, and we soon had Steve on board. As far as I know,

it was the first merger of three model railroads into a new system to compete with regional prototype railroads.

I designed a paint scheme that would be distinctive, not overly ornate, and not hard to paint. Allen stayed with V&O blue and white, Steve with VM Depot Olive and yellow, 2, but I decided the AM needed a shot of color and chose Scalecoat NYC Pacemaker Red instead of black. What I was really looking for was something more along the lines of Lehigh Valley's Cornell Red, as I'm not a fan of pure red, but the test unit, an Atlas GP38, looked pretty good, 3, so Pacemaker Red accented with Trailer Train Yellow it was.

We established the merger date as 1969. The Appalachian Lines

apparently had a friend at ITC, as that company released Avant Garde as its first typeface the following year; we must have received an advance sample and used it for all AL lettering. But to Allen, that date didn't really matter, as he set the new modeled date at 1975. And it's important to note that, as the railroad moved from the initial 1957 period to 1975, Allen's oldest son Brad—an active and highly knowledgeable railfan—assumed an increasingly important role in determining logical traffic patterns and locomotive rosters.

The first diesel in the new scheme was a GP40 that Allen debuted at the 1978 NMRA National in Dearborn (Detroit), Mich. I later designed a unified gray paint scheme for the day