

O Positive: The Case for O-Scale Two-Rail

Article by David Vaughn



Above: NKP 757 (US Hobbies/KTM with Super-Detailing) meets NKP 189 (Key Imports with Lee Turner weathering) with the Nickel Plate Limited on Photographer's Curve, the original track and scenery from John Armstrong's Canandaigua Southern. — Nick Bulgarino photo

Below: Colorado Model Railroad Museum display on model train scales. A gift from the Northern Colorado Model Railroad Club. Used with museum permission. — Michele Kempema photo

Going “bifocular”? Is your present scale getting stale? Are you looking for new challenges or frustrated with adding itty-bitty detail to models you can hardly see? Do you like the mass of your models to feel more like the prototype? Do you want to focus more on individual models than the whole train? Consider O Scale Two Rail (“OS2R”), one of NMRA’s Special Interest Group (SIG) scales.

The scale of our models sets their mass, affects how easy they are to work on, and impacts the detail we can add. Larger-size models are easier to build, detail, letter, and weather. More mass allows better operation, more detail, and easier building. O scale is 1:48 (1/4-inch to the foot) — a bit less than twice HO scale. It is second from the biggest in **Photo 2**; only G Scale is bigger. The mass — scale cubed — is roughly eight times HO scale. The difference is even more striking for smaller scales (like N and Z; **Photo 3**).

When most people think of O, they think of O-gauge three-rail trains like Lionel or MTH. There is nothing wrong with three-rail — lots of modelers started with Lionel, and there is a lot of “play value” in three-rail. However, if you are





Above: Sunset/3rd Rail GP7 with three American Z Line GP7s in front (on flat car) show just how much bigger OS2R is than Z scale. Three units aren't enough to reach the same length as one in OS2R, not to mention the amount of detail on the OS2R model! — Nick Bulgarino photo

interested in scale modeling, three-rail models have certain compromises compared to scale models. The rolling stock is narrowed and shortened to go around sharp curves. The couplers, trucks, and flanges are considerably oversized, and many of these models are based on whimsy, not prototypes. Higher priced three-rail product lines include rolling stock with semi-scale or scale proportions, but the third rail down the center of the high-mounted trucks with

oversized flanges and couplers can be visual distractions.

O Scale Two Rail ("OS2R") is 1:48 scale and the same gauge — the distance between the rails — as Lionel but with scale two-rail track and models, including scale trucks, wheels, and couplers. OS2R models operate the same way as HO and N, using DC or DCC. Some O-scalers use battery power; the larger size allows more room for batteries and decoders.

Proto:48 allows fine-scale gauge and wheels (**Photo 4**).

Through the end of World War II, O scale was a significant part of the scale model train hobby with several quality manufacturers and a stable of custom builders. Indeed, much of NMRA's founding and early development was driven by O-scale clubs seeking common standards. However, after WWII, smaller suburban houses limited layout space and favored smaller-sized trains.

HO-scale manufacturers — most of whom did not have investments in old tool-



O SCALE CENTRAL

Promoting O Scale 2 Rail

O Scale Central is the O Scale 2 Rail (OS2R) Special Interest Group (SIG) for the National Model Railroad Association (NMRA), and a non-profit tax-exempt corporation. We do business as O Scale Central® (OSC). Our mission is to promote OS2R model railroading and to service the OS2R community. To increase the visibility of OS2R and educate modelers about the Scale, OSC sends displays and representatives to train shows, NMRA Conventions, and Railroad PrototypeModeler (RPM) meets.

O Scale Central® maintains a website to promote Scale (www.oscalecentral.com). There, you will find free links to access resources on the website. Our most popular resource is our Scale-Wide OS2R Product and Service Guide, found on O Scale Info (www.oscaleinfo.com). O Scale Info also provides information to anyone curious about OS2R and answers to frequently asked questions.

O Scale Central® is a membership organization. In addition to promoting the Scale, we provide member benefits. OSC publishes a quarterly Journal/Newsletter called The Coupler. Members also enjoy monthly web show called O Scale Central Online, which features interviews with industry insiders and prominent modelers.

OSC maintains a voluntary, password protected Membership Directory to connect our members and the greater OS2R community. We also provide a private forum for OSC members to discuss topics of interest. OSC also works with OS2R manufacturers, show sponsors, and O Scale 2-Rail model train clubs to promote the Scale.

To join O Scale Kings/O Scale Central®, go to www.oscalekings.org/WP/. In the menu on the top of the website, hover over "JOIN" without clicking it. You will find options to fill out an Online or Mail-in application. Follow the instructions for the option selected.



Above: On the left is traditional O scale (the most common form of O-scale standard gauge) and Proto:48 (standard gauge O-scale fine scale) is shown on the right. — Norm Buckhart (ProtoCraft) photo, used with permission

ing — were much quicker post-war to figure out plastic injection-molding and mass production. Several O-scale manufacturers (e.g., Varney, Athearn) brought out HO-scale lines and gradually dropped all or most of their O-scale models. Brass locomotives and rolling stock were built for OS2R and HO, but the larger scale engines with shorter runs were generally more expensive.

OS2R has a cadre of dedicated modelers, but the enormous growth of model railroading has made O a minority scale. Some modelers may have never seen OS2R models; most have no idea what is available in the scale and how to find and use it. That's too bad, because modelers who have not yet chosen a scale or are frustrated with the limitations of their present scale would do well to consider OS2R. Indeed, most OS2R modelers started in other scales and converted.

A variety of equipment and accessories is available in OS2R. A comprehensive listing and how to find it is available at the OS2R Product Guide (<https://oscalecentral.com>). The searchable Guide, sponsored and maintained by O Scale Kings, is free to users and vendors and has more than 200 listings. O Scale Info (<https://oscaleinfo/WP>) provides a narrative introduction to OS2R and answers to frequently asked questions for modelers considering OS2R.

Although recent supply chain issues have caused disruptions and delays, importers continue to bring in OS2R models. Several more prominent manufacturers offer OS2R models. For example, Atlas (shop.atlasrr.com/) has a comprehensive line of OS2R engines, rolling stock, track, and accessories. Their Trainman line has attractive price points. Sunset/Third Rail (www.3rdrail.com/) imports a steady stream of OS2R engines, passenger trains, and cars. Bachmann imports a full line of On30 trains, engines, and rolling stock. Smaller manufacturers of rolling stock include, for example, ProtoCraft, which produces high-quality brass freight cars. Check out the Guide for other manufacturers. In

addition, tooling for high-end three-rail can be of high quality, and some three-rail manufacturers also offer equipment in two-rail and/or offer conversion kits.

Dozens of smaller, niche companies produce 1:48 structures, scenery, vehicles, figures, and other accessories. OS2R is the same scale as O-gauge/Hi-Rail, so accessories for three-rail are correctly sized for OS2R. Vehicles are produced in 1:48 and its nearby cousins 1:50 and 1:43.

OS2R is also a scale for builders, and the levels of detail will make viewers look twice (see Photos 5 & 6).

OS2R is a scale with a long history and millions of models produced. The secondary market plays an important role in connecting OS2R models, new and used, to modelers. eBay has a sizable

OS2R presence. Other secondary marketplaces include O Scale Yard Sale (groups.io/g/OSCALEYARDSALE/) and various OS2R online forums. Finding what you need in OS2R is not a problem and prices are comparable to quality HO.

The O-scale community welcomes newcomers and provides ways to gain knowledge and build friendships through social media, train shows, publications, clubs, and organizations. Scale-specific OS2R train shows are only now recovering from the pandemic and can provide not only marketplaces but also clinic and socializing opportunities. An annual OS2R National Convention and numerous smaller, regional shows round out the list of options.

Two OS2R-specific magazines, the online *O Scale Resource* (oscaleresource.com/WP/) and White River Production's *O Scale Trains* (oscalemag.com/), provide OS2R content, ads, and "how-to" articles. White River also publishes the *On30 Annual* (<https://on30annual.com>), which is loaded with excellent O-scale modeling articles. Broader market publications like *O Gauge Railroading*, *Model Railroader*, *Railroad Model Craftsman*, and the *NMRA MAGAZINE* include O-scale content. *Narrow Gauge and*



Above: This single sheathed boxcar, made by Pacific Limited, is a good example of a nicely weathered brass model. — David Vaughn photo

Below: An Atlas O Jack Frost Cane Sugar hopper weathered by Gabriel Martinez. The detail is so incredible, you can easily mistake it for the prototype! — Gabriel Martinez photo



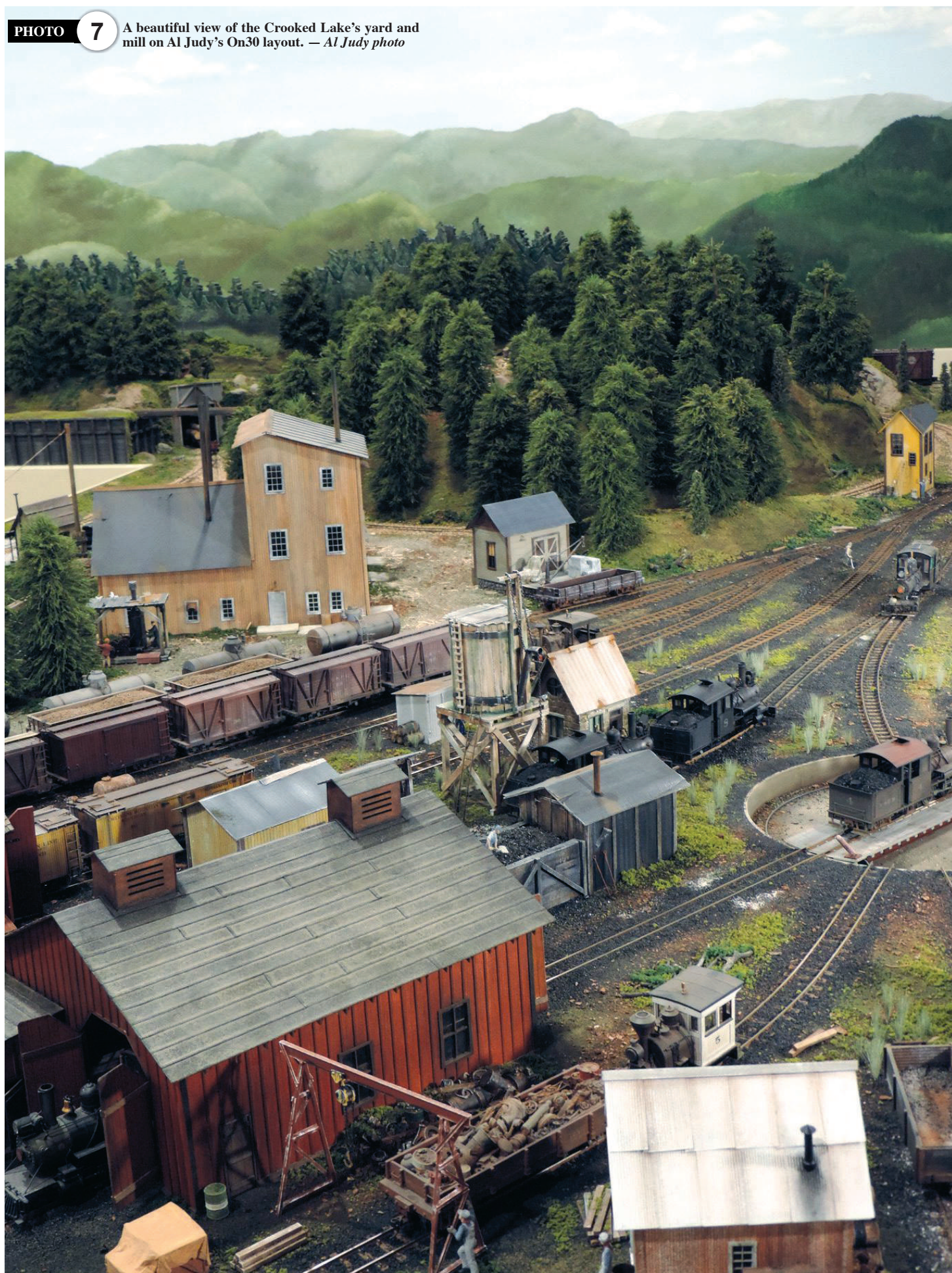


PHOTO 8



Above: O-scale can fit into small areas! This layout, modeled by Atlee Taylor, fits into a 12x10-foot space. — Nick Bulgarino photo

Below: New York Society of Model Engineers (NYSME) has one of the longest histories in O Scale Two Rail. Their club's current location dates back to the 1950s.— Nick Bulgarino photo

PHOTO 9



Short Line Gazette and other niche magazines augment the list and cater to smaller slices of OS2R.

Facebook and other social media sites have numerous active OS2R pages, including “2-Rail O Scale & Proto:48 Model Railroading.” You can find a list of online OS2R groups at oscaleinfo.com’s online groups/forums page. The same is true for OS2R clubs, of which there are several around the country. Check out the “Clubs” section on oscalecentral.com.

O Scale Kings (oscalekings.org/WP/) is a membership organization devoted to promoting and improving OS2R and NMRA’s SIG for the scale. It is a non-profit, tax-exempt corporation supported by dues and contributions. OSK sponsors O Scale Central, the Product and Services Guide, and introductory material on how to get started in the scale. It also publishes a members-only quarterly journal (*OSK Coupler*), provides online programs, maintains a membership-only directory and forum, and sponsors the National Convention. OSK also includes information on OS2R history. O Scale Central also provides lists of OS2R events and promotes the scale at all-scale shows, NMRA conventions, and RPM meets.

OS2R maintains a special presence at NMRA events, including the recent Mid-Eastern Region and the multi-region Indy Junction Conventions. At the upcoming NMRA National Convention in St. Louis, OS2R modelers will staff an OSK display in the SIG room, including Tony Koester’s 1:48 Wingate module, a *Model Railroader* 2020 project layout. The OS2R Big Bend Model Railroad Club and John Russell’s excellent OS2R Rock Island layout will be on the tours. Several OS2R-specific clinics will be offered. Check us out!



OS2R layouts take more room in O. Credible layouts can be built in modest spaces. Narrow gauge layouts bring O Scale mass with smaller equipment and curves (**Photo 7**). Smaller shelf and switching layouts provide great satisfaction in smaller spaces (**Photo 8**). Clubs and larger layouts offer the ability to operate long mainline trains (**Photo 9**). OS2R is actively developing and implementing modular layouts (**Photo 10**).

Technology is advancing in today’s hobby. From 3D-printing to surround sound, O-scale is taking full advantage of these opportunities. Several manufacturers, including SoundTraxx, make higher-capacity decoders suitable for larger locomotives and current draw. Resin cast and 3D-printed

rolling stock projects are well-suited to the relatively small runs common in OS2R. As indicated, the scale has benefited from some high-end engines and rolling stock produced by three-rail manufacturers, which are convertible to, or also offered in, OS2R.

Readers who have questions about O scale, need clarification about anything in the article, or otherwise want more information, please email secretary@oscalekings.org. Thanks for reading. There is no scale like O Scale. 🚂

David Vaughn is President of the O Scale Kings and a member of the O Scale Hall of Fame. He is a former National Director of the Nickel Plate Road Historical and Technical Society and a Sustaining Member of the NMRA.

Left: Prototype OS2R modular standard on display at the October 2020 Strasburg 2-Rail O-scale show. — David Vaughn photo