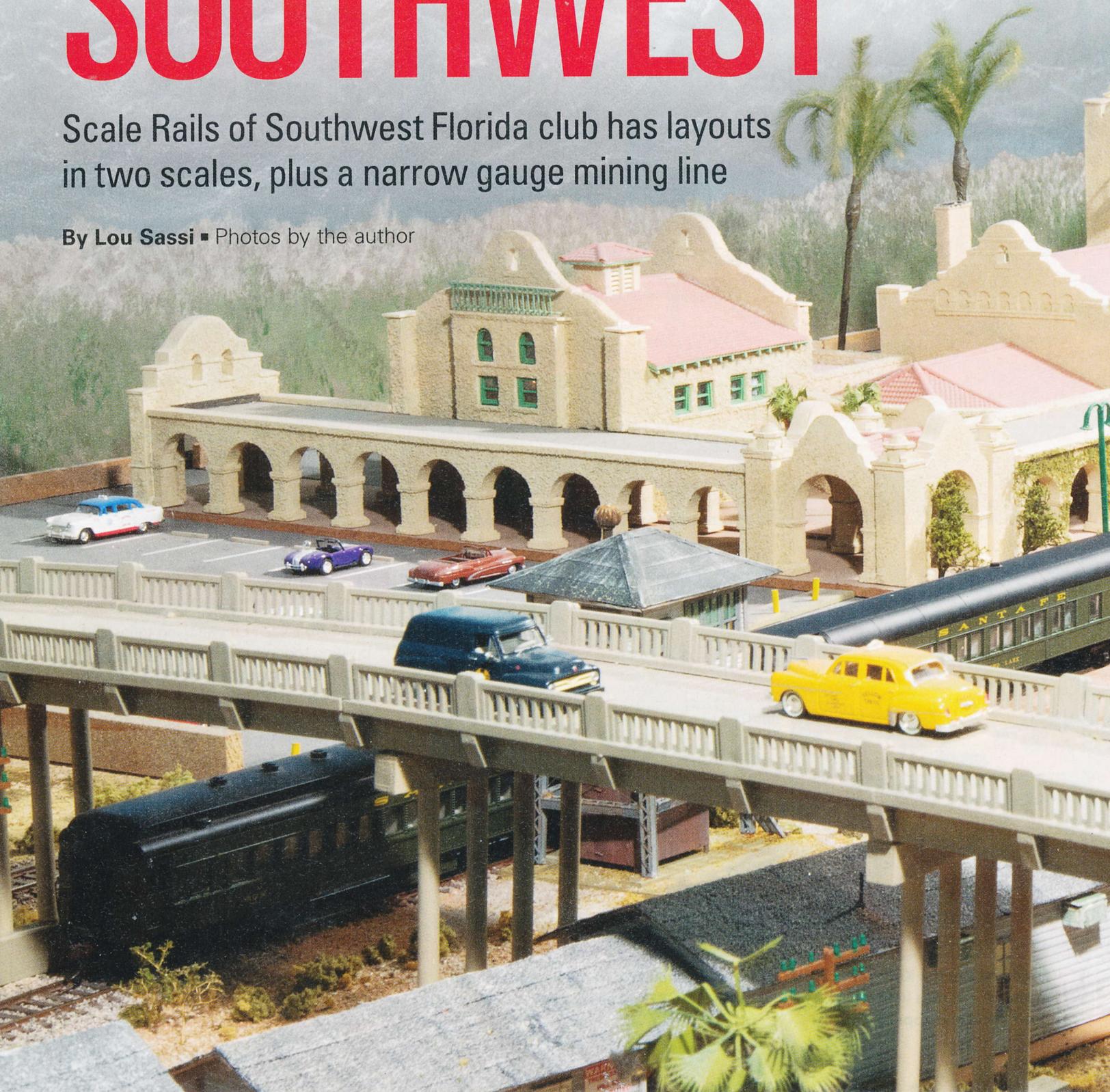


# SOUTH BY SOUTHWEST

Scale Rails of Southwest Florida club has layouts in two scales, plus a narrow gauge mining line

By Lou Sassi ■ Photos by the author



**1** The scratchbuilt San Bernardino Station hosts the eastbound local from Victorville while the westbound *Super Chief* passes through. Club member Stan Seeds built the station from measurements he made on site.





**T**he next time you visit Southwest Florida, be sure to see the Scale Rails of Southwest Florida Model RR Club in North Fort Myers, Fla. The club traces its roots to 1983, when it rented meeting space in the Fort Myers area. In the 1990s, a passenger car donated to the club became its meeting place. After a few years, the club sold the car to a Texas tour company. The proceeds were used as seed money, and members raised an additional \$56,000 to make a down payment on their current 2,500-square-foot, air-conditioned building. The clubhouse includes separate HO/HOn3 and N scale model railroads, an extensive modeling and prototype railroad library, and a tool and machine shop. The

club also owns two boxcars stored in the Seminole Gulf RR yard in Fort Myers.

There are 39 members, 10 of whom focus primarily on N scale [see “The N scale Tidewater Southern RR” on page 92]. Membership includes both full-time Florida residents as well as part-time “snowbirds” who winter in Florida. Activity swells from November to April, when the part-timers are in town.

### A WESTERN THEME

It might seem odd that a club in a Southeastern state would focus on railroading in the Southwest, but club members wanted their HO scale layout to feature big mountain scenery and significant grades. Also, many members owned equipment lettered for western railroads. The decision was made, and the HO scale railroad was named the Santa Fe, Colorado & Western RR.

**2** Rerouted by a track washout, the *California Zephyr* rolls through Pueblo, Colo., on the Scale Rails of Southwest Florida’s HO scale club layout. The station was scratchbuilt by club member Jim Morse.

Portions of the layout modeled on actual California prototypes begin on the upper level in San Bernardino and travel over Cajon Pass past Sullivan’s Curve, Mormon Rocks, and on to Victorville, duplicating the Santa Fe’s Los Angeles Division. Club members made several research trips to the area. On the lower level, the line models a portion of the Denver & Rio Grande Western’s Joint Line from Pueblo, Colo., through Colorado Springs, Castle Rock, and on to Denver. Each level can be run independently, and a helix connects the two between Victorville and

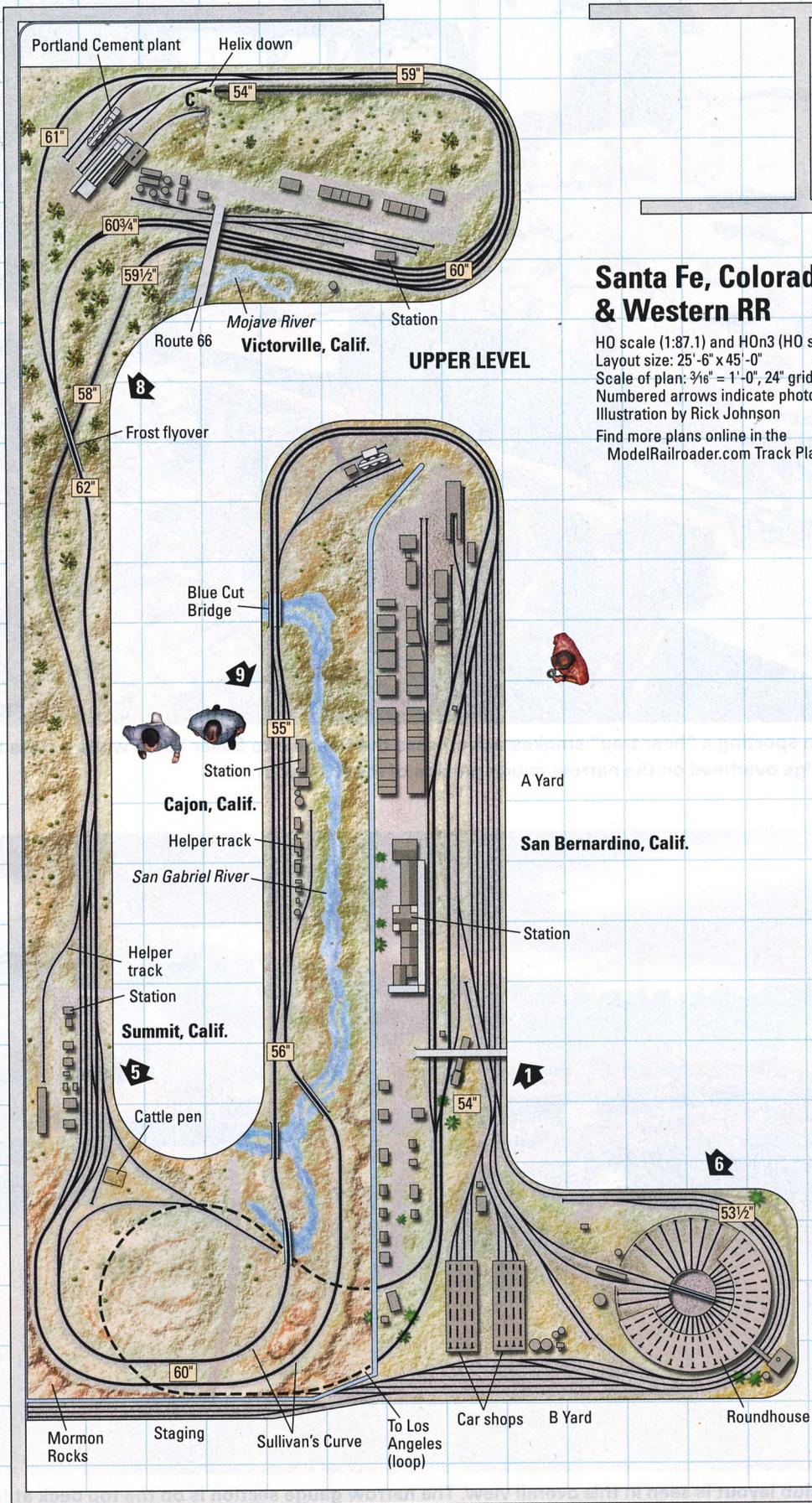
*Continued on page 91.*



**3** A class C-19 Consolidation sporting a “bear trap” smokestack crosses the trestle into Silver Town while a class K-27 Mikado crosses the iron truss bridge overhead on the narrow gauge portion of the HO layout.

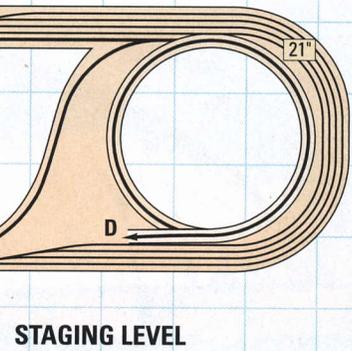
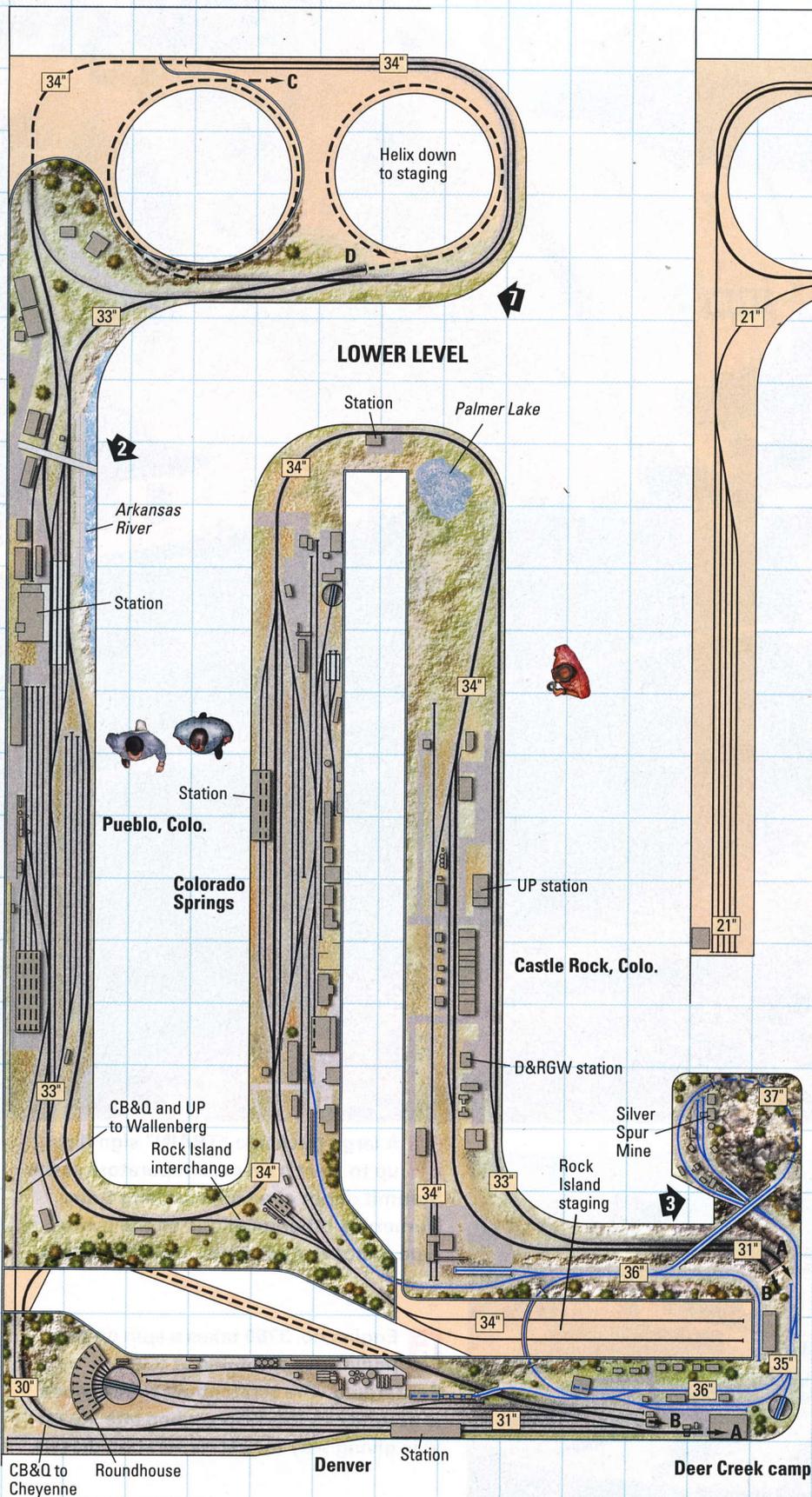


**4** The Scale Rails HO scale club layout is seen in this overall view. The narrow gauge section is on the top deck at far left; Victorville is at far right. The club owns its 2,500-square-foot headquarters.



## Santa Fe, Colorado & Western RR

HO scale (1:87.1) and HO<sub>n</sub>3 (HO scale, 3 foot track gauge)  
 Layout size: 25'-6" x 45'-0"  
 Scale of plan: 3/16" = 1'-0", 24" grid  
 Numbered arrows indicate photo locations  
 Illustration by Rick Johnson  
 Find more plans online in the  
 ModelRailroader.com Track Plan Database.



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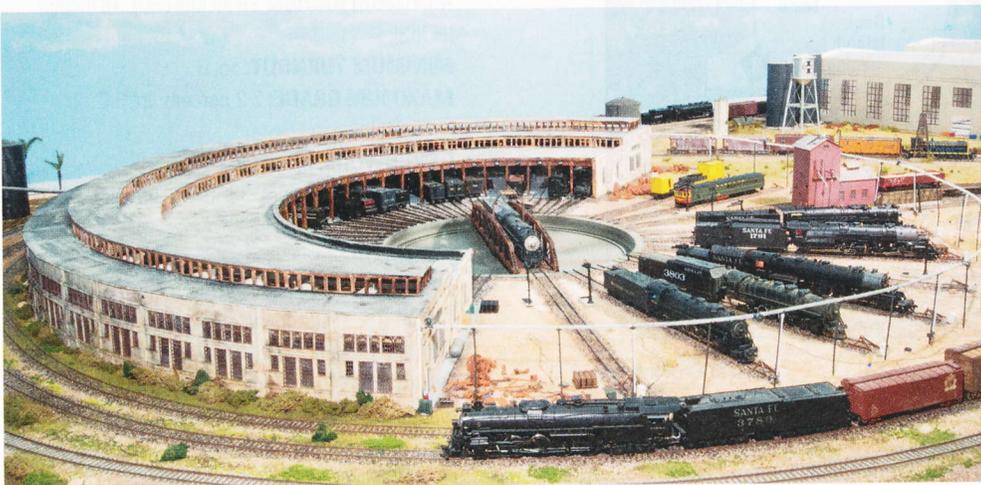
Registered users of our website can watch videos of trains running on both the Scale Rails club's HO and N scale model railroads. Look in the Online Extras section of our home page, [www.ModelRailroader.com](http://www.ModelRailroader.com).

**THE LAYOUT AT A GLANCE**

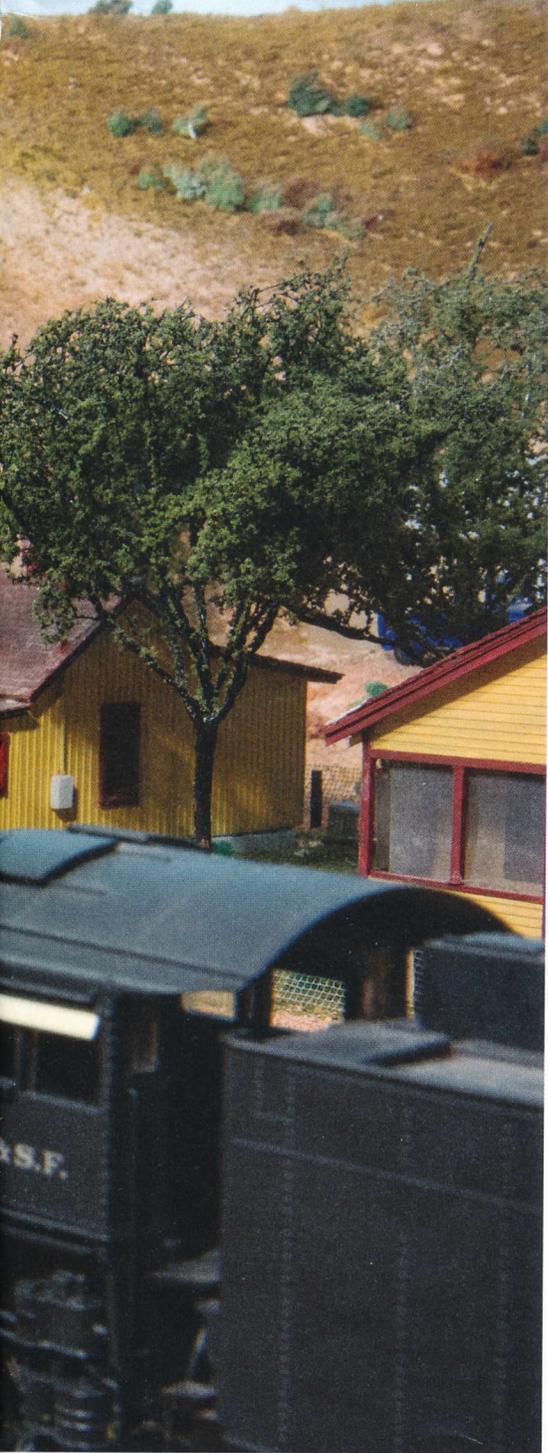
- NAME:** Santa Fe, Colorado & Western RR
- SCALE:** HO (1:87.1) and H0n3 (HO scale, 3 foot track gauge)
- SIZE:** 27 x 42 feet
- PROTOTYPE:** Atchison, Topeka & Santa Fe and Denver & Rio Grande Western
- LOCALE:** California and Colorado
- ERA:** 1955-1965
- STYLE:** multi-level walk in
- MAINLINE RUN:** 731 feet
- MINIMUM RADIUS:** 28 inches (HO), 18 inches (H0n3)
- MINIMUM TURNOUT:** no. 6
- MAXIMUM GRADE:** 2.2 percent up, 3.2 percent down
- BENCHWORK:** open grid
- HEIGHT:** 21" (staging), 32" to 35" (lower deck), 54" to 62" (upper deck)
- ROADBED:** cork
- TRACK:** code 83 flextrack (HO), code 70 (H0n3)
- SCENERY:** Sculptamold on plaster cloth over extruded-foam insulation board forms
- BACKDROP:** painted on tempered hardboard, wallboard, and concrete block walls
- CONTROL:** Digitrax DCC



**5** A large trackside “TRAIN” sign flips up to alert train order operators at the Summit depot of an approaching train. Numerous other locations on the prototype Santa Fe had similar train indicators.



**6** Engine no. 3780 takes a spin on the pony-truss turntable at San Bernardino. The scratchbuilt roundhouse is accurate to the 1950s, when late steam was giving way to first-generation diesels.



## A tale of two helixes



**7** Trains emerge from the helix connecting the upper and lower decks of the club's HO scale layout from the tunnel portal at left. Above the portal are two windows that let operators see their trains inside the helix. The lower helix in the foreground, yet to be enclosed, leads down to staging.

**THE LONG UPPER HELIX** connecting the decks of the Scale Rails club's HO scale layout represents the tracks between Victorville, Calif., and La Junta, Colo. Operators can keep track of their trains' progress on this helix on a nearby control panel. There, light-emitting diodes (LEDs) representing towns along the route – such as Flagstaff, Ariz., and Albuquerque, N.M. – light up as the trains pass infrared detectors spaced about a foot apart on the helix track. Two windows are cut into the helix's enclosure for those who want a more direct visual confirmation of their train's safe passage.

After emerging from the tunnel portal at the base of the helix, trains reach a turnout. One branch routes trains to Pueblo, Colo., on the lower level; the other sends them down a second helix to staging. Depending on whether the trains came from California on the upper deck or Colorado on the lower, this helix represents different prototype routes, so the indicator lights on this helix's panel show different towns being passed depending on which way a toggle switch is thrown.

Thanks to the close spacing of the infrared train sensors on the tracks, operators can safely run more than one train on the helixes at a time by maintaining a three-light space between them on the control panel. This keeps trains flowing, making tight schedules possible. – L.S.

*Continued from page 86*

Pueblo. Another helix running down from Pueblo goes to staging. There's also a 3-foot narrow gauge line that climbs from Colorado Springs into the Rocky Mountains' timber country. In addition to logging, the narrow gauge line delivers livestock, ore, and coal to Colorado Springs, where several dual-gauge tracks facilitate interchange.

### CONSTRUCTION AND SCENERY

The upper level of the railroad was built using just about all the tried-and-true techniques ever detailed in *Model Railroader*

over the years. The lower sections were actually built in the open aisle area and pushed into place under the upper level when finished. This prefabrication included benchwork, track, and wiring. Scenery was added after the lower levels were installed.

The original turnouts on the layout are gradually being replaced with handlaid ones using Fast Tracks assembly fixtures. There are more than 40 standard gauge, 15 dual gauge, and 25 HO<sub>N3</sub> turnouts.

Most structures on the layout are built from craftsman kits or kitbashed for their specific locations. There are 45 National

Model Railroad Association Merit Award-winning models on the layout. The layout was constructed when Digital Command Control was very new. From the beginning, the model railroad was wired for DCC, with the advice and technical assistance of a very helpful Digitrax dealer.

The lower level is lit by incandescent lighting installed under the upper-level benchwork before the scenery was started. Incandescent track lighting illuminates the upper level. Soon, both will be replaced with light-emitting diode lighting.

*Continued on page 94*

## The N scale Tidewater Southern RR



Florida East Coast E7 no. 1007, pulling a Jacksonville-to-Miami passenger train, passes a station in its namesake state on the Scale Rails club's modular N scale layout.

**THE SCALE RAILS CLUB'S** N scale layout is modular, based on Ntrak standards. When all modules are assembled together, it's 49 inches wide by 27 feet long.

The setup is normally controlled with Digitrax Digital Command Control, but the main lines are electrically isolated so they

can be run using direct current if a club member desires.

The scenery and structures are loosely based on the Tidewater region of the southeastern United States from the early 1950s to the mid-1970s. The layout doesn't model any specific town or rail system, since the first three modules were cobbled together from an older layout. These three modules were later remodeled to provide a seven-track yard. Two integrated 6-foot-long modules were added with a fourth inner track serving multiple industries.

The four Ntrak standard corner modules were replaced with 180-degree end modules with tighter than standard curve radii. This reduced a 1-foot back-to-back gap between the modules to 1". Space for the layout was at a premium, and no operator could fit into the 1-foot opening anyway. With additional modules, the layout now has the two end modules, four 6-foot modules, and six 4-foot modules.

A long passing siding was added to allow for the addition of another module, this one featuring two switching puzzles.

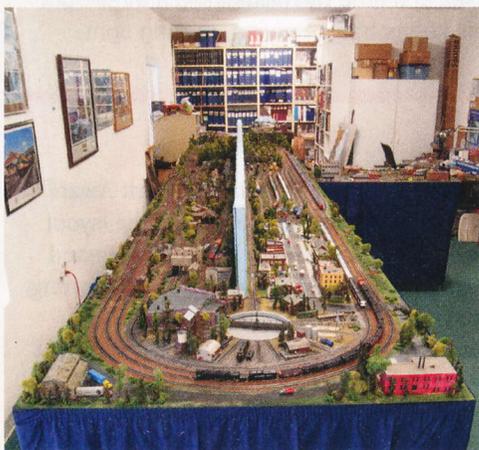
This module has sections based on the "Timesaver" and "Inglenook Sidings" switching puzzles. Under DCC control, both puzzles can be worked at the same time.

Though many Ntrak setups simply let three trains travel around and around in an oval, the Tidewater Southern includes plenty of industrial sidings to switch. The industries on the main layout include oil depots, coal mines, flour mills, power plants, warehouses, grain elevators, and factories. The Timesaver offers five more.

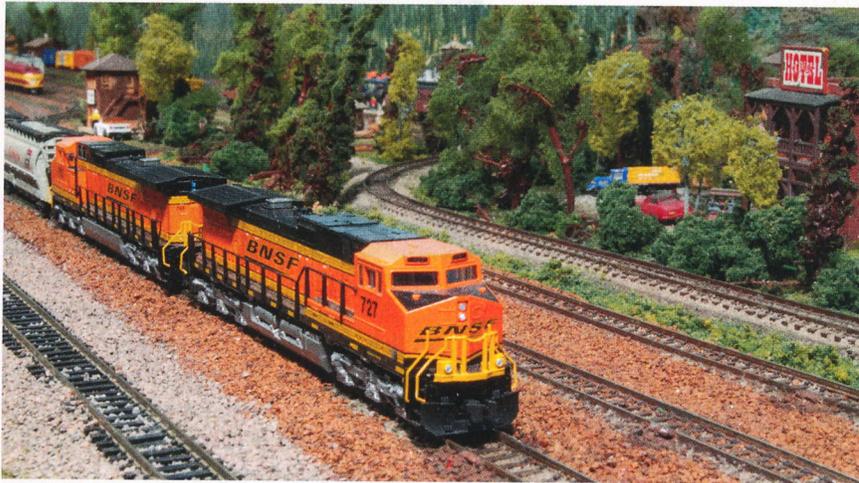
The layout boasts more than 150 structures. Featured are laser-cut wood kits by Bar Mills, American Model Builders, Blair Line, JL Innovative Design, and Northeastern Scale Models. Plastic structures include Walthers Cornerstone, Design Preservation Models, and Woodland Scenics models.

Though there are no grades on the layout, three modules incorporate mountain scenery. This is constructed from Sculptamold and plaster cloth over extruded-foam insulation board.

Most of the trees are made from twigs that are coated with hairspray and flocked



This overall view shows the club's Ntrak layout from the locomotive terminal end. The club exhibits the layout at an annual train show.



**A pair of Burlington Northern Santa Fe General Electric C44-9W diesels roar across the countryside on the N scale layout. The locomotives are by Kato.**

with various ground covers; many are also made with poly fiber.

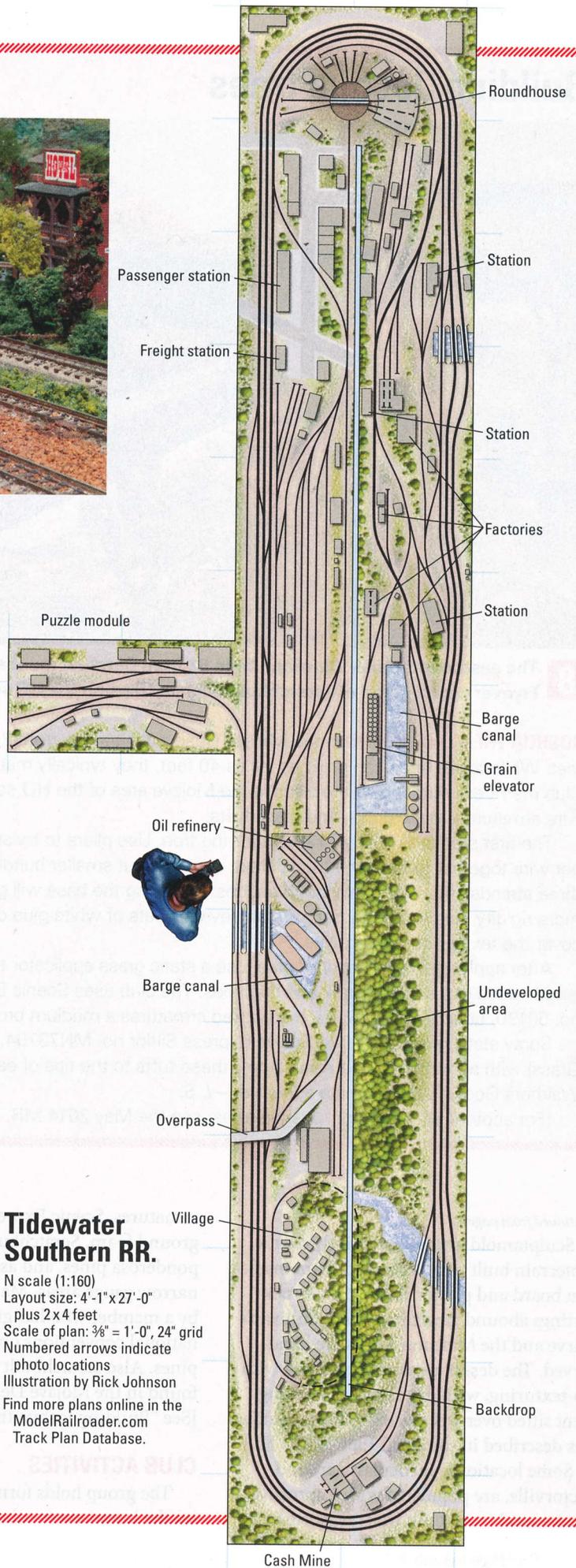
The N scale railroad is a feature at the Scale Rails of Southwest Florida train show each year. Members can set the layout up or break it down for transport in about two hours. As sound units have become available in N scale, the club now has two diesels and two steam locomotives with sound. Members plan to build two more 6-foot modules and to add more sound-equipped locomotives. — L.S.

## THE LAYOUT AT A GLANCE

**NAME:** Tidewater Southern RR  
**SCALE:** N (160:1)  
**SIZE:** 4'-1" x 27'-0" plus 24" x 48"  
**PROTOTYPE:** freelanced  
**LOCALE:** Eastern United States  
**ERA:** 1950-1970  
**STYLE:** island  
**MAINLINE RUN:** 162 feet  
**MINIMUM RADIUS:** 18"  
**MINIMUM TURNOUT:** no. 4  
**MAXIMUM GRADE:** none  
**BENCHWORK:** modular  
**HEIGHT:** 40"  
**ROADBED:** cork  
**TRACK:** code 80 flextrack  
**SCENERY:** Sculptamold on plaster cloth over extruded-foam insulation board  
**BACKDROP:** painted tempered hardboard  
**CONTROL:** Digitrax DCC

## Tidewater Southern RR.

N scale (1:160)  
 Layout size: 4'-1" x 27'-0"  
 plus 2 x 4 feet  
 Scale of plan:  $\frac{3}{8}$ " = 1'-0", 24" grid  
 Numbered arrows indicate photo locations  
 Illustration by Rick Johnson  
 Find more plans online in the ModelRailroader.com Track Plan Database.



## Building Joshua trees



**8** The eastbound *Super Chief* and train 62 from Barstow meet at the Frost Flyover near a stand of scratchbuilt Joshua trees on the HO scale layout.

**JOSHUA TREES ARE FOUND** in the Mojave Desert at altitudes from 2,000 to 6,000 feet. While these trees can grow as tall as 40 feet, they typically mature at 15-30 feet. Club members scratchbuilt the trees in the Mojave area of the HO scale layout using wire armatures, static grass, and grass tufts.

The first step is to build a skeleton for the tree. Use pliers to twist bundles of copper wire together to form the trunk. Next, separate out smaller bundles of two or three strands and twist them into branches. Soldering the base will give the trunk more rigidity, but isn't necessary. Brush several coats of white glue on the wires to cover the texture of twisted wire.

After applying the last layer of glue, use a static grass applicator to apply 2mm-length static grass to the trunk and branches. The club uses Scenic Express no. 50190, Late Summer. Spray the flocked armatures a medium brown color.

Spray static grass tufts (like Scenic Express Silflor no. MN73794, Autumn Buffalo Grass) with a medium green paint. Apply these tufts to the tips of each branch with Walther's Goo or cyanoacrylate adhesive. – L.S.

[For another way to model Joshua trees, see the May 2014 MR. – Ed.]

*Continued from page 91*

Sculptamold is used extensively over a subterrain built from extruded-foam insulation board and plaster cloth. Plaster rock castings abound, and the rocks at Sullivan's Curve and the Mormon Rocks are hand-carved. The desert areas are scenicked with zip-texturing, with dry Hydrocal and pigment sifted over wet plaster. [This technique was described in the April 1965 MR. – Ed.]

Some locations, particularly around Victorville, are populated with impressive cottonwood trees, built from sagebrush

armatures, Scenic Express SuperTrees, and ground foam. Scratchbuilt lodgepole pines, ponderosa pines, and aspens fill much of the narrow gauge areas. Many of these were built by a member who has given clinics at national conventions on making realistic pines. Also scratchbuilt were the Joshua trees found in the Mojave Desert near Victorville. [See "Building Joshua trees" above. – Ed.]

### CLUB ACTIVITIES

The group holds formal operating sessions on the layout every other Thursday morning.

## MEET THE SCALE RAILS CLUB



**THE CLUB** welcomes visitors Tuesdays and Saturdays from 10 a.m.-2 p.m. The clubhouse is at 1262 Piney Road, North Fort Myers, Fla. More information about the club is available on the web at [www.scalerails.org](http://www.scalerails.org).

It takes about 20 operators to conduct a full session, including two or three dispatchers and five yardmasters.

The staging yards at La Junta, Denver, and Los Angeles can hold 24 trains between them. Trains operate on timetable and train orders (TT&TO), and cars are routed using car cards and waybills. During a typical session, 20 to 25 trains will run, including the *California Zephyr*, *Super Chief*, and *Royal Gorge*, as well as local passenger hops, freight trains, and freight extras.

Scale Rails is a 100 percent NMRA club, meaning all members belong to the organization. This gives the club access to the NMRA's insurance and achievement programs. Two club members are NMRA Master Model Railroaders, and other members hold modeling achievement certificates.

Each spring, Scale Rails provides free modeling clinics for both members and the general public. These clinics include modeling subjects such as trees, building craftsman kits, scratchbuilding models, weathering techniques, electronic controls, handlaying turnouts, locomotive maintenance and repair, resin casting, scenery, and a range of DCC topics. Many current members were introduced to the club via these clinics, which are held every Saturday from January through April.

More than just a collection of friends who like to run trains together, the Scale Rails of Southwest Florida club has the goal of building a museum-quality model railroad display. Though work on both layouts continues, it's apparent that its members have achieved this goal. **GMR**



**9** The latest in 1950s motive power, a set of Electro-Motive Division F3 diesels, rolls through Cajon, Calif. The buildings were scratchbuilt by Stan Seeds, a National Model Railroad Association Master Model Railroader.