

Arizona Railroad



Historical Society

The Desert DISPATCH

Timetable

ARHS

Arizona Capitol Museum
1700 W. Washington St.
Phoenix, AZ

Special Notice Regarding COVID-19

As a public health precaution, **the Museum will be closed to the public until further notice.** The Arizona Capitol Museum is following industry standards and practices of museums across the region with plans for reopening later this summer. Due to the need to procure sanitizing supplies and protective coverings, in the best interests of our staff and visitors' health, we will open to the public soon. More information at: <https://azlibrary.gov/azcm>

ARHS Fall Swap Meet Saturday, Nov 28, 2020

9:00am-1:00pm

**Glendale Christian Church
9661 N. 59th Ave.
Glendale, AZ 85302**

For more information, call:
Craig 623-340-3529
DeWayne 623-308-1574

ARHS Returns to Layout Work at the Museum on a Restricted Basis



Arizona Capitol Railroad (ACR) narrow gauge engine number 12. This is a Blackstone C-19 loco in late 1880s paint scheme. There is also a matching engine 13. See below for more information on recent locomotive and rolling stock acquisitions by the ACR

President's Message

By Don Stewart, ARHS President

It has now been 5 months since the Museum has been closed. Beginning Friday August 28, the museum is allowing only two people per volunteer group in at a time. Therefore, we will resume work at the museum on a limited basis. We have asked the museum to allow 4 to 6 of us to go into the museum at a time to work while the museum is closed. Stephanie said she would discuss it with her managers and get back to me on when we can go back in. On three occasions, several members have gone down to move toolboxes into the storage area, drop off supplies, and measure the perimeter for the plexiglass barrier on the wall.

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ARHS Officers 2020-2021

President - Don Stewart
Vice President - Craig Faris
Secretary - Dave Brown
Treasurer - Dan Kubarych
Director - Ken Nelson
Director - DeWayne Koltin
Past President - Jesse Poole

The Desert Dispatch is a publication of the Arizona Railroad Historical Society. Views expressed by guest authors are their own and do not reflect the opinions or positions of the ARHS.

Editor - Bob Bridges
rkbridges611@gmail.com

Mission Statement

The **Arizona Railroad Historical Society** strives to create a world class railroad experience which includes history, education and railroad operations centered around the state of Arizona.

We are honored and excited by the opportunity to create an exciting experience in the Arizona State Capitol Museum in downtown Phoenix.

President's Message Continued

1. **We have also had a few meetings at member's houses.** It was nice to see other members and reconnect. It was good to see the harassment and joking were still in most all of us. A work session held at Jess' house went well with lots of tool cabinets disassembled and additional parts cut. The weatherman promised a 99-degree day but delivered a 106-degree day. While it was hotter than planned, we accomplished a lot. Jess and Jenny provided a great lunch to top off the day. We will get back together when this blasted heat improves.
2. **Those constructing buildings should send in photos of the work, even if it is just in progress.** Pictures of finished buildings can be sent in later. (Editor's Note: See page 3 for building photos!)
3. **Some Arizona Capitol Railroad (ACR) locomotives and cars have been finished.** Photos of some narrow-gauge equipment are shown below. We need to develop a logo for the ACR. If you have any ideas, let me know and we can start sending them around for review.



ACR Tank Car, narrow gauge (Blackstone narrow frame tank car)
 More photos page 4. *Photos by Don Stewart*

That is it for now guys. Keep the faith and work on what we can from home. When I hear from the museum, I will let you know.

Don



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ARHS Elections held at July Business Meeting

Elections for ARHS officers and board of directors were held during the July 13, 2020 business meeting. Ten members were present (quorum = 9 members). Members elected to a 2-year term are as follows: Craig Faris, Vice-President; Dan Kubarych, Treasurer and Ken Nelson, Board of Directors.

Editors note: *If you are building a model at home, please take pictures and email them to me with caption information. I would like to post them to our Facebook page, website and use them in coming issues of the Desert Dispatch – Bob rkbridges611@gmail.com*

Modeling at Home



Old 1950s service station from a modified City Classics kit. It may find a home along Route 66!

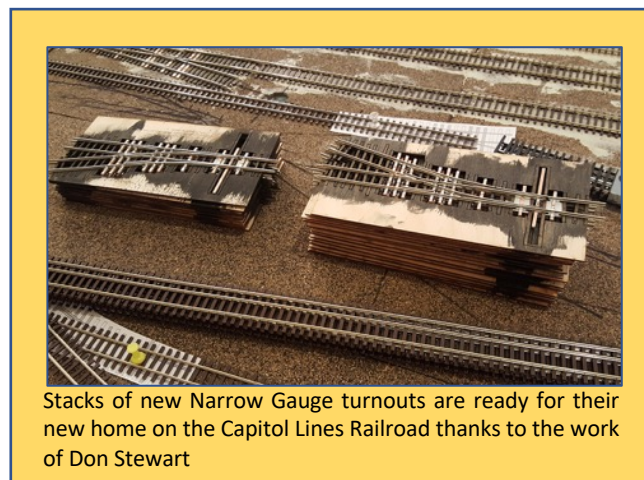


A craftsman style farmhouse, from a Walthers kit, typical of houses in Tucson and Phoenix in the 1940's and 50's.



Produce warehouse based on a Walthers kit. It may reside in the Phoenix industrial area, often called "The Duce".

Although the Capitol Museum is closed, Ray Rumble has completed the three fine looking structures above. *Photos by Ray Rumble*



Stacks of new Narrow Gauge turnouts are ready for their new home on the Capitol Lines Railroad thanks to the work of Don Stewart



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New Narrow Gauge Cars



ACR narrow gauge engine number 41. It is also a Blackstone C-19 of a later era. It was purchased from the Rio Grande Southern in 1952.

Photos by Don Stewart



ACR narrow gauge boxcar (another Blackstone car). There are 2 cars ready so far.



ACR narrow gauge log car is a Keystone kit. The ACR has 4 of them.

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Narrow Gauge Rolling Stock

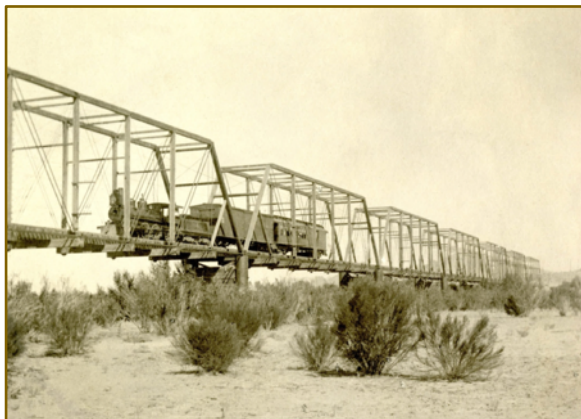


ACH NG flat cars will handle the cut wood (Blackstone with Stewart Locomotive Works load)

Railroads to Phoenix

By Jon Talton

<http://www.rogucolumnist.com/>



Tempe History Museum photo

The recent derailment and fire of a Union Pacific train on the Salt River bridge is a reminder that railroads still play a role in Phoenix, even if far less than in the past. As the late David Myrick explained in his seminal

Railroad of Arizona: Phoenix and the Central Roads, eight attempts were made to build a line to the Salt River Valley before the Maricopa and Phoenix Railroad's first train arrived on July 4th, 1887.

Among the many impediments — capital, supplies, heat, permission of the Pima Indians to cross their reservation — bridging the fickle Salt River was among the most persistent. The bridge pictured at left shows a "ten-wheeler" steam locomotive and two cars on the second iteration of the span. The first saw a flood destroy its approach trestle in 1890, then was severed entirely by the Great Flood of 1891, which also did substantial damage to canals and farmland; adobe structures collapsed from the rain.

In 1902, part of the bridge gave way without warning, dropping the locomotive 20 feet into the riverbed, killing one and severely injuring another, and leaving a passenger car hanging precariously. In 1905, the flooded Salt washed away a segment of this second bridge just minutes after a passenger train had crossed it. Similar washouts plagued the railroad's crossing of the Gila River.

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The 1902 Salt River Bridge collapse.

Finally, the current heavy steel truss bridge was built in 1912-1913. [UP says it will rebuild it](#) — or at least replace one of the truss spans — which is good news for continued freight and potential future passenger service. Given Wall Street's pressure to suck profits from major railroads and Phoenix's relative unimportance on the system, I'd be surprised if UP built an entirely new and modern bridge. **(Editor's Note: UP completed the replacement of the damaged spans and is in the process of repairing road damage at the site. Trains are again running over Tempe Town Lake—Arizona Republic, August 13th.)**

Such was not always the case.

Phoenix was once a railroad town, with multiple passenger trains daily and heavy volumes of freight originating from [the agricultural empire](#) made possible by Theodore Roosevelt Dam and its successors (which also prevented catastrophic flooding as seen in 1891 from washing out the bridge). Previously I wrote about [Phoenix Union Station](#).

But getting steel rails here in the first place wasn't easy. The Southern Pacific built across southern Arizona, reaching Tucson in 1880, with the incentive of federal land grants. The same was true in northern Arizona with the Atlantic and Pacific, which was absorbed by the Atchison, Topeka & Santa Fe Railway. But Phoenix was walled off from the north and east

by mountains and the escarpment of the Mogollon Rim.

The Maricopa and Phoenix, eventually becoming part of the Southern Pacific, was the first breakthrough. The second came in 1895, when the Santa Fe, Prescott and Phoenix Railway — a subsidiary of the AT&SF after 1911 — arrived in the territorial capital. It came via the twisty "Peavine" that left the Santa Fe main line at Ash Fork and went south to its namesake cities, as well as linking to mining short lines along the way. A second Santa Fe route branched west from near Wickenburg to cross the Colorado River and the railroad's main line in California.

Locally, the Phoenix, Tempe & Mesa Railway Co. built from Tempe to Mesa in the 1890s. Part of its remains are the roadbed of light rail (WBIYB) today. Another road, the Arizona Eastern was built from Phoenix and Tempe to Florence. Many of these early lines eventually folded into the SP benefited from the leadership and engineering skill of [Epes Randolph](#). But these were only spur lines, even though 11 pairs of trains ran daily here. Phoenix lacked a transcontinental railroad in the era when such an asset was of prime economic importance.



The Maricopa depot when it was the junction for trains to and from Phoenix, circa 1890.

As far back as the Pacific Railroad Surveys of 1853-55, carried out under orders from Secretary of War Jefferson Davis, future Confederate President, a route that would have gone through

the Salt River Valley was considered. It would have gone roughly from east of present-day Willcox northwest through Aravaipa Canyon and the Gila River Canyon.

Considering the primitive tools available to railroad builders, forbidding topography and Apache resistance, it's not surprising that this route never happened. At least as a transcontinental — rails ran each way eventually with a gap between Superior and Globe. Had it happened, this railroad not only would have reached prime copper country but put Phoenix on the map much sooner.

Instead, what eventually became the Northern Main Line or Phoenix Main Line came about in segments, many built by individual companies instead of big SP making it happen.

For example, in 1909 the Phoenix & Buckeye Railroad Co. was incorporated by Phoenix bankers and lawyers (Sheriff [Carl Hayden](#) was a director). Buckeye (once Sidney) was rich in alfalfa and ranching; a brief boomlet from a gold mine in the White Tank Mountains added interest. It was built through Tolleson, Avondale, and Buckeye to the Hassayampa River. Yet another line was constructed to Chandler. And none of these came easily. Surveying of the Northern Main Line finally began in July 1924 and it opened in November 1926. It allowed the Southern Pacific to beat a potential competing line west of Buckeye and, more important, to avoid double-tracking the southern line through Casa Grande and Tucson. Construction methods had advanced substantially from 40 years previously, including the use of REO Speed Wagons (not the band) to carry track workers.

When the 210 mile line from Picacho Junction through Coolidge, Chandler, Mesa, Tempe, and Phoenix to Wellton opened just east of Yuma, it rejoined the SP lines to Los Angeles and San Diego. Decades of dreams and hard work ("with many a fortune won and lost, and many a debt to pay") were crowned. The old Maricopa branch would be cut back to Kyrene.

SP shifted almost all of its transcontinental passenger trains [to Union Station, completed in 1923](#). SP built a new Tempe depot in 1924, replacing one lost to fire. Mesa saw a lovely new station opened in 1931; inside were murals by California artist John MacQuarrie.



Mesa's handsome passenger depot. It burned in the 1990s. Coolidge's charming station was demolished in the 1980s.

For decades to come, Phoenix enjoyed daily intercity trains service to New Orleans and Chicago, Los Angeles and the West Coast on SP, and a daily connection to Santa Fe's legendary main-line passenger "varnish" at Ash Fork (eventually Williams Junction).

Rails also moved heavy volumes of express and mail. These were carried on the front end of passenger trains, as well as SP mail trains. The Northern Main Line was as important as air conditioning to ending Phoenix's isolation and enabling growth.

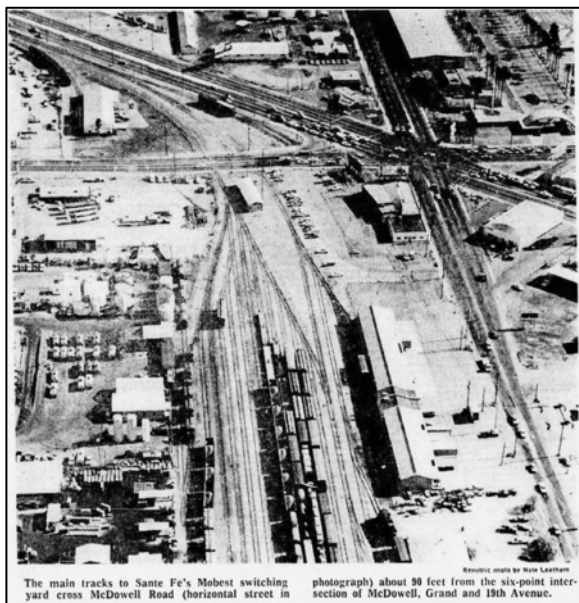
As critical, the main line enabled the Salt River Valley's bounty to be moved more quickly and farther to outside markets. These were principally citrus, lettuce, tomatoes, and other produce carried in refrigerated boxcars, much of it packed in [the downtown Warehouse District](#).

The "reefers" were iced from massive ice docks along the tracks downtown and on the Santa Fe beside Grand Avenue. Mechanically produced ice was fed into the cars' bunkers to keep the produce cool on its journey to eastern markets. Livestock came in cattle cars to the massive Tovrea Stockyards; Arizona beef traveled out in reefers from the slaughterhouses.



A lettuce train prepares to leave Phoenix in 1927. The refrigerated boxcars have ice shoved into their bunkers to keep the produce fresh.

Given the desert routes, both Santa Fe and Southern Pacific were quick to adopt diesels in the 1940s to replace water-guzzling steam locomotives. To handle this traffic, each railroad built and expanded yards. The SP's is between 16th and Seventh Streets. SP also built a bypass line south of Union Station exclusively for freight trains.



The main tracks to Santa Fe's Mobest switching yard cross McDowell Road (horizontal street in photograph) about 90 feet from the six-point intersection of McDowell, Grand and 18th Avenue.

The Santa Fe Mobest Yard (*above photo*) opens up at McDowell and 19th Avenue, running south. In addition to hundred-car trains originating here and others running through, both railroads built spurs to lure new industries

and served them with local freights. By the 1990s, SP added a smaller yard on Phoenix's west side and Santa Fe built container and automotive yards in Glendale and Peoria. When you cross the overpasses at Seventh Street and Seventh Avenue, you get a sense of the extensive trackwork that once ran beneath — now it's a single track.

In 1964, a line shift stranded Chandler from the main line, which ran via Gilbert.

In 1996, Union Pacific acquired Southern Pacific, once mighty and by then ailing. This brought together the two companies that had built the first transcontinental railroad. Late that same year, Santa Fe merged with Burlington Northern as America's once large number of Class I railroads dwindled to five.

By this time, the Salt River's agricultural Eden was being given over to sprawl at the rate of an acre an hour. Amtrak stopped service to Phoenix when the state refused to help keep the line to Wellton up to speed- and safety-standards. This left Phoenix the largest city in North America without intercity passenger trains. The UP's active line now runs from Picacho through Phoenix to Arlington; the rails west are out of service but could be revived.

As for freight, while railroads [still play "a significant role,"](#) the biggest outbound commodity is scrap metal; inbound new automobiles are the big load. Arizona has one of the smallest freight origination footprints in America, certainly for its size. The dreamers and builders of 120 years ago couldn't have imagined such a future.

This column first appeared on [roguecolumnist.com](http://www.roguecolumnist.com). It is reproduced here with permission from the author.

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Club Work Continues During Shutdown

In late July several club members gathered at Past President Jesse Poole’s home to work on custom storage cabinets to hold rolling stock and other layout materials. The cabinets will utilize metal drawers salvaged from new and used mechanics tool carts the club has recently purchased. The drawers and hardware had to be removed from the metal cabinets and new custom sized wooden cabinets are to be constructed from ¾ inch plywood. Despite temperatures that climbed into the triple digits on a hot July morning progress was made!

On hand were Jesse Poole, ARHS President Don Stewart, Board of Directors member Ken Nelson, Bob Bridges, John Clark, Ray Rumble and Al Shultz.

Much thanks to Jesse and Jenny Poole for lunch and refreshments for the work crew!



Don Stewart, Ken Nelson and Jesse Poole cut plywood for the custom rolling stock cabinets.



Bob Bridges roughs up paint on drawers in preparation for refinishing.



Ray Rumble, left, and Al Shultz work to dismantle draws from the original cabinets that will be used for the custom layout cabinets.



Why is John Clarke smiling? Because he got to work inside an airconditioned room while prepping drawer slides.



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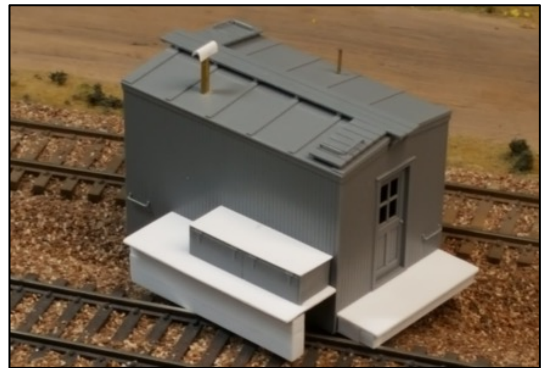
Finishing a Small Work Shed

Techniques for Creating Peeling Paint Effects

By Don Stewart

After building a Tichy boom tender car into a flat car, the small half box car body was left over. It was built into a small tool shed with a work bench and steps to the doors. The basic shed was from the Tichy kit and the rest was scratchbuilt. Figure 1 shows the structure after building.

Figure 1: Adding a scratchbuilt work bench, smoke jack, vent pipe and steps to the Tichy boom tender car turns it into a small tool shed.



Photos by Don Stewart

The first part of the finishing was to paint the entire structure a light wood color (Figure 2). This color represents light worn wood after other colors are scraped off.



Figure 2: The entire structure is painted a light wooden color.

The second coat of paint is a dark gray color applied in a couple of thin coats. This will represent the aged wood so keep the application light so the lighter wood can still be seen. Figure 3 shows this color application.

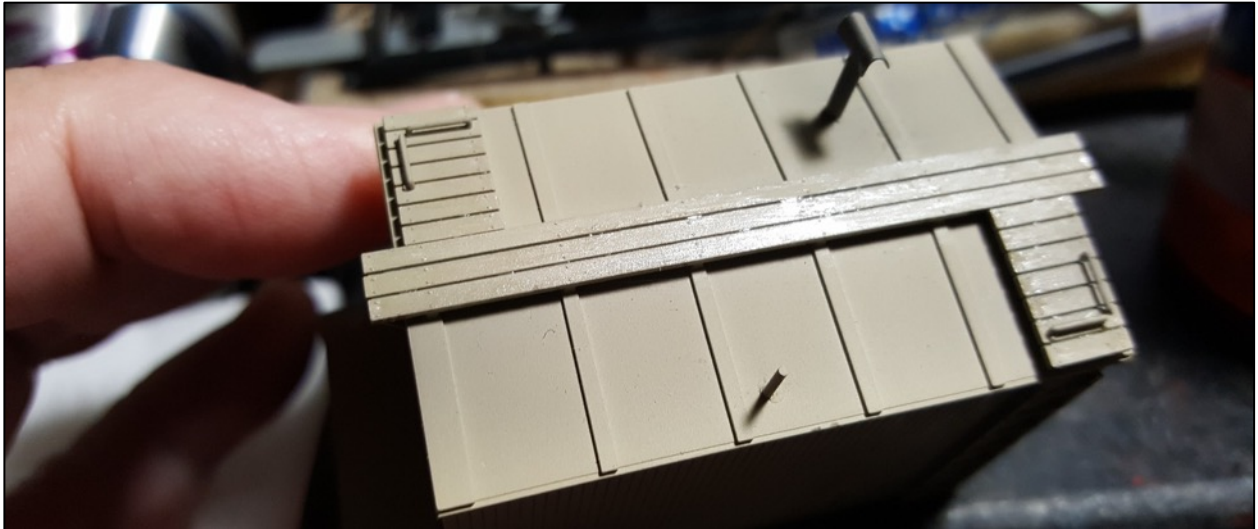


Figure 3: A second coat of thinned dark gray is misted onto the raw wood color.

After drying, rubber cement is used to add streaks along the sides and roof boards. This should be applied in a thick streaky method going along with the wood grain. Figure 4 shows the rubber cement and Figure 5 shows the side wall after the cement has been applied.

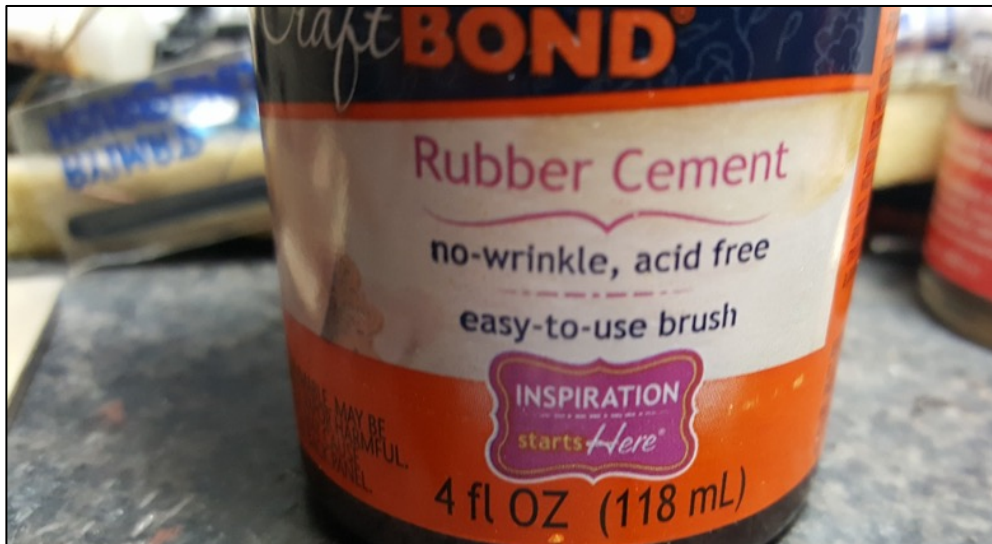


Figure 4: Rubber cement is used as a mask to give a paint peeling effect to the boards. Be sure to streak with the grain of the boards.

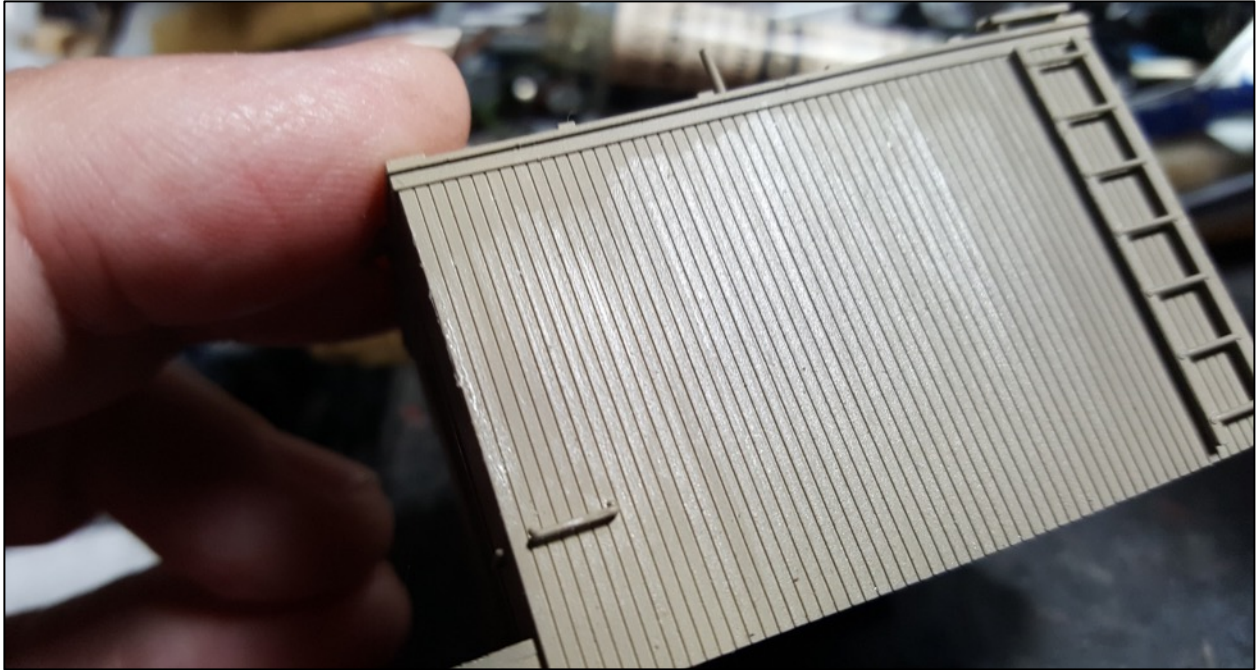


Figure 5: Rubber cement has been applied to the structure side wall. The shiny area is the rubber cement.

The structure's final coat of paint is applied over the rubber cement. In this case it is white. Figure 6 illustrates this coat of paint.

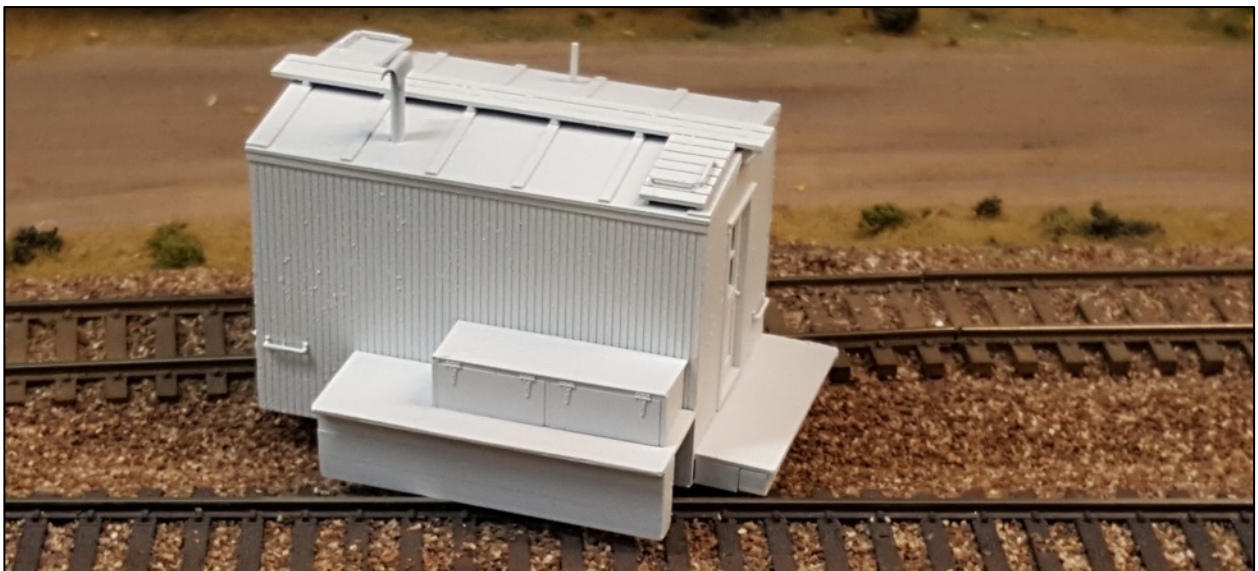


Figure 6: The shed's finish coat of white paint is added over the rubber cement.

After the paint dries, the next step is to peel away the paint over the rubber cement revealing the aged wood beneath the paint. Use a sharp hobby knife, either a chisel blade or angled blade to remove the white paint and rubber cement to reveal the paint below. See figure 7.



Figure 7: Use a hobby knife to gently scrape away the paint and rubber cement from the side, end and roof boards. This results in a peeled paint look to the building.

Once the peeled paint look is complete, it is time to paint the details. This includes the roof material, vent tube, smoke stack, and wooden portions representing tie stacks (see Figure 8).



Figure 8: Now the details are painted. The roof is grimy black, the vent pipe and smoke jack are gunmetal, and the workbench, its support, and the steps are smoke (representing ties). Details have been added with the oil can painted magnesium and the water bag painted tan and hung on a spike near the entrance door.

The final paint step is to coat the structure with flat paint and add a little airbrushed weathering. Pastels may also be used for this. The last step is to apply the window glass in the doors. The finished structure may be seen in Figures 9A and 9B.



Figure 9A: the finished structure showing the work table side. It is now ready to install on the layout.



Figure 9B: The finished shed from the opposite side showing the back door and step below the door jamb and the blank wall.



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More Modeling at Home

Photos by Don Stewart



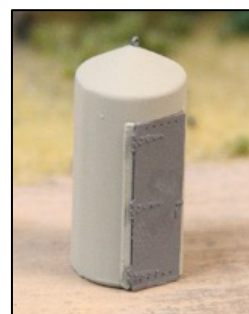
Car Dealership under construction



Sante Fe water tank



Small work shed for the right of way



SP round cement telephone booth. We have three of them!