



# NEWSLETTER

**Central Arizona Model Railroad Club**  
**April - June, 2019**

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## **PRESIDENT'S MESSAGE**

by Terrel Tinkler

Hi train enthusiasts!!

Winter is finally over and it's springtime in beautiful northern Arizona. The Board has been busy discussing options for new storage options – storage trailer or storage unit to house all of the club's equipment and HO module layouts. The Board's decision has come down to looking for a storage unit in the quad city area that will be larger than the existing unit on the ground floor and water tight.

There will be new shirts with the club logo available by special order beginning with our April meeting. Final costs will be known by then. The options will include polo shirts; polo shirts with pocket; long sleeve shirts with button down collar; and short sleeve shirts with button down collar and pocket. An order will be placed when we have at least six shirts requested by club members.

The Bradshaw Mountain Highrainers are operating in the Prescott Mall on the first Saturday of each month. Stop in and say hello. They are in front of the Mall entrance to J. C. Penneys.

In February, the Highrainers presented their layouts to the students at Territorial Elementary School and Del Rio Elementary School (Chino Valley Unified School District). I've heard through the grapevine that the students AND teachers had a great time with the displays.

I was talking with Anthony Piscitelli on the phone a few days ago, and he related to me that there is a long history of our Club's "Beat the Heat" swap meet. His recollection is that it started in 1988 at the

Sam Hill building near the railroad bridge across Granite Creek in Prescott. It was moved the next year to the long blue building on Arizona Street off Sheldon near Bennett Glass. The next year it moved again this time to the Armory. Then four years ago it was moved to the Liberty Traditional School, in Prescott Valley, where it will be again this year. Remember the date – August 17th, 9:00 a.m. to 1:00 p.m. We need lots of volunteers to help make the swap meet successful again this year.

And finally, please note that with an organization the size of ours, we inevitably will have members with medical problems. When you hear of someone with a health issue, please send them a card or give them a phone call. Also, let a board member know so that we can send out an email letting the members know. I understand that Susie Piscitelli had a procedure a few weeks ago and is doing well. Same for Dan LePage who had surgery on Mar. 28th.

That's it for the spring newsletter. See you at the CAMRRC meetings!!!

## **SCHEDULE**

*CAMRRC regular meetings are held on the second Wednesday of the month. They feature tables where you are welcome to bring items for sale and most months also feature a program. They are a also great way to get together with your fellow members. Meetings begin at 6:30pm for socializing and swapping and the meeting at 7pm located at the Prescott First Lutheran Church, 231 W. Smoketree Lane off Willow Creek*

**April 9** - CAMRRC meeting, First Lutheran Church  
**May 8** - CAMRRC meeting, First Lutheran Church

**June 12** - CAMRRC meeting, First Lutheran Church

**July 27** - Summer Cactus Meet - Phoenix

**August 17** - Beat the Heat swap meet

## **BUILDING A CONE TOP WATER TOWER**

by Joe Fauty

### **Update on the 2019 Beat the Heat Swap Meet.**

As of the 25th of March, we have sold/ allocated 74 tables of the 96 available tables. If you are planning to sell at this year's meet, please let your Secretary know as soon as possible. The tables are on a first come first served basis and your requests are honored (If possible) in the order received. Dick Gage and I have sent out advertising to the various railroad related publications, distributed flyers etc. and table requests are coming in from all over the State.

If you have anything that you would like to contribute in the way of door prizes for the swap meet, please bring them to one of the future monthly meetings.

We are in need of 2 or 3 volunteers to take the short food handlers course online to get a license. This would allow us to be able to serve donuts at the swap meet.

This should be another great Swap meet for the club.

Doug Glascock



The hemispherical bottom or cone top water tower was an imposing structure seen in a lot of steam era service yards.

Plastruct sells the water tower kit in N, HO, and O scale. The kit does cost less than buying individual pieces but it has some issues:

- The platform material is very thin – maybe 20 mils thick - therefore kind of flimsy especially when trying to glue on the railing.
- The railing is black ABS rather than white styrene therefore is hard to bend into a circle without breaking some horizontal rails.

### **BOARD OF DIRECTORS**

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Website: <http://trainweb.org/camrrc/> Editor: Peter Atonna: [mjatonna@gmail.com](mailto:mjatonna@gmail.com)

- The column feet are H-10, while H-12 looks more realistic to me.
  - The vertical bracing consists thin plastic rods.
- Using plastic coated wire is much better for overall stability

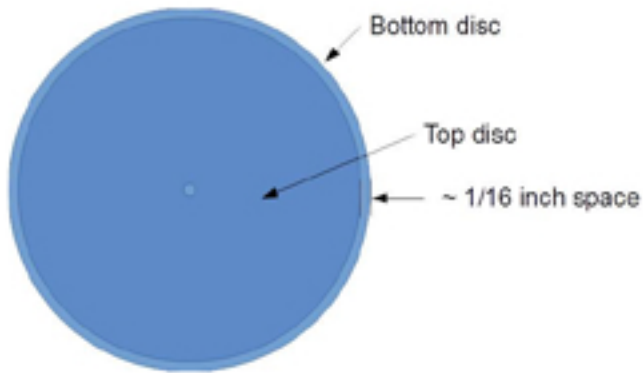


This article contains a tutorial on customizing the Plastruct kit or building one from scratch. That allows the builder to vary the tank diameter / height and overall tower height to his/her own specifications. Although I have built mine in O scale, the ideas apply to kits in other gauges, too.

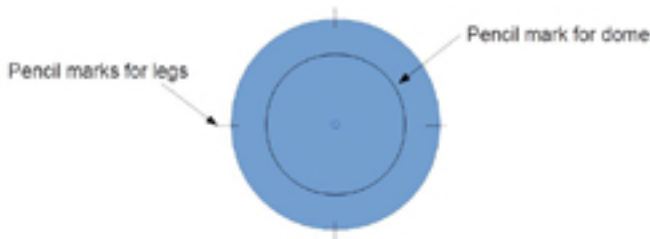
Once the tank diameter is determined the starting point should be the platform. The platform will be a solid piece to which both the top and the bottom of the tank are glued. The top of the tank is typical Plastruct ABS tubing: 3.3 or 4 inches in diameter. I have varied heights from 4 to 6 inches. The platform diameter should allow about 1 inch (4 feet) between the tank and the platform railing. The platform is actually two discs glued together whose diameters vary by about 1/16 inch. This provides for a lip on the edge to add a glue surface for the railing. The discs are cut from 80 mil flat styrene stock.



Note – use a finish sander with 150 grit paper to sand the discs and other pieces like the dome, tank tubing etc. This is a good prep for later painting. Use steel wool on the H-column legs and smaller pieces.



Another good idea is to mark the outside of the bottom of the platform at 0, 90, 180, and 270 degrees. This makes placing the legs much easier.



Once all pencil marks are made drill a 3/16 inch diameter hole for the down pipe. This is important since it will help align the bottom dome for gluing

The round tubing will be glued to the top of the platform then a hemispherical dome will be glued to the bottom. Depending on the diameter of the top tubing the bottom dome will be Plastruct VHH-xxxVG (VG designates gray ABS for a dome). So for example if TB-400 tubing is used then the dome will be VHH-400VG. The easiest way to align top and bottom pieces is to draw a circle the diameter of

the tank with a compass on both sides of the platform. I have used TB-325, TB-350 and TB-400 tubing for the tank with heights ranging from 4-6 inches

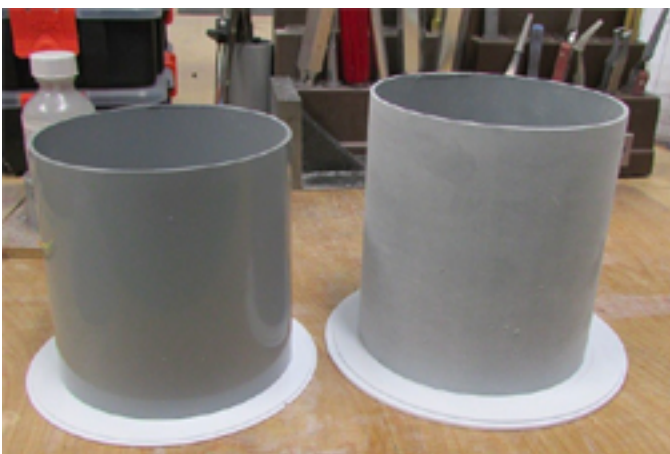
The cone top is actually two pieces that come as one kit, so must be glued together. Use Squadron white putty to smooth out the glue line and sand to a smooth finish – 150 grit paper.



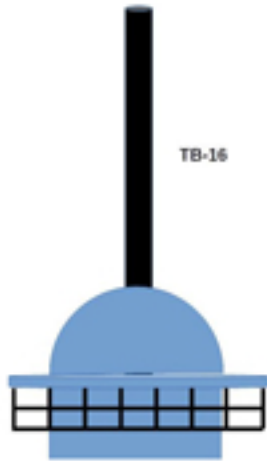
The part number for the cone is VC-96. It comes ready for tubing up to 6 inches in diameter and can be cut to fit the diameter of the tubing you are using. The inside of the cone is stepped to aid in making the cut. Use an Exacto knife to score multiple times to get a line deep enough to snap the pieces apart without bending the plastic. You can also cut all the through if you wish. The cone top should be left unglued especially if a flashing light is used on top of the cone. The wires can be hidden inside the tank and snaked through the down tube and then through a hole drilled in the platform base.



The railing should be glued to the platform. This can be done before or after the top tank is glued in place. It is best to use white styrene railing instead of the black ABS railing since the white styrene is easier to bend in place and less prone to breaking. The part number is HRS-8. Glue the railing to the edge of the smaller disc and to the larger disc. To start the railing use a little bit of super glue to hold the first end in place. Remember to leave about 1 inch of space between the two ends of the railing for the ladder assembly. An important note - make sure the space between the ends of the railing is centered on one of



the leg pencil marks since the ladder will be glued to one of the legs as shown later.



Before gluing the dome drill a 3/16 inch hole in the bottom to accept a TB-16 down tube then sand. Once the top tank and railing are glued align and glue the hemispherical dome to the bottom of the platform. Use the TB- 16 tubing to help align the dome with the holes in the dome and in the platform. Ensure the down pipe is standing straight. The TB-16 can be removed and

cut to length later. It is best to have it sticking up through the platform making it a lot easier to snake wire down through the piping.



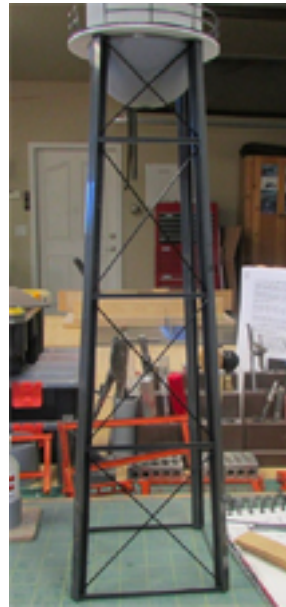
The legs are glued next. The legs are H-columns either H-10 that come with the kit or H-12 which I prefer. Depending on the length of the legs cut both ends of each leg at 5 degrees. The legs for the time being are held in place only by glue at the bottom. They should be placed so that they butt up against the dome for a little more added glue area. Hold the legs in place till the glue sets then leave the structure for at least 3 hours till the glue completely cures. Leg

lengths have varied between 12 and 18 inches depending on customer specs.

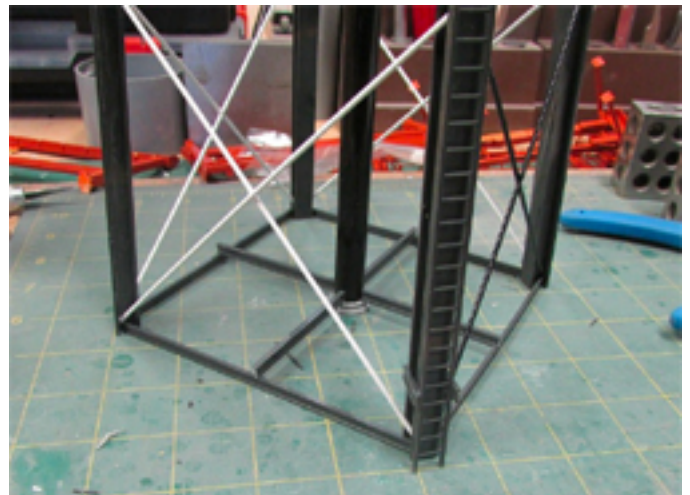
The horizontal bracing are C-6 channels cut to length. Cut each channel to fit. The flat side should face in. Determine the positions of the channels so they look good to you. I use three levels at the same height. Use wood spacers so that the channels line up on each side of the tower leg assembly.

Note – no matter how accurate you are placing the legs don't be tempted to cut all braces at each level

ahead of time and to the same length. Cut each individually to fit.



The vertical bracing can now be applied. It is best to use TB-2 black or white tubing here. TB-2 tubing is plastic coated wire so has the stiffness required to make the legs more stable. Cut to length with hand clips made to cut wire (I use Xuron) and glue to the insides of the H-columns. You can use either plastic cement or CA glue.



Now is the time to cut the TB-16 down pipe to length and insert into the tank but do not glue. A VC-24 cap is used at the bottom of the pipe. This adds glue surface for the bottom bracing. B-6 I-beams are used to center the down pipe by gluing to the C-6 bracing and to the VC-24 cap. Once the bracing is glued in place you can glue the TB-16 to the dome.

Now the ladders and details can be added. The ladder part number is H-8. LC-8 ladder clips can be used to attach the ladder to the tank. The offset provided looks more realistic. However since the ladder from the ground to the platform follows a leg it is slanted at an angle. Therefore glue pieces of C-6 channel to the sides of the H-column to act as glue joints for the ladder.



Once the top ladder is placed mark and cut a notch in the cone top to accept the ladder. The roof hatch is simply two rectangular pieces of flat 40 mil styrene

cut to 3/8 and 5/8 inch squares with a small rectangular piece as the hatch handle. A small piece of TB-8 tubing is cut at a 45 degree angle and glued to the tank underneath the lid to act as a drain pipe. If a hole is drilled in the top for a light you can add a small piece of TB-8 tubing to hide the joint.

The base is made from 1/8 inch thick hardboard sanded and painted to look like concrete. Paint the tower and add the decals of your choice. If during assembly you did sand the tank remember to spray with Dullcote before applying decals as the surface will be rough from sanding. If the spray is not used the decals will develop small dark spots – orange peel - and not look very good. I spray the entire tower to take the shine off the paint.

## **BUILDING A CONCRETE ARCH BRIDGE FROM SCRATCH**

By Donn Pease

A year or so ago I gave a presentation at a meeting showing how I built a five foot long truss bridge in HO scale to carry one track over the Cienega Creek in Southern Arizona. Next to the railroad bridge is a two lane, concrete arch highway bridge. There are a few kits on the market, but none comes close the prototype. I wanted it, and I wanted to work in plastic as it is easy to work with.

I began as I usually do, with a hand drawn plan, as much to scale as my “eye-ball” engineering skills will let me. Next I estimated what sizes of plastic shapes I needed and put in an order to Plastruct. My plan was to use 5/8” x 3/8” hollow plastic shapes to form the arches, one on each side. I pondered and searched for a year for ways to heat and bend the plastic to the shape of an arch with a 6” radius. The more I thought about it, the more I saw the plastic shriveling up in the heat.

I was talking to Lorne Noyes one time and he said that, yes the plastic will shrivel up with the heat. He suggested using laminated strips to form the arch. (Isn't it great to have talented members who will share their experiences in the club.)

And the construction started. I used half of a sheet of .040 inch styrene 12” x 24” to make the laminated strips. First I made a plywood and hardboard form



with a 6" radius curve to hold the laminations in place. Then I cut 20 strips of .040 sheet 15 mm wide (about  $19/32$ "), enough for two arch pieces. Then I put each piece into the form, glued them together until all 10 were in the form.

Set it aside for 24 hours



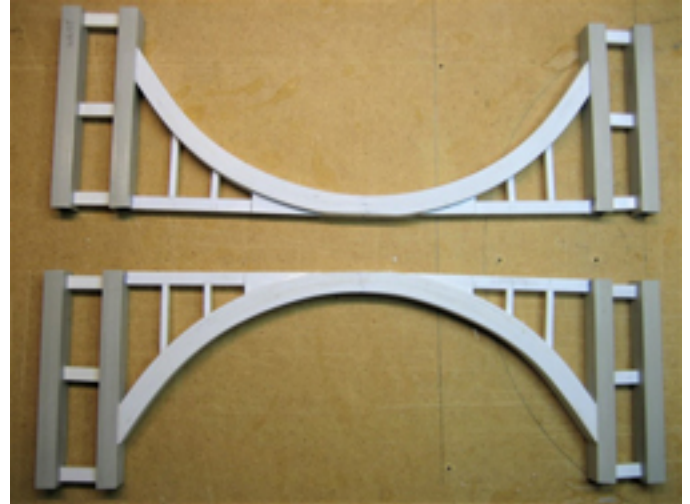
Repeat the process for the second arch.

Each of the arch pieces were pretty ragged on the edges between the laminations. It's hard to cut 20 strips exactly, precisely the right width. I discovered that I could hold a utility knife like a block plane and scrape the edges smooth. I did this for all four edges; much more quickly than sanding or filing.



The next step was to construct both sides of the bridge with the "end pieces." These consisted of two vertical columns at each end using  $5/8$ " x  $3/8$ " styrene tubes separated by 3 horizontal beams of  $5/32$ " x  $3/16$ " styrene at each end.

I glued the arches and end pieces for each side together, then added vertical strips of  $1/2$ " x  $1/2$ " styrene.



The next step was tricky as I was now working in three dimensions. Both the side pieces were fitted together with three cross pieces of  $5/32$ " x  $3/16$ " at each column. When all the glue for the cross pieces was dry, I added the three cross pieces between the arches on both ends. I found the  $1/3$  points for each cross piece and marked it, then inserted each piece, one at a time, rotating them to the same angle as the arch. Got to have steady hands and a good eye



OK, the sub-structure is finished. The next step is to build the roadway deck. I cut one piece of .040 styrene 12" long and 4" wide. On the under side, I glued pieces of  $1/8$ " x  $1/8$ " styrene around the outside edges so the deck will slip over the columns and the center of the arches. I left a  $1/8$ " set back on the substructure so the roadway would overlap it and

sit down tight. Then I added the railings (Rix kit #628- 0104) to the sides. One kit is just enough and over hangs 1/8" on both sides and both ends.



I kept the substructure separate from the deck so I could paint each part and not miss any hidden spots.

As of this writing the bridge is only painted in light gray primer and is not complete. But I set it in place on the layout to show the final location. The next step is to paint it "aged concrete" and weather it. Then set it in place and finish the scenery around it. Yea I know the pink foam doesn't look cool. But it will soon. (The scene, not the foam.)



## AT THE FAIR

by Dick Gage

Here are some shots taken at the Yavapai County Fair on September 6 through the 9th last fall.



Come by and see it when completed.



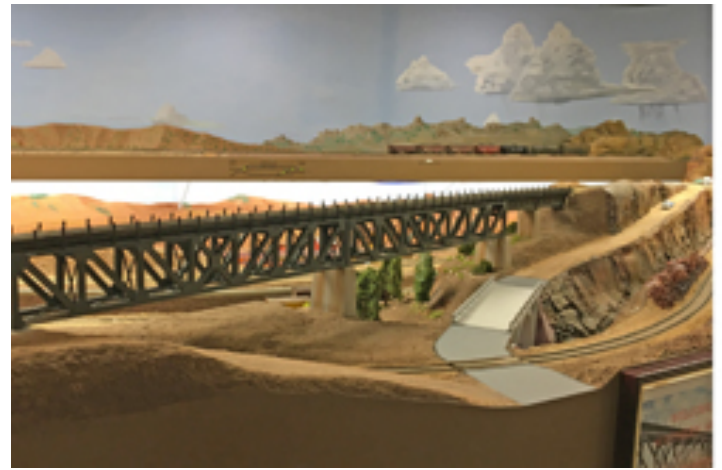
**Jim Hanna**



## **NORTH END OPEN HOUSES**

From all reports, our hosts had a great time entertaining our guests. And we have received several photos of the layouts to share with you.

**ERIC SITIKO**  
+ Norm Delucchi



**Donn Pease**

**Peter Atonna**



## LORNE NOYES

My neighbor Gary Mastin, using his iphone, took this dramatic photo of F units crossing Cienega Creek Bridge on Donn Pease's great replication of this well known Southern Arizona landmark.

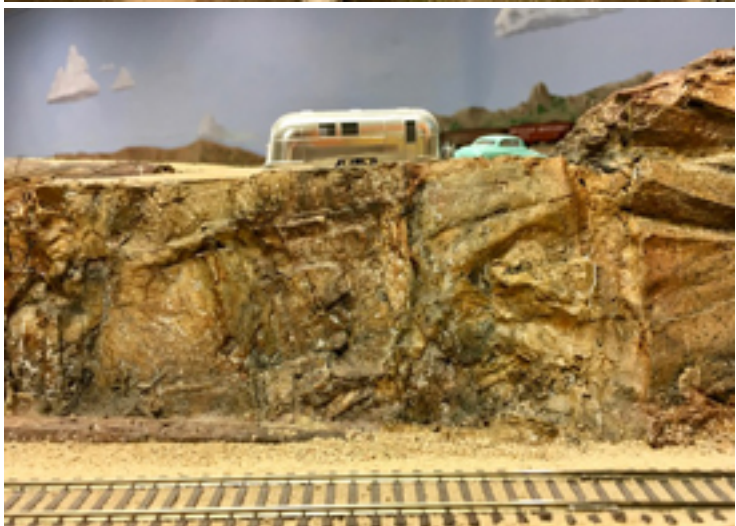


## Peter Atonna



## SHELDON PAYNE

Donn Pease



**STEVE TOTH**

**Donn Pease**



**Jim Hanna**





## LIBERTY SCHOOL DONATION

\$200 donation presentation was made to Liberty Traditional School for help with the CAMRRC 2018 swap meet,

LEFT TO RIGHT - Danette Derickson (principal), Connie Kubal (student council advisor), R.J. Mayer (faculty), Terrill Tinkler (club president), Doug Gilliatt (event chairman)



**Peter Atonna**





**Prescott Area**

**BEAT THE HEAT**

**Model Trains, Accessories & Toys**

**SWAP MEET**

**Saturday, August 17, 2019, 9 AM – 1 PM**

**Again at the Liberty Traditional School**

**3300 N. Lake Valley Rd, Prescott Valley, AZ 86314**

*Presented By:*

**The Central Arizona Model RR Club**

**Adults \$5.00 – Children 12 and under Free**

**Contact: Dick Gage © 802-272-1352 or Doug Gilliatt 480-390-0320**

**Table Reservations \$30.00 per table in advance**

**\*\* 1 Free Admission with Each Table purchased \*\***

**Dealer Setup Time 7-9 AM – No Early Public Admission**

***The CAMRRC is Not Responsible for Lost or Stolen Items***

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Name \_\_\_\_\_

Address \_\_\_\_\_

Phone \_\_\_\_\_ Email \_\_\_\_\_

# of Tables \_\_\_\_\_ (Limit 4 per seller) @ 30.00 each \_\_\_\_\_

Helper Name \_\_\_\_\_ @ 4.00 \*\* \_\_\_\_\_

Helper Name \_\_\_\_\_ @ 4.00 \*\* \_\_\_\_\_

Lunch Reservations (sandwich, chips, soda) \_\_\_\_\_ @ 7.00 each \_\_\_\_\_

Special Requests \_\_\_\_\_ Total \_\_\_\_\_

**Make Checks payable to: CAMRRC and mail to  
CAMRRC, 514 Goshawk Way, Prescott, AZ 86301**