# TIME-DEFYING TANKER

## Crafting the New Hackensack Fire Company's longest-serving truck in 1:24

**I REMEMBER WHEN I WAS YOUNG**; I would go to the firehouse with my father and loved looking at these tankers at the fire company. I just enjoyed looking at their sleek sides, and I was in awe knowing that it carried 2000 gallons of water. For a kid, that is a lot of bathtubs. And when the truck was running, the thunderous sound of the Detroit Diesel made it sound like a powerhouse of a machine. I never knew that when I got older, this tanker would eventually be a mark in history for the New Hackensack Fire Company as the longest in-service vehicle. And I also never even dreamt that I, as an active member, would eventually be able to drive this truck to calls myself.

This tanker was not a great riding vehicle for the trucks of this day and age, but I bet it was a top-of-the-line machine for its time. New Hackensack bought this tanker in 1978 and as with most of the new equipment, it was numbered Tank 1. Most fire vehicles purchased for New Hackensack usually get the number 1, and then the old number 1 is numbered 2, and so on. This way, the oldest truck was being replaced and the others all moved down the line. Before this truck, New Hackensack had two twin tankers that had gasoline engines, and looked slightly different from this vehicle. They were Ford over-


by **Ed Wahl**

head cabs and had the sleek sides, but the body sat lower than the top of the cab.

This new tanker was the first diesel utilizing a 6V92 Detroit Engine, and 350-gallon per minute single-stage Hale pump. Like the older ones, it carried 2000 gallons of water with a 5-inch round dump in the rear for discharging into a vinyl porta-tank. Essentially, the vehicle dumps its load of water, and then shuttles to a source to fill up for the next round, so the fire lines would always be supplied during the call.

After some years, it was time to replace the last gasoline engine tanker, so they purchased another diesel tanker and numbered it Tank 1. This one was renumbered Tank 2. The new tanker looked almost identical to Tank 2, but had a larger engine holding an 8V92 Detroit.

During its life span, Tank 2 needed to be refurbished and it was sent out for some much-needed upgrades. It was given a polyurethane water tank to replace the old steel one, and also installed was an 8-inch extendable dump tube to the rear of the truck with a direct fill just above it. Tank 2 originally came with two quad beam rotators on the cab, Mars lights (or Triple 8 lights) in the door, and regular lollipop-red alternating flashers on the front of the cab. These lights drew quite a bit of amperage, so they were updated with strobes to replace the Mars lights and lollipops, and half-bar sonic lights to replace the roof lights. Also added were working lights to the rear and side, and yellow strobes on the rear of the truck. The two double-beam rotators on the rear of the tanker were left alone.

From 1978 up until a few years ago, this truck was still in service, along with Tank 1, until both were sold to a fire truck refurbishing company in Pennsylvania. Both trucks may still be in service today for another fire department.

I wanted to make a replica of this truck ever since I got back into modeling in a heavy way. When AMT re-popped the Ford Overhead Cab Stake truck, I saw my opportunity to try. This was the first time I would be making a model where a lot of scratch-building was going to be involved.

**I never dreamt that I would eventually be able drive this truck to calls myself!**

The first thing to do was to take a lot of pictures of the truck. Tank 2 was still in service when I started this project about five years ago. I took close-up pictures of each section of the truck, and I took close-up photos of all the lettering so when it was time to look into decals, I would have it all ready. I also took measurements of the instrument panel, where compartments were and such, and the body itself. I am not that great at math, so I found a site on the World Wide Web where I could take the measurements I had, enter them, and then it would scale it down to 1:25. I know it is easy to figure out on paper, but this was even easier for me.

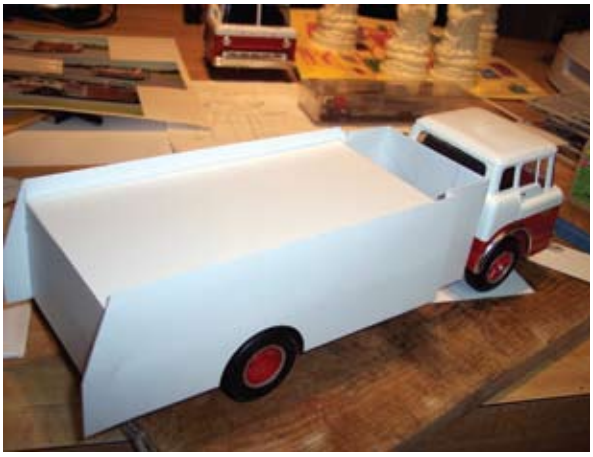
So now I had my measurements, and was ready to get started. First, I worked on the cab. As you can see in some of the pictures, there are two cabs. This is because my first intention was to build Tank 1 as well as Tank 2. As time progressed, and since it was taking me so long to finalize this project, I ended up taking the other cab and chassis and built it into a regular stake truck with a homemade lift crane.

I set up the cab with masking tape so I could do the color scheme and get the paint correct. This was done by painting the whole cab white first, then


Finding the right gear for emergency vehicles requires some resourcefulness. For example, the horns atop the cab were pilfered from a snap-together 1:32 Mack truck!

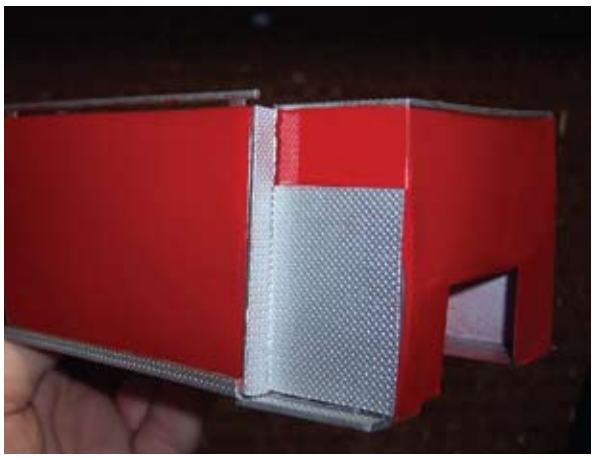
Ed started out building two fire tankers, but soon switched one back to stock stake truck configuration. The engine got a coat of green to replicate the Detroit Deisel colors.

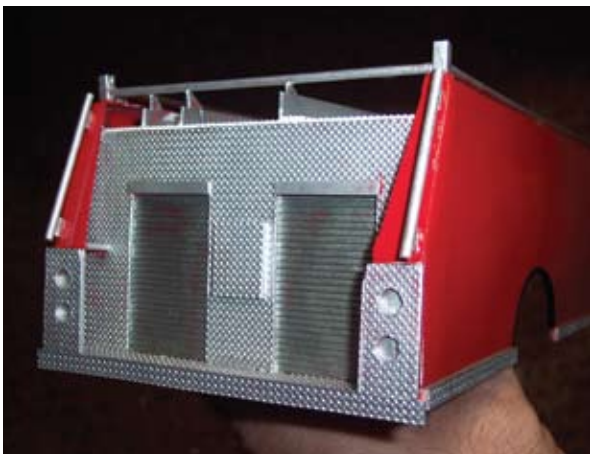
The cab was built without much embellishment to the radio gear. The entire rest of the truck was made from sheet styrene, cut, glued and filled to eliminate any seams.



Strip styrene made for a convincing set of dividers across the top of the tanker. After an application of primer there is, little evidence of scratch-building.

Fitting the new body to the chassis was a puzzler until Ed decided to use the stake truck body as a form to build the fire truck rear body around!






Always kept clean, the real tanker shows why weathering was not particularly important for Ed's build.

masking off the upper cab area and adding the red. The closest color match I could find to the real thing was Krylon red. I am sometimes leery of using this type of paint as you can never be sure of how it will react to the model's plastic and the other model paints and clears you may use later, but it seemed to give me no problems, so I continued until the end with the same color. The white was basic Testors enamel straight out of the spray can.

This truck had two axles, but the frame was much longer than the stake truck. Using my adjusted measurements, I lengthened the frame rails and the made a new drive shaft using tube styrene. Then I painted the whole frame the same red color. As for the engine, I wasn't going to go into detail with that as I had enough to do with the scratch-building of the body. I built the gas engine that came with the kit and painted it green as the Detroit diesels were painted. They did come out with the silver series later on, but this one was your typical Detroit fuel miser green, and I did this so any sight of the engine from the static pose would only show the green engine inside.

The chassis was basically from the kit. I made the interior the same color of the real truck, but I didn't add any radio or other equipment that I felt that would not be seen from the outside. The only alteration in order to make it look like the real thing was a resin bench seat I got from my buddy Doc Wiseman. The kit comes with regular bucket seats, but our tanker had the bench.

At the time I built the cab, I wasn't as proficient in building cars and trucks as I am today. I'm not saying I am the greatest car builder, but I learned more things over the years from Mid-Hudson IPMS and the Town of Newburg Model Car Club. One thing I learned is the use of Alclad. But when I was putting the chassis together, I didn't know about it yet, so I used Bare Metal foil for all the chrome parts. Later on I finally saw the results that Alclad produces compared to Bare Metal foil, so I removed the bumper and re-did the chrome.

I left the light sockets and all the chrome left on the cab in Bare Metal foil, but for the tire rims and hubs I used regular Tamiya silver for the highlights. I did this because I remember going down to the firehouse and getting a truck ready for a parade, and sitting Indian-style


The real truck gives an idea of how close the Krylon red paint was to capturing the exact shade used on Tanker 2.


The longer chassis of the tanker required Ed to cut and extend the frame and driveshaft.

for hours painting the hubs red, and then doing the back step and other diamond plate silver. I did the same with this truck. Of course, this time I was on a bench, and it took me only about 30 minutes, compared to hours on the real thing.

I figured that I would start adding detail to the cab in the way of lights and sirens, but I had to find the right parts. Since I was doing the truck as it looked now, it was a little easier to find the strobe lights by using plastic jewel pieces from AC Moore. The two half light bars on the cab came from the AMT "Robo-Cop" Ford Taurus kit. These were the same lights as the tanker, but in the Taurus kit it was a full light bar with a siren box in the center. I had to cut off the lights from the bar assembly to get the halves I needed. (If Robo-Cop was set in the future, why would they have picked a Ford Taurus as a patrol car? Yuck!)

Like I said earlier, it was neat to go to AC Moore and Michael's to pick up those plastic jewels. They work perfectly as strobe lights and the mirror backing on the plastic also gives them great sparkle to look like ground and working lights around the rig. I couldn't find the jewels for certain parts, so I had to cut them in my miter box to the size I needed. I also couldn't find small jewels in red or yellow, so clear ones were used and I coated them with Tamiya clear red and orange. I was told long ago that using the clear orange works better than the clear yellow, as it looks more like the amber lenses on vehicles, so that's what I used for directionals and marker lights. The directionals on Tank 2 were signal arrows and not the basic directionals from that type of cab. They were placed on the windshield wiper motor covers. I stole the directionals from the AMT American LaFrance kit to use on my tanker, and then covered them in the Tamiya orange.

On the front of the tanker are two electronic siren horns. I remember chatting with one of our older members, "Bud" Pottenburgh, and he told me a story that one of the commissioners of that time was worried that they wouldn't hear the siren of the truck if it was mounted under the cab. And when the truck finally came through, he asked the commissioner, "Do you think they will hear it now?"

I looked into many kits for these siren horns. I bought a couple of kits, but they just didn't look right when placed up against the truck. I started to lose faith and this was one of the times where I put the truck away. A few months later, I was looking at the 1:32 snap-together Mack fire truck kit and found it came with two electronic siren horns. I compared


Most of the chrome on the truck was replicated with Bare Metal foil.

them to the tanker and they were a perfect match. It was weird that the 1:32 scale worked better than any ones I could find in 1:25 scale. I even stole the air horns from the Mack kit as they looked better on the cab as well.

Like most truck kits, the plastic mirror brackets are large in diameter, and if they were blown up in scale, they would look like 1-inch pipes holding the mirrors. I picked out some thin solder for the brackets, and then used the mirrors from the kit to finish the job.

I wasn't really sure where to start on the body. Like I said, this would be my first attempt into totally scratch-building a body. I wasn't sure how I was going to attach this to the frame. I could see that it was going to be a lot of work. After checking the measurements and then comparing them to the body of the original stake body, I came up with the idea that I would use the stake body as the basic fit to the frame, and then add my new body components to that. I had to notch the very front a little to make the pump panel fit, but this also helped in holding the walls in place.

Making the wheel wells gave me the excuse to go out and purchase a circle cutter. It is a neat little device that adjusts to the size you want, and then pivots on a point so you can make a perfect circle. What was neat was that when I made the circle, I just used that halfway point as both sides to the body. I used sheet styrene for all of my building, but placing things together didn't always come out smoothly. Most of the time I had to add body filler and then sand it down to get the side to be a smooth surface.

I ordered some diamond tread plate from Don Mills, and used this in the areas where it was needed. The diamond plate is quite thick, but it is the best and most authentic for a 1:25 vehicle.

On the rear of the truck are


The roll-up doors were simply corrugated plastic stock behind cut-outs in diamond –tread stock – a convincing effect that didn't take too much effort!

The brackets for the rear-view mirrors were far too thick, so Ed used thin solder to replace them.

The intake hoses at left were made with toilet-tank tubing; the porta-tank at center has a styrene strip framework and rubber sheeting for the tank boddy.


Jewel-lights picked up at the local craft store were a huge help in fashioning the indicator and signal lights.

two roll-up doors and the door for the 8-inch extendable dump and inlet valve. I added the corrugated sheet styrene, then cut the openings to the doors and laid the diamond plate over it. This gave the appearance to the roll up doors being recessed into the body. I then cut out a rectangle to size for the dump door. I was thinking of adding the extendable dump with the door open, but felt that just leaving it closed in a static pose made the truck look more like the real thing at rest.

All of the pipe fittings that come out of the body are at a 45-degree angle. I placed tube styrene under hot water until it was pliable, then slowly shaped it; when I got the bend I wanted, I then ran it under cold water to hold. Then, by adding the caps I stole from the American LaFrance kit, I just glued them in place.

On the top on the hose bed of this truck, as most fire vehicles, there are separators or partitions for hose lays and equipment. I used corrugated sheet styrene with styrene strips for the partitions. On the top of this truck, there was a layer of 300 to 500 feet of 3-inch supply line. A long time ago, I found a ball of what I think was some type of cloth wrapping for holding plants up for the growing season. To this day, I have never seen it sold anywhere, and it is perfect for scale hose line. I have a whole roll of it and I knew the day I found it, it was going to be supply line for a future fire vehicle of my making. I added it to the tanker for its supply line, and put couplings from the American LaFrance kit on the ends.

On the tanker, there was a 2000-gallon porta-tank. This opened up like a small pool, and then the tanker backed up to it to dump its load of water. While the engine at the fire scene is drafting from the porta-tank, the tanker goes off to a water source and re-fills.

This is the reason why we had two tankers: while one was dumping, the other was getting more water. This I knew would have to be scratch-built. Using styrene rod, I built the framework of the porta-tank. The tank insides are rubber sheeting I got from my physical therapist. They use the rubber sheeting in different thicknesses to strengthen whatever body part needs attention in exercise. I asked if I could just get a few pieces of the different thicknesses, and they have been handy in making this, mudflaps, and other things on my modeling table. It is amazing how a modeler can see an object and realize he or she can use it in a replica to make it look that much more real.

Same with the large suction hoses that lay in the hose bed on top. I wanted to find the right size rubber, and the tubing that worked well came from the plumbing of the water filler in the back of the toilet. These are the tubes that are hooked to the refill that go into filling the tank. They worked well, and the couplings I had fit perfectly.

On the body of the tanker, there is one compartment door that is on the driver's side of the vehicle. On the real truck, this houses the batteries, which slide out on a tray. I knew I would have great difficulty trying to scratch-build the handle that opens this compartment, so again, I went to the American LaFrance kit and cut a compartment door off the body. I got it down to the size I needed and then added it on the surface of the body. This worked well as the real door protrudes outward, and the replica door did the same.

I had to order decals, and I found exactly what I was looking for on a message board of a gentleman who did it in gold leaf. I sent him the close-up pictures of the lettering of the vehicle, and he used his graphics program to remove all the elements except the lettering to give me an exact match to what was on the tanker. They were perfect, and me using my scale conversion, I gave him the size I needed. If you get time, visit his site at www.diecastanddecals.com.

The rails on the top and rear of the tanker were made from round styrene, and were attached to the body by small pieces of flat styrene.

I ordered the rear lights from www.policecarmodels.com but the lights came with generic silver rotators inside. I sanded these down, and using the same red and white lenses I used for the tail lights and back up lights, I added these to the rotators. They give the appearance of a more realistic rotating light.

Now my tanker is all together, and will most likely go on tour with me to different shows. When it is done, I will probably leave it at the firehouse museum as the replica of New Hackensack's longest in-service vehicle. ■

**ED WAHL** **IPMS/USA #23318**

Ed, the president of IPMS Will Cook, vice president of IMPS/S.P.A.S.A.M and a member of the Quad Cities Scale Modelers, joined IPMS in 1986 after going to local meetings for four years and deciding he was "good enough" to join up! A genuine generalist, Ed's built everything since he started the hobby in 1953 with a Gowland & Gowland Stanley Steamer, which he still has. Ed retired as assistant to the superintendent for business affairs for an elementary school district; since retirement, he's worked with grass-roots advocacy groups to improve the funding of public schools for education services for children with special needs. Ed also enjoys Bible study and photography. He lives in Homewood, Illinois, with his wife of 25 years, Janet, and he's proud of his two daughters and four grandchildren.


The finished model will someday have a place of honor in the fire department's museum to honor its longest-serving tanker.