

What the Phone Company Taught Me About Customer Service.

EMRR Corner

Go Green: Reader Tips On Cleaning Launch Rails

Reader Project: Triceratops

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on an Aerotech Mantis Launch Pad.**

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What The Phone Company Taught Me About Customer Service

By Tim Van Milligan

I don't usually talk *business* in this *How To Build Rockets* newsletter. But today something happened that made me just about lose my cool, and I just need to rant to get it off my chest. It was about a customer service issue that happened to me. Since I'm extremely passionate about the customer service issue, it grates on me when I see companies treat their customers rudely.

Even though it put me in a foul mood, these types of occurrences always reinforce my desire to do better for our customers here at Apogee Components.

Here's the story...

We get door-to-door salesman in our office all the time. There seem to be a lot more salesman hoofing the pavement now that the economy is suffering. For a business owner like me, they can be really annoying. Michelle, our office manager here at Apogee Components, intercepts most of them and keeps them out of my office. For that I'm eternally grateful (Michelle is really helpful, and if you've talked to her on the phone, you know what I mean). But it annoys me just the same, because I'm still paying her salary while they are in the office eating up her time.

This morning, we got three different salesmen in less than an hour. First was a furniture salesman, selling stuff right off the back of an 18-wheel semi-truck (that was really spooky). Then there was a photocopy machine salesman, and finally a representative from the local phone company. That was the one that really grated on my nerves.

The phone company rep comes in and says "We've been doing an audit of your account, and we believe we can save you 20% on your phone rates." Sounds reasonable, right? Who wouldn't want to save 20% on your phone bill? (I feel with 90% certainty that he was with the local phone company, as they are required to wear badges, and his looked legitimate.)

So Michelle grants him another two minutes to make his pitch. But here's where he blows it. He starts asking questions about our current phone service.

Does that make sense to you? Think about it. If he has done an audit of our account, shouldn't he know what features we're currently paying for on our bill?

At this point, I'm still in my office, and trying to hide. I have a newsletter to get out to you and our other customers, so I really didn't want to be disturbed. But I can hear the conversation. If they make a good case, and the deal is legitimate, sooner or later they will be talking to me.

The conversation in the entryway continues, and the customer service representative calls the billing-department switchboard on his personal cell phone. Since I can't see what number he dialed, I perked up. Why? Because I've had my phone company switched on me in the past (called slamming). I was worried that it would be happening again. He could have called some obscure phone company. All they need to do is get some key information like your current customer number and pretty much anyone can switch your phone account over to a strange phone company.

When talking to the guy on the other end, the salesman started chatting about the weather and what kind of car he drives. At this point, I felt he crossed the line, so I came out of my room. The line he crossed was that he was tying up our staff's time with his own personal chit-chat. He showed a complete disregard for Michelle's time. And since I'm paying for that time, in essence, he was stealing from me.

I introduced myself to the salesman, and he starts right into his basic sales pitch again. "I'm here because we've been doing an audit, and I believe we can save you 20% on your phone bill."

I play along... "OK. If you can save me 20% on my phone bill, just do it."

"There is a company system in place, and we have to do some preliminary stuff first."

"Why is that?" I ask. "Can't you just say, you're eligible for the rate reduction, and we'll automatically switch it over."

"We can't do that," the salesman says. "There are privacy laws in place, and we have to follow the company system."

"Show me the laws." I say.

"I can't do that, you have to be some sort of judge or something to see them." He replies.

"What?"

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About this Newsletter

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PEAK OF FLIGHT

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Is This Customer Service?

That is about the stupidest thing I've ever heard. Secret laws? I just don't buy it.

From here, things really went down hill fast as you might imagine. As I mentioned, I can't believe that the rules aren't written down where anyone could see them. And more to the point, the salesman said he didn't know where they were written down, and really didn't care to dig them out for me (the customer).

He was still on the phone with the guy in the corporate office all during this time. While I was talking with him, he had his hand over the mouthpiece. Now slowly, and very deliberately, he takes both hands and sets the phone down in front of me on the counter. He did it with both hands to be sure that I saw what he was doing.

I knew exactly what he was doing. He was calling my bluff (a high pressure technique of selling).

He thought that my overriding greed for a 20% discount would be enough to get me to shut up about the company systems and play along with his presentation.

My heart rate was going pretty high at this point. Do I play along? *Should* I play along with his game? After all, 20% adds up to a lot of money over a year's time.

From the back of my mind, a little voice says "No. Don't give in. You've got more important things to do than to expose this guy for what I truly think of him."

At this point, I quickly end the conversation and ask

him to leave. He does, but not before saying a little snide remark about phone rates are going up and that I should watch out for them. Again, he's appealing to my greed.

Am I the only one this kind of stuff happens to? It was awkward, I have to admit. But there was something so *'not right'* with this situation. I ended up getting myself worked up just for a \$20 a month phone discount. "Why did I get myself into this situation?" I asked myself.

The reason I got this way was because I really have a core belief in wanting provide great customer service. This guy was telling me he was my customer service rep, but what he was doing was not "customer service."

What I "re-learned" from this was that I hated being treated like a dope and have to put up with crap treatment in order to get a 20% discount. I'd rather pay higher rates and switch phone companies than being the doormat for that kind of poor service.

How does this story relate to you?

For you, the reader of this, I want you to know that I also go through the nightmare of what some companies call customer service. I try my best to run Apogee Components in such a way as to be the one bright shiny star in an otherwise dark and gloomy night of customer service.

First of all, as this story points out, if I can save you money, let's JUST DO IT! In other words, let me do all the work for you. The phone company wanted me to go through a complicated process to prove I was eligible. That is just

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PEAK OF FLIGHT

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Is This Customer Service?

silly. Either I'm eligible, or I'm not. Don't make the customer have to prove they are – just be proactive about it.

Let me give you an example of how we put this into practice at Apogee Components. Every day people purchase our RockSim software. Many people buy the full version of the program, even though they purchased the full version in the past. What they should have done was just order the upgrade edition from their previous version. But maybe their computer went dead and they don't have the original CDs. So they think they have to buy the full version all over again. That's just not right because it goes against the "grandmother principle." Simply, if you wouldn't treat your grandmother that way, then you shouldn't treat your customer that way either. So we refund the customer the proper amount, and send them the full version of the software. It's all automatic to us, because it is the right thing to do. That's why I'm really stumped as to why the phone company wants to make me play a stupid game to save money.

Another thing that I will insist upon is that we don't waste the customer's time. The most precious commodity in a person's life is their "time." Once you spend it, you can never get it back. The phone company salesman wanted to make chit-chat with his colleague on the phone while we

sat here and twiddled our thumbs. That irritates me to no end because it disrespects the customer's time.

I know your time is precious, so we do everything possible to get you the information you need quickly. A practical example is that we will never turn on our voice-mail system on our phones. We answer them with a real person that will talk to you. Some people are astonished that we answer the phones with a real human being. To me that is the least we can do. I wish I could answer them all personally, but unfortunately that isn't possible. But if you need to talk to me personally, all you have to do is ask.

Finally, if we have policies or procedures that affect our customers, I want them written down where you can see them. For example, we are required by law to ask for proof of age when a person orders a reloadable rocket motor (the propellant kits). I know this is a burden on our customers, and I hate it. But I'm not going to hide it from you. I put it on the web pages where you can easily see it.

I'll be the first to admit that we are not perfect. There are still some things that I know we're doing that are bugging customers. Most of the time is something that is beyond our control, or my ability to fix with existing or affordable technology. Our shopping cart on our web site is one example. I'm looking for ways to improve it that will be

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Is This Customer Service?

more user friendly to customers.

It does concern me when we fail to live up to your expectations. I hope that if there are any customer service problems that we are unknowingly inflicting on you, that you'll let me know personally. With the phone company, I don't have a clue as to who is the right person to yell at. But with your dealings with Apogee Components, you can yell at me. If I know about it, at least I can try to fix it.

About The Author:

Tim Van Milligan (a.k.a. "Mr. Rocket") is a real rocket scientist who likes helping out other rocketeers. Before he started writing articles and books about rocketry, he worked on the Delta II rocket that launched satellites into orbit. He has a B.S. in Aeronautical Engineering from Embry-Riddle Aeronautical University in Daytona Beach, Florida, and has worked toward a M.S. in Space Technology from the Florida Institute of Technology in Melbourne, Florida. Currently, he is the owner of Apogee Components (<http://www.apogeerockets.com>) and the curator of the rocketry education web site: <http://www.apogeerockets.com/education/>. He is also the author of the books: "Model Rocket Design and Construction," "69 Simple Science Fair Projects with Model Rockets: Aeronautics" and publisher of a FREE e-zine newsletter about model rockets. You can subscribe to the e-zine at the Apogee Components web site or by sending an e-mail to: ezine@apogeerockets.com with "SUBSCRIBE" as the subject line of the message.

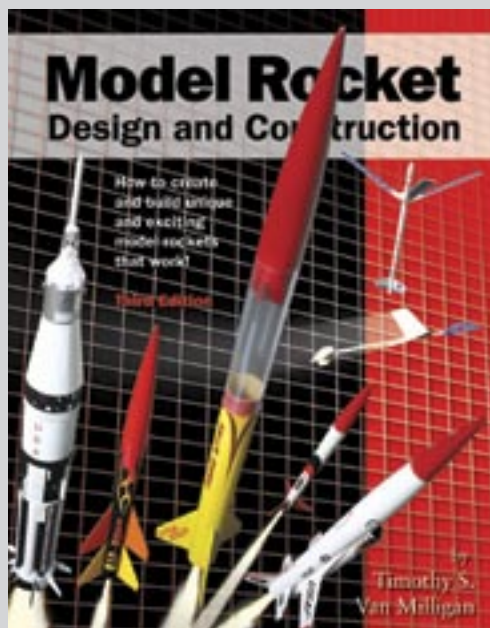
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PEAK OF FLIGHT

Go Green: Cleaning Launch Rails

By Tim Van Milligan

A couple weeks ago, I put out a request for ideas on what cleaners rocketeers were using to clean launch rails. Some of the "smokey" motors put out a lot of black grime that really sticks to the aluminum launch rails. I got a lot of responses back, so I'd thought I'd share them in this newsletter issue.

The most popular response for a cleaner was plain old, white vinegar. We wrote about this in Peak-of-Flight Newsletter 159 (www.ApogeeRockets.com/education/Downloads/Newsletter159.pdf), and how to build a cleaning chamber for reloadable motors in Newsletter issue 144 (www.ApogeeRockets.com/education/Downloads/Newsletter144.pdf).

What were some of the other things people have tried? Below is a list. I haven't tried any of these myself, so I can't vouch for any of them. I just list them for your own information in case anyone asks you what other rocketeers have used. If you have some comments on any of these, please let us know and we may do a follow-up article on this topic.

Cliff Sojourner wrote: Hands down the best stuff for cleaning the launch rail is plain old white vinegar.

- It's cheap - \$2 a gallon - and environmentally friendly, and does the job just as well as any hydrocarbon solvent.
- White vinegar also cleans motor cases for the same reason.
- It cleans up motor gunk from igniter clips.
- It also neutralizes & rinses uncured epoxy.
- Last, it also "sets" decals nicely.
- Be sure to rinse well after using.

Peter Mielke wrote: I used store bought white vinegar undiluted applied from a hand spray bottle for easy application and it removed the extreme carbon black fouling from



Figure 1: Igniter clips. Bottom one was cleaned with white vinegar. Top one has not been cleaned.

the FJ motors on contact. It literally dissolved on contact. To remove the heaviest build up I used an ultra fine grey Scotchbrite pad and the worst came off with little to no scrubbing.

I couldn't believe how quickly it worked when extremely harsh chemicals like carburetor cleaner would hardly touch the stuff.

There was no need to leave the rail soak as the action is immediate and complete. Better living through modern... uh, old chemistry.

My plan is to use the vinegar at the launch site so the biggest issue I'll have to face is having the water to wash off the vinegar. I do have a 5 gallon backpack sprayer so that should be more than enough water to remove the vinegar and residue.

I have used the Clorox brand wipes with some success

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Go Green: Cleaning Launch Rails

in the past and still use them to clean the engines but nothing compares to the vinegar.

In the past I have used dry film Teflon lube in an attempt to make the rail easier to clean (that's what the GiantLeap guys said to do). I'm going to try to not use anything at all just to see how it goes by just making sure the rail is cleaned more frequently with the vinegar and then I will use WD40 on the rail just prior to launch. WD40 does get sticky over time so I would not leave it on the rail in-between uses but it should be okay when its freshly applied.

Next I will use the white vinegar to clean the aluminum motors and I will let you know how it does. I have two 29mm motors still in need of cleaning from last weekend. The biggest issue with them is the plastic binder residue that forms in the area where the paper liner burns through and the forward nozzle due to plastic and black powder build-up.

Jonathan Bonebrake wrote: We cyclists use citrus based, biodegradable solvents to clean grease and tar covered parts. Finish Line and Pedro's are two good brands. Cheap too. Plus, they are not harmful to the environment. They can be found at most bike shops and online stores like:

<http://www.jensonusa.com/store/product/CM407C10->

[Finish+Line+Chain+Cleaner+Kit.aspx](http://www.jensonusa.com/store/product/CM602C01-Pedros+Oranj+Peelz+Degreaser+16+Oz.aspx)

<http://www.jensonusa.com/store/product/CM602C01-Pedros+Oranj+Peelz+Degreaser+16+Oz.aspx>

Geoff Kerbel writes: For a quick field cleaning, use nonchlorinated brake cleaner from the local auto parts store. It will cut through most of the gunk to at least allow you to use the rail some more that day. When you get home, soak a rag in SimpleGreen and soak the rail as much as you can with the stuff. Let it work its way in for at least 10-15 minutes and then hose it off. You can then scrub some of the more built up areas with another soaked rag. Touch up with some 000 steel wool and it should be nice and shiny in no time.

The SimpleGreen will work wonders on the buildup of hard carbon in your motor cases as well. Just soak the case in the stuff for about an hour and again just rinse off with water. You can even pour the stuff back into another container and let the particals settle out to use the liquid again and again until it gets to dirty to use anymore. Do not soak for more than 4 hours!!! Some of the cases will lose their anodizing if left in the liquid for too long. Personally I have, but some others have said that it will mess up the color of the casing. I don't see how since it is anodized and that is a process that etches into the base metal. I have

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Go Green: Cleaning Launch Rails

soaked mine for 8 hrs with no change in the color of the case. Most of the time, though, the four to five hour soak will get 99.9% of the gunk with just a light scrubbing to get the rest off.

Just remember to use plastic tools to do the scraping so as not to scratch the case. Do not use Scotchbrite on motor casings!!!!

That's another tip!!! Go to the nearest craft store and pick up some plastic clay shaping tools. They are strong and can scrape the cases without damage.

Anonymous Reader Writes: The standard solution for cleaning black powder firearms is soapy water. He might also try Hoppe's #9 gun cleaning solvent. Not exactly green, but it works for me. I don't know how well it would work with the soot from composite motors.

Lloyd in Canada writes: Straight vinegar works great, another is 50/50 vinegar and 3% peroxide but use caution with the 50/50 mix if left soaking it does etch the anodizing ...either way, wash with dish soap and water after.

Another Anonymous Reader Writes: Regular old muratic acid (the stuff you use to adjust the PH level in swimming pools), when put into spray bottle and applied to

aluminium will clean the nastiest grime you can imagine. Spray it on, let eat for a minute, then rinse well with water, (Wear gloves and mind the wind).

Ernie Pucket says: I use Fast505 cleaner/degreaser from Zep. It is available at Home Depot stores.



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PEAK OF FLIGHT

Reader Project: Doorknob Triceratops

Jon Kerfoot writes: *I have a bit of an odd question for you concerning Rocksim. The Tulsa Rocketry Club, of which I'm a member launches a "Rocket Science" project every May, wherein high school and junior high classes can create an experiment that fits in an 8" length of 4" coupler and the experiments are launched to approximately 4000 feet altitude on a large rocket.*

This year, we've decided to make insertion of the experiment canisters into and removal from the rocket much simpler than it has been in the past. Our booster is a 10.25" diameter, 59" long "Doorknob" type rocket. Instead of trying to shoehorn canisters into the nose cone like we did last year, we are going to make a payload section of three 4" diameter airframe tubes, each topped with a Ace 4" nosecone. I refer to it as the "Doorknob Triceratops."

To make a long question short, how do I set up something like that in Rocksim? I know that I can offset tubes that are inside a sub-assembly (like an ejection baffle), but I can't seem to figure out how to put the three tubes in a "cluster" with no outer tube. If you could point me to a lesson on the Apogee website or in the FAQ or someplace, I'd really appreciate it!

By the way, for more information on the Rocket Science project, visit: <http://www.tulsarocketry.org/RocketScience>



Doorknob Triceratops
Length: 101.5000 In., Diameter: 10.2500 In., Span diameter: 32.2500 In.
Mass 30744.375 g, Selected stage mass 30744.375 g
CG: 10.1537 In., CP: 28.6052 In., Margin: 1.80
Shown without engines.

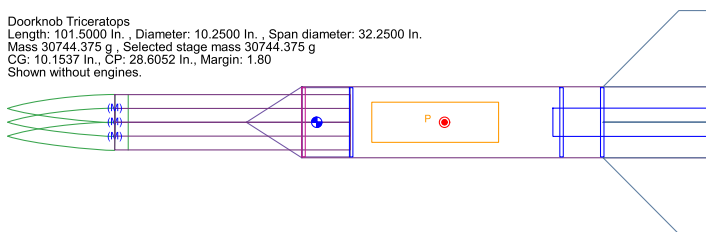


Figure 1: The Doorknob Triceratops rocket. The forward tubes are "pods" attached to the main tube, and then shifted forward.

[eTop.htm](#).

This is a very cool project. I didn't know if it was possible, at first. I know for a fact that it is not possible in the old RockSim version 8. But after playing around, it is possible to do it in version 9!

The three forward tubes are actually "pods" that are attached to the outside of the big rear tube. They are then repositioned using the radial position and the fore/aft location to put them in front of the tube.

That transition in the middle is actually the forward nose cone of the rocket (its a simple cone). In the 3D view, RockSim v9 automatically creates the correct mesh to give it that cut-out look.

But remember, while it looks like a transition, it is actually a cone. And unfortunately, you can't get a cutting pattern for it from RockSim. There is a little powerpoint tool that was created by Steve Humphrey that will create the pattern. You can download his tool at: <http://shumphrey.home.att.net/interests/rocketry/transitions/>. I haven't been able to try it, as I couldn't get it to work on my Mac. But it should work fine on Windows computers.

You can download the RockSim file (requires version 9) for this design so that you can see how it was put together at: www.ApogeeRockets.com/education/downloads/triceratops.rkt.zip

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