THURSDAY, MARCH 01, 2007

Remote Arrived!

Sixty-four days after I ordered my remote control, it *finally* arrived. This was the last (and by far most expensive) piece of the puzzle.

Included were the Futaba T9CAP transmitter with the Vantec Keycoder 16 module installed, the radio receiver, the Keycoder 16 receiver/demultiplexer, the RDFR23 speed controller, and four digital servos (along with some other goodies like the wall charger, neck strap, etc.).



The transmitter battery was fully charged, but the receiver battery had just enough charge to test a couple of the servos for about five seconds before the juice was gone. I'll charge the receiver battery for a good 18 hours and play around a bit. I have a lot of reading to do. (Don't let the airplane graphic on the LCD mislead you, this is tuned for a 75MHz ground frequency, channel 79.)



Oh yeah, I also applied a bit more Bondo to smooth out the remaining seams and bumps on the outer foot shells. I'll sand tomorrow, and then the foot shells will be ready for the gluing of the bottom strips, and the cutting of the slots at the top. *posted by Victor Franco at 10:29 PM* 0 COMMENTS

SATURDAY, MARCH 03, 2007

Drilled Drive Train Motor Mounts, Marked Foot Shell Tops for Cutting, Fun with Remote

After another evening of chatting with R2 builders last night, I returned to work on my droid.

I did a last bit of sanding on the filling I've been doing on the outer feet, and I think they are good to go, at least until I glue the bottom strips on. Then another round of filling and sanding in that area. :/

Most of the day was spent drilling holes in the drivetrain motor mounts. In some cases I measured, marked, and drilled.



Four of the holes on each motor mount are tapped with a 4-40 tap.



In other cases, I used a spare H&A drivetrain that Mike loaned me to use as a template, which I found handy for some of the trickier hole patterns.



Things turned out pretty good, but I found afterward that the motors are riding a bit high on the motor mount. This will cause the motor to bump into the flat metal bar that the motor mount hangs from. I will either shim the motor mount away from the metal bar, or simply cut out the material from the metal bar that is getting in the way. I haven't decided yet.



I also marked up the foot shell tops, Mike and I plan to cut the slots out of the tops tomorrow.



And I couldn't avoid playing with the remote some more. I hooked up the

Keycoder 16 to the CFSound III, and I played R2's sounds using the remote for the first time! I had the sound system and speaker in the droid, and he was chirping happily. That was neat.

posted by Victor Franco at 11:40 PM 0 COMMENTS

SUNDAY, MARCH 04, 2007

Worked on Foot Shell Top Slots, Reinforcements & Door Frames with Mike

Mike and I continued working on the foot shells today.

We started off by cutting the grooves to form the slot in the top of shells. Mike pushed while I pulled on the sled to feed these through on the table saw. The cuts turned out very good. A couple of simple horizontal cuts and the slots will be open.



Next we cut some reinforcements for the inside corners of the foot shells, and glued them in.



We wrapped up by starting work on the door frames for our center feet. We got the top, left and right sides cut and glued in. We plan to finish up the door work next weekend.



I also asked Mike for his opinion on my motor mount boo-boo from yesterday, and he advised me to recut and redrill. That's the plan.

Mike's foot shell quote of the day: "Remind me never to do this again." *posted by Victor Franco at 10:59 PM*⁰ COMMENTS</sup>

MONDAY, MARCH 05, 2007

Finished Cutting Slots from Foot Shell Tops

Tonight I finished the cuts that Mike and I started yesterday on the tops of the foot shells.

I started by using my Dremel with the cutoff wheel attachment to slice the main part of the material away.



Next, I smoothed out the remaining part with a file. I switched to a finer file, followed by an emery board, to smooth these out.



I will still need to bring these slots down a bit further, but I am waiting to do some more drivetrain work first, so I can fit the aluminum into the foot shell and see exactly how far down the slots need to be brought, in order to line them up with the channel that will fit within them.



posted by Victor Franco at 10:02 PM 2 COMMENTS

TUESDAY, MARCH 06, 2007

Rubber for Center Foot, Foot Shell Gap Filling I'm starting to think about construction of my permanent center foot. The goal is to have it look like Mike's.



The foot will be made from wood, with a layer of rubber to cushion the ride. The rubber is for joining large pipes together.



I sliced it so that it can be cut flat. I have to pause until I start cutting the wooden parts of the foot, so I'll know how large the piece of rubber needs to be.



I also did some gap filling and smoothing on the center foot shell. As usual I'll



sand this down, and repeat as necessary.

posted by Victor Franco at 10:58 PM 0 COMMENTS

WEDNESDAY, MARCH 07, 2007

Bondo, Sand, Repeat

Infinitely.

Another round of minor filling and sanding on the center foot shell. It is getting very close to being done now.



posted by Victor Franco at 10:12 PM 2 COMMENTS

THURSDAY, MARCH 08, 2007

Finished Sanding Center Foot Shell, Door Work on Outer Foot Shells

Tonight I finished up sanding the center foot shell, all surfaces are reasonably smooth now.

I spent some time working on the gap between the door and the shell for the outer feet. The width needed to be increased a bit. These may still need a little more work, but I'm waiting to see how the door frame looks after this weekend before I continue.



posted by Victor Franco at 9:33 PM O COMMENTS

SATURDAY, MARCH 10, 2007

Chris' Rockler Install, Finished Cutting Door Frames on Foot Shells

Chris Romines joined us today, and Mike and I helped get his Rockler bearing installed on his Imperial droid.



Mike and I finished cutting the door frames (that also double as reinforcements) for the foot shells today.



The bottom door frame strip on the center foot shell is intentionally high for the

moment, it will be trimmed down with the Dremel. The bottom door frame strips for the outer foot shells have not been glued on yet, I hope to do that tomorrow.



posted by Victor Franco at 9:57 PM 0 COMMENTS

SUNDAY, MARCH 11, 2007

Recut Drivetrain Aluminum Again, Finished Center Door Frame Bottom

Today I visited Kelvin and his band saw yet again, and for the *third time* I cut the aluminum channel for the drivetrain. This was necessary because the channel in the outer foot shells is about 1/4" longer than the H&A drivetrain spec, so there was a gap between the foot shells and the aluminum. Recutting these channels eliminated that gap.



I also had to recut my motor mounts, because when I drilled the holes on the former motor mount for the screws that hold the motor on, I drilled them too high. I need to drill the holes in these pieces a bit lower this time.



When I got home, I trimmed the bottom piece of the door frame on the center foot using the Dremel. I started with the cutoff wheel, and finished with the sanding drum.



I just need to keep moving forward on these foot shells and the drivetrain. The center foot shell is almost done, the outers aren't far behind.



posted by Victor Franco at 11:02 PM 0 COMMENTS

MONDAY, MARCH 12, 2007

Cut and Glued Outer Foot Shell Door Frame Bottoms, Bondo for Outer Shell Foot Strips & Center Foot Shell

First off, I should mention that I had to do some photo maintenance tonight. If you see anything wrong with photos from the past, especially between February 17, 2007 and March 11, 2007, please let me know so I can address the issue(s). Now, on to today's update.

I love daylight savings! It means I get more daylight after work, and that's a good thing. This evening I used that extra daylight to cut the 34 degrees from the strips that make up the bottom of the door frame for the outer foot shells.



As usual, I used the smelly Oatley PVC glue to glue the strips in place.



I normally don't use clamps to hold the bonded surfaces of PVC together, but on a particularly thin strip I decided to do so. I will trim the freshly glued-on strips

down with the Dremel soon, much like I did those for the center foot shell yesterday.



I wrapped up by doing some minor gap filling on the strips for the bottoms of the outer feet, and on the center foot shell. I plan to glue those strips onto the outer feet sometime this week.



posted by Victor Franco at 11:06 PM 0 COMMENTS

TUESDAY, MARCH 13, 2007

Trimmed Bottom Door Frame, Attached Bottom Strips for Outer Feet

R2 is going to be getting new shoes soon.

Today I trimmed the bottom of the door frames on the outer feet that I glued in yesterday. As with the center foot shell, I started trimming with the Dremel cutoff wheel, and finished with the drum sander.



More importantly, I finally attached the strips at the bottom of the outer feet. I used PVC glue to attach each strip, one at a time.



There were some visible gaps here and there, so I used Bondo to fill those. I'll sand/fill/sand again as needed. Experience shows that this step usually takes a few days of finishing work. Right now everything is a PVC-primer-Bondo mess, but it will look a lot nicer soon.



WEDNESDAY, MARCH 14, 2007

Redrilled Motor Mounts Correctly, Started Sanding Bottom Foot Strips on Outer Feet

I made pretty decent progress tonight, especially if the definition of progress includes fixing previous errors. All of the do-overs have the effect of making these blog entries look very similar. Oh well.

I drilled the new motor mounts that I cut last weekend to fix the problem with the last set, where the motor was riding too high on the motor mount. I drilled the main 7/8" hole where the motor shaft and shaft adapter fit through, along with the three 5/16" holes that lie in a triangular pattern, where the screws go that hold the motors onto the mounts.



I also drilled and tapped the 1/4" holes on the top of the motor mounts, so that they can hang from the main bars of the drivetrain.



Hooray! The motor now fits under the main bar!



I wrapped up the evening by sanding down the bottom foot strips on the outer foot shells that I attached yesterday. I'll hit them with primer to see what needs

further work, and go from there.



posted by Victor Franco at 11:08 PM 0 COMMENTS

THURSDAY, MARCH 15, 2007

Foot Shell Finishing Continues

Nothing too exciting to report. The foot shell finishing cycle of sanding/filling continues. I think they'll be just about done in a day or two.

I still need to attach the doors, I hope to have that done by the end of the weekend.

posted by Victor Franco at 10:43 PM 0 COMMENTS

FRIDAY, MARCH 16, 2007

Dome Motor Wheel, Yet More Foot Shell Finishing, Cut Door Holders

I managed to squeeze in some building tonight, while also participating in the weekly R2 Builders chat.

I picked up a couple of Razor scooter wheels from Play it Again Sports in Costa

Mesa. These have a 3/4" inner diameter, to fit around the 3/4" shaft adapter attached to the Saturn motor. A spring will pull the motor and wheel into the Rockler bearing, causing the dome to spin when the motor is powered in either direction. I'll have to put a layer of tape on the shaft adapter to ensure a snug fit.

I only need one of these wheels (one dome per droid), I can use the second one to build a miniature unicycle or something.



The foot shells are nearly done. I used a little super glue to fill in small voids, and I sprayed accelerator onto the glue to instantly dry it. I sanded this smooth afterward, and now there's not much else that needs fixing. Maybe one more pass...



I wrapped up by cutting the door holders that will go on the back of the foot shell doors.



I now have a PVC tank infantry.

Two sets of these will be glued to the bottom and top of the back of the doors. On the top, the thin pieces will tuck behind the door frames to help hold the doors in place, while on the bottom the thin pieces will swivel to lock and unlock the door from the bottom of the door frame. I also will have some pieces cut to help ensure the door is centered on the frame.



Tomorrow I plan to drill mounting holes into the aluminum drivetrain channels that were cut last weekend.

posted by Victor Franco at 11:36 PM 0 COMMENTS

SATURDAY, MARCH 17, 2007

Drilled Drivetrain Channel & Main Bar

I went to Kelvin's again today to drill some holes in the drivetrain channel that we cut last weekend. His drill press has a fence, which I wanted to use to get a nice, straight row of holes.

Twenty-four holes were drilled and countersunk (twenty-five if you count a practice hole) with a 0.266" drill bit and a 1/2", 82 degree countersink bit.





When I came home, I worked on drilling and tapping the main bars that will hang from the channels, and from which the motor mounts will hang. I used a #7 drill bit, followed by a 1/4-20 tap to drill and tap these.



Everything seems to line up properly, the screws go through the countersunk holes in the channel and they screw into the main bar. I still have four more holes to drill into each of the main bars for the motor mounts, and I need to drill some holes in the aluminum wheel holders.



posted by Victor Franco at 9:34 PM 2 COMMENTS

SUNDAY, MARCH 18, 2007

Started Cutting Permanent Center Foot

Way back in February of last year, I made a quick, sloppy center foot to get my droid on three legs. Now it's time to make the permanent center foot that will fit inside my PVC foot shell.

Today simply consisted of lots of cuts to make up the top part of the center foot.

First, there is the rectangular base that the wooden channels will ride atop.



And then there are the channel walls themselves.



I cut the channel walls 1/2" higher than normal so that I could add 1/2" thick supports on each side to help keep them from buckling.



The final result is a nice channel that fills the foot shell groove in the middle. The center ankle fits perfectly in there.


A layer of rubber will go underneath today's work, and beneath that will go a couple of layers of 1/2" plywood glued together. The two caster wheels will attach to the plywood. I may have to find smaller casters (I can salvage the nice wheels), the footprint of the top of them is too large.

I wrapped up by test-fitting the outer foot shells on the ankles to see if they fit. The left shell fits fine, but the channel gap in the right shell needs to be widened a tad in order for the right ankle to fit. I'll do some light filing and all should be well.



posted by Victor Franco at 10:18 PM 2 COMMENTS

MONDAY, MARCH 19, 2007

Marked Drivetrain for Drilling Holes for Axles

I didn't get a whole lot done tonight. All I had time to do was mark the drivetrain aluminum where I'll be drilling 1-3/8" diameter holes for the wagon wheel bearings that will go in place for the wheel axles. I plan to visit a friend-of-afriend's machine shop tomorrow evening to drill these relatively large holes.



On a less delightful note, Mike confirmed my fears that the poplar wood I used yesterday for the center foot will not be structurally strong enough. I'll need to use plywood.

I had chosen the poplar because I am just about out of 1/2" plywood, and what little I have is of questionable quality. I have lots of nice smooth poplar, but I had a sinking feeling it would not be structurally sound.

Well, I built the temporary center foot more than once, why not the permanent one? By the time this droid is done I will have almost built two of them - one for real, and one for the scrap bin.

posted by Victor Franco at 11:16 PM 0 COMMENTS

TUESDAY, MARCH 20, 2007

More Shaft Adapters, Wheel Housing Drilled & Milled, Battery Recharger for Remote

Lots of pictures today.

Back on January 28th of this year, I drilled four shaft adapters for the drivetrain and dome drive. Two of the adapters turned out fine, but the other two had holes that were a little off-center. So early today on the way in to work, I went back to Industrial Metal Supply and purchased another foot of 3/4" diameter steel rod. I had them cut as many 1.25" sections as possible (9) for the shaft adapters. They use a humongous band saw to cut the steel rod.



Now I have a lifetime supply of raw material for shaft adapters for my drivetrain and dome drive.



In the afternoon, I went to my friend-of-a-friend's machine shop to have the wheel housing of the drivetrain cut and milled.

First, they calibrate the CNC machine so that the 1-3/8" diameter hole will be exactly where it belongs.



Then, a big bore starts drilling the hole.



After all the holes were drilled, they milled out the slots on the top that will allow the chain to be tensioned.



When I got home, I found that the slots on top were just slightly too close to each other, so I had to file one of them on each wheel housing to widen it slightly.



Everything seems to fit as far as I can tell.



I also tried out one of the foot shells to see how it would fit, and it also seems to be in pretty good shape. I will need to file the channel area on the foot shell a bit lower to match the drivetrain channel, but I already planned on doing that.



Finally, I bought this today, whatever it is.



posted by Victor Franco at 11:02 PM 2 COMMENTS

WEDNESDAY, MARCH 21, 2007

Installed Bearings, Wheels on Drivetrain

I spent most of the evening in the garage tonight, fitting the bearings into the holes that were drilled into the wheel housings yesterday. The bearings are slightly tapered, enough that they didn't quite fit through the holes. I used the drill press with the drum sander to sand the edge off the bearing. I let the bearing spin at a slow, constant rate against the sanding drum, in order to get an even sanding all the way around.



Once the bearings were all pressed into the holes, it was another chore to get the wheels in there. It is a *very* tight fit. I had to sand down the inboard side of the bearings to get everything to fit, and it is under stress. I may go back and sand some more, to relieve some of the stress.

The axles went in without too much fuss, it's just a matter of aligning everything perfectly.



I wrapped up tonight's work by screwing the channel down in place and installing some of the gears, to see how it all fit together. I think everything is still looking good.



I still need to drill four holes in each main bar to hold the motor mounts, and I need to drill holes in the channel for the ankle bolts. At that point, the main part of the drivetrain will be done, and all I will need to do is install the chain. I also still need to install the doors on the foot shells.

posted by Victor Franco at 10:26 PM 0 COMMENTS

THURSDAY, MARCH 22, 2007

Received Battery Chargers, More Drivetrain Assembly, Finished Footshell Filling

Today I received the battery chargers for the main batteries that will power my droid. I'm still waiting on the actual batteries, they should arrive soon. The charger I received a couple of days ago is for the remote control transmitter and receiver batteries.



I did some more assembly work on the drivetrain tonight. I needed to see how everything fit together before I drill the final few holes.

I *think* (and hope) that I'm just about done with the foot shell finishing work. I filled the last of the small voids in a small edge of each of the outer shells with Bondo.

As a reminder, a large portion of the inboard side of these outer foot shells will be completely cut out and removed to allow the drivetrain to pass through, into the battery boxes (which will also need to be cut). Thus, I did not bother finishing that area of the foot shells to perfection.

Tomorrow I'll sand, and then I think the foot shell finishing is complete. Yes, I still need to attach the doors. I'll get to that eventually...

posted by Victor Franco at 11:08 PM 4 COMMENTS

FRIDAY, MARCH 23, 2007

Finished Adding Foot Shell Reinforcements

This morning I sanded smooth the Bondo I applied last night. Barring any future mistakes that require repair, the foot shells are done being filled and sanded. (I reserve the right to even out the seam between the door and the shell via filling and/or sanding as needed.)

I finished gluing in the last of the foot shell reinforcements. Each of the outer shells got a pair of thin strips of PVC to help reinforce the bottom strips on the front and back of the shells.

I removed the temporary feet from my droid in anticipation of being able to install the drivetrain on the outer feet. I plan to recut the center foot tomorrow from high quality plywood that Matthew Henricks is making available to me.

It looks like R2 parked in a bad neighborhood.

posted by Victor Franco at 10:14 PM 0 COMMENTS

SATURDAY, MARCH 24, 2007

Recut Top of Center Foot, Mounted Half Moons

A big thank you to Matthew Henricks, who generously donated some 1/2" high quality plywood for the rebuild of my center foot.

The bad news is that I had to junk my center foot made from poplar, the good news is that today's recut of the center foot from Matthew's plywood went extremely fast, as I was able to use the poplar center foot pieces to guide the plywood cuts.

Like last week's version, this version seems to have turned out pretty good. The fit is just about right. Note that I still need to build up the bottom of the foot to accept the caster wheels.

Next, I returned to the foot shells. Today I mounted the half moons onto the doors.

I started by placing all the parts on the foot shell doors. The outer foot shell doors have a few details on them, while the center foot shell doors just have the resin half moon pieces.

I traced each item, and then removed everything except the half moon, and taped it down in place.

I placed another half moon on the drill press table, so that when I set the door upside down with its half moon taped underneath it, the back of the door would be perpendicular to the drill bit. I marked a location on the back of the door deadcenter, and two more marks one inch to the left and right, for the three #41/2" screws that will hold the half moons onto each door.

The doors seem to be holding the half moons just great!

I had intentions of getting the door holders installed today, but that didn't happen. One of these days it will though.

posted by Victor Franco at 10:21 PM 0 COMMENTS

SUNDAY, MARCH 25, 2007

Ground Down Wheel Hubs, Drilled Ankle Drivetrain Holes, Drilled Shaft Adapters, Cut Battery Boxes

Today I went back to Mike's, where good things always happen.

I showed Mike the very tight fit of the wheels in the wheel housings. Mike took the wheels to the bench grinder to help get them to fit much better. Mike ground down the first one, I did the other three. After the wheels were shaved, we added lubricant. Now the wheels spin nice and free in the wheel housing.

The grinder makes neat sparks.

I had been paralyzed with fear on making one of the last cuts to the drivetrain, the hole for the ankle bolt that attaches the drivetrain to the tip of the leg. I wasn't sure how best to drill this hole. Should the channels be cut separately? Together? How to position them?

In the end, we drilled both channels as they would be mounted in the drivetrain. We drilled slowly and were able to successfully drill straight holes, 1/2" in diameter. I plan to use a 1/2"-to-3/8" bushing, and a 3/8" bolt in the hole.

We also drilled some more shaft adapters, using the 3/4" steel rod I had cut this past week.

Last on the agenda was cutting out a square from each of the battery boxes, for

maintenance purposes. This square will be on the inboard side of the battery boxes, and will be held in by a screw in each corner.

Mike used his super-human Dremel abilities to cut very straight lines with the small saw blade attachment. The first battery box gave Mike a pretty good coating of PVC dust.

He managed to avoid a second coating when he cut the other battery box.

The drivetrains are almost done. I just need to drill and coutersink the four holes in each main bar for the motor mounts, and I need to assemble the chain.

Thanks for the two millionth time, Mike. The finish line is drawing closer, I won't be bothering you for help that much longer. *posted by Victor Franco at 11:03 PM* 0 COMMENTS

MONDAY, MARCH 26, 2007

Main Batteries Arrive, Attached Foot Shell Doors, Marked Main Bar for Drilling

Today, the batteries I ordered from ragebattery.com arrived. I ordered a total of eight 6-volt, 12 amp-hour batteries. My foot and dome motors will run off of 24 volts, so those will be wired in series. The sound system runs off of 12 volts. (The dome electronics run separately off of four D cells.)

I ordered enough batteries to have a spare set when needed. The 6-volt package is reasonably small and inexpensive.

I finally installed the foot shell doors tonight.

First, I taped the doors in place, as centered as I could get them.

Next, I glued down little squares of PVC. The squares on top have rectangles that extend above them. They are fixed behind the top door frame. The bottom squares will have similar rectangles on them too, but those rectangles will pivot on a nail. That way the doors can lock and unlock from behind, by reaching underneath and pivoting them. The doors then slide out from the bottom.

There are also a couple of small strips on the diagonal sides, to help center the doors left-to-right. All Mike's idea.

I wrapped up tonight's work by marking the main bar for drilling, where the motor mounts will be held in with screws. Hopefully I'll drill those tomorrow, and then all the cutting and drilling on the drivetrain will be done! Unless I find a

problem, that is.

posted by Victor Franco at 10:44 PM 0 COMMENTS

TUESDAY, MARCH 27, 2007

Drilled Holes for Motor Mounts, Prepped Foot Strips, Finished Door Holders, Attached Door Details

Tonight I drilled the holes in the main bar of the drivetrain to attach the motor mounts. Four holes on each main bar, 0.266" in diameter and countersunk.

The drivetrain is getting closer. I still need to file some flat spots on the axles for set screws on the gears and wheels, and I need to hack on the shaft adapters a little bit to get them to fit snugly on the motors. Then the shaft adapters need to be pinned to the shafts. And the chain needs to be attached, of course.

I also cleaned the aluminum strips that go on the front and back of each of the feet. Here's a tip: If parts arrive taped together, do yourself a favor and don't wait a year or more to take the tape off.

Next, I finished installing the foot shell doors by nailing in small strips of PVC onto each of the bottom door holders.

Now all I need to do when I want the doors to come off is pivot the strips of PVC.

After gagging on acetone fumes earlier, I was ready to gag on PVC glue fumes. I glued down the various details that go on the doors of the outer foot shells.

And that was a wrap for this evening.

WEDNESDAY, MARCH 28, 2007

Installed Drivetrain Bushings, Filed Foot Shell Channels to Match Drivetrain Depth, Dremeled Drivetrain

Some bushings that I ordered from McMaster-Carr arrived today. These are the 1/2"->3/8" reducers that I need for the ankle bolts. I lightly tapped them in with a hammer, and now they have a nice, snug fit.

Next, I filed the bottom of the channel slots in the outer PVC foot shells to match the depth of the drivetrain. When I first filed these down, I intentionally left a little bit of slop on them, until the drivetrain was ready. Tonight I finished the job.

I found that I will need to widen the channel gap on the right foot shell about 1/16". The tip of the ankle isn't quite fitting through.

I also had to hack on the drivetrain itself tonight with the Dremel. The door frames slightly touched the drivetrain from the inside, so I removed a small amount of material to resolve that.

posted by Victor Franco at 10:41 PM1 COMMENTS

THURSDAY, MARCH 29, 2007

Worked on Center Foot

Not a whole lot of progress tonight.

I am deviating slightly from the original design of the center foot. I'm going to sink the sides that form the channel into the the base, rather than use supports. This allows me to stack two layers of 1/2" plywood above the casters without having the foot wind up being too tall.

First I made a couple of parallel dado cuts, 1/4" deep and 1" apart.


Then I trimmed the base to size. At least I hope I did, I'm a little worried I may have overdone it on the trim, but I'm still working on fitting it into the shell.



I also widened the channel gap in the right foot shell, so the tip of the ankle can

fit through now.

Like I said, not much progress. posted by Victor Franco at 10:20 PM 0 COMMENTS

FRIDAY, MARCH 30, 2007

More Center Foot Work, Started Working on Drivetrain Chain

Tonight I continued where I left off on the center foot.

I trimmed the channel sides a little lower.



I started working on the layer that the casters will attach to.



I cut a pair of 1/2" pieces of plywood to size, and glued them together. These will be trimmed to match the angled profile of the foot shell.





Finally, I wrapped up with an attempt to separate the chain so that I can get pieces of the correct length. My chain tool turned out to be a piece of junk, so all I did was make an oily mess. I found a better chain tool in my bag of tricks, so I may be able to continue working on this without having to go out and buy one.



Saturday: The California Science Center Star Wars exhibit, featuring... R2 Builders!

posted by Victor Franco at 11:42 PM 0 COMMENTS

SATURDAY, MARCH 31, 2007

California Science Center

Today was R2 Builders day at the California Science Center, which is currently hosting the "Star Wars: Where Science Meets Imagination" exhibit.

As usual, Mike's R2 was the star of the show, making the rounds and regaling the crowd.



Mike gave a talk about R2 building and the R2 Builders Club. He talked about his R2 on stage, and showed various parts (including my drivetrain). William Miyamoto and Guy Vardaman also said a few words.



There we also the cool props at the exhibit, including Luke's landspeeder, the rebel blockade runner Tantive IV, and the Jawa's sandcrawler, among many, many more.





And of course, a Lucasfilm R2-D2 prop was there.



Afterward, we visited one of the R2 mailboxes and took some pictures. All in all, a fun day!



posted by Victor Franco at 11:23 PM 0 COMMENTS