" 49% Finished, 90% To Go! "

Project Status: @ ~ 1497 HRS
" Only a couple hundred more things to do!!! "

F1 BOSS werds of wizdumb: " Think *TRACTOR,* not *Space Shuttle*..."


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The digest version of my building progress:

The fuselage was moved to my T hangar! The tail is on, the wings are on, the prop is on, and the wheels and tires are on!. IT NOW LOOKS LIKE AN AIRPLANE! WoooHoooo!

The Garmin/Garmin AT avionics stack and the TruTrak Autopilot have been ordered. The Horizon I dual screen, single AHRS EFIS with EIS engine monitor is installed in the instrument panel, and the AHRS installed. The EIS unit is mounted and the power wires connected. The magnetometer is mounted in the turtledeck and the wires are connected. Works GREAT! I upgraded the memory in each EFIS DU to 1 gigabyte, and uploaded terrain data for all of North America and all current software.

My Mattituck TMX-IO-540 engine is hung! The Engine Cowl hasSkybolt C-loks installed and all the screws and nutplates are installed. The air filter is in the scoop and the scoop screwed to the lower cowl. My MT Propeller and governor are installed, the propis torqued and safetied. The rear engine hard baffles are assembled and the soft baffles are riveted to the hard baffles. The front engine hard baffles need the soft baffles riveted. I've installed the Airflow Performance FM200 assy on the bottom of the sump. I've installed the Vetterman exhaust and the Rick Robbins heat muffs need reconfigured. The fuel hoses are in position and the control cables installed onto their respective brackets, adjusted and cotter pinned. Spark plug wires are trimmed, crimped and attached. The wires for the Plama III coils are trimmed and terminated, and the ground shield soldered. The EGT and CHT wires are installed, terminated and connected. All sensor wires and hoses are installed.

I have both EVO tapered wings fitted, the spar bolt holes reamed, and the wings bolted in place. The flap fairings (gap seals) are finished. The bracket assys for the aileron push tube mechanism are installed. The push tubes, caps and rod ends are finished. I dimpled the covers for the inspection holes. The aileron push tube slot doublers are installed. I've finished the bottom aileron gap seals and the top gap seals are ready to final trim and rivet. I've also started the aileron end caps, and the wing tips! I've installed my heated pitot. I started to install my nav lights with strobes and the wing tips are screwed down. I've mounted the PIAA 1500XT landing lights and I'm fashioning a Lexan lens to cover

the cut out in the LE. The lower wing root fairings have been started, and the right fiberglass fairing has been trimmed around the flaps.

The landing gear wheel assemblies are aligned and installed. Nylon brake lines and compression fittings inside the cabin are finished. The steel bulkhead fittings in the firewall and fittings for the stainless braided brake lines down the gear leg are finished. The parking brake valve is located, but needs the T-handle push pull cable installed. The wheel pants are set to place and the gear leg fairings are partially trimmed and clekoed to position.

FAA Registration: I sent the kit plane Bill of Sale, the FAA original triplicate registration application and a notarized affidavit of ownership in to the FAA, with my $5 check of course! That was 4/2/07. I got my registration for N540MT back three weeks to the day!!!! WOOHOO!

The Main Electrical supply and ground wires are installed from both batteries to the buses. The Blue Sea BatteryLink ACR battery isolator is installed. The Alternate/Secondary Dual Battery System is installed and modified. Service wires from the starter and alternator are set with solenoids and B-lead circuit protection. The Main DualBus , the E-bus and the B-bus are installed.

I formed brackets for the LSE Plasma III dual electronic ignition control units and stacked them into place. I made a bracket for the MAP sensor on top of the LSE controllers and wired the various engine sensors to the GRT EIS. I've drilled the firewall and connected 3 bundles of EFIS and Plasma III ignition wires, all are installed and ready to go!

I've been trying to install everything around the engine, FWF (firewall forward). I've hung the oil cooler and the cooler ducts and hoses are finished. I've run engine control cables, and the fuel and MAP hoses. The alternator and starter are wired and good to go. I went back and modified the mechanical fuel pump drain port to drain out the bottom and installed a drain hose.

I'm also working back inside the cabin with the throttle quadrant, control cables and the cabin fuel lines , electric fuel pump, high pressure fuel filter, and fuel totalizer. All are adjusted and finished.

The aft baggage shelf and close-out are finished. The new hat rack , and extended baggage floor are fitted and ready to paint. The static lines are connected and the canopy track nutplates are epoxied in place. The ACK ELT with annunciator has been located, batteries installed and operation tested and confirmed.

I've wired the elevator trim tab servo, the TruTrak Autopilot pitch and roll servos, a pair of tail light wires to the forward stick bay. I have also started wiring my stick grips, and ran the ELT cable to the instrument panel and the flap motor wires to the forward stick bay. The battery solenoids are located, and the main bus is riveted to position on the left boot cowl shelf. I've located and riveted the aux (avionics) bus on the right sidewall, opposite the throttle quadrant.

The Instrument Panel is temporized to position as I slowly begin to add electrical components to the ship. I installed a keyed ignition switch in the right sub frame. The nine W51 rockers have been test fitted. I placed an eyeball vent in the right panel sub frame. I inserted an old style split master in the panel near the key. The RadioRax avionics mounting rails are riveted to place. The fuel pump, landing lights, nav lights, strobe lights and heated pitot wiring are completed.

The Mark III flap mechanism installed and wired to relays in the stick bay. Fabricated rear seat side wall cover panels and arm rests. The aft inspection panel is finished. I split and partially re-glassed the empennage fairing.

The Rudder , Elevators , HS and the VS are installed. The rudder stops are set, and the cables are run. The elevator control tubes are finished. I need to finish the tail light and the end caps. Lots of fiberglass finishing work to do down the road on the tail feathers.

The Canopy slider and SSW are completed. The latch mechanism is installed. The Windshield Faring is glassed and coated with 2 layers of micro. Lots of finishing to do there, but the canopy is essentially complete!

I bought a 3 -bladed MT aerobatic (counterweighted) Propeller and governor. The MT governor was recalled, repaired and returned by MT to replace an inadequately heat treated part. The prop is installed and needs safetied. Mattituck shipped me the correct longer STUDS for the engine case and the prop governor is installed..

Disclaimer: What you will find in the following pages is a more or less chronological history of my F1 EVO Rocket build. I'm working on many different aspects of the airframe at the same time, so updates often occur on multiple pages simultaneously. The pages are arranged by major component, and somewhat follow the plans. BTW, I am ***not*** purporting that I am an expert on how to build ANYTHING, I'm just showing how I did it, right and ***sometimes wrong***. This is my first kit plane project, so please don't take me or this website as any kind of authority, because I am NOT any sort of kit building or aircraft mechanical authority.

DO NOT do business with Michael H. Moore of AvWorks Inc., in Mooresville, North Carolina. Read about that lying, thieving scumbag HERE.

I'm building my own kit airplane. Yep, that's right. And I plan on flying it too. I've been

looking for a plane that will cruise at least 200 mph and go 1000 miles on a tank of gas. Going ***FAST*** and ***FAR*** is the whole idea. And the Team Rocket F1 is the machine that fits the bill!

Now to buy a new or newer certified production aircraft to do that, you're talking hundreds of thousands of dollars. That, I don't have to just throw around on a "hobby" (although it's more a passion).

My goal was to find a single engine airplane that would take me from Central Indiana to Tampa or New Orleans non stop. Well, I found several planes that could do that. But to get one that I could better afford, I chose to build my own. Plus I'll have the advantage of being certified to be a FAA approved mechanic on my own airplane!

The **Team Rocket F1 Rocket** can cruise at well over 200 mph. It can fly about 5 hours at lower power settings. As most people will tell you, about 3 or 4 hours in a small plane is about most of us private pilots can manage. I think I'm good for 4+, especially if I know I can get there in one hop. The back and the bladder are the deciding factors on stops, more so than fuel.

If you get up around 10,000 feet, you can get around 230 to 240 mph. Maybe even more! But you won't fly 4 hours at full throttle down low. With 52 gallons total, and the Lycoming IO-540 burning 16 gph or more, 3 hours of wide open fun is all you'll probably get.

Another consideration is that the F1 is also fully aerobatic. It handles about the same stresses as my Super Decathlon, rated at +6 and -4 g's. And like the SD, it's tandem seating, so you and the controls are centered in the ship. That makes maneuvers easier and much more fun!

My quick build F1 EVO kit arrived to my home May 10, 2004 in very good shape. I used Team Rocket's recommended ABF trucking, which TR set up. Cost about $1100 to have the kit trucked to my door. The kit was hand packed in the back of a 'pup' trailer, and enclosed/blocked off by itself. TR loaded the truck by hand for no charge and no crating fees. That's good, because crating a 17 foot fuselage and an 15 or so foot pair of taper wings would cost a small fortune.

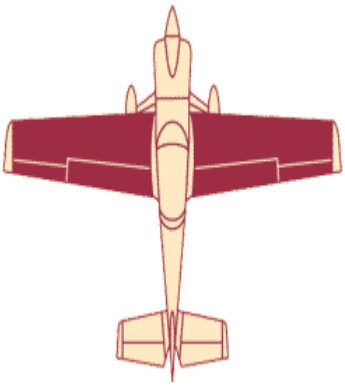
The quality of the quick build parts appears very nice. They were pretty well packed and organized, and most parts are labeled. The only (minor) problem is that some of the parts are marked with indelible ink and I can't get some of them cleaned off, and paint won't hide it. Some parts aren't marked, but it's not hard to figure out what the are.Much of the plane comes primed already! That was a pleasant surprise. It looks like they are using "MarHyde" type primer. It comes off with lacquer thinner, but not very easily. Very durable stuff.

One note about this quick build kit: Although the parts are very well engineered and beautifully constructed, you *do* have to build this thing. It is not merely an assembly process like an erector set. Only a few parts are pre-punched, so there's a ton of measuring, marking, and making decisions where to drill, rivet and assemble. There's just a lot more work to constructing this kit than you might find with a brand "V" pre punched quick build kit plane. Most Team Rocket parts go together beautifully, and typically only one way, so it's hard to screw it up. It certainly could be much harder than it is, because the F1 *is indeed* a quick build kit, with much of the most complicated work done for you at the HPA factory in Prague. The wings and the fuselage come very complete. Even the stainless firewall is in place. Very nice!

Having worked on this plane several months, I'm having a ball! The work is progressing nicely. Team Rocket (Mark F.) is very helpful, and this kit is just COOL! Most of my problems and frustrations in

building come from my lack of experience and building skills. This kit is not all that difficult to construct. It's just frustrating and puzzling at times. But as each component comes together you get a MAJOR sense of accomplishment and satisfaction.

My goal is to get a safe, well constructed plane put together and go fly. I am not going for a show winner. I don't have the skills (yet) or the patience (never). I'm not going to languish over cosmetics or complexity. I'll do the best I can, and I'm getting better all the time. But I'm sure trying not to sweat the small stuff. You do that too much, and you'll never get done. Remember, my goal is to FLY the darn thing. I like the building, but the means have to justify the end!



The EVO production wing is finally in production. Flight testing is reported to show that the plane may not have the 6% more top speed (yet!), but the stall speed has been lowered to 44 knots! The landing speed is now supposed to be noticeably slower than an RV, in part perhaps due to the Fowler type flaps as well as the tapered wing. In fact many have said that the F1 EVO lands as easy and slow as a Cessna 150! Not bad for a 250 mph airplane!

DocThrock's Team Rocket F1 EVO experimental airplane kit kit plane aircraft construction home builder "home built" "Matt Throckmorton" "Matthew Throckmorton" "M.E. Throckmorton, DDS" Yamaha FJR 1300 "Super Sport Touring" Super Decathlon DocThrock "Doc Throck" EAA83

Below is Team Rocket's Ole' 84, which I call the "factory ship". This was taken at Sun And Fun 2004.

Vince Frazier has a gorgeous F1H. Yep, that's a Team Rocket/Harmon Rocket hybrid. Best of both worlds? Well, it's awesome. And one Saturday while he was getting ready for his first flight he gave me a taste. He let me sit in it! Of course he took the keys out. HAH! Notice in the pic below that he chose to make a tip-over canopy instead of the standard slider. That's just a matter of preference.

I think the front half of Vince's plane is Team Rocket, and the back end of the plane is Harmon Rocket. But I'm not sure. If you are interested, there is a link to his massive and informative website on my links page, or just click the pic. I may not remember the particulars, but I do know that this is ONE FINE ROCKET! You might not be able to tell the sheen in the pics, but this is one of the shiniest and prettiest paint jobs I have seen. The lower is a clear coated silver metallic that is just beautifully finished. I think Vince said that his paint was PPG. Man, does it look terrific! Well Done Vince!

Randy Pflanzer has a gorgeous F1 Rocket (pictured below). His website, Pflanzer-Aviation.com, has been the largest source of building information, next to the TR manual, for my project. If you are building a Rocket, you need to visit his website.

Greg Nelson flew his exquisite F1 Rocket from California to Sun and Fun 2004. His plane is immaculate! I spent a few hours around his Rocket listening to his explanations and going over his plane. What a beauty!

Do you think these F1's have some get up and GO? You BETCHA! Just let Greg Nelson show you how:

I've visited Jim Wining's shop a few times and learned quite a lot during his F1 Rocket build. His yellow #34, is now in the air! Congratulations, Jim!

I took my FIRST F1 Rocket ride with Jim Winings, who had just flown off the minimum time on his ship. Jim is an excellent pilot and the plane was nothing short of PHENOMENAL. Let me tell you that I was impressed at how smooth, quiet, responsive, powerful, comfortable, and docile the F1 Rocket is in the air and on the ground. IMPRESSIVE!!! Yes, I took a big leap of faith buying this kit, never having flown in one, let alone take the controls (from the back, which was STILL NICE!). Not that I didn't try to get a demo flight. Mark just never could accommodate me. Doesn't matter. If my plane flies anything like Jim's, I'll have it made. It's going to be a little bit of apples versus oranges, because Jim has made quite a few mods to his plane. Many of those mods should be standard on the kit, in my opinion. None the less, the airframes are essentially the same, except that I'm putting on the EVO wings.

Not only was that my first Rocket ride, that was my first EXPERIMENTAL ride of any kind. Never even been in an RV! How's that for confidence in Mark's F1 Kit?! I'm telling you, the handling was superb. The visibility in Jim's plane will be better than mine. You might notice he has the tip over canopy. That thing is beautiful. Talk about visibility! It was like an open cockpit without ANY wind or noise. None. And EASY to get in and out (relatively).

Here's another great looking F1 Rocket. Bill Tew is out there on the right side of the US. His Rocket boasts a KTM custom IO-540 and he reports it to be as smooth as silk!

Eric Hansen has a beautiful F1 up in Canada. Fresh out of the paint shop 4/05, just in time for Spring.

Yet another new F1 Rocket from Canada, below is Mark Esterhuizen's kit #85, complete with TACS (Taxi Aid Camera System). Yes, the nose is a little high on these birds, and unless you have a forward looking camera (or periscope) on the ground, S turns while taxiing are mandatory.

Oh, yes, you NEED to buy one of these babies for yourself! I can't wait to get mine in the air. Take a ride in one, and you'll never wanna look back!