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the KOSMONAUT

AUGUST FUN FLY @ THE FAIR GROUNDS



After a late July, early Aug. that even professional weather forecaster's called "weird", the clouds parted long enough for a group of Kosmonaut's to have a fun evening at the State Fair Parking lot. In fact, our group of 8 managed 43 flights in 3 hours. The tone was that of most KOSMO launches, laid back and fun. We even got our many times postponed "Gooney" drag races in.

We'll cover the drag races first. Basically, the models are Baby Bertha's or Estes or Semroc Gooney's powered by "A" motors. Each round has three possible points, first off, highest, and first safely down. There were six competitors and when the smoke had settled Steve Saner had edged out Duane Lanterman for the first place trophy, donated by Ron Shipley. Eric Martin brought his two children Sam and Reaghan and they accounted for eleven of the flights. Those two kids love to fly ! Eric also flew his Semroc Defender Space Probe on a cluster of 3 C6's.

Keith Ravenstein competed in the drag races and flew his rocket glider twice, the last time on an A10 for a very nice flight.

Steve Saner besides winning the drag race flew a number of other models including his KSU Big Bertha on a D21. That Bertha was moving !!

Duane Lanterman, runner up in the drags, flew a variety of models, his nicest flight being a superroc on a B6.

John "Scale" Palmer outdid himself for variety with an Ariane, Space Shuttle, Honest John, a Amraam, Mercury Redstone, and a Delta II.

Wilder Parks competed in the drags and then finished out his day boosting a Baby Bertha on a C6. <u>Wilder surprised us with an announcement that his</u> <u>family is moving to Minnesota</u>. We understand there is a pretty good rocket club up that way, so we expect to see you launching with those guys. Who knows, maybe a group of us will head your way someday. <u>We really will</u> <u>miss you Wilder</u>, you have added so much to our club. Good luck to you!!

The field of Gooney Dragsters



John Palmer and Delta II



AUGUST FAIR GROUNDS LAUNCH CONTINUED =======

Sam preps his model (note the blue lips, think he has just eaten a sucker or snow cone)

Eric and Reaghan at the pad



Editors Ramblings – IMPORTANT UPDATE ON FFFF LAUNCH -

We may think of them as our launch fields, but of course they are farm land and priority ONE is crops ! The Ellinwood Airport currently has about a quarter mile of open area and that is followed by about two tenths of a mile of milo. South and East of the airport runway is thick soybeans. So currently we are changing the launch site to the Lanterman Family Farm. It is 2 miles west of Ellinwood on Highway 56 and then 2.2 miles north on NE 80 Ave. (about a half mile further north than previous launches there). We will have about a mile free of obstructions. However, if it rains shortly before the launch that field may not be useable, so we would revert to the smaller Airport site. The final decision will be made the Thursday night prior to the launch and will be on our clubs website and those with cell phones may also receive a text.

U.S. Space and Rocket Center / Marshal Space Flight Center

Huntsville, Alabama by Steve Saner

The last full week of June this year, my wife, Peri, and I took a road trip through parts of the deep south. This trip was not only a chance to get away, but also a celebration of our 10 year wedding anniversary. We went first to New Orleans and spent a day and a half seeing and experiencing the many sites of that city. We then drove east along the Gulf coast to Alabama. Then north and east just into Georgia and then back to north central Alabama before heading back home. While planning this trip, one destination that I definitely wanted to hit was Huntsville, AL. A couple years ago I had the opportunity to visit Huntsville briefly on a business trip. Riding a shuttle from the airport to our hotel I saw a Saturn V rocket poking up well above the tree line. Unfortunately there was no opportunity to go check that out on that trip. So, I've had on my bucket list ever since to make a return trip to Huntsville.

Huntsville, AL is called the "Rocket City" and for good reason. Near the city is the US Army's Redstone Arsenal and on that property is also NASA's Marshal Space Flight Center. This was a long time headquarters for Wernher von Braun and it has been instrumental in many aspects of the US space programs even to this day. To celebrate this legacy, the U.S. Space and Rocket Center was created in 1968. It is a NASA visitor center and, since 2002, also a Smithsonian Institution Affiliate.

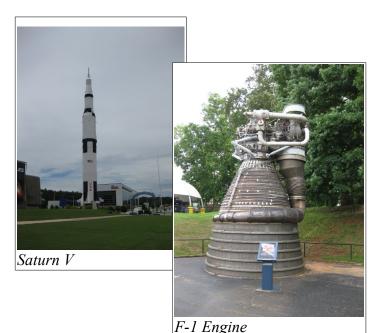
The most striking feature of the Center is the full size Saturn V rocket standing tall above all surrounding trees and buildings. We learned that this is not a real Saturn V. It is full scale and some parts appear to be real, but it is mostly made of steel and concrete, designed to withstand Alabama tornadoes. There are, however, many actual relics of the past space programs, as well as examples of military missiles. Many of these are scattered around out doors and you can walk around and look and even touch them. Also on the grounds is Space Shuttle Pathfinder. This was not a real shuttle, but it is full sized. It is made mostly of wood and steel and was a test simulator used at MSFC as well as the Kennedy Space Center. It is sitting on a simulated stack of fuel tank and boosters that are made of concrete. The entire structure is there as a memorial to the loss of Space Shuttle Challenger.

What I would consider the crown jewel of the Center, however, is located in a large building. That is an actual Saturn V rocket. It was originally built and used as a test model, but it was fully functional and could have flown if needed. It is laying horizontally and suspended up off the floor. The fairings between stages have been removed so that you can see the tanks and the upper stage engines. Also, above the third stage was the Instrument Unit. That is sitting to the side so that you can get a better look at it (talk about an electronics bay). Much of the Apollo payload units are not real, but reproductions have been made to actual size so you can get an idea of how it all looked. However, off to the side are displays of actual Apollo pieces as well. This display gives you a keen appreciation for the shear size of the Saturn V rocket and just how complex and awesome it was, and really still is.

Also available from the U.S. Space and Rocket Center is a once daily bus tour that takes you to the Marshal Space Flight Center and the Redstone Arsenal. We took that tour and were very glad that we did so. A very capable guide narrated for us about the history of the area and what we were seeing. We also made several stops along the way. One of the current missions of the MSFC is operations support for the International Space Station. Our first stop was at ISS Payload Operations Integration Center. We were able to look through a glass window at the actual mission control with people at the stations and a wall of screens showing the current status of operations. The purpose of each station was described along with a few interesting anecdotes. Also in this building is a full scale actual replica of the space station equipment. Controllers and engineers can go in there and actually do the things that they are having the astronauts do, so as to work out any issues that might come up.

Another stop of the tour was at the actual Redstone test stand. This is where they test fired the Redstone rocket engines. These aren't used for anything any more, but remain as a testament to the inventive work in the early days of the space program. From the bus we also saw the F-1 engine test stands and other similar things. The MSFC is currently very involved in the Space Launch System project and we were told about some of the work being done, but were only able to see the facilities from the bus.

All told, we probably spent about five hours at both the Rocket Center and the tour. One could certainly spend more time if you wanted to read and study every detail of every exhibit. We felt that it was a worthwhile experience and were happy that we were able make that destination on our trip.





Some of the rockets on display



ISS Payload Operations Integration Center



Replica of part of the ISS for testing and troubleshooting



Redstone Test Stand



KOSMO 2013 LAUNCH CALENDAR



SEPT. 7 – SAT. – FINAL FRONTIER FUN FLY Lanterman Family Farm or Ellinwood Airport (see Editors Ramblings this issue for more info) – Ellinwood, Ks.- 10am-5pm -10,000' FAA Waiver- \$3 members, \$4 non-members- BBQ @ noon (small fee)

SEPT. 21 – Alternate date for FFFF due to bad weather

OCT. 19 -SAT.- NIGHTFLIGHT – Hutch Fair Grounds-Hutchinson, Ks. - 3pm-8pm - "Jr. Drag Races" Special Event – Class 1 rockets, "night rockets" from 7pm-8pmbring your own sack lunch.

NOV. 2- SAT. - LOW AND SLOW – Location to be determined- 2pm-5pm- Pizza to follow- Our annual small rocket launch and social.

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