

October 2007: Space and Rocket Museum

Yay, I got to go to Huntsville again this week, for a short flight test (four in one afternoon) which left Friday mostly free. So I prevailed on the guys travelling with me to visit the Space and Rocket Museum.



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Huntsville is smaller than Tucson (population-wise), and has a similar problem in being "boring" (actually, there's more to do there than in larger Tucson), at least, compared to a larger city like Phoenix or Birmingham. So they have to do the best they can with what they've got. But Redstone Arsenal and Marshall Space Flight Center (NASA) is a huge thing they've got, and the Space and Rocket Museum is a fine showcase of those assets.



The Museum is located on I-565, near the North Gate of the Arsenal on Rideout Rd. You can't miss it, with the huge Saturn V rocket (with blinking aircraft warning beacons) right by the road. Most of the museum is focused on the Apollo moon missions, so the Saturn boosters are a big part. Here's a Saturn I with my friends David and Ryan walking toward it (and eventually under it, where the insides of the big engines can be seen). Inside the



museum is a history of the U.S. space program from the point that Werner Von Braun and the German scientists arrived all the way through the planning for the International Space Station. The

main room houses a collection of Apollo items, including the big F-1 rocket engines of the Saturn first stage, and this mock-up of the Lunar Excursion Module with one of the Lunar Roving Vehicles parked in front.



(Unfortunately, it's pretty tough to take pictures with a little camera inside a large building, so I don't have many inside pictures.)

There's quite a bit about Werner Von Braun; he's a figure of great local fame (Von Braun Center on the Arsenal, Von Braun Civic Center

in the downtown area). Interestingly enough, there's a man who is working with us (from another company, on behalf of the Army) who is 80+ years old (still quite active and sharp, and rides dirt bikes!) and worked with Von Braun in the glory days! Of course, the German scientists came to transfer rocket technology to the Americans, such as developed for the V2. Here's the tail of a recumbent V2 next to a V2 rocket engine. I was amazed to see the flight computer for the V2 - a set of switch contacts riding cams on a shaft turned by clockwork! Incredible!



Along with the Von Braun memorabilia, there were pictures and static displays of his vision for rocket craft and space stations - stuff I grew up on, checked out of the libraries at Edwards AFB. Of course, the whole Apollo bit was keenly interesting for me, since I had tracked the progress of the Apollo program as a boy in Ohio and California. I had watched the moon landings on the television late at night. I watched the live feed from the moon as Neil Armstrong took his "one small step for man, one giant leap for mankind." Sad to say, while my interest in rockets and space have led me indirectly into the missile business, my two young friends, who were born after the Apollo era, were *not* terribly interested in the space exhibits.



Now, they *were* interested in some of the rides! The Museum is also home to [Space Camp](#), where younger kids can be sent for the summer to "be astronauts", which includes experiencing space-type motions, like lift-off. This drop tower is different: most drop towers we've ridden (Knott's Berry Farm, Pima County Fair, Castles and Coasters) slowly haul the car to the top of the tower and then release it. This one accelerates the car up from the bottom, very quickly ("rocket action") and flings it up, so the sensation of zero-G without actually falling is prolonged. Pretty intense.

They also had a centrifuge ride, right from the fair ("Galaxy 2000"), but I was amazed to find my friends had never been to the fair to ride these sort of things, so it was new to them!

Now, of course, Redstone Arsenal is an Army installation, and Von Braun's team was brought out by the Army, so a lot of the early Army tactical ballistic missiles were on display. Here's a Juno, a model I can't remember, a weaponized Redstone missile, and a Redstone rocket in a configuration as used for the monkey shots and the Mercury missions. There were several other displays, such as an Atlas ICBM as used by the Air Force (I hadn't seen an Atlas since I was little, at Wright-Patterson AFB in Ohio), and a Chaparral air defense vehicle as used by another Raytheon friend when he served in Vietnam. There's more Army exhibits inside, including robot vehicles, helicopter models, displays of other missile systems, and... TOW!



One aspect of this visit which was peculiar was the film showing at the IMAX theatre. I had seen a "spacey" IMAX at the National Air and Space Museum of the Smithsonian, in Washington D.C., and the close-up image of the flame-vomiting Saturn engines moving past after lift-off will stick with me all my life. But at the Space and Rocket Center, the film was "Hurricane on the Bayou", a (emotional) "documentary" of the effects of Hurricane Katrina on New Orleans, and the idea that the impact was worsened by the loss of river delta acreage due to the "Big Brain" ideas of the last century - levees and navigation canals and the like. It was an interesting film, but the ironic message I took away was, it was Big Brain ideas that produced unanticipated side-effects in the last generation, and this generation thinks that our Big Brain ideas to fix those problems will not themselves have unanticipated side-effects? And all this in a Museum dedicated to the Big Brain ideas of the U.S. Space Program!