

THE OFFICIAL JOURNAL OF
THE KANSAS ORGANIZATION FOR SPACEMODELING



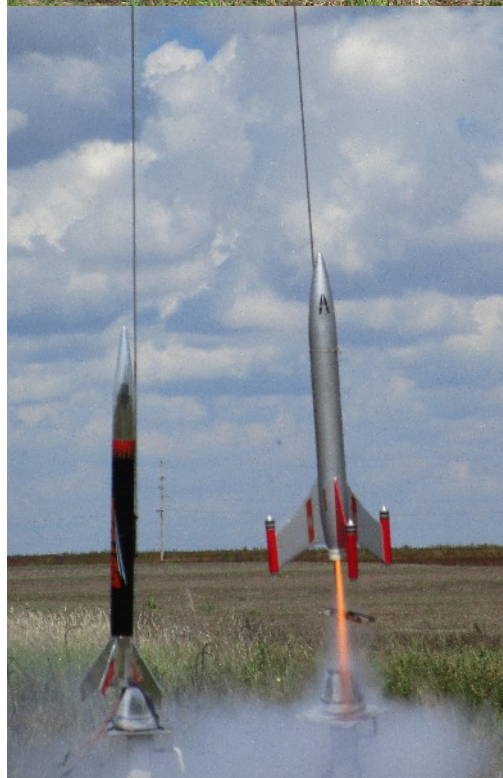
the **KOSMONAUT**

SEPTEMBER/OCTOBER 2018

VOLUME 37 NO 5

FINAL FRONTIER A GREAT SUCCESS

BY Duane Lanterman



CELEBRATING
60 YEARS NAR

Final Frontier – *continued from cover*

After a weeks delay due to a very rainy conditions right after Labor Day our field in Ellinwood once again saw action. 10 KOSMONauts from a variety of towns and cities in mostly Eastern Kansas brought old favorites and new projects to friendly skies and mostly cooperative winds.

Brad Smith from Leavenworth was anxious to get his Level 2 attempt up early while winds were light and so the days 2nd flight featured his Terror Dactyl powered by a J280SS motor. He passed the written test with flying colors earlier that morning and the tension built as the rocket was loaded onto the far pad. Black smoke erupted from the rocket as it headed skyward landing about 1/2 mile away. Keith Ravenstein who was heading the certification declared the flight a success and so Brad now can look forward to increasing his hobby budget a notch higher. Congrats Brad !! Brad had 5 more flights of various rockets during the day.

Peter and Linton Bayless from Shawnee Mission are veterans at Final Frontier and they made 10 flights between them including their ASP which has appeared on this field many times on a H125 and Little Red perhaps one of the smallest but fun rockets to leave the pad. Their fleet can be seen on the front cover of this issue bottom right.

Fred Smith of Hutchinson brought his latest rendition of his tower and made good use of it launching 6 rockets of his own design mostly on "C" power. Fred will undoubtedly miss having Estes C11 motors in the future. Lets hope they bring them back soon.

Duane Lanterman of Great Bend had flights with his Estes Majestic and Prowler but this best flight was with his recently finished Estes Sahara on a F26.

Keith Ravenstein of Great Bend had just one flight with an original model called "Every Kids Nightmare " which turned into a sky writer on an Estes E12.

Bob Wingate won the long haul award driving in from Independence Mo. the night before. It has been sometime since Bob had been at Final Frontier although he has made recent appearances at our KRAMO contest in Hutchinson. Bob made 4 flights including one of a rocket built by the late Dave Bucher which is featured on this issue front page bottom left.

Marvin Applegate of Wichita was the most prolific flier with 8 flights all on either F or G power. We have come to expect some great flights from Marvin.

Steve Saner of Andover had the highest flight of the day hitting 5400' with his self-designed Vega on a J270. Other flights were a Pringles rocket on an F engine, a three cluster D launch and an Astron Outlaw on a Quest composite B that seemed way underpowered. Earlier this year he had the same results with the other composite B in the package. Wondering if others have had similar results.

Finally, Evan Beckman of Wichita successfully launched his "2017 club rocket" named Blondie twice on an Aerotech G80. Guess if it gets painted it may have a new name.

Final Frontier – continued

Thanks go out to KOSMO treasurer Sharon Lanterman for coming out to grill hot dogs for us at noon. Many of us at the end of the day cruised into Ellinwood to eat at Annie Mae's before heading to our respective homes having renewed friendships and having enjoyed burning some propellant on what turned out to be a good weather day.

Motor classification and quantity used A -1 B-5 C-10 D-4 E-6 F-9 G-5 H-1 I-1 J-2



Illustration 1: Brad Smith and his successful Level 2 model



Illustration 2: Fred Smith has been working on the ultimate tower. This may be it.



Illustration 3: Break time ! Hot dog !!

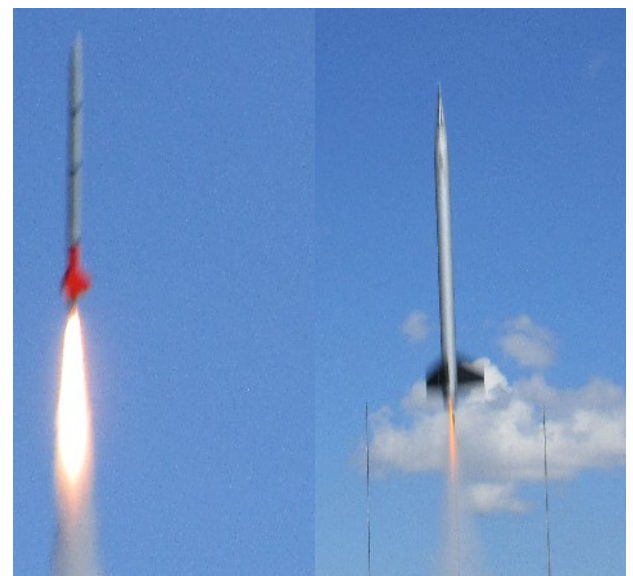


Illustration 4: WE HAVE LIFT OFF !!

PROJECT WATER-LOFT AND MY 3-D PRINTER

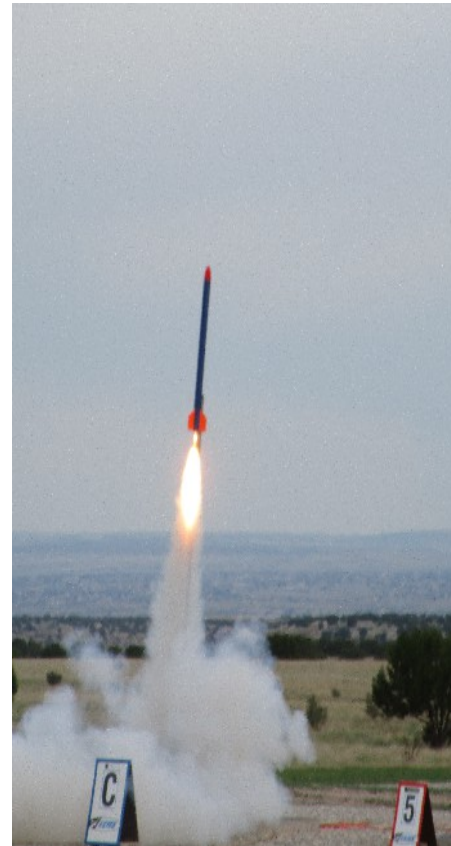
BY Steve Saner

Last December I bought a low-end 3D printer (Creality CR-10, if you care). I've been experimenting with it and figured a time would come when I would use it to make some rocket parts. The opportunity came when I decided to build an entry for the 1 liter water-loft contest at NARAM 60. The nose cone is a design that I found online that I could edit the dimensions and modify slightly. The e-bay and other parts I designed myself using an open source 3D modeling program called FreeCAD.

The e-bay is the most complex of the parts and consists of 3 separate pieces that are screwed together with sheet metal screws. The bottom part contains a well that holds a 9v battery and a screw activated micro-switch. On top of that is a plate to which the altimeter was mounted similar to a traditional e-bay sled. On top of that then is a forward bulkhead and spacer unit. There is a hole that passes through the bottom section that is used to run an e-match wire. For this setup I only needed a single ejection charge in the aft direction.

Unfortunately, the rocket experienced some recovery problems and was ultimately not successful. I don't believe that any of the printed parts were to blame, however. I look forward to finding some other ways to use this tool in future rocketry projects. If anyone has suggestions, I'd be happy talk to you about it.

Photos: Duane Lanterman



The KOSMOⁿaut is published bi-monthly by the KANSAS ORGANIZATION FOR SPACEMODELING NAR SECTION #427. Hard copy subscriptions are \$8 for 6 issues. Membership is only \$15 a year and includes the KOSMOⁿaut (digital version or hard copy, please specify when you join or renew) AND launch fees for all events except KRAMO. Newsletter editor is the current KOSMO secretary Duane Lanterman. Membership and subscriptions checks should be made out to KOSMO and sent to Sharon Lanterman, 642 N. Homestead Rd. Great Bend, Ks. 67530.

Tale of the Saturn 1B

by John Palmer

Way back in the 1980s I purchased my first Saturn V. If you have a Saturn V you also need a 1B. At the time my finances were not going to let me purchase a kit, so began my attempt to build a scratch 1B. I always enjoy scratch building. I found all the parts I needed from my main source of scratch parts (the trash). An old wrapping paper tube became the main body. My manufacturing and modeling skills had not yet matured. I did not have 8 smaller tubes for the fuel tanks so I just painted them on. From 10 feet away it looked ok. At my first KOSMO launch in August 1997 I loaded the rocket on the pad and Mark Johnson pressed the button. Whooshm then bang a cato! I had never experienced a cato like this, it zippered up the side of the motor and rocket. I thought wow these guys will never let me launch again. Ha ha you did. Skip ahead a few years and I wanted to build a cluster rocket and the Saturn 1B would be a great choice. After building a new first stage with 8 tanks and a central core (5 motor cluster ready) I cut the top of my old rocket off and put it on top of the new first stage. The old first stage sat in storage for many years. After my attempts with the 1B I built my 5 motor cluster Saturn V. After a few mishaps I was "fixing" the top of the rocket when I notice I had two bottoms and one top on hand. In my free time I decided to build another top with the idea of a 3 stage rocket. The other day I was going through my storage shed and noticed that the third stage of my Saturn V fits perfectly in the old first stage. Wow, a new idea for a rocket popped into my head. After a few modifications to the first stage, the now second stage fits perfectly into the slot. At the present time I have decided not to repaint the first stage leaving the graphics of the 1980s. My how times have changed! I am planning on the first launch as a single stage and If all goes well a two stage launch will be in the future. (*ed. Note: Hope you can make it down for NightFight in Nov. We'll let you launch again !*)



Join us for the last KOSMO launch of 2018
NIGHTFLIGHT
SATURDAY NOVEMBER 10 2018
HUTCHINSON KS
STATE FAIR GROUNDS PARKING LOT
MODEL AND MID-POWER ROCKETS THAN CAN BE REASONABLY RECOVERED
WITHIN THE FIELD
LAUNCHING BEGINS AT 3PM - NIGHT LAUNCHING AT DUSK TILL 7PM
NIGHT ROCKETS MUST BE LIGHTED DURING THE ENTIRE FLIGHT
BRING YOUR JACKETS ONCE THE SUN GOES DOWN
IF WEATHER CONDITIONS ARE NOT FAVORABLE WE WILL STILL MEET AT THE FIELD AND
AT APPROXIMATELY 3:45 WE WILL DECIDE WHERE TO MEET AND EAT TOGETHER

