



the KOSMONaut

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2026 LAUNCH SEASON GETS UNDERWAY

ARTICLE BY DUANE LANTERMAN
PHOTOS CREDITS TO DUSTIN WYANT AND DUANE LANTERMAN

As unpredictable as Kansas March weather can be, this year at our annual meeting, we set aside each Saturday in the month as potential launch dates. In this years March we had weather on a Sunday with 60 mph winds followed by a Monday morning with a wind chill below zero and ending the week with temps in the mid 90's. Fortunately for our club the second weekend looked to be acceptable and it proved to be a good choice. Added to the day was a BBQ meal set up by president Steve Saner and paid for out of club funds. We may try make the meal more a part of future dates.

TOP ROW- Austin Streit's beautifully finished Optima – Optima flies on a H128 – Austin's Micro Magg and his "Light Blue"

SECOND ROW –Steve Saner's KOSMO Club Rocket – H135 Launch – Steve's "John Deere" rocket and it's maiden flight



SPRINGFEST – MORE PHOTOS



Jeremy Lepel's Harpoon



Jeremy's Phoenix



Jeremy's Estes Vapor



Duane Lanterman's Estes Odyssey



Duane preps his Majestic



Ignition using an ancient cooperhead

The SpringFest Crew



SPRINGFEST CONTINUED -



Keith Ravenstein arms the launch pad



Keith's "Little Skiter" flew numerous times .



Talk about a cool recovery vehicle! Keith's 1963 Falcon made numerous recovery runs



Zac Twigg's "Split Personality" on the pad



The I205 motor pushed Zach's rocket to just under Mach 1



Zac tracks his flight on the ground station as Dustin Wyant looks on.



Time to chow down



How I do

by Michael Mitchell



My favorite glues

Of the glues I've used to build model rockets—white glue, plastic cement (both tube type and bottle liquid), cyanoacrylate, and contact cement—my favorites are yellow wood glue and two part epoxy. Here's how and why I use these the vast majority of time in my building and repairs.

Yellow wood glue

I've been using Titebond since 1980 when I bought my four ounce bottle at Science Education Center in Wichita. (I still have and use it; of course, it's been refilled several times.) Rather than use modern larger bottles with a rectangular slot opening, my bottles have a small round opening. I squeeze fit a Testors glue tip on top, then a stainless steel diaper pin seals the opening until I need to use the glue. This setup works great for me.

From what I've heard from several KOSMO members, this next statement may upset some: I thin my Titebond with distilled water! I use about 10 drops per ounce of glue, then I shake the glue bottle to thoroughly mix. The benefits are 1) this delays the thickening and clumping process that eventually overtakes stored Titebond, 2) it flows better through the installed glue tip, 3) I use much less glue, thus taking less time to dry, and 4) I have better control applying the glue. I find this works better with double glue joints, as there's really no glue build up. Although I end up applying many coats of fillets with thinned glue, I feel I have better control of the result. I also believe with less glue to dry at a time, less shrinkage and its resulting distortion may occur. Clunky thick glue for me? No, thank you. I also use Titebond to install shock cord mounts, launch lugs, and many other added parts that don't call for a specialized glue or cement.

Epoxy

Although I've had varied results and satisfaction mixing and using epoxy, I have resolved to use it on nearly anything and everything that slides together*. (Making careful alignments when using wood glue when sliding parts together for me has been disastrous and frustrating.) This includes couplers, noses, centering rings, thrust rings, engine mounts, plus anywhere that hot ejection charge gases might burn or compromise plastic or paper parts and surfaces on or in a rocket. I regard epoxy as a fire and heat retardant. I also use it to hold metal engine hooks in place, as it's often a good product to bond several different types of materials. I've used five minute epoxy in the past, but my current "go to" is 30 minute two part epoxy. I thus have more time to finesse and position my work. I use epoxy quite sparingly, so I never am concerned about added weight.

When I use epoxy I always have the attitude I'm working with honey. It can be, and often is, messy. I use a clean paper card for mixing, a toothpick or dowel for mixing and applying, and I often use a tissue or paper towel for wiping away residue, including sometimes from my fingers. (I've heard acetone can help, but I've never used it.) The few times I made fillets with epoxy were rather satisfying—a very strong and smooth joint with only one application!

* Some plastics don't respond well to epoxy. When plastic cement is called for, even when sliding, I normally use that, not epoxy.

REFURBISHING AN ESTES SATURN V

John Palmer KOSMO/DAR MEMBER

I acquired a pretty rough bottom (First and second stages) of an Estes Saturn V at the KOSMO annual meeting in January, probably model 2001 based on research I did. A couple people said it had my name on it. (I am known for saying “I can fix it!”) When I got home the first task was to strip it down. Off came the fake fins that were installed and then the engine fairings. Lots of sanding. Even more sanding to take off several coats of paint. I would assume that someone put a clear coat on it and it yellowed. After a lot of sanding, the white under coat came through. During the sanding process several of the tunnels were removed. After removing the bad areas, it was time for more sanding. With all the sanding and removal of old glue the lower 3 inches had to be removed.

After all the old paint and parts were removed it was time to start reconstruction. First was to add the 3 inches of the BT101 back on. Just so happen to have one on hand. Second decision was to decide to make the engine mount for a 29 mm motor, Since the rocket will be heavy I figured it will need a bigger motor. Centering rings were cut out of quarter inch plywood. Motor mount installed and then the entire motor assembly installed into the booster. Fortunately, over the years I have accumulated many extra parts or am able to recreate parts. After all the sanding, most of the paper corrugations were worn down to the point that new paint would not show any of the detail. Time to make new ones. I learned a long time ago that scribing lines on card-stock with a medium point pen makes good replacements. The new wraps are scribed 1/8 inches apart. Next was replacing the tunnels. I picked up some half round dowels, so I cut them the appropriate lengths and installed them. Several years ago I picked up from Boyce some 3D printed fairings with fins, and this was a good project to use them. Many years ago, I ordered a vacuum set from Estes for the Saturn V. Still had a few pieces left. This makes the third rocket the parts have been used on.

Next step was painting and decals. One good coat of primer was enough. A little light sanding to smooth things out. A nice coat of flat white. Then I brushed on the black roll patterns. Starting in 2010 I started scanning in all the decals from all the kits I purchased. This has come in handy over the years as many of my rockets have needed make overs. I printed off a new set for the booster and applied the decals (I use clear labels). I used the ones I needed, and any extra decals were put in a file for later use. Pictured on the left is the original project and the one on the right taken after it received the makeover.



**IT'S COMING IN JUNE – KANSAS ROCKET AERO MODELERS OPEN – KRAMO 46
JUNE 6 OR 7 2026
HUTCHINSON STATE FAIR GROUNDS PARKING LOT**

Our 46th edition of our annual contest is approaching soon, so start building and join the fun !

COMPETITION EVENTS -

BABY BERTHA SPOT LANDING

YOU HAVE TWO OPPORTUNITIES TO LAND YOUR BABY BERTHA AS CLOSE TO A SPOT ON THE FIELD. MODEL BUILD IT STOCK BUT USE ANY RECOVERY SYSTEM AND ENGINE.

“A” SCALE PARACHUTE DURATION

USE ANY SCALE OR SPORT SCALE MODEL, POWER IT WITH AN “A” ENGINE, RECOVER IT WITH A PARACHUTE AND YOUR TOTAL TIME OF TWO FLIGHTS WILL COUNT FOR YOUR SCORE. THERE WILL BE NO CRAFTSMANSHIP POINTS GIVEN. PISTONS ALLOWED

“1/2A” STREAMER DURATION

YOUR MODEL POWERED BY A 1/2A ENGINE AND RECOVERED VIA A STREAMER. TOTAL TIME OF TWO FLIGHTS WILL COUNT FOR YOUR SCORE. PISTONS ALLOWED

“1/2A” PARACHUTE DURATION *MULTI-ROUND* -

THIS ONE IS A BIT DIFFERENT THAT OUR NORM. THERE ARE 3 OFFICIAL ROUNDS. FIRST ROUND WILL HAVE A 60 MINUTE WINDOW FOR LAUNCHING, THE SECOND AND THIRD ROUND EACH HAVE A 45 MINUTE WINDOW. WE WILL RUN THIS CONCURRENTLY WITH OTHER EVENTS AND SPORT LAUNCHING. EACH CONTESTANT CAN FLY ONE FLIGHT PER ROUND. YOU ARE ALLOWED TO HAVE TWO MODELS AND A THIRD IS RECOMMENDED IF A FLY-OFF IS NEEDED. SCORING WILL BE THE SUM OF ALL THREE ROUNDS. IN CASE OF A TIE, THERE WILL BE UP TO 2 FLY OFF ROUNDS. NO FLIGHT MAY EXCEED 5 MINUTE EACH ROCKET FLOWN MUST BE CAPABLE OF MORE THAN 1 FLIGHT. **NO PISTONS ALLOWED IN THIS EVENT**

SO THERE YOU HAVE IT. WE HOPE EVERYONE ENTERS ALL FOUR EVENTS.

BUILD A BABY BERTHA, BUILD A REPLICIA OF A REAL ROCKET AND POWER IT WITH AN “A” ENGINE AND RECOVER IT WITH A PARACHUTE, PUT TOGETHER A MODEL TO BE RECOVERED BY A STREAMER AND POWERED BY A “1/2A” ENGINE, AND FOR THE MULTI-ROUND EVENT BUILD TWO OR THREE MODELS THAT WILL BE POWERED BY A “1/2A” ENGINE AND RECOVERED BY PARACHUTE.

CONTEST DIRECTOR IS JEREMY LEPEL. PRIZES WILL INCLUDE RIBBONS, CERTIFICATES, MODEL ROCKETS, AND MUCH MORE.

THE DATES AGAIN ARE *JUNE 6 OR 7TH*. THE BEST WEATHER DAY OF THE TWO WILL BE CHOSEN AND ANNOUNCED THE FIRST PART OF JUNE. CHECK OUR CLUB'S WEBSITE www.kosmo427.org, or our Facebook Page, or our clubs email list.

AND DON'T FORGET SPORT FLYING IS ENCOURAGED DURING THE DAY. PLEASE PLAN YOUR FLIGHT TO LAND WITHIN THE BOUNDS OF OUR FIELD.



KOSMO EQUIPMENT UPGRADES COMING

At our annual meeting in January the club approved the purchase of launch pad tripods that Steve Hamous has built. These will allow the use of 1/8", 3/16", and 1/4" rods. The club is including these in our request for Grant Money from the NAR. As we go to press it appears the club is also giving approval for a new wired launch system that Jeremy Lepel will construct. It will accommodate 5 pads. The cost of the pads and launch system will exceed the limit of the grant so club funds will be used to cover the difference.

HAVING A "HOOT" WITH THE GRANDKIDS BY MIKE STEWART, KOSMONaut

Back in March I had the opportunity to take my grandkids to the Northern Virginia Association of Rocketry launch at the Great Meadows field. (home of the ARC championships) There were a lot of ARC teams flying qualification flights as well as numerous rocketeers flying everything from 1/2A power up to "J" motors. We were a bit far away to get some decent launch photos but the grand kids had "hoot".

Later we went to the Air and Space Museum Annex. I've included two photos, the first is a model of the 1/48th scale model Saturn V (which my grandson immediately wanted to replicate including staging, oh the dreams of young kids!) The second photo is of the MMU hanging from the ceiling. My cousin Robert Stewart flew the MMU on the flight of shuttle STS41B as well as McCandless.





2026 LAUNCH CALENDAR QUICK OVERVIEW

MAY 23 – SPORT LAUNCH – HUTCHINSON FAIR GROUNDS – 10AM-3PM

JUNE 6 OR 7 – KRAMO 46 – HUTCHINSON FAIR GROUNDS – 10AM-4PM IF SATURDAY AND 9AM -3PM IF SUNDAY - OUR ANNUAL CONTEST – SEE ARTICLE IN THIS ISSUE FOR EVENTS

JULY 18- MORNING SPORT LAUNCH – HUTCHINSON FAIR GROUNDS - 9AM-1PM

AUG 15 – MORNING SPORT LAUNCH – HUTCHINSON FAIR GROUNDS – 9AM-1PM

SEPT 12 – FINAL FRONTIER FUN FLY – HP FIELD IN ELLINWOOD -10AM-3PM
ALTERNATE DATE SEPT 26

OCT 10 – ROCKET-OBER – HP FIELD IN ELLINWOOD – 10AM-3PM
ALTERNATE DATE OCT 24

NOV 7 – NIGHTFLIGHT – HUTCHINSON FAIR GROUNDS – 2PM- 6PM
Details on launch fields can be found at our club's website www.kosmo427.org

**THE APRIL MONTHLY LAUNCH FELL VICTIM TO THE KANSAS WINDS.
NO JOY ! NO REPORT OR LAUNCH PHOTOS.**



NOTE FROM THE EDITOR – Duane Lanterman

I hope you are all enjoying this issue of “the KOSMOnaut”. As we celebrate its 45th year of publication I hope you have noticed an increase in participation by members in the articles. We have Michael Mitchell’s second monthly column HOW I DO in this issue, last month had an exciting article by Doug Bailey on the trip he and his wife Carol took to Houston, and John Palmer in this issue tells the story of a poor neglected Saturn V that has found new life and Mike Stewart recalls a fun trip with the grandkids. I continue to do the launch coverage articles and photos with great additional photos from Dustin Wyant. I would encourage more of you to send articles my way so this truly will be a club newsletter. Thanks.
Email your photos or articles to rocketsandracing@cox.net

CURRENT CLUB OFFICERS -

PRESIDENT/SR. ADVISOR - STEVE SANER	VICE PRESIDENT -ZAC TWIGG
SECRETARY – DUANE LANTERMAN	TREASURER – SHARON LANTERMAN

CURRENT COMMITTEE LEADS–

HISTORIAN – MARK JOHNSON	RSO – DUSTIN WYANT
CONTEST DIRECTOR – JEREMY LEPEL	FAA WAIVERS – DUSTIN WYANT
FLYIT/TAKE IT – BILL LINDSAY	WEBMASTER – STEVE SANER

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