the KOSMOnaut

Official Journal of the
Kansas Organization for SpaceModeling
celebrating 45 years of publication
NAR SECTION 427

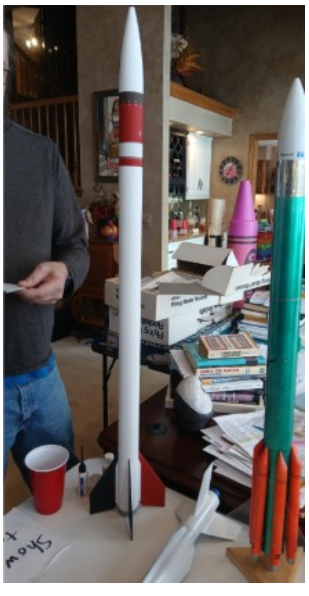
KOSMO - NAR #427

January/February **Volume 45 No 1**

2026 THE STAGE IS SETS FOR AN EXCITING YEAR

PHOTOS BY DUANE LANTERMAN

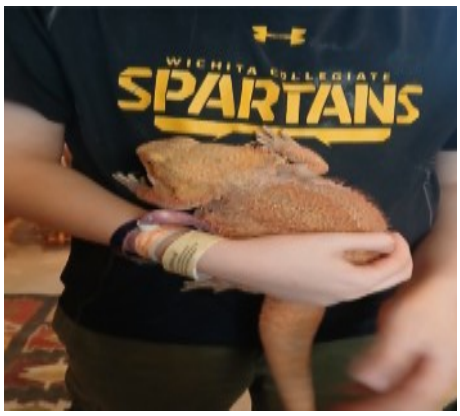
KOSMO's annual meeting took place on a very frigid afternoon as January was drawing to a close. The atmosphere inside the Steve and Janet Hamous home was warm and inviting. Fourteen members were in attendance and we were treated to delicious ham, potato, vegetables, rolls, and pecan bars.
The usual business was conducted – election of officers (same as last year), treasurers report, details on the NAR video conference for sections our president attended, and the setting of the launch calendar for the new year. Our long running (46th version) contest dubbed KRAMO was discussed and events were set. Keith Ravenstein and Zac Twigg plan to upgrade our launch system and Steve Hamous will pursue some new tripod launch pads. We will request money from the NAR Grant program to assist with cost. Steve Saner will pursue a bit further a request by a KU student needing some help with level 2 cert. Members were displaying their winter projects with some outstanding examples on display. The meeting ended with an auction of "stuff" that members donated and at its conclusion $303 was raised. The Hamous's graciously donated the money members payed for their meal which went into the clubs kitty. The club will be donating $50 to the Reno County 4H in memory of Kirk Zongker, a club member who passed in 2025.



FRONT PAGE PHOTOS: L to R – J. Palmer's Gemini Titan, B. Lindsay's ULA Vulcan, Lindsay's Sharky, and J. Palmer's Soyuz. Bottom row: Group Photo and J. Lepel's D Region Tomahawk.

PHOTOS THIS PAGE: L to R – Two of the rockets F. Smith built, D. Lanterman's Odyssey, B. Lindsay's Patriotic PML model, and members shooting the breeze on rockets and putting down some delicious food.

Fred Smith shares some building techniques



Ok, it's not a rocket but this very cool bearded dragon joined the meeting.

DOUG AND CAROL'S AMAZING ADVENTURE

Submitted by Doug Bailey, KOSMOnaut

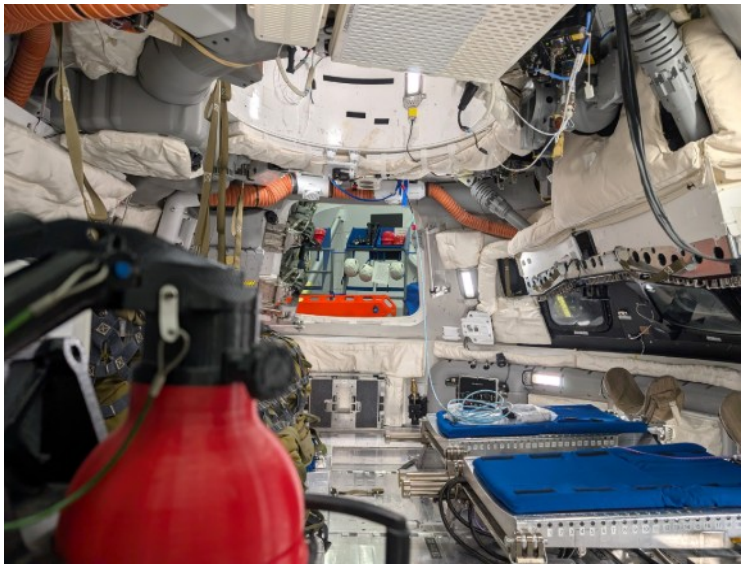
In January Carol and I visited her cousin's daughter and son-in-law in Houston at NASA's Johnson Space Center. These smart "kids" both run consoles in the International Space Station Mission Control. Because of their access they were able to take us on a behind the scenes and look at many parts of the Center that the public never gets to see.

Mission Control is obviously staffed 24/7 as all the systems aboard the International Space Station depend on them. Console operators run 10-hour shifts, 7 days in a row. They then have 3 weeks to recoup and do other supporting research. While we were in the viewing gallery the Flight Director granted permission for us to come down to the floor. It was truly a heart-stopping once in a lifetime opportunity to be standing in the middle of that brain trust, watching readouts and video live and real time.

Building 9 is the Space Vehicle Mockup Facility where full-scale, high-fidelity versions of all the major capsules and modules are located. A nearly complete ISS including the Japanese and Russian modules, Orion capsule, Gateway Space Station, and many others are there. They said every astronaut since the 60's has trained on that floor. The public tour allows you to walk along one wall in an enclosed catwalk high above the modules. Our private tour got us on the floor, and walking into several trainers. Standing inside the ISS and sticking my head inside the new Orion capsule were things I never imagined doing. One journalist who toured the building said Building 9 is "The Giant Space Toy Box Of Your Dreams". I couldn't agree more.

The day had several other high points – like seeing the new Mission Control Room for all of the Artemis program (did you know Artemis was Apollo's twin sister in Greek mythology?). And the Neutral Buoyancy Lab, the largest swimming pool in the world, where an entire space station is submerged so astronauts practice weightlessness. Without the inside track we had you won't get to experience everything we did, but a trip down to Houston is still highly recommended!

MISSION CONTROL



INSIDE THE ORION CAPSULE

2026 LAUNCH CALENDAR QUICK OVERVIEW

MARCH – SPRINGFEST – HIGH POWER FIELD IN ELLINWOOD 10AM-3PM
PLEASE CHECK OUR CLUB'S WEBSITE, EMAIL LIST, FACEBOOK PAGE AS WE WILL USE THE FIRST SATURDAY WHERE THE WEATHER IS ACCEPTABLE.

APRIL 11 – SPORT LAUNCH – HUTCHINSON FAIR GROUNDS – 10AM-3PM

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

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TIP OF THE MONTH – -BUILDING THE ESTES SOYUZ – by John Palmer KOSMO/DAR member

1- Tape off connecting points before printing and painting. Will not have to sand later.

2- Plan on a dowel between upper and lower part of the escape rocket.

3- Have a 2 inch masking tape for the silver on the booster.

4- Place the 2 inch tape on an easy to remove cutting service.

5- Place the template on the tape and cut around the template.

6- Lift the tape off the cutting surgace and place on the booster.

7- Do not glue the second stage engine onto the second stage until you have CG correct. See instructions

8- I used Rustoleum Flat Army Green.

9- Regular model glue did not work well for me. Mostly used epoxy

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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

"The KOSMOnaut" is published bi-monthly by the Kansas Organization for SpaceModeling NAR Section #427. Hard copy subscriptions are $8 for 6 issues. Membership in KOSMO is $15 a year and includes the "The KOSMOnaut" (please specify hard copy or digital) and all club launch fees except for our annual contest KRAMO. Newsletter editor is secretary Duane Lanterman. Submissions are always welcome! Membership and subscription checks should be made out to KOSMO 642 N. Homestead Rd. Great Bend, Ks. 67530

KOSMOnaut NEWSLETTER BEGINS IT'S 45th YEAR
compiled by Mark Johnson and Duane Lanterman

The newly formed NAR section chapter KOSMO #427 began its communications with members in 1980 with a single page hand written bulletin and in '81 it upgraded to print from a computer and still remained a single page. The editor was Mark Johnson founding member. In 1982 Mark produced the first official Kosmonaut, multi-page newsletter, began with a production run of 12-15 copies and ran about 6 pages. Realizing shortly after the clubs formation that all the charter members had a zero in their NAR numbers they immediately started calling themselves the Kosmo-Naughts" which gave birth to the newsletter being called "The Kosmonaut" and eventually morphed into "the KOSMOnaut". Over the years the newsletter has continued to be 6-8 pages with some bonus issues. The 1982 issue was produced on a 1200 line per minute line printer. Mark used a very basic text editor running on an NCR 8270 minicomputer. The block lettered logo was done by hand and the layout was done the hard way, by hand, with spacing and columns done by eye. Several years later Mark got a decent word processor and the newsletter had a much better appearance. Not long after that the need for a club logo on the newsletter arose as it became more ""sophisticated". Mark used his first grade skills and copied the state of Kansas from the 48 states map from a large-format Rand McNally Road Atlas. Mark made a copy of a button that Joe Warnock gave out at KRAMO with the K incorporating an upward arching arrow and scaled it to fit inside the state of Kansas outline. A draftsman at Mark's work rendered the 427 that appears on the right side of the logo with Leroy lettering stencils. The final touch was a trip to a copier to get the NAR logo, scaled to fit the space on the left of the familiar logo. Mark's editorship ended as Duane Lanterman assisted by Rick Calvert began with the January/February issue of the newsletter in 1990.

The production of the newsletter entered a new phase, perhaps not quite as sophisticated. The word processor they used was one made for the Radio Shack color computer. (with attached TV as a monitor) and a dot matrix printer. (think slow and noisy) Lots of the type was cut out and pasted on with Lepages liquid glue. The photos also were glued into place sometimes cropped with scissors. Lots of cut and paste for sure. Some graphics were drawings done by hand or from a program disc called "1001 graphics." This editorship continued until the end of 1993 when Ron Shipley became editor.

Ron Shipley was editor from 1994 through the end of 1996. The newsletter had a very nice look with lots of photos and used a more advanced word processor. Ron editorship was crisp, concise, and well done, but after 3 years he retire from that position and Duane again became secretary and has done the newsletter since 1997. At the end of 2000 Ron took on a very time intensive task of scanning all the issues of The Kosmonaut 19 years of the newsletter (about 685 page !) along with an extensive photo gallery onto a DVD. This product received a nice review from NAR headquarters. I'll also mention the newsletter has received some honorable mentions over the years from the LAC newsletter awards.

In '97 Duane had upgraded to a Compaq desktop which helped the quality of the newsletter, and for quite a number of years Duane produces the newsletter on a HP laptop and a LibreOffice word processor. Many people in the club have contributed to articles, plans, photos and these are *always appreciated.* The late '90's saw a very cool cartoon drawn by Chelsey Atkinson as a part of the newsletter. In the early years the newsletter was the main way of communicating with members who have always spanned the state of Kansas and beyond and we delivered it by snail mail. Now of course we have updates on Facebook, our clubs website, and clubs email list but the newsletter continues to be an important part of communicating. Very few hard copies of the newsletter go out now and once the newsletter is finished it is sent to Steve Saner who posts it to the web. Steve also maintains the website and without Steve the newsletter or website would never see the light of day.

This has been a very brief review of "the KOSMOnaut." Particularly this year I want to encourage you to submit articles, photos, plans, and add to our new feature Tip of the Month by emailing Duane at rocketsandracing@cox.net.

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

Yes, our 46 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. USE ANY SAFE RECOVER AND ENGINE SIZE.

"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.

"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.

"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.

SO THERE YOU HAVE IT. I HOPE EVERYONE ENTERS ALL FOUR EVENTS.
BUILD A BABY BERTHA, BUILD A REPLICA 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.

Introducing a new column to the KOSMOnaut “How I do”

HOW I DO
by Michael Mitchell

Razor blades and hobby knives

When I first started building model rockets in my early teens in the late 1960s—before die cut or laser cut fins existed—I used a single edge razor blade for cutting almost everything: fins and other parts from a balsa sheet, body tube lengths, launch lugs, and slits for an engine hook. I didn’t own a hobby knife, didn’t want one. It seemed too easy for me to rotate a knife handle while cutting, moving the cutting edge askew to the line of cut. I felt I had better control with a razor blade, as my fingers were closer to the work, plus the blade had a protective metal spine along the non-cutting edge. Today I have certain applications where I’ll use a knife; other times I’ll yet use a razor blade.

<u>Razor blade</u>

I now reserve a single edge razor blade for cutting out fin templates, cutting or trimming launch lugs to length or shape, and cutting body tubes to length. While many rocket kits today with balsa fins feature laser cutting, many of the rockets I build are either my own design, copied from a design, or are upscaled or downsized from other rockets I have and like. I therefore use or make fin templates for these. When cutting out fin templates I first glue them to a stiffer piece of cardboard, apply this in a press, then after several days of drying, I make the final trimming with a razor blade against a metal edge. My hands/fingers are closer together using a razor blade (vs a hobby knife), so I feel I have better control. For launch lugs, I like to cut their length “to scale” when upscaling or downsizing a model, and again, with my hands/fingers closer together, I feel I have better control. (I also insert a 5/32” metal rod or drill bit inside a 1/8” lug to provide better cutting support and control.) When I cut a body tube to length, I select either an outside (phenolic) coupler made to fit that tube, or I make one from a selection of similar tubing by splitting its length, then holding it firmly on the outside of the tube to be cut, then taping it together so the guide edge is perfectly aligned all the way around. Whether using an external coupler or a cut-and-spliced piece of tubing, the guide edge must be smooth and even. I then tape the guide at my mark, and I make multiple, very light passes with my razor blade along the guide to cut the tube. Again, with all these above tasks, I feel I have better control with a razor blade.

<u>Hobby knife</u>

I primarily use a hobby knife to cut out fins I’ve marked using a template on a balsa sheet. I always use a metal straight edge for straight lines, freehand otherwise. I always use a cardboard or similar backer, and I make many light passes. I also use a very dull hobby knife blade as a “picker” to clean out glue nozzles, move aside debris, scraping away paint that crept under my tape, etc.

For both razor blades and hobby knives, I’ve also learned the benefit of sharpening my blades, not merely throwing them away when they dull. With some practice and a learning curve on a sharpening stone and using some lacquer thinner as lubricant—helps keep oil off my blades that are used to cut rocket parts—I get more use and time out of the blades I have.