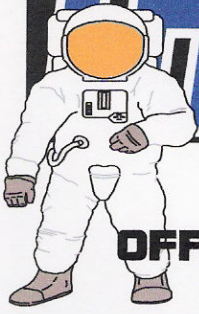


# THE KOSMONAUT



SEPT-OCT 2009

VOL. 28 NO. 5

OFFICIAL JOURNAL OF THE KANSAS ORGANIZATION  
FOR SPACEMODELING NAR SECTION 427



**KOSMONAUTS  
AT - NARAM  
RUSH CO. FAIR  
FFFF 29**

# RUSH CO. FAIR

**TOP LEFT: DENNIS  
ELDER PUTS THE  
CLIPS TO HIS  
MODEL. TOP RIGHT:  
PHILLIP'S COVER  
MODEL HEADS SKY-  
WARD. BOTTOM:  
SOME OF THE ROCK-  
ETS ON DISPLAY**



**FRONT COVER: TOP LEFT, MARK AND BONNIE CHECK THEIR PEANUT SCALE MODEL AT NARAM. FAR RIGHT: PHILLIP SCHEUERMAN LOADS HIS "JUDGE" AT THE RUSH CO. FAIR. BOTTOM: THE CREW AT FFFF 2009 IN ELLINWOOD.**

## NARAM-51 – Rockets in the Pennsylvania Mountains

Mark Johnson

This year's NARAM promised to be "interesting" at the very least. The original flying site was to have been near Shanksville, PA, about 3 or 4 miles from the Flight 93 site. However, that fell through when the construction of a planned wind farm started earlier than expected, closing the field to other uses. The new field was a lot closer to Johnstown, but also quite a bit smaller. Recovery of long-duration models would prove to have some challenges. We arrived late Saturday evening, having taken two days to drive in from home. This was my 22<sup>nd</sup> consecutive NARAM; the last one I completely missed was NARAM-29 in California.

Sunday was the final day of pure sport flying, as well as of the FAI team selection flyoffs. We didn't do any sport flying, because it was a bit windier than I expected, and the only model I brought out was my R/C glider, which needs a pretty calm day to keep it from blowing away. The manufacturers' demonstration launch was Sunday afternoon – there weren't a lot of big new products this year, but some interesting kits from FlisKits and Quest were shown. We set up 'camp' near our friends Lynn Thomas and Bob Kaplow, and set out to find all the 'usual suspects' who get to NARAM most every year.

More about the field: I said it was "interesting," and here's why: As long as the wind was out of the west, or maybe slightly to the northwest, everything worked out pretty well – there was a large mowed area that ran down into a bit of a valley, then back uphill. Most any other wind direction was some kind of trouble – with a south wind, your model went into a horse pasture. With a southwest wind, you went across a 250,000 volt power line and into a valley with a cow pasture, and trees beyond. If the wind happened to be out of the east, which I don't think it ever was, for any length of time, that put your models up over the sport range, behind which was a rather steep bluff covered with blackberry canes and small trees. A north wind meant going down into a valley, with some grass and more trees and brush. The field was located on top of a hill, but not a particularly steep one.

The good news: For the most part, the weather cooperated. There were a couple of mornings where flying was delayed because of fog - or clouds, depending on your point of view. The city of Johnstown is in a valley at about 1100 feet above sea level, and the flying field, about 10 miles away, was at something like 1700 or 1800. There were mornings when the city was cloudy, with halfway-decent ground visibility, but you ran through fog coming up out of the valley. Sometimes the field would be above the cloud layer, sometimes right in it. When that happened, we waited until the clouds broke. Sometimes you could look into the adjacent valleys and see clouds below us. But it never rained during any flying time – only at night, and I think we only lost a couple hours to rotten visibility.

Back to the contest: Sunday night was the competitors' meeting and scale model turn-in. There were a LOT of nice models in Future Scale (now renamed "Concept Scale") and in Peanut Sport Scale as well. I had just barely managed to get our 1/30 scale, 7.5 inch long Nike-Smoke ready to go, right before we left. It wasn't all I wanted it to be, but at least it was an entry.

Monday morning: Time for 1/8A Helicopter and A Streamer Duration. This turned out to be the only really breezy day of the contest-flying week, with 12-15 mph winds much of the day. That played havoc with the Micro-Maxx powered helicopter models – a lot of them failed to deploy or tumbled instead of rotating. Even so, there were some pretty amazing flights – C Division winner Chan Stevens posted a 96-second flight to win in that division. There were a lot of others in the 25 to 50 second range – pretty incredible for such a tiny motor. The FlisKits model designed for the event was probably the most popular, but there were a lot of scratch-built models too. Team division was not nearly as competitive as C Division – the winning time was a total of 29 seconds – but there were still lots of good flights. As Boris and Natasha, we managed a 7-second first flight, losing quite a bit of time due to initial tumbling in the breeze, and were DQ'd for no-deploy on our second flight – the burn string didn't work, and our rotors unfolded only on impact. We placed 9<sup>th</sup> out of 11 team entries. George Gassaway (Southern Neutron Team) tried using a 25-foot-tall launcher as a high-altitude starting point to gather a few more seconds of fall time, which caught quite a bit of attention, but we'll never know if it would have made a difference – both flights went unstable.

A Streamer Duration was quite challenging in the wind. All the good flights went into the cow pasture or beyond, and no small number went into the high-voltage power line, including one of ours. I forgot to mention – the fences around the cow and horse pastures were electrified. At least, they were supposed to be. I never heard of anybody getting 'bit' and I know I got into the hot wire at least once myself, and never got a shock. Total times in all divisions ran in the 4-minute range, with NAR President Trip Barber winning in C Division at 266. Models were a mix of minimum-diameter 13mm models, 18mm models, and a few radicals flying FAI-style models with gigantic streamers. We placed 5<sup>th</sup> in Team Division with a 152 second total, just 10 seconds away from a medal. James placed 13<sup>th</sup> with a single 84-second flight – better than either of ours – after suffering a separation on his first flight. Our first model would have probably done 80 seconds or more, except that it ended up in the guard-neutral (top

wire) of that 250,000 volt power line. Of course, it had to hit the worst-case situation. When we left the field Friday afternoon, it was still there. I expect it will stay there until the shock line finally wears through.

Tuesday: Random Altitude and 1/2A Parachute Duration (multi-round). The sky started out cloudy, but at least there wasn't any wind. The target altitude for Random Altitude was announced at the beginning of the flying day as 175 meters, through some kind of random draw. This sent everyone scrambling to their model boxes to pick models, motors, add weight, and try to hit the target. In the end, over a half dozen came within 4 meters or less, with a tie at 0.0% in team division between the "Oh Look! A Chicken!" team (Bob Kaplow and Lynn Thomas) and "Why Us?" (Lila Schmaker and the late Ken Fark, who sadly passed away last January – but his teammate finished out the season by herself). Tracking during the morning was challenging, as the cloud layer at first wasn't much higher than the target altitude. Things got better during the day. One observation: relatively few people flew to an altitude higher than the target altitude, which reinforces something I've always heard – that most of us will overestimate, rather than underestimate, how high our models are actually flying. Keep that in mind next time somebody asks you "How high did it go?" How did we do, you ask? Well, not so well. I used my venerable old 1969 Estes Aerobee 300, and an oversized streamer that didn't come out of the model. As a result, the rocket ended up sticking up out of the grass, and the flight was ruled unsafe. It probably wouldn't have hurt anybody but the general rule has been that any model that manages to impale itself and stay vertical in the dirt should be DQ'd. It was tracked at 127 meters, despite bad sky conditions.

1/2A Parachute was quite an experience. The 120 second max turned out to be fairly easy to hit, although a lot of flyers lost models in the process. There were a goodly number of people with two maxes, but only two who 'maxed out' with 3 flights – Mike Konshak from Colorado, who will be the NARAM-52 contest director, and the Jeckyll and Hyde Team from Texas (Terry White, and I don't know who his teammate is). Quite a few of the maxed flights drifted away, and weren't found immediately, although some models trickled in later in the week. Our team pulled off two maxes split by a 61-second flight in the middle – a good thing, because our two maxes were both lost, the last one still going up – I had it at 3 ½ minutes or so, riding away on a thermal when it went out of sight. That was good enough to earn us the 3<sup>rd</sup> place medal in Team Division. Our two maxes were partly luck, partly skill in that I managed to find thermals that some other folks missed. The thermals were not as strong as those at the Arizona NARAM 3 years ago, but they were 'good enough' for a lot of good flights. One of the funniest sights I saw all week – and I saw it happen at least twice – FAI large-diameter models on 1/2A3-4's that ejected right at apogee in the cold, damp morning air. They didn't have enough airspeed to yank the chute open, and had such a lightweight rocket body (those 40mm tubes and nose cones only weigh about 3 or 4 grams) that the weight wouldn't do it either – so the model just kind of fluttered down in about 20 seconds, with the parachute, heaviest part of the rocket, leading the way. It looked so silly that it was all I could do to keep from rolling on the ground laughing. The ones with FAI models who did get their parachutes open had, of course, no trouble making the 2 minute max, even in dead air, but it was pretty much an all-or-nothing deal. I even managed to coach James to a max on his 3<sup>rd</sup> flight, after he had parachute problems on the first two.

Tuesday night was the manufacturers' forum; again, not a great amount of new stuff. Bill Stine of Quest told the latest tales about the D/E/F motors. It seems they are now cleared through the Department of Transportation, but Homeland Security, in the form of the Customs and Coast Guard, are preventing the motors from being imported. At least some of them are apparently manufactured, and sitting in a freight container in Shanghai waiting on the paperwork. Evidently, since these were made by a munitions factory rather than a fireworks factory, the US government thinks they are some kind of a threat. Bill is still trying to get at least the D motors released, but isn't promising any specific dates. Aerotech continues to introduce a few new, interesting motors, with red and green motors in F and G sizes now available. The 137 N-sec Blue Thunder G80's have also been very popular.

Wednesday was brought to us by the letter "B" - B Rocket/Glider Duration and B Altitude. The weather for gliders was good, although not great, and there were quite a few individual flights in the one-minute to two-minute range. Winning totals were 200 seconds and up, in all divisions. We had a first flight of 46 seconds with a somewhat non-vertical boost (the Internats guys said it would have been DQ'd at a World Championships), so I tried angling the glider away from the vertical, hoping to end up going straight up. The boost was vertical enough, but my sliding wing started to flutter, killing about ¾ of its altitude and leaving us lucky to get 17 seconds, for a 61 second total - 9<sup>th</sup> place.

B Altitude brought out the big guns – the top places in most divisions used 2-staged models with various types of delayed ignition. Some worked, some didn't (staged late and went horizontally or not at all, and DQ'd). The ones that worked were 50 to 150 meters higher than those of us going low-tech with single staged 18mm models. President Barber pulled out his famous gravity anomaly to lead all flyers with a two-staged model tracked at 451 meters. Once again, cloudy skies made tracking very challenging – there were a lot of 'Track Lost' calls. The lucky ones found their models and flew again, since the current rules allow you to make otherwise-clean flights that don't get tracked, without limit.

Thursday was egg day – D Dual Eggloft Duration was the event of choice. Motors, technologies, and times were all over the place. Big fiberglass bodies with 50 inch or better chutes seemed to dominate the top places, but there was just enough wind that it was a big gamble – go for a 5-minute-plus time, and you might end up losing it over a ridge. A few folks used retrieval transmitters in the bottom of the egg capsule, some with better effect than others. Top times were in the range of 6 to 10 minutes, but 2 to 3 minutes would earn a place in most divisions – all except the big kids in C Division. There were a lot of Apogee D10's flown, a few reloadable D13's, and a few D21's, but also a whole bunch of D12's. If you managed to catch the afternoon 'Thermal Express' it didn't much matter what motor you used. We suffered a disaster on our first flight – used a 40" parachute in a model that was too small, and the chute never got out, let alone unfolded. It ended up making a rather loud splat about 10 feet from Jim Filler's (the NARAM-50 Contest Director) truck. I told him that I had the range, and that next time I wouldn't miss. We dropped back down to a 24" nylon chute, just to get a qualified flight at 49 seconds. James suffered a D21 cato that blew the back end off his model, ending his day. I did come home with some good ideas for a future dual eggloft model. After the contest flying, I headed for the sport range and burned through a pack of D12-3's with the RC glider; had a great time and wowed the spectator line just a bit. I'm not exactly a great RC pilot, but I was able to have some good fun with my 2 to 2 ½ minutes of glide time.

Friday was the photographer's favorite – Scale models. This year we had two craftsmanship events, Peanut Sport Scale and Future/Fiction Scale, which has now been renamed "Concept Scale" although the rules are still the same. Peanut scale models are tricky, because they have to be either less than 30 cm (about a foot) in length, or less than 2 cm in diameter (about BT-20 sized). That makes for a pretty small model, and it can be hard to get much detail to gain degree of difficulty points. Still, there were a lot of really nice models – and then there was ours, which placed next-to-last in static judging. I won't embarrass the last-place flyers by naming them. Our first flight was DQ'd because of alleged unsafe recovery – the streamer stripped off, and the model supposedly fell in such a way that it presented a hazard to the RSO. How a model that only weighs 8 grams can ever be a hazard to anybody, unless it's streamlining in, is beyond me. Anyway, we had to re-fly it to get a qualified flight – and barely managed that, because I forgot to add noseweight when I switched to a different streamer, and the mini-Nike Smoke has pretty critical stability.

Future Scale featured a lot of aggressive attempts – there were three F- or G-powered X-Wing fighters, and I figured that at least one of them would spectacularly disassemble itself somewhere during its flight. I was wrong. All three of them worked beautifully. There really weren't a great number of unsafe flights, for once. In fact, even though a lot of the Future Scale models were quite large, I don't remember any of the big ones providing any kind of catastrophe.

I rounded out my day of flying by making three more RC glider flights. I should have stopped after only two; the last one went down over the bluff behind the sport range, and I had to push the rudder control hard over to make it spiral in so that it wouldn't get too far away. I had the devil of a time finding it on the steep slope among the bushes and berry canes, but finally worked my way around to where I thought it had landed, and started flipping the stick back and forth so I could hear the servo moving. After that, it only took me about 5 minutes to find the thing, which fortunately was undamaged.

Summing up: We had a good week – managed to qualify in all but one event that we flew, brought home a nice 3<sup>rd</sup> place medal for the trophy case, and got to see a lot of old friends we've known for 20 years or more. And yes, Vern and Gleda Estes were there. It wouldn't seem like NARAM if they weren't, but I don't know how many more years they will be able to come for the whole week. They're both looking pretty good but like all of us, they aren't getting younger any time soon. I'm looking forward to NARAM-52 out in Colorado, and hope that a lot more of our club will be able to join us there. Remember – you don't have to be a great competitor to enjoy flying at NARAM – bring your own best stuff and keep your eyes open for new ideas. Mark your calendar now for the last week in July!

Full results of the meet, and hundreds of photographs, can be found at Chris Taylor's fantastic web site, [www.naramlive.com](http://www.naramlive.com) – and NARAM-51 will be the main feature of the November/December issue of Sport Rocketry.



Two NARAM  
photos this  
issue from  
Chris Taylor's  
naramlive.

# Ellinwood Hosts Final Frontier Fun Fly

By Duane Lanterman

An early morning fog gave way to clear skies and the 19<sup>th</sup> annual Frontier Fun Fly in Ellinwood Kansas. Eight KOSMO members made their way to the wide open field at the Lanterman Family Farm. There were 27 sport flights and 22 flights in the 3 new rocket drag racing classes. As has been the case this past year there were a number of interesting cluster flights, some 2 and 3 stage rockets, and two camera rocket flights.

Linton Bayless of Overland Park kept busy with 7 sports flights. They included a launch of his Estes 36D Squared that he now refers to as the "Milo Field Miracle". (it spent the better part of a year hidden out at the farm, then found just needing a good cleaning and a fin glued back.) His son, Peter, flew his Patriot on a cluster of two D's and two E's. This model always flies well.

Keith Ravenstein flew just one sport model, but it was a great flight. His beautifully finished Sky Video 1 was powered by a I285. A live video feed was sent back to the ground to an antenna on top of his car, displayed on a tv, and recorded on a VCR.

Ron Shipley flew four sport flights. His Nike Smoke Extreme was the only model to find the small field of Milo, but it was recovered after an extended hunt. He too had a camera flight with an on board digital video camera and powered by a G35. It was a very nice flight landing very close to the pads. Unfortunately the camera did not record. My guess is we will see this rocket again at Night Flight.

Steve Saner launched three sport models but in the process used 11 motors. His Hydra 7 leapt off the pad under 7 Estes C6 motors and his Comanche 3 got lots of altitude with a D to C to C. It is amazing how high this model gets on that first stage D motor! Unfortunately his second stage was never found, our only loss of the day.

Duane Lanterman had 3 sport flights including an ACE kit not flown since the early 80's on 4 C's and his Eagle 429 making its third flight, this time on two G64's.

Hutchinson Kansas was well represented by Fred Smith and John Palmer. They each had 4 sport flights. It was great to see Fred flying with us and his Phantom 2008 was straight out of the last issue of Sport Rocketry. The ejection charges of the C motors were not quite enough and it made two hard landing, but the rocket proved to be amazingly tough. Once the D12 was used it made two great flights. I wouldn't be surprised to see some variations on this model by other members at our upcoming Night Flight. (insert light source and you are done!) John (scale man) Palmer flew some of his regulars including his Saturn 1B on 4 C's and a D, his arrow straight Phoenix on an E9, and his Claw on a H165 to a beautiful landing.



Jr. Dragster's

FFFF - Rocket Drag Racing - Rocket drags have been a part of FFFF for sometime but this year we changed the classes around. Traditionally we have flown an E9 class and a 20 nwt-second class. This year's classes were Funny Car (Gooney rockets, min. dia 1.5", max. 1.75, body tube and nose cone 11" max. and "A" power), Jr. Dragster ( min. dia. .74 and "A" power) and Pro Stock (min. dia. 1.25" and "C" power) Kosmo style rules apply with points for first off, highest, and first safely down.

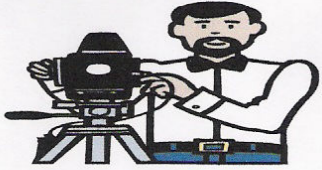
Only three models were entered in Funny Car, but there were five entries in each of the other two classes. Fred Smith judged the models for static display and first went to Ron Shipley in Funny Car, Duane Lanterman in Jr. Dragster, and Keith Ravenstein in Pro Stock. Twenty two launches were made in the three classes and when the black powder finally settled Ron Shipley took the first place trophy in Funny Car with Duane Lanterman second, Steve Saner gathered the first place trophy in Jr. Dragster with Duane Lanterman second, and in Pro Stock Duane Lanterman took first with Ron Shipley second. We wish to thank spectators Mike Straub and his grandson Jace for helping to judge the flights in our drag racing and for their assistance in recovering rockets.

After we tore down the range, a number of us gathered at Main Street Pizza in Ellinwood for some great food and began our trips home and looked forward to Monday and Labor Day.



**LEFT: STEVE SANER HELPS KEITH RAVENSTEIN LOAD HIS SKY VIDEO 1 PRIOR TO ITS I285 POWERED FLIGHT. RIGHT: DUANE LANTERMAN'S USA 1 PROPELLED BY 4 C6 MOTORS.**

## FFFF PHOTO SHOOT



**RON SHIPLEY PREPS HIS UDRI DIGITAL CAMERA ROCKET**



**EARLY MORNING ACTIVITY. JOHN PALMER (MIDDLE OF PHOTO) PREPARES TO FLY HIS APOLLO 1B, WHILE HIS "CLAW" STANDS NEARBY.**



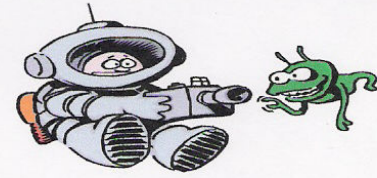
**FRED SMITH EARNED A COUPLE OF CORE SAMPLES THE FIRST TWO FLIGHTS, BUT MOVING UP TO A "D" MOTOR RESULTED IN TWO GREAT FLIGHTS!**







# FFFF PHOTO SHOOT



**TOP L : Dr. Bayless & his F22 glider.**  
**Top R: Duane Lanterman's Eagle on two G64's.**

**Bottom L : Peter Bayless returns his Patriot.**

**Bottom middle: Ron Shipley's colorful Interceptor E leaps off the pad.**

**Bottom R : Steve Saner and his Mercury Redstone.**



# KOSMO 2009 LAUNCH CALENDAR



**NIGHTFLIGHT SAT. OCT. 24<sup>TH</sup>** ELLINWOOD, KS. AT LANTERMAN FAMILY FARM 10,000' WAIVER 2PM-6PM, BBQ FROM 6PM-7 PM, LIGHTED CLASS 1 ROCKET LAUNCH FROM 7PM-8PM. MEMBERS \$3, NON-MEMBERS \$4 CHECK WEBSITE OR CALL 620-793-7491 FOR LAST MINUTE UPDATES

**LOW AND SLOW SATURDAY NOV. 7<sup>TH</sup>** MARK AND BONNIE JOHNSON RESIDENCE, WICHITA, KS. 2PM-5PM, LIMITED TO 1 POUND ROCKETS AND 400' ALTITUDE. PIZZA FOLLOWING LAUNCH. FLY FREE, EAT FOR FIVE BUCKS !

#####

**30<sup>th</sup> Anniversary Celebration** - Yes, next year marks the 30<sup>th</sup> year of KOSMO. This is certainly something to celebrate. I'm sure we will come up with a number of ideas, but the first came up over pizza in Ellinwood Labor Day weekend. We'd like to have a 30<sup>th</sup> anniversary button, about the size of a half dollar. You can wear it on your jacket, hat, etc. What we need is a design and that's where you come in ! Start thinking of what your button would look like and then deliver it in person, snail mail, or email your design in time for the annual meeting in Jan. More info in the next issue of the KOSMONAUT and on our website.

#####

**Thank you.** You may have noticed that each issue of the KOSMONAUT is now available for viewing on your clubs website, [www.kosmo427.org](http://www.kosmo427.org). In fact, currently all the issues for 2009 are there for viewing. This is possible due to Keith Ravenstein stopping by the editor's home and doing the necessary steps so that the can be transmitted to your webmaster Steve Saner. Thanks to both of your efforts behind the scenes. I personally print out each issue so that I have the KOSMONAUT in glorious color.

#####

**Gathering of the NIKES** - Our "club rocket" this year was the Nike Smoke or really an variation there of. We have been a little slow in seeing these on the field and as a reminder Night Flight will really be your last chance to fly them this year. So hurry and order that kit, or throw together those parts that look like a NIKE and bring them out in Oct.

---

---

## ***Kansas Organization for SpaceModeling=***

THE KOSMONAUT IS PUBLISHED BI-MONTHLY BY THE KANSAS ORGANIZATION FOR SPACEMODELING, NAR SECTION #427. SUBMISSIONS ARE ENCOURAGED ! SUBSCRIPTIONS ARE \$8 FOR 6 ISSUES. YOU CAN BECOME A KOSMO MEMBER (INDIVIDUAL/FAMILY) FOR ONLY \$10 A YEAR, WHICH INCLUDES A KOSMONAUT SUBSCRIPTION. THE EDITOR IS DUANE LANTERMAN, 642 N. HOMESTEAD DR., GREAT BEND, KS. 67530 AND CAN BE E-MAILED AT [rocketsandracing@cox.net](mailto:rocketsandracing@cox.net) SUBSCRIPTIONS OR **MEMBERSHIPS SHOULD BE SENT TO** RICK CALVERT, 1227 281 BYPASS, GREAT BEND, KS. 67530. OUR CLUB WEBSITE CAN BE FOUND AT [www.kosmo427.org](http://www.kosmo427.org)

#####