

# STORM WARNING



October 2005

## Welcome and Thanks!

For many of you, this is the first edition of the KLOUDBusters **Storm Warning** newsletter you have ever seen. **Storm Warning** is used by KLOUDBusters to communicate with our membership and is published 2 or 3 times per year. We're sharing this special edition of **Storm Warning** with our many rocket friends across the Midwest, West, and South Central USA who came to Argonia to make A.I.R. Fest 11 one of our most successful launches ever. It gives us the opportunity to share some of the experiences and photos from A.I.R. Fest 11 with everyone who came.

KLOUDBusters intentions are to continue to host a top-notch regional launch every year over Labor Day weekend and to have our many friends from all over the USA come to Argonia to share their great projects with us. This newsletter is our little way to share a little back and to just say, "**Thank You!**"

Before we go any further, we must also offer a huge, "**Thank You!**" to all of the people who made A.I.R. Fest 11 possible. Thanks to the KLOUDBusters Board of Directors who start planning ahead literally a year before each A.I.R. Fest with new ideas for events, reservations, etc., and continue right through the launch organizing and running the event. Thanks also to the countless people who volunteer to work the various parts of the launch, most of whom are KLOUDBusters members. From launch system and other infrastructure improvements and maintenance, to range set-up, to web-site creation and operation, to pre-registration and registration, to LSO, RSO, and Pad Manager duty, to away cell coordination, to crowd and traffic control, to any number of other duties, it takes the efforts of dozens of people to tend to every detail to make a large launch run smoothly and be a fun event for flyers. Thank You! Muchas gracias! Merci beaucoup! Danke schön, Domo Arigato!

While thanking people for such a successful launch, we would be remiss if we didn't offer a HUGE

"**Thank You!**" to the farmers and landowners who allow us to fly and recover our rockets on their land. It is by their generosity and benevolence that we can enjoy our hobby from such a great site. Many thanks to Rick, Denny, Alan, Oran, Monte & Diedre, and Mark!

Ok, now on to the fun stuff . . .

## A.I.R. Fest 11 Recap

by Terry Smemo

What a launch! The planets all lined up to allow A.I.R. Fest 11 to be fabulous! The rain from the previous weeks held off (we had the wettest August here on record). The temperatures were warm but not unseasonable, and the winds were, for the most part, lighter than average; although at times they made things just a tad interesting... Combine the great weather with the fact that LDRS 24 was held in Alberta, Canada -- out of reach for a lot of flyers -- and A.I.R. Fest 11 was a BIG hit. We had 126 high-power flyers from 16 states registered, with 73 of them



Photo Credit: Tim Sapp

Things are looking up for Chuck Pauler, Gerald Graves, Dana Morris and Bob Block as they enjoy another extreme flight at A.I.R. Fest 11.

participating only on the commercial days, 15 participating only on Experimental day, and 38 participating on all commercial and Experimental days.

## A.I.R. Fest 11 Motor Counts

For 4 days, those 126 flyers plus a large number of mod-roc and mid-power flyers were busy. Over the course of A.I.R. Fest 11 weekend, a total of 516 motors were burned! We saw A-N single motors, clustered low-, mid-, and high-powered rockets. There were airstarts and two-

and three-stagers of every size and configuration. For sure, rocketry diversity was on display all weekend. Below is a detailed breakdown of the motor counts:

Impulse Class	Fri. 9/2/05	Sat. 9/3/05	Sun. 9/4/05	Mon. 9/6/05	Impulse Totals
A	1	16	25	-	42
B	5	20	10	-	35
C	8	43	25	-	76
D	4	21	16	-	41
E	4	19	8	-	31
F	2	19	8	-	29
G	12	17	15	-	44
H	0	9	14	-	23
I	11	16	22	-	49
J	8	19	28	6	61
K	8	14	12	2	36
L	5	5	3	3	16
M	2	10	3	8	23
N	1	-	1	4	6
O	-	-	-	1	1
P	-	-	-	3	3
All	70	229	190	27	516

### Certification Flights

And in all those flights logged, there were no less than 22 certification flights! The certification flights were as follows:

Cert. Level	Fri. 9/2/05	Sat. 9/3/05	Sun. 9/4/05	Totals
L1	0	4	4	8
L2	0	2	7	9
L3	0	5	0	5
All	0	11	11	22

Quite a few KLOUDBusters regulars and some new members achieved new certification levels at A.I.R. Fest 11. First off, the new Level 3 flyers: Steve Klausmeyer flew his 6" X 10' **Go! Rocket** on an M1297, Lance Lickteig flew the black and yellow **Go! Shocker** on an M1297, Wesley Walker had a nice flight of his **Ultimate Endeavor** on an M1297. J.B. Sommerfeld yanked a main chute on his first attempt so tried again and succeeded on his **Ultimate Endeavor** on an M1400 (Editor's Note: I wonder if my wife would have bought *that* story ... "Honey, I had to buy and fly a second M motor due to a little technical problem on the first certification attempt."), and Mike Reese from WI got his Level 3 on a scratch build rocket and an AMW M1480RR. All these flyers successfully achieved their Level 3 certifications. Way to go, guys!!!

Other certifications included Allan Richardson with a very nice flight on his stretched PML **Tethys** for his Level 2 cert. Chuck Colpitt (OK), Chuck Kremer (NV), Tim Heffel (Wichita), Steven Waner (Wichita), Mike Wrobel (NE) and Cash Walters (MO) each had the unique accomplishment of successful Level 1 **and** Level 2 attempts over the 3 days of flying at A.I.R. Fest 11. Wow, everyone really kept the Prefects hopping all weekend! Congratulations to these flyers and everyone else who achieved new certification levels at Argonia this year.

As for the remaining 480 or so flights of the weekend ("The Kitchen Sink"), time does not permit recapping but a few. Folks really went all out, providing great entertainment for the spectators (and there were plenty of them, too!). We'll highlight a number of flights that caught our eyes (when we were paying attention), then a longer article or two featuring detailed descriptions of a couple of the weekend's flights follow. They're special because 1) they agreed to write articles or provide detailed information about their projects, and 2) we have photos.

### The Kitchen Sink

It used to be that A.I.R. Fest Friday would be a pretty slow day -- not this year! We had 70 flights with a full half of those flights of the high-power variety! Shawn Ashbaugh from Edwardsville, MI continued his patriotic tradition of flying his Dynacom **Scorpion** THREE times on red, white and blue motors. One flight was on an Aerotech L1150 Redline, one flight was on an Aerotech M1297 White Lightning, and one flight was on an AMW L1080 Blue Baboon. These were awesome flights, no problems, and it is just amazing how quickly Shawn can recover and cycle that rocket for another flight. Not only that, but Shawn wasn't done! He also flew his Dynacom **Phoenix** on an L1500.

Shawn burned more APCP in one day than many of us burn in a year. Or two! Also on Friday, Ken Herrick from Melrose Park, IL flew his Performance Rocketry **Competitor** on an L850. Friday was a typical large launch show-up and set-up sort of day with these and a bunch of other launches for entertainment.



Photo Credit: Tom Jenkins  
Lance Lickteig's **Go! Shocker** heads skyward on an M1297 and a successful Level 3 certification flight.

Saturday was a busy day and saw 229 flights of all shapes and sizes. Early in the day, Dennis Blackburn, Bob Brown, Jay Bailey and Jim Cooper held a "**KLOUDBuster**" rocket drag race. The **KLOUDBuster** is a kit that the club makes and sells. The **KLOUDBuster** rocket is short and fat -- we're describing the rockets here, not the rocketeers as most of us are TALL and fat. Anyway, Dennis and Bob's rockets flew on Aerotech J350s while Jay and Jim's rockets flew on CTI Pro 38 J330s. In a result that can only be described as "conclusive", Jay and Jim's rockets were halfway to apogee before Dennis and Bob's rockets got off the pad!



Those CTI ignition pellets really work! Sadly, Bob's rocket lawn darter due to a faulty (Bob had other words to describe it) altimeter. The good news is that Bob

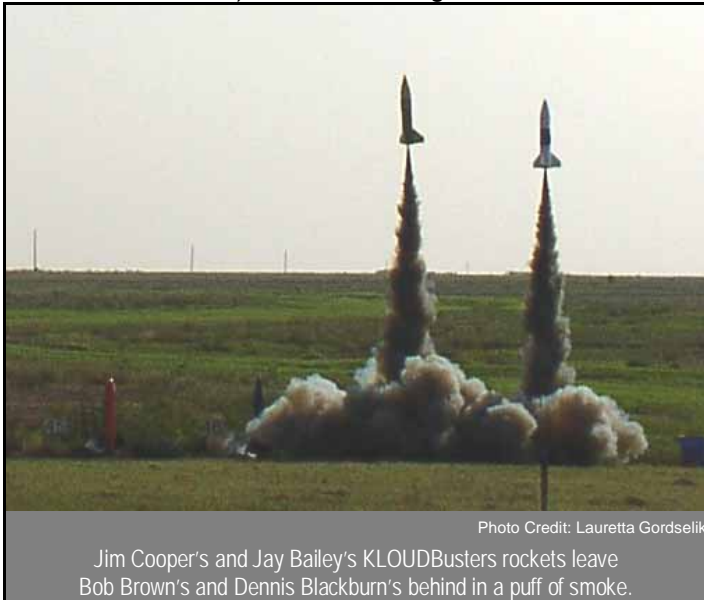


Photo Credit: Lauretta Gordselik

Jim Cooper's and Jay Bailey's KLOUDBusters rockets leave Bob Brown's and Dennis Blackburn's behind in a puff of smoke.

is 100% consistent with the **KLOUDBuster** rocket: he's crashed it every time! He has threatened to make the next one out of steel so he doesn't have to keep rebuilding it. In reality, I believe he will be using a different brand of altimeter with backup motor ejection . . . The **KLOUDBuster** rockets give a whole new meaning to "low and slow" flights and bring the entire flight well into view even on high impulse motors. **KLOUDBusters** have been flown on motors from "I" through "L" impulse and a J350 will put them up about 1000'.

Also on Saturday Todd Graves from Janesville, WI flew his **Concept 98** on an M1600 Redline. Jim Cooper from Coates, KS flew his gorgeous **Talon 4** on a Hypertech L550.; love the 8 sec. burn on that motor. Jim continues to pass more gas at Argonia than Mel Brooks. KLOUDBuster Don Dasis put up his new brightly painted LOC Precision **Warlock** on a long-burn J90. Chuck Haskins from Chicago flew a LOT of rockets including his Hawk Mountain **Transonic 2** on an AMW L1300 Blue Baboon. SEEYA! Steve Griffin and Ben Marx, a.k.a. Team BS flew their complex project **Yellow Jacket** on Saturday. This 60 lb scratch-built rocket was powered by a central M1939, airstarting 3 J570s at 7 seconds, followed by 3 more J570s airstarting at 10 seconds! What a sound! What a flight! I think it's still arcing over! As mentioned before, Steve Klausmeyer from Wichita, KS dazzled us with his Level 3 certification flight. Steve is known for his outstanding engineering, and his Level 3 rocket was an elegant example. It was about 10' tall, 6" in diameter, painted orange and green and it weighed just 35 lbs. Appropriately, it was named **GO!** And it did, prompting LCO Bob to proclaim, "Steve, we gotta rename that rocket **WENT!**". It ripped on an Aerotech M1297 and recovered perfectly on a color-coordinated parachute made by Steve's wife, Susie. Congratulations Steve! One of KLOUDBusters founding members, John Baumfalk flew a

clever rocket he calls **The Duck** that appeared to be two airframes fused into one with a very unusual nosecone tying them together. We hoped the name wasn't prophetic, but indeed everything worked great! John's rocket featured rear deployment and it was recovered without damage.

It's too bad more of Saturday's flights can't be summarized, as there were dozens and dozens of terrific flights. The weather was great and the big boys brought out their big toys to play.

Sunday was another real crowd pleaser. Andrew Grippo who joined us from Ponchatoula, LA and flew quite a few rockets over the weekend flew his Binder Design **Sentinel 54** on an Aerotech K695. Love those Redline motors. We were glad that Andrew and his family could make it to Argonia after the devastating affects of this year's hurricanes. Also on Sunday, our favorite Wildman, Tim Lehr, had arranged for an AMW N2800 Skidmark motor demonstration. The motor was flown in Todd Graves **Ultimate Endeavor** and HOLY SMOKES, SPARKS, AND THUNDER, did that thing really pound the ground. It was one of the most impressive single-motor launches we've seen and drew oohs, aahs, and applause from the crowd! Karen Wiley flew her **Toaster** on an I285 and oddly, it didn't crash, blow up or do flips. Jake Pursley flew his football rocket on a pair of Hs for a touchdown. I flew my **Safety Rocket** -- a converted traffic cone -- on an I285 but it became a sky writer. **Drat!** More power next time!

One more thing on Sunday that requires a mention is the **Ultimate Endeavor** drag race between Todd Graves from WI, Jeff Machado from OK, and Jim Hendrickson from GA. These rockets were loaded with various combinations of I, J, K, and L motors with some lighting on the ground and some airstarting. It would take a couple thousand words to describe all the details of these "flights," but as they say, "A picture is worth a thousand words." Browse the 'net to <http://www.sappgeeks.com>. Navigate to the AIRFest 2005 Sunday photos and click on the very top small photo of these 3 rockets. Tim Sapp from Texas has put together a wonderful photo essay of these three rockets' ... uh ... err ... flights. Go check it out; you will be glad you did. A few of Tim's photos are included in the photo pages with this



Photo Credit: Tim Sapp

Don Dasis launched one of the more colorful birds seen over the weekend.

newsletter. Tim caught some great shots on Saturday and Sunday and has graciously shared many of them with us.

Monday, between the fits and starts and anticipation of the **Delta III** project, **PLENTY** of other awesome EX motors were burned in some sweet projects. In fact, most of the mere mortals stepped back this day as spectators and let the big dawgs entertain us! Mike "Keebler" Wilkins (from a magical tree, somewhere near Amarillo) flew his impressive **Nike Zeus**. This is a 100 lb scratch built rocket Keebler uses as a test mule for experimental motors, probably because it's bulletproof! It flew successfully on a 14,000Ns N3114 made-up of Super Polish Rojo and Amarillo Blue propellant. Nice flight! Tom Ciolino from Columbia Missouri flew his **Hope and a Prayer** on a White Flash 15,000 Ns N3000. Charlie Meitl from Hardtner, KS flew his stretched **Pterodactyl** on a Polis Rojo L953. Seems like Charlie has been working on this rocket for years! But he got it right as it flew beautifully. David Hailey flew **Hailey's Comet** on an 8 second 13,111Ns N1300. Chuck Pauler from Wichita flew his all carbon fiber **Triply eMpowered** on a cluster of three 3" M1523s. This works out to 18,000Ns which is the equivalent of a mid-N. And a long walk! Besides the **Delta III**, there were 2 more P impulse pigs --the biggest of the big dawgs-- launched on Monday. Team Wildman's **Wildman** rocket was loaded with a central Super Polish Rojo N3400 surrounded by six (6) M1250 'Bits and Pieces' sparky motors. That is about 58,000 newtons of juice under this 125# bird. And what a flight to about 7600'! The other P entry was Clay Kremer's **Anarchy X**, which also featured a central N with 6 M's surrounding it. The 48,500Ns Ns in that set of motors kicked Anarchy X up to 14,900' and she hit mach 1.07. There were MANY other fabulous flights on Monday but time and space don't permit a retelling. Thanks to everyone for sharing their **SWEET** big projects and cool homebrew motors with us at Argonia.

## BBQ, POOL PARTY & FLY FESTIVAL

What would a large launch be without all the non-rocketry happenings that take place? Getting together with old friends from far away is half the fun, right? Naturally, A.I.R. Fest 11 had no shortage of off-hours festivities and party time.

Saturday evening after the waiver closed, about 130 revelers headed into Argonia for the 2nd Annual **A.I.R. Fest BBQ and Pool Party**. The lure of the cool water was irresistible to many who washed off the days dust with a dip in the pool. The only downside of rocketeers swimming was the ring they left behind – like a giant bathtub! Ick! The food was great and the camaraderie was abundant. Plenty of friendly lies from the day's events were shared and were only outnumbered by the friendly flies that joined us for supper. During the party, the winners of the Mile High contests were announced. These guys flew rockets closest to 1-, 2- or 3-miles in altitude and received trophies and vendor gift certificates for their efforts.

The winners were:

One Mile, Jeff Short, 5272';

Two Miles, Herman Owens 10,580'; and,

Three Miles, Chuck Pauler 16,766'.

Notice that Jeff missed by just 8 feet and Herman missed by only 20 feet!! Chuck, we don't know why you did such a lousy job, missing by 926 feet -- just kidding, there, buddy! Congratulations to these Wizards of Altitude Precision! Nice job and congratulations to all who participated! After announcing the winners, Bob Brown



Photo Credit: Darrin Plumer

Adoring fans look on as Herman Owens receives his trophy and prize for winning the A.I.R. Fest 11 2-mile Altitude contest.

was 'selected' to go for a dip. Not sure he appreciated the decision, and he really didn't seem to be cooled off much by it, but he showed grace under pressure and didn't kill any of those involved ... yet.

## STARS, MOVIES AND MOSQUITOES

After everyone had their fill of ribs, chicken, barbequed beef and all the other goodies at the pool party, quite a few folks headed back to the launch site. After dark, Doug Gerrard who came all the way from New Mexico with his wonderfully engineered camera rockets showed home-movies of many of his launches on the side of his trailer. Doug has a one-of-a-kind approach to rocketry photography, using sophisticated camera equipment and complex camera configurations on the rockets, on the launch pads, and on the ground from many angles. Not only that, many of the places where Doug launches his technological masterpieces are extremely picturesque and look just plain COOL when filmed from a rocket. Doug's show was very entertaining and informative. We certainly hope Doug can join us again for A.I.R. Fests in the future. We would love to keep track of his latest projects. You can keep track of Doug's work on his web site: <http://www.rocketryphotography.com>.

For the amateur astronomers in the bunch, Harold Henderson, Rob Kuhns, and our own Mark Logan, members of the Kansas Astronomical Observers (KAO),



brought down a few large telescopes. As luck would have it, this year's A.I.R. Fest coincided with the new moon which providing fantastic views of deep space in the dark, clear heavens. It really is amazing how dark it can be well away from the city lights on a moonless night.

The various contingencies from the different parts of the country that had established camp at the launch site each had little parties of their own with many of us wandering aimlessly in the dark from one to the next. Plenty of hospitality, food, mosquitoes and BS, er, ah "camp-fire chatter" were available with a Texas drawl or an Illinois twang or Nebraska flair. From start to finish, Saturday was truly a blast!

Folks who traveled back through Wellington after 11:30 had the added pleasure of going through a sobriety checkpoint on US-160. Despite having our vehicle filled to the gills with rockets, rocket parts, traffic cones, motors, an all-too-visible case of Coors Light and a burned out headlight, the officers waved us through. Heck, I was hoping they'd stop us, as I wanted to swap traffic cones with them since I had crashed mine earlier in the day! When we approached, however, they all stopped everything and stared at us as we crept through at 5 mph. Can't figure out why they didn't want to stop us...

## EPILOGUE / CREDITS

Once again, many thanks go to the guys and gals who put this launch together. From the comments our guests made, everything went smoothly and flyers were glad they came. Our club has a reputation for doing things right, and that is because of two things: 1) we have GREAT leadership; and, 2) we have willing volunteers. Thanks



Photo Credit: Tim Sapp

Volunteers like KLOUDBusters member Mike Dickenson are the only way the club can continue to pull-off big launches like A.I.R. Fest 11. Thanks folks!

KBoD and Thanks Volunteers! If you are reading this and are not a KLOUDBuster, we enthusiastically invite you to join our family. Many hands make for light work!

We also benefit from great relationships with our neighboring clubs. To those clubs and their members we also say, "Thanks!" We know you support us and help out in numerous ways. You are always welcome at our launches and we welcome your input. We also strive to support you by publicizing your launches in our newsletters. To make sure your launches DO get published, kindly send launch details to Terry Smemo at [tsmemo@kc.rr.com](mailto:tsmemo@kc.rr.com).

No launch would be complete or even possible without our great vendors! Your presence lends credibility and "weight" to our launches. Science Education Center, Giant Leap Rocketry, Star Rocketry, Wildman Rocketry, Rocket Garden, and Mostly Missiles, we appreciate your commitment to the hobby and we try to support you as you support us! Again, we are always open to your ideas and suggestions.

Each Spring KLOUDBusters elects new Board members. If you like what we do and would like to help us build KLOUDBusters into an even better club, consider running for a seat on the Board. We always need new ideas to keep what we do fresh. And if you want to do something that isn't being done, let us know! We'll make room for you! The more energy and creativity we can generate, the more people will benefit.

Last but certainly not least, please tell your friends about our hobby! The more people each of us tell about this great hobby the more people will get involved. Mom always said, "There's safety in numbers!" and she was right! If we could magically double our (Tripoli's) membership overnight, I believe the ATF problems would go away. If that sounds optimistic, then maybe they'd just get smaller. Either way, we would all breathe easier knowing that our hobby is secure. So PLEASE bring a friend to the next launch!

Suffice it to say this was the biggest and BEST A.I.R. Fest we've ever had, can next year be even bigger and better?

## Delta III Project

by Terry Smemo

The most anticipated flight of A.I.R. Fest 11 was undoubtedly that of the **Delta III** project. Led by known miscreant Kevin Trojanowski, a team of 24 mostly-Nebraskans calling themselves "*Redneck Rockuhtree*" dazzled everyone by building and flying a scale (don't recall WHAT scale) version of the Boeing **Delta III** rocket. This rocket oozed cleverness and excellence in design and construction. Word has it that Kevin was only minimally involved... We hear that an offhand comment by Kevin's wife Debbie was the impetus for selecting the Delta for the team's project! Kevin put up a great website at <http://www.insaneprojects.com> which is still available on-line for many in-process photos, commentary, and hijinx by the design/build team. As for the rocket, it was enormous! It was about 21 feet tall, and weighed in at over 600 lbs loaded. The bottom section had a central 16" airframe

surrounded by 9 –count ‘em NINE-- strap-on boosters, each one 7.5” in diameter. The upper section was 26” in



Photo Credit: Lance Lickteig

*Delta III's muscle loaded for bear and ready for delivery to the Redneck Rockuhree team's encampment.*

diameter. Power for this beastie came from the motor genius that is Pat Gordzelik. Using Loki and Mostly Missiles hardware, Pat Provided PowerPlants of ePic ProPortions, namely a P for the Primary Pushing and 9 L's for the boosters. The P burned Super Polish Rojo and six of the boosters burned Wayside White with the remaining three airstarting boosters burning Amarillo Blue. All told: 77,592Ns of Texas whupass mojo.

Recovery was with a pair of 28' man-rated chutes, one for each of the two main sections, and nine 12' chutes, one for each booster. The explosive bolts used to jettison each booster were simply elegant in simplicity and effectiveness!

We got to see that first hand when the **Delta III** flew! Despite the best intentions to launch first thing Monday morning, the launch was delayed while all the bugs got sorted out. Actually, the TRUTH is that Kevin had to take numerous pit stops as a result of nerves. Nevertheless, finally it was time. After a respectful 10-count, the 6 Wayside White L's pressurized and began the heavy lifting. Unfortunately, the P was slow to spring to life, not really coming up to full power until the rocket was near the top of the launch tower. The velocity wasn't high enough for stable flight and the top-heavy beast nosed over a bit, establishing a flight path more horizontal than vertical. The good news is that the boosters boosted marvelously, and they



Photo Credit: Lauretta Gordselik

*Anticipation builds as the Delta III final assembly on the pad nears completion.*

jettisoned in a beautiful aerodynamic ballet. All of the chutes came out on cue and all of the boosters recovered pretty much as planned. But due to the horizontal flight, there was a high-speed deployment, which resulted in the lower section coming in without the benefit of a parachute. Happily, the upper section recovered pretty much nominally.

While we hated to see a less-than-perfect flight, given the many successes of the **Delta III** Team's garage engineering, the flight has to be logged as a success. But wait; it gets better! Planning is underway for a rebuild and reprise at LDRS 25 in Texas next July. There MAY have been mention of more power... We salute the **Delta III** Team and wish them the best of luck. We also thank them for choosing A.I.R. Fest 11 for the maiden voyage of **Delta III**. In addition to the photos included here, there are quite a large number of photos and videos of the flight available on-line.

### Airy Bair Reprise

by Gary McKnight

*Our esteemed Treasurer Gary McKnight flew his Airy Bair project as a reprise of his Level 3 certification flight on Saturday. Gary wrote the following description of his rocket and its A.I.R. Fest 11 flight.*

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The Delta II rocket loosely inspired the original **Airy Bair** design. I also had thoughts of entering LDRS bowling ball loft competitions, but primarily the project had to be my Level 3 certification rocket. Two things blew it out of the running for the bowling ball lofts: first, the altitude I was seeking was blown away by others, and second, the more I built it for certification, the heavier it was getting. The idea of strapping on boosters like a Delta II is still there, but will be a later iteration along its life. A few factors in the design made some people nervous, one being the oversized forward section coupled with the relatively small fins. The shock cord attach points, static vent hole locations and launch rod/rail use were other areas of concern, but all were overcome.

The fins are made of composite materials, including phenolic honeycomb covered by carbon fiber cloth (Impulse Aerospace). The 6" diameter airframe is single filament wound fiberglass (Hawk Mountain) which extends from the aft end up to about 8 inches into the 12" diameter forward section. Fiberglass couplers make the secondary airframe wall and cover the entire 6" diameter airframe except for the fin locations. The couplers are not only held in place by epoxy (West-Systems), but are dowel-pinned wherever centering rings are located and screwed together with sexton bolts at other places. The large upper section is fiberglass covered phenolic (PML) and is doubled walled with phenolic couplers. The transition and nosecone are made from stacked 3/4" plywood blanks and were turned on a small wood lathe I got off eBay. Motor retention is accomplished with the SlimLine motor retention system (Giant Leap). Shock



ords are custom made (Rocket Rage). Recovery is via a RRQS100 (Rocket Rage) main parachute and a RC-7 (Rocketman) drogue parachute. Electronics include the Radio Flyer (Tom Farrand) and a G-Wiz LC Deluxe

(SFSM). It stands right at ten feet tall and weight about 60# without a motor installed. With the M1939 motor, it weighs in at a hefty 82-83 lbs. Trackers haven't been used mainly because the rocket does not go out of sight. Just in case of the unforeseen circumstance when it does go out of sight, the Radio Flyer emits a beacon through the hand held HAM radio that can be tracked.



Photo Credit: Lance Lickteig

Need any excavation done around the property?  
Gary McKnight has taken on a sideline

An ideal flight would have the two main sections separate at apogee connected by the 3/4"X30' shock cord and deploy the RC-7 drogue. It's a very small chute for this size rocket, but its main goal is to keep the aft section above the forward section and keep the nose cone pointed down. Main chute deployment is then controlled from the ground by radio and is possible anytime after apogee with the Radio Flyer. The G-Wiz is always at the ready to fire at 800', which would ideally push the nose cone down to the end of a 2in x 40 ft shock cord, pulling the main out of the deployment bag and as the main filled with air, everything would easily turn. With the aft section landing first, the forward section would follow and finish with the nose cone and chute settling gently to earth.

**Airy Bair** sims to about 7800' of altitude, but because of a poor design decision on my part (I have to power down the altimeter to disassemble enough of the electronics bay to get to the electronics to SEE blinking diodes on it!), I have been unable to retrieve any actual altitude data from either flight. With the arc it flew on A.I.R. Fest Saturday, it probably did not reach 7000'.

The A.I.R. Fest Saturday launch was **Airy Bair's** second flight. This time the flight became a whole family affair as my parents, Frank & Pill McKnight, came up from Oklahoma to celebrate their 50th wedding anniversary. My sister, Linda, and two nieces, Brit and Shan, from Lilburn, GA (Atlanta) joined in the celebration. My daughter, Jennifer, and granddaughter, Victoria, were here from Florida and my Aunt Marge came in with my parents. My

daughter and the Georgia girls went out to the pads to help with the final launch preparations. Thanks to Dana Morris and Chuck Pauler for letting me hitch a ride to the pads and for their help as well. My parents had come to A.I.R. Fest last year to watch an **Airy Bair** launch, but the weather did not cooperate. This time, though, the Saturday weather was great and the winds were modest. **Airy Bair** was set-up and launched from the '60' bank of pads. The M1939 roared to life and spewed an impressive cloud of smoke, dirt and dust high into the air. One of the cool things about both of the **Airy Bair** launches to date is that as the motor builds thrust the lower part of the rocket is almost completely consumed by the cloud of debris and smoke, and then he emerges majestically from that cloud and heads for the sky. As **Airy Bair** flew upward, he arced impressively over the huge A.I.R. Fest crowd where right at apogee the drogue 'chute was deployed. Once the large main chute deployed, the rocket drifted behind the crowd and landed 100 yards or so west of the fence in the open, plowed field.

I was lucky enough to have Mark 'Sci-Ed' Logan already in the field, waiting to reel in the parachute and set the nose cone on it. It was a pretty sweet recovery as the Georgia girls walked out to retrieve the rocket with me and decided to help me carry it back in. It flew and recovered without incident or damage.



Photo Credit: Gary McKnight

**Airy Bair's** upper section is recovered by 'The Georgia Girls'. Another successful flight for this bird in commemoration of his folks 50th Anniversary.

**Airy Bair** has been the main topic of 3 engineering class projects and I still have plans to use him for a few more. Design tweaks for **Airy Bair** continue today as I had planned several different configurations for flight. So as long as it can be recovered, I hope to keep flying it.

## Distant Thunder 2005

It seems like after A.I.R. Fest each year the time really flies by quickly and soon it is time for Distant Thunder and then winter sets-in and unless you're a true die-hard or we get some unseasonably warm weather, we start thinking about our winter projects.

Before you put away all those rockets and motors for winter, how about one big last blast of the season? Of

course that means one thing – Distant Thunder; two days of commercial flying and camaraderie before winter.

In addition to our normal antics, KLOUDBusters would like to invite any and all youth, either groups such as Girl Scouts, Boy Scouts, 4-H, or school groups, or individuals with a parent. There will be a number of contests and prizes for the youth and KLOUDBusters are encouraged to attend and provide advice and guidance to our future rocket scientists. If you know of any groups or individuals who are interested in rocketry, please let them know about this Youth Launch.

Flyers fees for Distant Thunder will be \$5 per day, UNLESS you volunteered some of your time for A.I.R. Fest 11. That's right, if you put in some time during set-up, LCO, RSO, Pad Manager, registration, or other duties, the KLOUDBusters has decided to offer FREE Distant Thunder as a big "Thank You!!!" Without our many club members who volunteer their time to serve duty at our large launches, our club could not successfully host the biggest and best launches around. Thank You KLOUDBusters!!!

We will set-up for the launch beginning at around 8:00am on Saturday morning prior to range opening. Also, once again a *Hunters Breakfast* will be held on Saturday from 5:00am to 10am at the United Methodist church basement at 307 North Main in Argonia. At 10 a.m. there will be a drawing for a Savage 510 Double Barrel shotgun, (12 gauge, 2 3/4" chamber) and other prizes.

### KLOUDBusters Christmas Party and Gherkinbaum Festival

**It's almost time for our Christmas party! Mark your calendar!** – Or -- It's beginning to look a lot like... pickles? Get excited, the time and place for the annual KLOUDBusters Christmas extravaganza have been set and are as follows:

**WHEN:** Saturday December 10, 2005  
6:00PM to 10:00PM

**WHERE:** Kiwanis Park Shelter  
5101 W. 2nd in Wichita  
Between West St. and Hoover Rd.

This is the same place we've had the party for the past two years. There will be food (it's still a potluck), a business meeting and the ever-fragrant Gherkinbaum! Hopefully we will also have a little entertainment. If you have photos or video of launches from this past year, please contact Lance Lickteig at [lancel@cox.net](mailto:lancel@cox.net) to make arrangements for copying and displaying your multimedia items. Personally, I'd like to see some of the certification flights, drag races and "bloopers" from A.I.R. Fest 11!

As for food, PLEASE READ CAREFULLY!!! Due to extenuating circumstances (Karen and I are getting married and will be gone for a couple of weeks!), I won't be chasing people this year to nail them down as to

whether or not they are coming, and what they are bringing. Instead, just bring what you brought last year. Well, a fresh batch would be good... If you didn't come last year, PLEASE JOIN US! It's free! It's fun! Just bring a food item to share with the group. If you are NOT coming, please post it to the Yahoo group. If you know someone who is not on the group, please invite them. Questions or problems, contact me at [tsmemo@kc.rr.com](mailto:tsmemo@kc.rr.com). Thanks! The party will be a blast!

### 2006 Flying Schedule

We' have scheduled another full slate of KLOUDBusters launches at Argonia for 2006 plus a nearby LDRS. It should be a great year of flying – check it out ...

Event	Date
January Fun Fly	Saturday, January 7, 2006 EX Sunday January 8, 2006
February Fun Fly	Sunday, February 12, 2006 EX Saturday February 11, 2006
March Fun Fly	Saturday, March 11, 2006 EX Sunday March 12, 2006
KLOUDBurst 16	Saturday-Sunday, April 8-9, 2006
EX-only Fun Fly	Sunday, April 23, 2006
	-----Break for Wheat-----
LDRS 25 Amarillo	Thurs.-Tues. June 29 thru July 4, 2006 -No local fun fly--
August Fun Fly	Sunday, August 6, 2006 EX Saturday August 5, 2006
A.I.R. Fest 12	Friday-Monday, Sept. 1-Sept. 4, 2006 9/4/2006 is EX only.
October Fun Fly	Saturday, October 7, 2006 EX Sunday October 8, 2006
Distant Thunder 2006 EX-only Fun Fly	Saturday-Sunday, November 11-12, 2006 Sunday, November 19, 2006
December Fun Fly	Sunday, December 10, 2006 EX Saturday December 9, 2006
Christmas Party	Saturday, December 9, 2006

[Always call KloudLine or check the KLOUDBusters web site prior to going to the launch site just in case there is schedule change due to weather or field conditions.](#)

### Call for Nominations – Prefect 2006

Each year KLOUDBusters elects a member as Prefect to represent our local club's interests with Tripoli Rocketry Association, the national rocketry organization. The Prefect is also the person who takes the responsibility for applying for and maintaining the FAA waiver under which we obtain legal permission to launch our rockets. The Prefect must be a KLOUDBusters member in good



standing and a Level 2 certified flyer. The elected individual will serve as Prefect for the 2006 calendar year.

If you would like to nominate someone to run for Prefect, or if you would like to volunteer yourself to run, please contact Lance Lickteig via e-mail ([lancel@cox.net](mailto:lancel@cox.net)).

**KLOUDBusters Logo Decals and Stickers**

Would you like to display your KLOUDBusters pride on your vehicle, on a rocket, on your range box /toolbox, or anywhere you choose for that matter? There are two options available: a decal or a sticker. "What's the difference?" you might ask. Well, the decal transfers only the KLOUDBusters "Rocket through



Photo Credit: Lance Lickteig  
KLOUDBusters logo decal displayed proudly on the back window of Lance Lickteig's Rocket Van.

the Cloud" logo directly to the window or other surface. The sticker has the logo imprinted on a clear sticker backing. If you're interested in one or the other or both, look up Gary McKnight at the next launch or e-mail him at [gfmcknight@cox.net](mailto:gfmcknight@cox.net) and he can get you fixed-up with the logo of your choice. The decal cost is \$6.00 and the sticker cost is \$3.00. A portion of the proceeds goes directly to KLOUDBusters.

**KLOUDBusters Information**

President	Darren Owens ( <a href="mailto:president@kloudbusters.org">president@kloudbusters.org</a> )
Vice-President	Dennis Blackburn
Treasurer	Gary McKnight ( <a href="mailto:payments@kloudbusters.org">payments@kloudbusters.org</a> )
Secretary	Lance Lickteig
Member at Large	Mark Logan
Member at Large	Chuck Pauler
Prefect	Bob Brown ( <a href="mailto:prefect@kloudbusters.org">prefect@kloudbusters.org</a> )
Web Site:	<a href="http://www.kloudbusters.org">http://www.kloudbusters.org</a>
KloudLine:	620-456-8323 (24X7 launch updates)
Mailing Address:	KLOUDBusters, Inc. P.O. Box 771217 Wichita, KS 67277-1217

**Photo Pages – A.I.R. Fest 11 Miscellaneous**



Photo Credit: Lance Lickteig  
Steve Klausmeyer's *GO!* Rocket - Level 3 certification project is ready to fly on an M1297.



Photo Credit: Tim Sapp  
A future astronaut practices for his first trip into the heavens aboard Keebler Wilkins *Nike Zeus*. Better get this young fellow a seat belt, though.

KLOUDBusters has hosted LDRS 4 times at our Argonia, Kansas launch site – [1993](#), [1994](#), [1999](#) & [2003](#).

## Photo Pages – A.I.R. Fest 11 Miscellaneous



Photo Credit: Tim Sapp

Jim Cooper's *Talon 4* on a Hypertek L550 clears the rail.

We have seen tons of great photos from A.I.R. Fest 11.

- Tim Sapp has a web site with many of his photos: [www.sappgeeks.com](http://www.sappgeeks.com).
- Laretta Gordzelik is a very talented rocket photographer and provided a CD with many launch photos, candid 'people' photos, and lots and lots of *Delta III* photos.
- Tom Jenkins from Wichita is a photographer by trade and uses his skill and equipment to photograph aircraft of all sorts in flight. Tom took many photos last year at A.I.R. Fest 10 and this year captured many great shots of Lance Lickteig's Level 3 certification flight that will appear in a later newsletter and on-line.
- Lance Lickteig captured a few launch photos and some shots around the launch site on his new/old Olympus E100RS.
- Darrin Plumer provided a few shots that he took over the weekend.

**Many thanks go to everyone who takes the time to snap photos at launches for everyone to enjoy later. A picture is worth a thousand words.**



Photo Credit: Tom Jenkins

A nice shot of Bob Block's J530R to J180 2-stager on its way to an out-of-sight 10,000+ feet on this 3" rocket.



Photo Credit: Laretta Gordzelik

*Master Blasters* Dan Stroud and Pat Gordzelik compare the relative size of their motors.

Photo Credit: Tom Jenkins

Bob Block's 2-stager looks like it's doing some "Cloud-Busting" of its own

Photo Pages – A.I.R. Fest 11 Miscellaneous



Photo Credit: Laurretta Gordzelik

An unidentified Black Brant leaves behind a very unique smoke cloud formation as it leaves the pads.



Photo Credit: Laurretta Gordzelik

John Clifton from GA and Jack Hooper from NM put a thrill into the crowd with their AMW M2200 Skidmark drag race.



Photo Credit: Tim Sapp

Jeff Machado (OK), Todd Graves (WI) and Jim Hendrickson (GA) conjured up an incredible drag race with their Ultimate Endeavors . . .



Photo Credit: Tim Sapp

. . . but things went bad very quickly, as motors and rocket parts head off in their own directions.

The first-ever Discovery Channel **Rocket Challenge** series was produced by the First Television production company at KLOUDBusters launch site near Argonia, KS in the summer of 2003.



Photo Pages – A.I.R. Fest 11 Miscellaneous



Photo Credit: Tim Sapp

A very artistic shot of rocket debris from the 3-way drag race.



Photo Credit: Tim Sapp

Chuck Pauler's Dynacom Tarantula lifts-off on a CTI M795 toward 16,000' in altitude after the motor's 13 second burn.



Photo Credit: Laurretta Gordzelik

Team Wildman and Clay Kramer brought out the big dawgs for A.I.R. Fest 11. *The Wildman* (top) and *Anarchy X* both flew on Monday and each featured a central 'N' motor surrounded by 6 'M' giving each total installed impulse of a 'P' motor.

Photo Pages – A.I.R. Fest 11 *Delta III*



Photo Credit: Laurretta Gordzelik

The *Delta III* team test fits the boosters on to the main airframe. The 6" hole in the main airframe fits the Loki P case and each booster gets an L. 77,592Ns total.



Photo Credit: Laurretta Gordzelik

Most of the assembly is complete as the anticipation builds toward liftoff.

Check out lots of details about the *Delta III* at <http://www.insaneprojects.com>.



Photo Credit: Laurretta Gordzelik

One final photo opportunity prior to the moment of truth.



Photo Credit: Lance Lickteig

*Delta III* sends a plume of dust and debris billowing as it clears the pad. This photo was taken from about 1/2 mile to the southwest of the launch pad.

Photo Pages – A.I.R. Fest 11 *Delta III*



Photo Credit: Laretta Gordzelik

The flight path takes *Delta III* toward the north and west as the 'P' was late coming up to pressure causing the flight to be under-powered at liftoff.



Photo Credit: Laretta Gordzelik

Six of the boosters separate as planned from the main airframe. Well Done!!!



Photo Credit: Laretta Gordzelik

Landowner Rick Nafziger, Pat Gordzelik, Chuck Mies and Bob Brown share a lighthearted moment out in the field. We extend a huge "Thank You" to these guys for all they have done for rocketry and KLOUDBusters in the past, present and future.



Thank you rocketeers  
for making A.I.R. Fest 11 a great success !!!  
Join us next year September 1-4, 2006 (Labor Day weekend) for  
A.I.R. Fest 12 or for any one of our other launches.