



THE LEADING EDGE

NEWSLETTER OF MUROC EAA CHAPTER 1000

Voted to Top Ten Newsletters, 1997, 1998 McKillop Award Competition

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<http://www.eaa1000.av.org>

November 2009

Chapter 1000 meets monthly on the third Tuesday of the month in the USAF Test Pilot School Scobee Auditorium, Edwards AFB, CA at 1700 or 5:00 PM, whichever you prefer. Any changes of meeting venue will be announced in the newsletter. Offer void where prohibited. Your mileage may vary. Open to military and civilian alike.

This Month's Meeting:



Semiannual Cookout with the USAF Academy Cadets

Tuesday, 17 November 2009
1830 hrs (6:30 PM Civilian Time)
High Cay Partyhaus
Rosamond, CA

"Gee, Brain. What are we going to do this month?"

"The same thing we do every month, Pinky, try to take over the world of aviation."



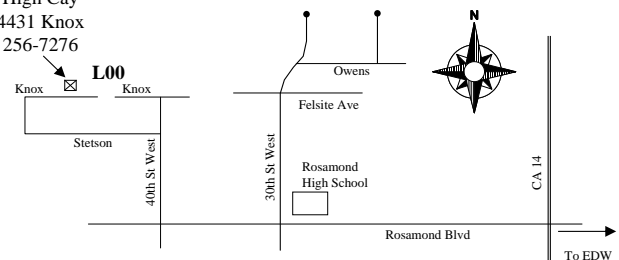
There are now three distinct possibilities. First, you remember watching this cartoon in the late nineties. Second, you don't remember a silly cartoon about two genetically altered lab rats that scheme to take over the world, so you are wondering what this has to do with our meeting this

month. Third, you remember said cartoon but still have no idea what significance it holds. I'll admit I always wondered why one of them was named "Pinky" when they were exactly the same color. But, let's put that aside. I am supposed to tell you about our chapter meeting this month.



It's time again for the cadet feed. Cadets from the United States Air Force Academy are coming to Edwards AFB to see what this whole idea of flight test is really about. These aren't just any cadets. These young men and women are enrolled in Aeronautical Engineering 456 at the Academy. Their class project requires them to come here to participate in sustained aerial flight. While they are in town though, we take this opportunity to broaden their perspective of aviation. Oh sure, they'll get lots of chances throughout their careers to see supersonic fighters that assure air superiority over the battlefield. They will no doubt be exposed to massive, powerful strategic airlift platforms that consume 20,000 pounds of dead dinosaurs every hour. But, we know there is much more to aviation than that. We have to show these young Americans what aviation is really about – eating hamburgers, drinking beer, and telling tales of feats of daring and wisdom.

High Cay
4431 Knox
256-7276



So, here's the plan. We'll all meet at **High Cay at 1830**. If you flew in the Air Force Reserve, that's when Mickey is pointing south for all he's worth. There will be beer, soft drinks, chips, and condiments. Oh yeah, there will also be pulverized remnants of dead cows and my personal favorite, the 30mm steak. We will surely venture out to see the progress **Houdo** is making on the **Glasair**. We might even make it far enough to see the **RV-8A Astroblaster** lying in pieces on the bench. With luck, we

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can have a live demonstration of the “**Bill Mill**” – not road worthy but definitely a sight to see. Of course, no such evening would be complete without stories and bad jokes. The standard rules apply. Each story must contain at least six percent truth. This requirement can be waived only if it is a very good story, or if no one present can refute the presence of six percent truth. So, bring your stories, bring an appetite, and meet us at **High Cay** on **17 November 2009** at **1830**.

Last Month's Meeting

EAA Chapter 1000

Erbman's Bearhawk Manufacturing Facility

Rosamond CA

20 October 2009

Gary Aldrich, Presiding

The October meeting was held in the garage/secret **Bearhawk** manufacturing facility at **Russ Erb's** house with 17 members and guests (mostly from Chapter 49) in attendance, **Kommandant Aldrich** presiding. **Vice Kommandant Weathers** provided refreshments consisting of C³'s, tortilla chips and salsa, and soda of recent vintage.

Russ “Erbman” Erb (or “**Erbdude**” for the more contemporary) gave a demonstration of how to prepare a fabric coating. The demo was done for the benefit (allegedly) of those who are building a fabric airplane. However, before you go and attribute this simply as altruistic on his part, let us consider the real motive and hidden agenda of the “**Poly Fiber Professor**”- he needed patch material for his own **Bearhawk** and was more than willing to employ the **sweatshop labor** of those who had only a slightly more than passing interest in the process. We “**metalheads**” and “**composite jockeys**” were able to resist the lure his “**dope peddling**”.

Actually, in his “**Short History of Fabric**”, we learned that that dope is no longer utilized. Other fabric fun-facts are that the cotton originally used has given way to **polyester/Dacron®**, and that **Poly Fiber** and **Ceconite** are in actual fact one and the same, but only material marked as **Poly Fiber** is allowable under the STC.

Russ began the lesson/demo with a recommendation to “follow the manual”, in this case: “**How to Cover an Aircraft Using the Poly-Fiber System**” by **Jon Goldenbaum**.



Highly specialized tools are required, such as paint brushes and an iron. Not just any iron, oh no, my friends. The “**Poly Prof**” uses the Black and Decker Quick ‘n Easy 365 (no steam, no starch), tested and documented for temperature calibration. **Russ** claims that a deal is in the work with B&D for his product endorsement.

Somewhere in the process, **Houdu** noted that this was the “perfect meeting”: **Russ** got six guys to actually listen to what he was saying and do his bidding while the rest of us stood around and drank beer.



"Houdu will never miss one beer. Well, maybe two..."

A “Cliff Notes” summary of the process:

Clean and prep the frame over which the “**Poly Fiber**” will be applied.

Glue the “**Poly Fiber**” to the previously cleaned and prepared frame (see step 1) using “**Poly Tak**”, a general purpose adhesive

Heat the “**Poly Fiber**” in a two step process using the Black and Decker Quick ‘n Easy 365 iron, first at 250 degrees, then again at 350 (thus the importance of iron temperature calibration).

Optional step at this point, do any miscellaneous clothes ironing as long as the iron is out.



Gee, the Global Reach CTF is really strict about uniform appearance, even on its civilians!



Cobra could never get a quarter to bounce off of his Army bunk. Finally he feels fulfilled.

Apply **"Poly Brush"** and **"Poly Spray"** to the now heat-treated fabric to fill the **Poly Fiber** fabric weave and act as an adhesive for any tape applications required.

After dried, apply the **"Poly Tone"** color coat for desired color.

It should be noted that due to the pungent and overpowering aroma of the **Poly Brush**, we were forced to evacuate the facility in order to breathe. Which is a good safety tip: **Always use a well-ventilated facility.**

It was at this point that **Kommandant Aldrich** had his **"Fiberfill"** and declared that **"Victory"** had been achieved, although it was never clearly established that any **"Poly Tone"** had actually been applied. In point of fact (rarely, if ever, documented in any Chapter 1000 proceeding), we must conclude that no actual application of **"Poly Tone"** occurred since the **"Poly Brush"** was still wet, not that anyone cared at that point since few of us could breathe. It is noted for the record that **Russ** appeared immune to the effects of the **"Poly Brush"**. (*fooled you...*)

The assemblage disassembled and dispersed, reassembling at Coach's Sports Bar. No records were kept of those proceedings in accordance with C1000 bylaws.

- **Kent "Cobra" Troxel**
Minister of Propaganda



The Screamin' Yellow Zonker was displaced from its usual berth for the workshop. Note the traffic jam behind it caused by all of the attendees.



Stormy correctly identifies the "Poly Prof"



Cobra points to an example of the final goal--a fully coated fabric sample



Knife supervises the cleaning of the frames



This workshop sponsored by Consolidated Aircraft Coatings, makers of Poly Fiber Products



Measuring out the fabric



Clamping the fabric into place prior to cementing around the frames



The Poly Prof demonstrates one of the only implements authorized for marking fabric--the pencil. Chalk lines are okay too. Any form of ink is strictly Verboten! The pencil will disappear in the coatings; the ink won't.



The Poly Prof expertly demonstrates the "brush and smash" method of fabric cementing as Hellmuth holds the well-used Poly Tak can



"And then the giant fabric spider drops down and spins a web of rib lacing to hold the fabric in place..."



Doug Triplat tries his hand at fabric cementing





The assembled group patiently waits to see the 350°F iron burn through the fabric and through the earth all of the way to China. The jokes on them, as it will sit happily on the fabric all day with no ill effects. Besides, the extension cord isn't that long.



Murry Rozansky finishes the heat shrinking with the iron. He mumbled something about not letting his wife see him do this....



The Poly Prof demonstrates brushing on the first coat of Poly Brush



Even with the garage door open, soon the outgassing Poly Brush would drive everyone outside



Observers observing observers

Kommandant's Korner

I knew it would happen...

Hand in Zurg's monthly tithe a little early and, presto, he expects it early every month. This time it's so



Erbman can take his family to Knott's Berry Farm. Frankly, I don't see the connection as I doubt EEZ is considered part of the Erb clan. Anyway, not much to report on from the Korner this month. The Fightin' Skywagon has been fairly quiet as my weekend activities have largely centered around non-aviation events such as household chores, fixing cars, and building new computers for both Mrs. Kommandant and Zurg (who, no doubt is using his to produce this very newsletter).

We did manage to participate in the first "Wings and Wheels" event staged by the Rotary Club of Lancaster. This was a fun event with a wide variety of classic cars and hot rods interspersed with several ("dozens" if you read the newspaper account) aircraft. There was also a Chili cookoff contest with some very serious competitors. PPO Dodson, who showed his monster Z06 Corvette on the line was rumored to have sampled most of the

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offerings. Maybe he'll give us a "blow-by-blow" description at the meeting. With the event being held at the home base of the **VC-180** it was only fitting that we do a "taxi-out" and place the Chapter 1000 flagship on display. We were parked in between a pretty little **Bellanca** and a well restored **Tri-Pacer**. Also in attendance was an **RV-6A**, an **Extra**, a **BT-13 "Vultee Vibrator"**, a huge Russian **AN-2**, and a couple of biz jets. Alas, none of the Troopers in attendance garnered any trophies or door prizes but it was fun none-the-less.

The crisp air of late and the time change harkens the approach of another holiday season....and you know what that means! **Festivus!** Yup, Mrs. **Kommandant** and I will be hosting yet another gathering of Chapter 1000 revelers in our home on **Tuesday, 15 December**. Normally, I would promote an event in the current month's newsletter, but I want to give you a reminder in time to do your **Festivus shopping** for the popular **Kommandant's Krap Exchange**. Last year we notched up the quality of the **Krap** a bit and I think everyone appreciated it. With this much notice, I expect we'll see some really nice items change hands. There's plenty of time to shop the **aviation section of Nordies**...(according to Mrs. **Kommandant**). The **Grievance Pole** is ready in my garage after somehow failing to go home with its usual keeper, so we're pretty much set for the event. More details to follow in next month's 'Edge.

Until then, fly safe and check 6

- Gary Aldrich
Kommanding

Slide Rule? What Is It?

(In the June 2009 edition of *The Leading Edge* the question was posed "What Is A Slide Rule?" Stormy suggested that a Slide Rule was "One child on the ladder at a time." Apparently that wasn't the answer Erb the Elder was going for...)

A slide rule is a mathematical calculating machine based on the use of logarithms.

What are logarithms?

"Logs" were used before electro-mechanical calculating machines and electronic calculators to simplify multiplication and division of large numbers. Surveyors used tables of logarithms for simplifying calculations and increasing accuracy.

There are two standard systems, to the base 10 and to the base "e." To the base 10 is easier to explain.

In algebra 10^1 is equal to 10. 10^2 is equal to 100 and 10^3 is equal to 1000. 10^1 times 10^2 is equal 10^3 or 1000. You added exponents.

You can also say the log of 10 plus the log of 100 is equal to the log of 1000.

What confuses many persons is when you have values like 3^2 , how do you get 9 with logarithms? You use big tables of logarithms published in handbooks.

The log of 3 to the base 10 is 0.47712 which is equivalent to $10^{0.47712}$. Since 3^2 is 3 times 3 we can add the log of 3 to the log of 3 or the log of the answer is 0.95424. $10^{0.95424}$ is equal to 9.



A plugger doesn't worry about his computer getting infected with an Internet virus.

A slide rule is basically two sticks with the distances equal to the logarithms marked on them so you can add distances equivalent to the logarithms.

Standard slide rules were 10 inches but when I got to Edwards in 1954 I was issued a 20-inch slide rule for more accuracy in standardizing performance data. The instrument readings were sometimes to the nearest 10 but the corrections could be calculated to 3 decimal places.

Years ago I put tape on my slide rule with the values of standard altitude density ratios. It helped a lot in checking computer aerodynamic calculations.

- Lee H. Erb, aka Erb the Elder
Det 5 Arlington, TX

RV-8A Astroblaster Update



Astroblaster Production Superintendent Stormy Weathers identifies the next Cleco® to be removed



Top side of the wing, with multiple drawings reminding which wing this really is



How many RVs do you know of that line the landing light well with diamond plate? At least it's aluminum...



One of the fuel tanks. As it is, this will never hold water, or fuel for that matter. We suggested that it needs another side.



Stormy contemplates methods for closing the open side of the fuel tank



It's entertaining when the kit manufacturer has to put notes, warnings, and cautions directly on the parts

Need a Windows 7 Test Drive?

As mentioned by **Herr Kommandant**, **Evil Editor Zurg** recently acquired an insanely fast Intel Core i7 computer running the latest in non-Apple operating systems. If you would like to check it out before making the plunge yourself, contact **Zurg's** lackey **Erbman**.

Web Site Update

As of 8 November 2009, the hit counter showed **129397**, for a hit rate of 16 hits/day for the last month.



Just a reminder that the EAA Chapter 1000 Web Site is hosted courtesy of Quantum Networking Solutions, Inc.

You can find out more about Qnet at

<http://www.qnet.com> or at 661-538-2028.

Chapter 1000 Calendar

Nov 17: EAA Chapter 1000 Monthly Meeting, 5:00 p.m., Edwards AFB. USAF Test Pilot School, Scobee Auditorium. (661) 609-0942

Dec 1: EAA Chapter 49 Monthly Meeting, 7:00 p.m., General William J. Fox Field, Lancaster, CA. (661) 948-0646

Dec 8: EAA Chapter 1000 Board of Directors Meeting, 5:00 p.m., High Cay, 4431 Knox Ave, Rosamond CA. (661) 609-0942

Dec 15: EAA Chapter 1000 Festivus Etc Celebration, 6:00 p.m., Kommandant's Quarters. Quartz Hill CA. (661) 609-0942

Jan 5: EAA Chapter 49 Monthly Meeting, 7:00 p.m., General William J. Fox Field, Lancaster, CA. (661) 948-0646

Jan 12: EAA Chapter 1000 Board of Directors Meeting, 5:00 p.m., High Cay, 4431 Knox Ave, Rosamond CA. (661) 609-0942

Jan 19: EAA Chapter 1000 Monthly Meeting, 5:00 p.m., Edwards AFB. USAF Test Pilot School, Scobee Auditorium. (661) 609-0942

Feb 2: EAA Chapter 49 Monthly Meeting (?), 7:00 p.m., General William J. Fox Field, Lancaster, CA. (661) 948-0646

Feb 9: EAA Chapter 1000 Board of Directors Meeting, 5:00 p.m., High Cay, 4431 Knox Ave, Rosamond CA. (661) 609-0942

Feb 16: EAA Chapter 1000 Monthly Meeting, 5:00 p.m., Edwards AFB. USAF Test Pilot School, Scobee Auditorium. (661) 609-0942

Mar 2: EAA Chapter 49 Monthly Meeting, 7:00 p.m., General William J. Fox Field, Lancaster, CA. (661) 948-0646

Mar 9: EAA Chapter 1000 Board of Directors Meeting, 5:00 p.m., High Cay, 4431 Knox Ave, Rosamond CA. (661) 609-0942

Mar 16: EAA Chapter 1000 Monthly Meeting, 5:00 p.m., Edwards AFB. USAF Test Pilot School, Scobee Auditorium. (661) 609-0942

Apr 13: EAA Chapter 1000 Board of Directors Meeting, 5:00 p.m., High Cay, 4431 Knox Ave, Rosamond CA. (661) 609-0942

Apr 20: EAA Chapter 1000 Monthly Meeting, 5:00 p.m., Edwards AFB. USAF Test Pilot School, Scobee Auditorium. (661) 609-0942

To join Chapter 1000, send your name, address, EAA number, and \$20 dues to: EAA Chapter 1000, Doug Dodson, 4431 Knox Ave, Rosamond CA 93560-6428. Membership in National EAA (\$40, 1-800-843-3612) is required.

Contact our officers by e-mail:

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Instrumentation and avionics requirements for VFR/IFR

Gary Aldrich	gary.aldrich@pobox.com	661-609-0942
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Inputs for the newsletter or any comments can be sent to Russ Erb, 661-256-3806, by e-mail to erbman@pobox.com

From the **Project Police** legal section: As you probably suspected, contents of The Leading Edge are the viewpoints of the authors. No claim is made and no liability is assumed, expressed or implied as to the technical accuracy or safety of the material presented. The viewpoints expressed are not necessarily those of Chapter 1000 or the Experimental Aircraft Association. **Project Police** reports are printed as they are received, with no attempt made to determine if they contain the minimum daily allowance of truth. So there!

THE LEADING EDGE**MUROC EAA CHAPTER 1000 NEWSLETTER**

C/O Russ Erb

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Rosamond CA 93560-7692

<http://www.eaa1000.av.org>

ADDRESS SERVICE REQUESTED

THIS MONTH'S HIGHLIGHTS:

REGULAR MEETING 17 NOV @ HIGH CAY

FABRIC WORKSHOP REVIEW

DO YOUR FESTIVUS SHOPPING!

RV-8A ASTROBLASTER UPDATE



The Leader In Recreational Aviation