



THE LEADING EDGE

NEWSLETTER OF MUROC EAA CHAPTER 1000

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

President
Vice-President
Secretary
Treasurer
Newsletter Editor

Gary Aldrich 661-609-0942
Scott Weathers 661-317-9453
Kent Troxel 661-947-2647
Doug Dodson 661-256-7276
Russ Erb 661-256-3806

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

April 2010

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:



Cookout with the USAF Academy Cadets

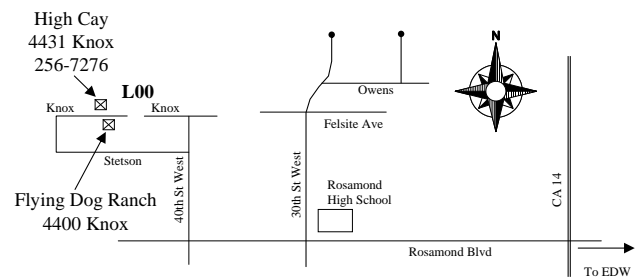
Tuesday, 20 April 2010
1830 hrs (6:30 PM Civilian Time)
High Cay Partyhaus
Rosamond, CA

Colleagues:

What has sixteen legs, inhabits mountainous regions at 7000 feet elevation, and eats cows? This creature is typically twenty one years of age and alerts at any mention of aircraft or flight test. Please join us at **High Cay** (See attached map.) to observe a live specimen of the subject creature during feeding. Oh, the creature is a group of cadets from the **US Air Force Academy** who are enrolled in **Aeronautical Engineering 456**. They are here to visit the **Test Pilot School** and conduct flight test in support of their class project.

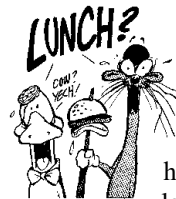
While they are here, we have asked them to join us for a typical evening of EAA Chapter 1000 regalia. It's sure to be the highlight of their trip to the Air Force Flight Test Center. Please bring an appetite for hamburgers and be prepared to share stories of aerial achievement and daring feats of airmanship - just so we can observe the expected response to this stimulus.

The ceremonial fire (barbeque grill) will be lit at 1800.



- **Scott "Stormy" Weathers**
 Vice Kommandant

Nineteenth Annual *Project Police* Airport Barbecue 15 May 2010 at Rosamond Skypark



For the nineteenth year in a row, the *Project Police* are fabricating a reason to party.

Last year we thought we had downscoped the event since Obama hadn't bailed out the chapter and a perceived lack of interest from the previous year. The joke was on us—there were far more aircraft that flew in than the previous year when we called it a fly-in. The Spot Landing contest and People's Choice airplane judging were eliminated which was met with a large round of apathy from the assembled participants who didn't even notice since there were no awards presented.



THE LEADING EDGE

The best part will remain—there will be food! Expect food to be available around 1000.

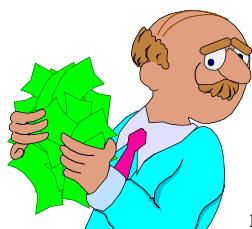


The big event will still happen at the newly expanded **High Cay Partyhaus** on **Rosamond Skypark**, so you can still fly in if you so choose. Rumor has it that **Erbman's Three Sigma** will actually be in a flyable condition this year. The scuttlebutt is if you twist his arm gently he may take you flying. Of course, you can always try that on **Gary Aldrich** with the **Flying Skywagon II** or **Kent Troxel** with the **F35 Banana Raptor**.

Clear your calendar now! More details next month.

HEY DUES DELINQUENTS!!!

You're being cut off!



Yep, this is your last newsletter. You can, of course, still avert this disaster by forwarding your dues check (\$20) in according to the directions on the last page.

This is the last time we'll remind you. You're on your own now.

Last Month's Meeting

EAA Chapter 1000

USAF Test Pilot School, Scobee Auditorium
Edwards AFB, CA
16 March 2010

Gary Aldrich, Presiding

The March meeting was held at the Edwards AFB Test Pilot School Scobee Auditorium with 10 people in attendance, including one guest. C³'s and sodas were served in the Rick Husband Lounge (no chips or salsa as the **Vice Kommandant** sniveled something about nobody eating them...I don't think so). After all the C³'s had been scarfed up, a code "C⁵" was declared (**Completed Consumption of Chocolate Chip Cookies**) and we proceeded to the theater for the evening's event.

Featured speaker **Russ "Erbdude" Erb** reprised his starring role in the sequel to "**Super/Turbocharging for Dummies**" originally done in November 2003. More than six years in the making, "**Supercharging, Part Deux**", or "**Super-Dupercharging**" was sure to be a hit. The technically brilliant PowerPoint[®] brief was chocked full of detailed performance charts with enhanced graphics and animation, a virtual tour de force. However, as most sequels, it lacked the impact of the first installment, perhaps due to our contempt of the familiar. It was obvious from the get-go that **Russ** felt compelled to

educate rather than to entertain (a misguided approach at best). Now, I must admit that the audience of mostly engineers sat in rapt awe of what was flashing before our eyes. For me...not so much. But what do I know? I'm an **Army pilot** and a **business major**. They were just colorful pictures whose meaning and significance remain a mystery. After all, an Army pilot discussion with a crew chief usually consists of a grunt and a "plane fly good! (or bad, as the case may be). Which is still better than a Marine pilot report that consists of only the grunt, wherein the qualitative aspect of the plane's performance must be inferred by the tonal inflection.

Still, the brief was superbly done, plenty of pictures and diagrams of "ironmongery", and not without its moments of humor. Classic lines like "we're here to pump...you up", and the colorfully descriptive "suck-squeeze-bang-blow cycle of most thermodynamic processes" did not fail to deliver the goods. **Russ** was truly in his element with plenty of Geek Speak to go around. **Doolittle** actually understood what he was saying and by **Knife's** count asked 6 questions and made 5 comments. Not to be outdone, the **Kommandant** weighed in on **Russ's** quotation of **Gagg and Farrar** whose findings are "true for normally aspirated engines within the limits of experimental accuracy" with the quip of "Oh, so it's really **WAGG and Farrar**, then".

Yeah.....good times.

At the end of 70 slides, **Russ** opened it up for questions. Let the record clearly show that yours truly broached the subject of "**turbo-normalizing**" and after a brief discussion received **high accolades** from **Russ** with a "you make a good point". Hey, I just thought you should know.

"Victory" was declared and a debrief was conducted at the BK lounge. I even bought **Russ's** dinner.

Most of this is true.

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

The Month Before Last's Meeting

EAA Chapter 1000

USAF Test Pilot School, Scobee Auditorium
Edwards AFB, CA
16 February 2010

Gary Aldrich, Presiding

(Then at last, the long lost report of the February meeting, as promised to you last month...)

Fifteen lost souls showed up for the Chapter 1000 "**Bill Mill**" meeting.

The **Vice Kommandant** called the meeting to order after all the C³'s were consumed. **Bill** started the meeting by explaining how he installed the 220 volt 3 phase electrical system to power the Bill mill. A nifty little device that converted the 220 volts single phase coming in to 220 volts with 3 phases. Actually it looked more like an electric motor with a shaft sticking out that would make a great shoe buffer if they could figure out how to attach that fuzzy little buffing ball to the end of it.

Anyway Bill started out naming all the parts of the mill and what they did. Magically he produced an aluminum block that was roughly 3 x 3 x 1 inches which was to become an ashtray. Bill demonstrated how to use the table vise to hold the aluminum block and how to attach the cutter to the mill. Measurements were made and everyone was talking in thousandths of an inch. Wheels were spun, power feeds were engaged and chips were flying. Everyone was saying things like table feed, cross feed, lefty loosey and righty tighty. It was a manly night. One after another the members were given the opportunity to "run the mill". Mistakes were made, but I've been paid off not to divulge the names of the guilty parties. After almost 3 hours of clear concise instruction an ashtray was produced. Alas, not one smoker in the group to preflight and test. All agreed that it would probably fly and we left it at that.

Most of this is true.

- George "Knife" Gennuso
Emergency Substitute Minister of Propaganda

Kommandant's Korner

ToyMaster
Revisited...

Fourteen years ago this month I submitted my first article for publication in the Chapter 1000 Leading Edge.

The name of the article was "**Tips from the ToyMaster**" and it was a product review...of sorts, for a pricey (at the time) but cool flashlight for pilots. The article also formally documented in the fledgling publication a couple of terms that have become entrenched in the lexicon of the *Project Police*.

"**Gadgetosis Nervosa**" (GN) was reportedly coined by founding chapter member **Norm Howell** to describe the irresistible urge to buy the latest, greatest tool or toy (ostensibly aviation-related, but not a requirement). Before Norm moved on to greener (and wetter) pastures we had a spirited competition going to see who was afflicted with the worst case of GN. It became a chapter sport to show one of us a new doodad or gewgaw and see how fast the other would shell out the cash to get one (or, better yet, the next version). Though I had Norm at a disadvantage pay-scale-wise, he, not being married or trying to force a child through college, always seemed to better me in the contest. Thus, a string of new-fangled GPS units, flashlights, tools, etc served to bemuse and amuse the membership at the monthly meetings.

"Aviation-Induced Divorce Syndrome" or AIDS was another term, whose origin is less clear, that has continued in common use despite its morbid connotation. It is routinely uttered in hushed tones by (usually) male pilots when discussing the state of a comrade's marital discord or lack of progress on his homebuilt project. This form of AIDS, thankfully, is almost always curable by time, patience, and a healthy dose of flying to spouse-friendly locations.



On the other hand, in reviewing that ancient article I realized that except for the ravages of inflation, my GN condition hasn't changed much. I'm still a sucker for the latest and greatest. The \$40 flashlight that spurred that review has long been supplanted by one that cost nearly seven times that sum. **Mrs. Kommandant** (who was just **Mrs. Aldrich** in 1996) still shakes her head when I proudly show her my latest "must have" gadget. I do miss the competition, though several different *PPTAF* Troopers have on occasion threatened to challenge my ToyMaster title. Maybe if I started issuing more tantalizing product reviews I could entice another contest...

Fly Safe, and Check 6

- Gary Aldrich
Kommanding

Project Police Invade Whiteman, Educate Locals

Some time ago, *Project Police Officer (PPO) Murry Rozansky* sent an inter-office memo to *PPO Erbman* requesting that he present his critically acclaimed presentation on Aircraft Engine Supercharging (*U.S. Working Title "We're Here To Pump You Up"*) to EAA Chapter 40, where **Murry** had been an undercover *Project Police* operative for years.

It seemed reasonable that since Chapter 40 meets at **Whiteman Airport** that the proper way to travel to the meeting would be by airplane. The request to speak was made back at the time that the *Bearhawk Three Sigma* was making noises that flight was imminent. Of course, that ended up taking a lot longer than we originally thought. The speaking engagement was shifted to the right time and time again, until finally on 20 March 2010 all of the stars aligned and the date was arranged.

In preparation for this mission, on Presidents Day (15 Feb 10) **Erbman** flew a practice mission to Whiteman as a route survey and to inspect the venue. Good thing too, because he (like many other pilots) was able to identify Whiteman airport on the first try. Well, except that it was really Burbank. He found Whiteman airport when it was directly under him.

On 20 Mar 10 **Erbman** launched from Rosamond Skypark in the mighty *Bearhawk* with copilot **Satoka "Tuki" Hanaoka** and flailed his way through ATC to get to the Newhall Pass, where he found Whiteman Airport on the first try this time. In fact, when he found it he was lined up perfectly for about an 8 mile final. After a "we can use the airplane again" landing, they tied down in transient parking a proceeded to the restaurant.

We were greeted by the rather unusual question "What? Only one *Project Police Officer*?" **Erbman** replied "Hey, you've only got one meeting." After a quick setup of the computorial equipment and a nice breakfast, the meeting was started. **Bill Berle** announced how the FAA was gracious enough to add another four aircraft onto the STC for his EZ Flap handle (<http://www.ezflaphandle.com>). There was an extensive discussion about hosting the B-17 *Aluminum Overcast* later this year and all of the ridiculous requirements that

THE LEADING EDGE

the airport was trying to force upon them. One of the chapter members gave an update on his progress building a roadable car of his own design. **Erbman** passed this guy's contact information to our **Vice Kommandant** so that maybe we can have a meeting presentation on this in the future.

Next was a break when most of the chapter piled out of the meeting room onto the transient ramp to inspect the **Bearhawk**. Eventually they were herded back into the meeting room and the program was started. After a short discussion of "Who the Hell is **Erbman**?" and "Whatsa TPS?" **Erbman** launched into his presentation. It seemed amazingly well rehearsed, since he had just given it at Chapter 1000 four days earlier. **Vice Kommandant Stormy** had originally planned to travel to Whiteman to hear the pitch, but had later decided that he could travel less and get credit for another meeting program by scheduling **Erbman** for an encore performance.



Bearhawk Three Sigma on the Transient Ramp at Whiteman Airport



Erbman preps the **Bearhawk** for the legions of onlookers



Professor Erbman rambles on about engine modeling to the rapt attention of the Chapter 40 members



Bill Berle sits in the **Bearhawk** to test his EZ Flap Handle installation



Erbman discusses flap actuation techniques with Bill Berle

The flight back was mostly uneventful and did not climb through the Burbank Class C airspace without permission. An aerial review of the Poppy Preserve showed no noticeable coloration from floral blossoms. Maybe it's better now.

- Erbman
(Photos by Tuki)

Tips From The ToyMaster

(Encore publication from March 1996)

Gadgetosis Nervosa...If your name is neatly printed on the address label of this newsletter, you; or someone you know suffers from this insidious killer of bank accounts. In its most advanced state, it can contribute to a full-blown case of the dreaded **AIDS (Aviation Induced Divorce Syndrome)**. This month's tip deals with a related strain of the disease known by the initials HIV.

HIV, or Hysterical Illuminodeficiency Virus, is caused by that innocuous little device floating around the bottom of your flight bag...the flashlight. We've all been there; no moon, black as the inside of a cow, so dark that the wingtip strobe flashes are swallowed up as if by some diabolical wormhole. You get the picture. You're on the NDB to Fox, deep in the soup, those 50-cent post lights you picked up at the swap meet are proving they aren't worth even that, so your trusty Mini-Maglite is firmly clamped in your teeth. As you approach minimums Joshua Approach calls for a radio check, and as you key the mic and start to talk your AA-cell cigar departs to live among the Snickers wrappers and 5-year old sectionals in the bowels of the airplane. No sweat, right? Grab your backup light. . .you know, the one with the batteries stolen from the kid's walkman...etc., etc.

"YOU PAID \$40 FOR A FLASHLIGHT?!?!?!?" If you hold the page up to your ear, you can still hear my wife shrieking those words as she methodically reduces my MasterCard to shreds of plastic. "Au contraire, my love" I say soothingly. "This is no mere flashlight, it's 'a unique lighting instrument', and 'one of the best cockpit safety enhancement devices ever'." I gently open the elegant leatherette case to reveal the "Blackout Light" manufactured by NavAire Instrument Corporation of Akron, Ohio. Let me tell you about this little beauty while she is off searching for my backup charge cards....

To call this just another flashlight is to call the Mustang just another airplane. Neatly encased in the aforementioned leatherette box is a true example of elegance in engineering. Measuring 3.5 by 1.0 inches in length and height and weighing in at 2 ounces, the Blackout Light is well constructed from space age high-impact ABS plastic and anodized aluminum. It is powered by two AAA cells (included) and has both clear and blue-green lenses. What sets this instrument apart from the average flashlight is the included mounting system which allows you to fasten the light to virtually any headset (or anything else, for that matter) for true hands (and teeth) free operation. The Blackout Light uses a clever mounting scheme comprised of a disk-shaped, self-adhesive bracket sporting a quarter-inch "nipple". With minor pressure, this nipple engages a suitably sized receptacle in the body of the light. The fit is such that the light can be adjusted through 360 degrees of pitch and about 20 degrees of yaw and roll. This movement allows illumination of the charts in your lap as well as the instruments on the panel and there is enough friction in the system to hold the



adjustment until you change it. The light weight and small size combine to make the installation virtually transparent on most general aviation noise reducing headsets. Three different brackets are included to fit any headset contour as well as a strip of the ubiquitous Velcro to cover the other one percent of mounting problems. A simple quarter-turn of the aluminum head, in either direction, turns the light on and there is no focusing required to obtain an optimum lighting pattern. The blue-green filter is touted as "the new standard for cockpit lighting" and "military style". Even though I have a passing acquaintance with military technology through my day job, I can't vouch for this claim of "unsurpassed night vision performance". However, in scientific trials while piloting my Jeep through the Antelope Valley night, I can say that the illumination provided by the light made reading even the fine print of the instruction brochure easy and my night vision did not seem affected. I suspect that performance in the air will be at least as satisfactory. The blue-green light has the appearance of being brighter than the typical red lens while not producing glare. I also suspect the color is night-vision-goggle (NVG) compatible, but I'll let the more well-heeled among you test that theory out. Other features of the light include a high intensity grain-of-wheat sized bulb common to most modern mini lights, as well as a matte-finished reflector which gives an even light pattern free of hot/dark spots. Too cool, you say? Well, in the fine tradition of the Ginzu knives, that's not all! The tailcap of the light contains a handy compass that (when separated from the batteries) reliably points out the North magnetic pole! Now you see how they come to call this thing a "safety enhancement" system.

OK, so I've got you all lathered up and ready to spend...how do you get yours? I got mine from the JetStream aviation catalog (1-800-470-2FLY) for \$39.95. You can also contact the light's maker, Navaire, at 1-800-603-6014. Their brochure lists a full complement of replacement parts and additional brackets to ensure years of trouble-free aviating. Oh yeah, the "piece d'resistance"? It comes in two colors...black for the Bose crowd, and David Clark green to match the discriminating aviator's ensemble. If you aren't dialing one of those numbers right now, you're not infected with **Gadgetosis Nervosa**....yet! (P.S. Admitted G.N. carrier **Norm Howell** bought his after deliberating for nearly a micro-second. Ask this noted flight test legend for his personal assessment.)

- Gary Aldrich

Web Site Update

As of 30 March 2010, the hit counter showed **131708**, for a hit rate of 14 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

Apr 20: EAA Chapter 1000 Monthly Meeting, 6:30 p.m., High Cay, 4431 Knox Ave, Rosamond CA. (661) 609-0942

May 4: EAA Chapter 49 Monthly Meeting, 7:00 p.m., General William J. Fox Field, Lancaster, CA. (661) 948-0646

May 11: EAA Chapter 1000 Board of Directors Meeting, 5:00 p.m., High Cay, 4431 Knox Ave, Rosamond CA. (661) 609-0942

May 15: Nineteenth Annual Project Police Airport Barbecue, Rosamond Skypark (L00), Rosamond CA. (661) 256-3806

May 18: No EAA Chapter 1000 Monthly Meeting. Go to fly-in instead.

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

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

Jun 15: EAA Chapter 1000 Monthly Meeting, 5:00 p.m., Edwards AFB. USAF Test Pilot School, Scobee Auditorium. (661) 609-0942

Jul 6: EAA Chapter 49 Monthly Meeting, 7:00 p.m., General William J. Fox Field, Lancaster, CA. (661) 948-0646

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

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

Aug 3: EAA Chapter 49 Monthly Meeting, 7:00 p.m., General William J. Fox Field, Lancaster, CA. (661) 948-0646

Aug 10: EAA Chapter 1000 Board of Directors Meeting, 5:00 p.m., High Cay, 4431 Knox Ave, Rosamond CA. (661) 609-0942

Aug 17: 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:

President/Flight Advisor Gary Aldrich: gary.aldrich@pobox.com

Vice President Scott Weathers: flynwax@pobox.com

Secretary Kent Troxel: kenttroxel@sbcglobal.net

Treasurer Doug Dodson: houdu@pobox.com

Technical Counselors: Gary Sobek: Gary@rvdar.com

Bill Irvine: wgvirvine@yahoo.com

EAA Chapter 1000 Technical Assistants**Composite Construction**

Doug Dodson	douglas.dodson@pobox.com	661-256-7276
George Gennuso	pulsar1@sbcglobal.net	661-265-0333
Brian Martinez	brianmmartinez@aol.com	661-943-5379
Bob Waldmiller	waldmiller@qnet.com	661-256-0932

Wood Construction

Bob Waldmiller	waldmiller@qnet.com	661-256-0932
-----------------------	---------------------	--------------

Aluminum Sheet Metal Construction

Bill Irvine	wgvirvine@yahoo.com	661-948-9310
Miles Bowen	cessna170bdriver@yahoo.com	661-822-0806
Russ Erb	erbman@pobox.com	661-256-3806

Welding/Welded Steel Tube Construction

Russ Erb	erbman@pobox.com	661-256-3806
-----------------	------------------	--------------

Engine Installation

Bob Waldmiller	waldmiller@qnet.com	661-256-0932
Doug Dodson	douglas.dodson@pobox.com	661-256-7276

Electrical Systems

Miles Bowen	cessna170bdriver@yahoo.com	661-822-0806
--------------------	----------------------------	--------------

Instrumentation and avionics requirements for VFR/IFR

Gary Aldrich	gary.aldrich@pobox.com	661-609-0942
---------------------	------------------------	--------------

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

3435 Desert Cloud Ave

Rosamond CA 93560-7692

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

ADDRESS SERVICE REQUESTED

THIS MONTH'S HIGHLIGHTS:

MONTHLY MEETING 20 APR @ HIGH CAY

19TH ANNUAL FLY-IN 15 MAY

KOMMANDANT GETS NOSTALGIC

PROJECT POLICE INVADE WHITEMAN



The Leader In Recreational Aviation