

THE LEADING EDGE

NEWSLETTER OF MUROC EAA CHAPTER 1000

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

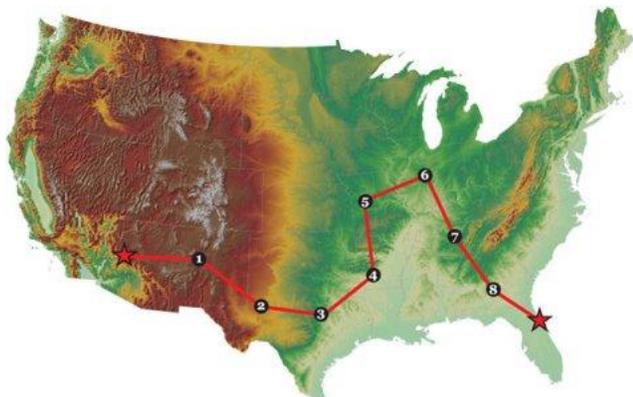
President	Gary Aldrich	661-609-0942
Vice-President	Hellmuth Steinlin	760-963-5445
Secretary	Kent Troxel	661-947-2647
Treasurer	Doug Dodson	661-256-7276
Newsletter Editor	Russ Erb	661-256-3806

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

January 2016

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:



The Air Race Classic

Mercedes Eulitt
 Tuesday, 19 January 2016
 1700 hrs (5:00 PM Civilian Time)
 USAF Test Pilot School Auditorium
 Edwards AFB, CA

This month we get to hear about something you probably don't know much about. **Mercedes Eulitt**, long time friend of the *Project Police*, will be with us to talk about her participation in **The Air Race Classic**.

What's that, you ask? I didn't know either, so I consulted "The Source of All Knowledge" (Wikipedia). It said...

"The **Air Race Classic** is an annual transcontinental [air race](#) for female pilots. Route lengths are approximately 2,400 statute miles (3,900 km). All flights are conducted in day [visual flight rules](#) (VFR) conditions. Each aircraft is handicapped for speed and engine power. The goal is to have the actual ground speed be as far over the handicapped speed as possible.

This women's-only air race was originally started in 1929 as [Women's Air Derby](#) by pilots including Amelia Earhart back when women pilots were banned from competing against men. Following the discontinuation of the [Powder Puff Derby](#) in 1977, the Air Race Classic was established in that year by a new organization to take its place."



Your dues are due now!
\$20 to Opie
See back of newsletter for address

If you prefer,



you can pay online by **PayPal**® at the [Join/Pay Dues link on the EAA Chapter 1000 web site.](#)

You may also qualify for the government sponsored **EAA Chapter 1000 "Free Dues" program.**¹

Want more details? **Mercedes** will fill us in on all of the details. All we've heard so far is that she "participated" in the event—I don't know if she was flying or volunteering.

Come early and the snacks from the **Schmoozemistress** will make it worth your while.

TAKE NOTE: If you do not normally have base access and depend on having your name on an Entry Authorization List to get past the young airmen with weapons, **you must get to the Visitors Center at the West Gate No Later Than 1630!** At 1630 the Visitors Center closes, and after that you will not be able to get in based on the EAL. New procedures. Don't ask questions and don't be late!

Contact **Gary Aldrich** if you need to be added to the Entry Authorization List. Do it now—the day of is several days too late.

- Erbman

¹Simply write your name on a government printed "Free Dues" coupon and hand it to any chapter officer. "Free Dues" coupons are available at any bank, ATM, and many businesses. Ask for it by the secret code name "Twenty Dollar Bill."

Last Month's Meeting

EAA Chapter 1000
Kommandant's Kwarters
Quartz Hill, CA
15 December 2015
Gary Aldrich, Presiding

The December meeting was held at the Kommandant's Kwarters, residence of Mr. and Mrs. Kommandant Aldrich for our annual *Festivus* celebration, highlight of the Antelope Valley social season. Attendance was down this year for unknown reasons.

As usual, **Gary** and **Anne** had graciously provisioned ample amounts of wine, spirits, beer and soda, followed by the serving of the traditional *Lafestivusagna* (patent pending), along with *Chocolate Lasagna* and other treats for dessert.



And then, the much anticipated “*Kommandant's Krap*” (K²) gift exchange.

Mrs. Kommandant drew the lucky #1 slot, opening the box to find a genuine replica of the **Alien Mind Reading Protection Hat** as worn by Joaquin Phoenix in the movie “Signs”. Also attached was a gift certificate to BJ's restaurant.



However, **Doug Dodson** quickly stole both hat and certificate under the “combat rules” process.



I can personally attest to the effectiveness of the Hat as I was unable to read Doug's mind at all.

Kommandant Aldrich scored a very cool airplane motif booze shaker.



Yours truly ended up with a highly coveted vintage “Visible V8” engine model from the 60’s.



I still miss the days of getting an old venturi, a broken headset or a box of oily sparkplugs. The gnome was notable for its absence, subsequently reported to be in Virginia with **J.P. Kury** who relocated there.

The *Feats of Strength* (FoS) which would normally follow were dispensed with as authorized by the **Kommandant**.

I continue to regard these *Locally Improvised Practices* (LIP) as serious breach of Festivus etiquette, but I bow to the will of the people.



The Kommandant proceeded to the *Airing of Grievances* (AoG) where one tells others how they have

been a disappointment during the last year. However, as usual, the festive mood had brought about such an air of good will that the only significant grievance was made by **Vice-Kommandant Hellmuth Steinlin** who encouraged members to actually attend meetings when we have guest speakers (“shamed the members” would be more descriptive).

The AoG was followed by the presentation of the cheesy chapter awards, certificates and pins. New this year were awards for **Tuki Erb** as **Schmoozemistress**, and **Gail Dodson** for **Logistics**. Both of these ladies have given generously of time, effort and talent over the years in supporting the various BBQ’s and parties.

Treasurer **Doug Dodson** reported that the chapter was financially solvent, that in fact we had several thousand dollars in a secret Swiss bank account (SSBA).

Of no surprise was that no one offered or even suggested that **Kommandant Aldrich** should be wrestled to the floor, the traditional closing of the Festivus celebration. Instead, the **Kommandant** strongly encouraged (demanded) that we all have second if not third helpings of food to reduce the clean-up.

Most of this is true.

- **Kent Troxel**

Minister of Propoganda

Chapter 1000 of the Experimental Aircraft Association of these United States of America and Occupied Territories

“We have more zero’s in our chapter than any other!”

Kommandant’s Korner

The *Fightin’ Skywagon* is back in the air! Yep, N2705K took to the skies on 2 January 2016 after a prolonged hiatus (previous flight 21 August 2015) caused



by the discovery of metal shards in the oil filter. If you’ve been following the progress of the issue you know a complete overhaul was dictated by the destruction of the number 1 exhaust valve hydraulic lifter and its associated camshaft lobe. What ensued over the 4+ months was an exciting (and expensive) journey in aircraft maintenance. I learned a tremendous amount under the tutelage of master pilot-mechanic-examiner-accident investigator **Mike Grimes**. With his guidance, as well as advice and counsel from numerous other luminaries in the AV aviation community, it appears after three flights and 5.5 hours that all is well forward of the VC-180’s firewall. That pleasing first takeoff the second day of the New Year did not come without some head-scratchin’ moments, though.

First among the bumps-in-the-road to flight was our recent visitor, **El Niño**. This weather pattern which promises to help with the drought in the Southwest also hindered the rebuild and testing process. Record low temperatures significantly shortened the time I could spend

in the hangar hooking up and re-installing all the accessories and sensors on the newly constructed O470. Regardless, I persevered with numb fingers and dripping nose and declared the installation complete on 23 Dec. What remained at that time was to pre-oil the engine, reinstall the propeller/spinner, and push out for the first engine run. A series of Pacific storm systems then proceeded to provide day-for-day slips to the test schedule as I had decided that a minimum ambient temperature of 50 degrees F would be required in order to minimize friction damage during that first start. Ultimately, the combination of warming temperatures and radiant heat applied to the engine resulted in a successful injection of warmed oil into the system...on 30 Dec.

Pushing out into the chilly hangar alley way I engaged the starter while **Grimes** and **Doolittle** stood fire watch. The engine started quickly and oil pressure rose into the green range within the prescribed 30 seconds. After another minute or two of idling I shut the engine down. At that point I was informed of what appeared to be a fuel leak at the bottom of the carburetor. A small amount of 100LL was pooled atop the air box. After some discussion, another short run of the engine was made with special attention to the location of the suspected leak. Again, the engine fired right off and no leaks were observed...until shutdown when the same puddle of fuel appeared in the same place. Discouraged, the group pushed back into the hangar and retired to the Saloon to discuss the issue.

The post-test discussion centered around the possibility of a leaking primer system rather than any fault with the carburetor. This could have been caused by a faulty primer...or just one that was not fully in the "locked" condition and allowed fuel to be sucked into the intake manifold by the low pressure associated with the engine spinning to a stop at shutdown.

Thus, on New Year's day another run was made with special attention to the primer plunger lock. Alas, the engine runs replicated the problem once more. Removal and inspection of the primer assembly was in order and revealed no obvious defect so I retired to my workshop to explore the options.

One path was simply to order a new primer from Aircraft Spruce for \$449. Sticker-shock! So, since Spruce was closed for the holiday I plugged "Essex (mfr) Primer leaking" into the Google and commenced to surfing. There, on a hit from the "Van's Air Force" blog site I discovered a nugget of information that would lead to a solution to the problem. One of the correspondents admonished an RV-builder with a similar problem to mine to ensure that the primer body was properly installed in the instrument panel. By "properly" he said that since the knurled nut that serves as the securing feature to the panel also serves as the locking mechanism for the plunger, it is possible for the plunger to be unseated if that nut is not fully screwed onto the primer body before the hex nut on the opposite side of the panel is tightened.

EUREKA! And by that I don't mean KEKA. I returned to the airport on 2 January to reinstall the primer "properly" and run another test. This time the engine ran

for about 6 minutes and, when shut down, remained dry. With that success I quickly cowled up the engine and proceeded to the runway for the test flight. It was still chilly and the airplane was light, but it seemed to leap into the air as if eager to escape the long hangar stay. I climbed to 5500 feet MSL and engaged the autopilot for what turned out to be 2.7 hours of left turns within 2 nm of WJF. During that time I followed the Continental-recommended procedure of running at high power for one hour followed by periods of varying power settings. Throughout the flight I monitored the oil and cylinder temps which all stayed mercifully cool; no doubt aided by the 32 deg F OAT. The only "squawk" from the flight was the fact that maximum commanded prop RPM was shy of the red-line by 30 or so. This issue was solved on 3 January by re-rigging the governor control cable and on that day's flight the specified maximum RPM was attainable. The re-rigging also allowed a good inspection of the engine which seemed leak free and healthy.

So, that's where I am. On a flight yesterday I ventured as far as Rosamond in my orbits and the engine continues to perform smoothly and strongly. Now comes the question, "When is the break-in over?" This is a tough one as you can get lots of opinions on the length of time the engine is at risk for an "infant mortality" failure. I'm just going to proceed cautiously, with another close inspection and oil change in a few hours as I build confidence in the mighty Continental. Stay tuned for more boring engine reports!

Fly Safe and Check 6!

- **Gary Aldrich**
Kommanding

Det 5 Project Police Inspection Report

In November 2015 we took a trip to Arlington TX for the primary reason of introducing **Emily** to her Grampa face-to-face. This trip put us right on the edge of the target area for the **RV-8B Astroblaster**, currently being fabricated by **EAA Chapter 1000 Detachment 5 Commander Scott "Stormy" Weathers**. It's never too early to start training up young **Project Police Officers**, so a raid...er...inspection was arranged.

This was an announced inspection, which carries two benefits, especially when operating from remote bases:

1. It avoids the wasted time and resources mounting an attack...er...inspection only to find that the target inspectee has escaped to another location.

2. It greatly increases the odds that the inspectee will take defensive measures, such as having Chocolate Chip Cookies (C³) available.

The available Time On Target (TOT) was very limited, as we arrived on 21 November and Stormy was leaving town on 23 November. After some complicated math calculations using set theory we learned from studying "New Math", we decided that the best time for the inspection was the afternoon of 22 November.



“Halt! This is a duly sanctioned inspection by the Project Police! Don’t try to distract me with Chocolate Chip Cookies because Mommy won’t let me eat them yet! Take me to your project!”



“There is an excessive amount of dust on this wing. Sawdust, no less. What’s with that?” Emily demonstrates child prodigy technique in the Project Police Point™



“Here’s the guilty party! Here’s the one guilty of insufficient effort expended on this project! What’s your total rivet count (TRC), Mister? What’s your Rivet Count 30/60/90 day lookback?”



Stormy shows excellent defensive strategy by introducing the inspector to Mary, his building assistant and supplier of Chocolate Chip Cookies sans Squirrel Food



“You! Get back to work! I’ll be here if you need me”



The white board once used to track the TRC has been repurposed temporarily to other uses



Any proper inspection will include a review of the documentation



The aerodynamically shaped dining room table is stored in the folded position. Note the aviation wall art behind it



“The Prandtl Vorticity Generator goes right here”

The **Project Police Inspectors** found that Stormy had an acceptable cover story for his lack of progress on the **RV-8B Astroblaster**. It seems that his Mother in Illinois (**Ma WX**) has been taking medical treatments that made it difficult to climb the steps into her house. **Stormy** offered to build steps at a much gentler slope to make it easier on her. She agreed, but begged him not to overdo it, as he is wont to do. Of course, **Stormy** didn't listen to her.

In keeping with the example of Government procurement, the steps were not built on site, but rather built in Texas 600 miles from the installation location.

Someone pointed out to **Stormy** that the slope was so gentle that he wasn't really building steps, but just a succession of landings.



One of the sections of the steps in the garage workshop



Loading the “Stairway to Heaven” on the truck and trailer for departure the next morning



The installed stairway two days later

More Gratuitous Photos from the Udvar-Hazy Center to Fill Up Space



Nelson BB-1 Dragonfly, nee Bowlus Bumblebee. The Nelson BB-1 Dragonfly was the first motor glider produced in the United States. It first flew about 1946. In 1945, William H. Bowlus and Ted Nelson formed the Nelson Aircraft Corporation to build a two-seat, motor glider version of the popular Bowlus BA-100 Baby Albatross nicknamed the Bumblebee. When this aircraft went into production, they renamed it the Dragonfly.



Another view of the Dragonfly



Bowlus BA-100 Baby Albatross under the Boeing Dash 80



Another view of the Baby Albatross



You heard that Nemesi went to the Smithsonian? Well, here's proof, sitting under the Boeing Dash 80. Nemesi dominated Formula One racing, winning 45 of 48 races it entered from 1991 until its retirement in 1999.



For the Kommandant: Geraldine "Jerry" Mock's Cessna 180 Spirit of Columbus that she flew around the world in 1964 in just under 30 days.

Web Site Update



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

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

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

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

Apr 19: EAA Chapter 1000 Monthly Meeting, 6:30 p.m., Location TBD, Rosamond CA. (661) 609-0942

Apr ??: Annual Adelanto (52CL) Fly-In. Let's all go see Hellmuth! (661) 256-3806

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

May 17: No EAA Chapter 1000 Monthly Meeting. Go to the Airport Barbecue on Saturday

May 21: Twenty Fifth Annual Project Police Airport Barbecue, Rosamond Skypark (L00), Rosamond CA. (661) 609-0942

Jun 14: EAA Chapter 1000 Board of Directors Meeting, 5:00 p.m., High Cay, 4431 Knox Ave, Rosamond CA. (661) 609-0942

Jun 21: 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 Hellmuth Steinlin: hellmuthsteinlin@hotmail.com

Secretary Kent Troxel: kenttroxel@sbcglobal.net

Treasurer Doug Dodson: douglas.dodson@pobox.com

Technical Counselors: Doug Dodson: douglas.dodson@pobox.com

EAA Chapter 1000 Technical Assistants

<i>Composite Construction</i>		
Doug Dodson	douglas.dodson@pobox.com	661-256-7276
George Gennuso	pulsarl@sbcglobal.net	661-265-0333
Brian Martinez	brianmmartinez@aol.com	661-943-5379
<i>Wood Construction</i>		
Bob Waldmiller	waldmilr@qnet.com	661-256-0932
<i>Aluminum Sheet Metal Construction</i>		
Bill Irvine	wgirvine@yahoo.com	661-948-9310
Russ Erb	erbman@pobox.com	661-256-3806
<i>Welding/Welded Steel Tube Construction</i>		
Russ Erb	erbman@pobox.com	661-256-3806
<i>Engine Installation</i>		
Russ Erb	erbman@pobox.com	661-256-3806
Doug Dodson	douglas.dodson@pobox.com	661-256-7276
<i>Electrical Systems</i>		
Russ Erb	erbman@pobox.com	661-256-3806
<i>Instrumentation and avionics requirements for VFR/IFR</i>		
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:
REGULAR MEETING 19 JAN @ TPS
FESTIVUS RECAP
FIGHTIN' SKYWAGON FLIES AGAIN
DET 5 PROJECT POLICE REPORT**

