



THE LEADING EDGE

NEWSLETTER OF MUROC EAA CHAPTER 1000

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

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January 2017

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:



Revmaster Engines

Joe Horvath

**Tuesday, 17 January 2017
1700 hrs (5:00 PM Civilian Time)
USAF Test Pilot School Auditorium
Edwards AFB, CA**

Every homebuilt airplane has at least one thing in common—it needs a reliable engine of sufficient power. Many of us have turned to the time-proven Continental and Lycoming powerplants, frequently at great expense. (Would you believe that “Lycosaurus” is not just a joke about the age of the basic design used by Lycoming, but is really a type of dinosaur? “Google” it yourself...) Other homebuilders, seeking to save some cash, have tried to use engines originally designed for cars. This always requires some level of modification, and many have fallen short in the “reliable” requirement. It turns out that the design conditions for automobile engines are significantly different from those for airplanes, particularly in the cruise power requirements.

One engine type that has been surprisingly successful in this regard is the VW. Yes, the little, low powered car that came out of post-war Germany. The fact that the basic layout of the engine is very similar to our beloved



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Lycomings and Continentals may have something to do with that success. What is the secret to that success? You’ll have to come to the next meeting to find out!

Several outfits have had good success making VW engines into reliable aero engines. One of those is surprisingly local, just barely far enough away to qualify for an FAA certification cross-country flight. **Revmaster Aviation** is located in Hesperia CA, and the man behind the company, **Joe Horvath**, is coming to speak to us this month.

Back in the 1950s, the Volkswagon Beetle, more commonly known as the “VW Bug”, was taking Southern California by storm. It wasn’t exactly burning up the lakebeds at 36 horsepower, so Hot Rodders did what Hot Rodders do—they hopped the engine up to produce 11 percent **more power!** Yes, a blistering 40 horsepower! Right at the forefront of this was **Joe Horvath**.

So how did these Hot Rodders make the jump to aviation? Northrop Aircraft came to Joe requesting that he

¹ Simply 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.”

build a serviceable engine for military target drones.

Before long, Revmaster Aviation was born and began marketing engines to experimental aircraft builders too. For the rest of the story, you'll have to come to the meeting.

We'll need to ask him if his facility is near the Hesperia Airport. A post-meeting field trip could make for a good fly-out destination!

As for the immediate post-meeting activity, we will make our traditional trek to the **BK Dead Kow Emporium** where we can listen to **Doolittle's** stories and ask **Joe** more probing questions.

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

Last Month's Meeting

EAA Chapter 1000

Kommandant's Kwarters

Quartz Hill, CA

13 December 2016

Gary Aldrich, Presiding

Chapter members and guests converged at the **Kommandant's Kwarters**, residence of **Mr. and Mrs. Kommandant Aldrich** for the December meeting and our annual *Festivus* celebration.



Some of the assembled Festivarians after a filling round of *Lafestivusagna*

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) for all the gathered *Festivarians* (a new word which I have just invented), followed by "**Death by Chocolate**" for dessert.



Death By Chocolate. Many Festivarians gave their all in the conquest of this delectable dessert

Dinner was followed by the much anticipated "**Kommandant's Krap**" (K^2) gift exchange. The **Kommandant's** selection yielded a bottle of 12 year old Chivas Regal and a flask appropriately festooned with the logo of "Keep Calm and Drink Up". The **Kommandant** seemed pleased with his treasure, saying "**I love the 12 year olds**", which was quickly judged best comment of the evening.



First Dog Pixel rounded up all the various tissue and package decorations as each gift was opened. The effort was apparently exhausting as she was "in the bag" by the end.



The gift exchange was followed by the presentation of the cheesy chapter awards, certificates and pins. New this was the **MVP award**, which by unanimous vote was given to **Mrs. Kommandant**.

Vice Kommandant Steinlin gave a preview of the first 3 meetings of 2017 and encouraged members to actually attend meetings when we have guest speakers (**shamed** the members would be more descriptive).

Much has been made in this column and elsewhere of our chapter's deviation from time-honored Festivus protocol. I even wore a Festivus shirt (available on Festivus.com) which provided the basics of Festivus: The Festivus Pole, The Airing of Grievances, and Feats of Strength.



Festivus is not complicated, people.

Do we have a Festivus Pole? Well, yes. But hey, who doesn't? A Festivus Pole alone does not a Festivus celebration make.

But do we toss washers? No.

Do we swing hula hoops madly about in a frenzy? No.

Do we practice the cathartic "Airing of Grievances"? No.

Do we engage in Indian Wrestling and other "Feats of Strength"? No.

Do we wrestle the head of the household to the floor and pin him? No.

How have we gone so wide of the mark? How have we lost our way? I dare say that most of us don't even realize that we are supposed to do these things.

I must conclude that our chapter members are nothing more than **FINO's** (Festivarians In Name Only).

This is a sad state of affairs.

But I grow weary of being the only one trying to illuminate the true path.

I give up. Have it your way. No longer will I preach against of heresy of FINO's. Wallow in your ignorance you band of Philistines.

I'll simply report the facts as they may have happened.

Most of this is true.

- Kent Troxel

Minister of Propaganda

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

"We have more zeroes in our chapter than any other!"



Last year—Emmy picks up some tips from Mrs. Kommandant



This year—"Man, this Death By Chocolate is amazing...hmmm, that app looks interesting! I'll have to download it and try it myself..."



Emmy shows her favorite Snoopy video to Pixel as their Moms look on



“Excuse me, Sir. My partner here and I are going to need to inspect that”



“So Neil Armstrong says to me, if you ever write a book about the subject, don’t say that I was ‘the first man to walk on the Moon’. Say that I was ‘the first PILOT to LAND on the Moon’.”



Port wine in an all-aluminum bottle with a screw cap. What will they think of next?



Silka opens the survival kit in a water bottle. Very useful if things go pear-shaped at the remote offices of the Edwards Aero Club



Kanard finds the coveted Simpsons Christmas Pint Glasses



“Heh, heh, heh...Erbman will never figure out it was me who brought the Santa Monica Museum of Flying T-shirt”



Joe Ford opens a Smith & Wesson Captain's Flashlight from Sporty's. The Kommandant immediately searched for a loop hole in the Kommandant's Krap rules that would allow him to steal it



Vice Kommandant Steinlin reminds us we have outstanding programs coming up, and shamed us for our pathetic attendance



“Good Night! See you next year!”

Kommandant's Korner

Pitter, patter! That's the sound I heard on my solar panels for most of last night. **Zurg's** minion suggested I spend some column-inches discussing adverse weather operations, what with the current climactic conditions and those we've had thus far this winter. We are pretty fortunate to have a relatively benign climate (the meteorological kind...not the political kind) here in the Southwest. It enables sport aviators like us the luxury of near-year-round exercise of our passion for flight. Yet, when at a gathering of non-aviators we nod and utter concurrence when someone exclaims "how fortunate we are that we've seen so much rain lately...it's so good for the water crisis, crops, skiing, etc". This, while secretly wishing La Niña would return with dry, blue skies.



The weather around here is so good that the flight testers at Edwards have to go elsewhere to find adverse weather to test new systems against. Speaking of adverse weather, I am reminded of when I was involved in testing the "Night, Adverse Weather" (NAW) variant of the A-10 Thunderbolt II. We had configured the two-seat YA-10B with sophisticated (for 1983) radar and infrared sensing systems to evaluate its capability to operate in a wet, nasty European war scenario. In order to simulate the required weather conditions, we deployed the airplane and test crews to **McChord AFB**, Washington and flew at night as a simulated attacker against Army maneuvers at the nearby **Fort Lewis**. The test went "**swimmingly**" (nearly literally) as we had to brave atrocious heavy rain, low ceilings, and frigid temperatures...any or all that would keep N2705K securely housed in hangar 703. One evening the task was to attack armored vehicles in an exercise. Our weapon of choice was the AGM-65D Maverick IR missile. The intrepid flight testers slogged around in the dark and rain looking for heat signatures that might indicate idling tracked or wheeled vehicles. The rain and mist was so bad many of the target runs ended when the intended target

grew four legs and materialized into a cow! Most of us...except maybe **Opie**...are reticent to take our recreational flying machines into weather like I've just described, even if equipped with a host of high tech gadgetry.



Fairchild Republic YA-10B

Regardless of the awesome potential of XM Weather and FIS-B now available in many of our cockpits, winter weather...even in California...presents hazards best not challenged in most light aircraft. We must be wary of the often false sense of security when we can see weather displayed on a cockpit screen. Besides the latency issue, which has received much interest lately, a critical ancillary piece of climactic information must be integrated with the green, yellow, and red blobs on the screen. That piece of intelligence is, obviously, temperature. A temp at or near the freezing point can make all the difference between a safe flight through rain and turbulence and a terrifying encounter with airframe icing. I've had the misfortune (and maybe lack of situation awareness) to survive a few of those terrifying encounters. In one, I blithely attempted to climb through rain and cloud...and 0 deg C...to "get on top". I had to abort that attempt when ice accumulation on the propeller made it so unbalanced that I thought the engine would shake out of the mounts. Descending with reduced power was the only option and I was fortunate that I was over the great Central Valley of California. The controller, sensing the panic in my voice when I informed him I was in a descent and could not maintain my assigned altitude, cleared me for "any usable altitude". I had an escape plan that day that involved descent into warmer air before hitting the ground. Knowledge of the forecast freezing level, corroborated with the simple OAT indicator allowed me to complete a flight the might have resulted in a diversion at best, and disaster at worst. That experience has stayed with me over the years and engendered a strong respect for airframe icing. It has figured in go-no go decisions as well as flight planning and execution. Recently I returned from Northern California in solid IMC and rain...but below the freezing level. The flight might have been more pleasant and smooth if we were above the clouds, but I chose the rainy ride to eliminate the duel with the ice monster.

I guess the point for all this is that winter flying anywhere presents increased challenges requiring diligence in flight planning and execution with an escape route in mind. For our class of air machine, the presence of ANY airframe ice, whether it's in the form of frost on the wings before takeoff or accretion in flight, requires an immediate execution of the escape plan. For the frost it might mean retiring to the warmth of the Raven's Nest for a second cup of coffee. For the latter it might mean an immediate course change, altitude change, or precautionary landing short of the intended destination.

So, as I sit here watching the rain and drinking my second cup, I wish you safe and sane aerial adventures.

Fly safe and check...the weather

- Gary Aldrich
Kommanding

Life Imitates Art – Or Does It?



Aurora Models Aero Commander kit, circa 1961

The 1961 model boxtop above was created by noted New York commercial illustrator Mort Kunstler who painted this pastoral scene of a rural airstrip showing an elegantly-clad couple about to board an Aero Commander for a trip to some far-off exotic locale. The hangar across the field proudly displays the name of the little airport which reads "ZAHN'S" as a ground crewman stands atop a wooden step ladder filling the fuel tanks of one of these aircraft from a GULF gas truck parked alongside. The finishing touch is another 'Commander cruising overhead in this classic example of aviation art at its best.

Believe it or not, this scene is dead accurate. That was a real airport, those aircraft were actually based there, and the local gas service was indeed GULF for as long as the airport existed. Zahn's, located in Amityville, New York, from 1945 through 1979, was once Long Island's busiest general aviation airport. Home of the Amityville Flying Service, Zahn's Airport sprang from an apple orchard owned by Joe Zahn which was purchased by three local businessmen who realized what general aviation could bring to the community. As with the rise and fall of many post-WWII businesses, however, the airport became rather derelict toward the end of its existence.

The green-and-black Aero Commander 560F shown in the foreground belonged to a very cool guy named Stan.

His hangar was located directly across the field from the flight school and he used the plane for private charter and aerial ambulance work. Sometimes during a fuel call to his plane, Stan would jump in the cab of the gas truck and floor the engine to expedite fuel flow while rushing to launch for yet another emergency aero-med mission. His high-speed low passes before entering the landing pattern were legendary.

The airborne Commander is shown flying over Zahn's main runway, a 4,000-foot strip of asphalt that was home to everything from the flight school's yellow J-3 Cubs (often referred to by students as the "Amityville Horrors"), to the New York Yankees' private DC-3 and a beautiful Grumman Mallard used by the New York Daily News. Those old T-hangars in the background became stand-ins for Roosevelt Field during filming of the 1957 aviation classic, "The Spirit of St. Louis" starring Jimmy Stewart as Charles Lindbergh. Other aircraft based there included Twin Beech D-18s, Cessna 310s, and Piper Apaches, plus all the classic single-engine Cessnas, Pipers, Mooneys, and Beechcraft.

So how do I know all this stuff? I worked there as a line boy in 1967 and actually drove that gas truck. I stood on that same step ladder while refueling Stan's Aero Commander, and I also made my first solo flight in one of those J-3 Cubs. Zahn's was simply a magical place where dreams came true and thousands of aviation careers were launched. It was also a much simpler time before TCAs and ABC airspace restrictions, but anyone who ever flew there found their lives enriched by the innate charm of the place and all the colorful characters who shared a passion for aviation.

They say "life imitates art", but in this cover painting, art was really imitating life. I can just imagine what led to the creation of this image since the Aurora Model Company plant was located in West Hempstead, only twelve miles west of the airport. Discovering that Zahn's had a bevy of Aero Commanders, I'll bet the art director sent either a photographer or Mort himself out there for a photo shoot.



Zahn's main hangar in 1969, just before the airport closed down to be replaced by a business park

If Stan's 560F was parked on the grass in front of his hangar at dusk, the flight school complex across the field (accurate right down to the rotating beacon) would be exactly where it is shown in the painting and that airborne 'Commander would indeed be flying right down runway 18. Add in the Rolls-Royce, a few fashion models and the GULF gas truck stationed on the airport, and voila – you'd have the boxtop painting exactly as it appears above!



Nineteen-year-old Zahn's lineboy who became an aviation artist and EAA 1000 member



The actual Aero Commander 560F seen on the model boxtop, in its hangar at Zahn's.

- Mike Machat

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 10: EAA Chapter 1000 Board of Directors Meeting, 5:00 p.m., El Indio Restaurant, Rosamond Skypark, Rosamond CA. (661) 609-0942

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

Feb 14: EAA Chapter 1000 Board of Directors Meeting, 5:00 p.m., El Indio Restaurant, Rosamond Skypark, Rosamond CA. (661) 609-0942

Feb 21: EAA Chapter 1000 Monthly Meeting, 5:00 p.m., Edwards AFB. USAF Test Pilot School, Scobee Auditorium. (661) 609-0942

Mar 14: EAA Chapter 1000 Board of Directors Meeting, 5:00 p.m., El Indio Restaurant, Rosamond Skypark, Rosamond CA. (661) 609-0942

Mar 21: EAA Chapter 1000 Monthly Meeting, 5:00 p.m., Edwards AFB. USAF Test Pilot School, Scobee Auditorium. (661) 609-0942

Apr 11: EAA Chapter 1000 Board of Directors Meeting, 5:00 p.m., El Indio Restaurant, Rosamond Skypark, Rosamond CA. (661) 609-0942

Apr TBD: EAA Chapter 1000 Monthly Meeting, Semi-Annual Cookout with the Cadets (661) 609-0942

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

May 9: EAA Chapter 1000 Board of Directors Meeting, 5:00 p.m., El Indio Restaurant, Rosamond Skypark, Rosamond CA. (661) 609-0942

May 16: No Monthly Meeting! Go to Airport Barbecue instead

May 20: Twenty Sixth Annual Project Police Airport Barbecue, Rosamond Skypark (L00), Rosamond CA. (661) 609-0942

Jun 13: EAA Chapter 1000 Board of Directors Meeting, 5:00 p.m., El Indio Restaurant, Rosamond Skypark, Rosamond CA. (661) 609-0942

Jun 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, George Gennuso, 3119 Lennox Ct, Palmdale CA 93551. Membership in National EAA (\$40, 1-800-843-3612) is required.

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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

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