

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 2014

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:



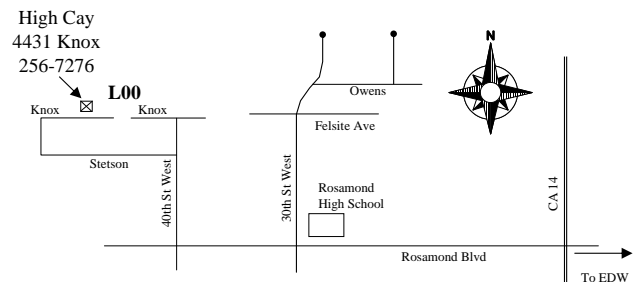
**Cookout with the
USAF Academy Cadets
Tuesday, 18 November 2014
1830 hrs (6:30 PM Civilian Time)
High Cay Partyhaus
Rosamond, CA**

Once again, following chapter procedures, we remind you that one thing we aviators do extremely well is to follow procedures. Referring to the unpublished **Project Police Secret Need To Know** checklist (as amended), in November we host the visiting cadets from the US Air Force Academy. You've seen this before—the cadets are here as part of their Flight Test Course (where they secretly hope to learn enough to eventually become like the **Kommandant** or **Opie**) so they can fly a high performance jet sortie with TPS to collect data for their final report.

Of course, we use this as an excuse to get together for another scrumptious grilled dinner from our own **Master Grillmeister**. After several semesters across the street, this semester's celebration returns to the **High Cay Partyhaus**. You won't want to miss that. **Gail Dodson** returns to her position in charge of logistics. Grilling will be the responsibility of **Master Grillmeisters Knife** and **Cobra**. As for beer procurement, **Opie** promises the keg will be properly stocked.

While you're enjoying your masterfully prepared **Project Police Burger**, be sure to engage the cadets in some conversation. I know we're all introverted engineers, which means we look at our shoes while talking to someone. The extroverted ones in the bunch will look at the other person's shoes. It's easy to start—simply ask the cadets a broad question like "Where is your first assignment?" or "What mission did you have to design for in your Aircraft Design course?" My personal favorite is "What is the latest stupid rule to come down?" Trust me, there is always something.

Following dinner will be tours for the cadets of the **Combat Bearhawk** and possibly the **Glamorous Glasair** and **Twinkle**. Added to this semester's offering is a chance to inspect **Joe Ford's** Rocket project. It's not quite ready for you to sit in and make airplane noises. You're welcome to come along on those as well.



- Erbman
For the Vice Kommandant

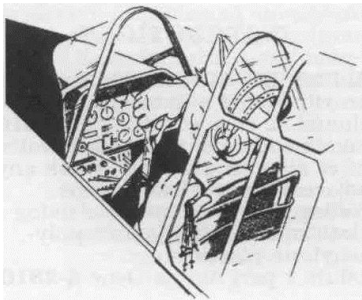
Last Month's Meeting

EAA Chapter 1000
USAF Test Pilot School
Scobee Auditorium
Edwards AFB, CA
21 October 2014
Gary Aldrich, Presiding

At the October meeting we welcomed local avioniker **Jeff Landon** to speak to us. Jeff certainly felt like he was among friends as many of us are also his customers. The meeting was started after schmooze time with **Schmoozemistress Tuki**, and after **Kommandant Aldrich** gave Jeff, Jeff's daughter (an accomplished pilot) and others a tour of the TPS campus.

Thirteen or so members of the **Project Police** gathered to hear what Jeff had to say. As you might expect, the primary topic of the evening was an unpronounceable word – ADS-B. Jeff talked about the many ways currently available to meet the ADS-B Out requirement by the deadline of 1 Jan 2020. Of course, the **Kommandant** reminded us in no uncertain terms that the *Fightin' Skywagon* was already ADS-B Out and In compliant (just ask him—there's a label near the pilot's door saying so. He claims he got carried away one day with the labelmaker. We suspect there is a label on the labelmaker identifying it as a labelmaker).

Jeff was able to answer our many questions. I was pleasantly surprised that he knew the answer to my question—"When will my (orphaned, discontinued) GNS-480 get a software update to make it an approved position source for ADS-B Out?" (2nd quarter 2015). He did talk some about non-Garmin solutions, though the vast majority of the equipment being installed is Garmin.



Jeff said that when the ADS-B Out mandate came out, the cost of compliance was about \$10,000 to \$13,000 dollars. There wasn't much response then. He said he was getting more business now that the cost of compliance had

dropped to about \$4,000. I found it entertaining that everyone in the room was thinking things like "Wow, that's gotten really cheap" as though we were talking about the cost of buying lunch. Cheapness seems to be a relative concept based on what you're buying. Try explaining to your wife why buying a Chanel handbag for \$4,000 is ridiculously expensive, but installing ADS-B Out for \$4,000 is a real bargain!

Jeff talked a little about ADS-B In, which is readily available in several solutions and very popular, but is not covered by the mandate. Out is required, In is optional. Of course, most people will see Out as only benefitting ATC, not the user, whereas In has a clear benefit to the user. Jeff reminded us that because of the architecture of the system, ADS-B In will not reliably show traffic unless you are equipped with ADS-B Out.

After all of this talk about alphabets and the cat going In and Out, we adjourned to the **BK Dead Cow Emporium** where Jeff was treated to the hospitality of the **Project Police**. He also told me that he had the necessary equipment to help me find out which of my three altimeters is correct (if any). A man with one watch knows what time it is; a man with two watches is never sure. Apparently that works for altimeters too.

- Erbman

Emergency Backup Minister of Propaganda
Chapter 1000

"We have more zero's in our chapter than any other!"

Kommandant's Korner

STANDARD

Time...Yup, we've once again manipulated the way we measure time. One can argue that the custom of Daylight Savings



Time has outlived its usefulness in today's American Society. The original purpose...to get more productivity from the agro-Americans has probably been tempered by the invention of headlights on farm machinery and milking-machines on timers, but for many Americans, the semi-annual ritual of changing clocks (HI, AZ, and some others need not apply) has morphed into a good reminder to do other "stuff".



The fire department suggests we use the 6-month-ish events to check our smoke and CO detectors for functionality. At least one of our flock changes out all the batteries in his detectors when changing clocks...how anal is that? Personally, I wait until each of the little buggers starts whining about low voltage...which always happens in the middle of the night. Further, Naval

Aviators use the time change to determine the color of their flight suits! It's kind of like the rule of not wearing white after Labor Day (or something). Turns out, the PDT color is tan, while the PST color is the more common olive-drab.

Speaking of aviators, the change to standard time spurs many of us, including the Air Force aviators, to commence a flurry of night currency and proficiency flying. Why does that happen? Well, as we know, the FAA defines "night" (for logging purposes) as one hour after sunset to one hour before sunrise. Thus, with the earlier setting of ol' Sol, you can fill those night currency squares and still have some evening left to work on the airplane...or visit with the family. If you are among those who are brave enough to commit aviation in the dark, you might be advised that there are probably a few other folks in the pattern who, like you, haven't tried judging their height by the runway lights in six months or more. Best beware. Some pilots think that a properly illuminated and flashing aircraft is much more visible at night. Personally, I think that can be good or bad. The good part is that you are more likely to see traffic; the bad is that the traffic you're staring at might be a star, or a semi-trailer on the highway. No less an aviation legend than our own **Jimmy Doolittle III** told me that he once tried to rejoin his mighty

A-7D on a tugboat beacon in the harbor. "C'mon, Lead, push it up...you're killin' me here!"

Besides the obvious darkness issue, there are a couple of physiological concerns about night flying worth mentioning. If you were fortunate enough to have attended a formal aviators' physiology class conducted by the military or some other agency, you were likely briefed on the effects of darkness on visual acuity. Seems the "rod" light receptors do a reasonable job of gathering photons, but the "cones" start to go offline as light diminishes. Those cones are the doohickeys that supply color vision. Thus, as it gets dim in the cockpit some colors begin to "fade". That makes it a bit hard to differentiate the colors on a chart or display. Further, in yet another gift from the calendar, as we get older this problem gets worse. In fact, overall visual acuity suffers at night in senior pilots for this reason and because the iris of the eye opens wide to gather light and helps less with focusing.

Supplemental oxygen can help with these problems so if you have it on board it's a good reason to use it...and at lower altitude than regulations require. I use 8,000 feet as a good starting altitude. I find I retain more vision and I am more alert at the end of a long flight. Alertness is also a factor for many if night flying impacts circadian rhythm. The pilot that works a full day at the office and then takes a "relaxing" evening flight is likely not to be as sharp as usual. That's why military pilots shift their work schedule during night flying season and abide by regulatory crew rest requirements.

Finally, there are concerns with your mighty steed as well. How many of you check the operation of all exterior and interior lighting before a flight? Not in our usual routine, right? Well, it's pretty important for night flying if you want to be seen and to be able to find your Snickers Bar in the cockpit. Chances are those lights may not have burned since the last annual...or the last time change.

Well, time to exit "CFI-mode". Hope my instructor voice didn't offend you. We can talk a lot more on techniques for landing in the dark and navigating, but not this month. Catch me at the November meeting with the Cadets if you have some tips you use for night aviating or you disagree with what I've said here.

Fly safe, Check 6, and Lights on!

- Gary Aldrich
Kommanding



Young Eagles Rally 18 Oct 14 at KTSP

We made it happen, again! We continued our relationship with the terrific folks from the community of Tehachapi, CA to conduct a very successful and safe Young Eagles Rally at

Tehachapi Airport on Saturday, October 18th. We executed the same game plan previously established by

Dave Marten to provide aircraft orientation flights around Cummings Valley on a beautiful Saturday morning. When the sun came up, there were still more than a few clouds.

However, after completing a weather reconnaissance mission it was concluded that we could commence operations on time. The first group of kids walked to their aircraft just after 0800. Our ground crew kept the paperwork and dispatching chores running smooth. We kept flying until about noon when we ran out of Young Eagles. A total of eight aircraft and eight pilots participated in the all-volunteer effort, supported by a ground crew of enthusiastic natives led by Mr. Paul Nafziger. We flew 22 kids on Saturday with 16 sorties! This is one of those rare occasions where our excess volunteer capacity exceeded the demand.

As your Young Eagles Coordinator, I did my best to answer questions for many visitors and moms and dads wondering about how to get their kids started in aviation. Due to persisting personal financial challenges I again was unable to participate as a volunteer pilot. But, I had a very rewarding job talking with the enthusiastic kids and parents. It always makes my day to witness young kids experiencing their first ride in an aircraft. Of course they're not just young kids. They're future airline pilots, fighter pilots, flight test pilots, and astronauts.

Community outreach events like these are some of the more rewarding things we do as EAA members. I look forward to seeing you at the next Young Eagles Rally either as a pilot or ground ops volunteer.

- Tom "Duke" Wayne

EAA Chapter 1000 Young Eagles Coordinator

Fox Annual Air Fair 2014 and Pancake Breakfast – 25 Oct 14



The Combat Bearhawk made the 0.4 hour cross-country from the hinterlands to the big city to be on display. *(The privilege of being newsletter editor is getting to choose what airplanes to feature first. If this bothers you, maybe you should write this stuff)*



Another airplane representing the *Project Police* was the *Fightin' Skywagon*. This also became the default meeting place, along with Opie and his flight student Steve



A surprise entry from the *Project Police* stable was the *Glamorous Glasair Gail Warning*. This airplane has flown south of the Equator and north of the Antarctic Circle



American Champion Scout



Mark Neufield's Harmon Rocket



Dick Ewers' 1979 Cessna T210L



Joe Biviano's Thorp T-18



The host airplane: Donna Knighton's 1976 Piper Lance



Donald Sicher's Mini 500. Note the position lights on the tips of the skids



Iris Sicher's Cessna 182P



Challenger II. This airplane was the winner of the Judges' Choice trophy. Makes you wonder what criteria they were judging on



A BAE 146-200 that has been converted for fire bomber duty



Les Slifkin's 1966 Ercoupe Model A-2

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

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

Nov 18: EAA Chapter 1000 Monthly Meeting, 6:30 p.m., High Cay, 4431 Knox Ave, Rosamond CA. (661) 609-0942

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

Dec 16: EAA Chapter 1000 Festus Etc Celebration, 6:00 p.m., Kommandant's Kwarters, 42370 61st Street West, Quartz Hill CA. (661) 609-0942

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

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

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

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

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

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

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

Apr 21: EAA Chapter 1000 Monthly Meeting, 6:30 p.m., Location TBD, Rosamond CA. (661) 609-0942

May 16: Twenty Fourth Annual Project Police Airport Barbecue, Rosamond Skypark (L00), Rosamond CA. (661) 609-0942

May 19: No EAA Chapter 1000 Monthly Meeting. You should have gone to the fly-in 3 days ago

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

ADDRESS SERVICE REQUESTED

THIS MONTH'S HIGHLIGHTS:

COOKOUT WITH CADETS 18 NOV @ HIGH CAY

JEFF LANDON'S ADS-B FOLLIES

KOMMANDANT MUSES ON DST

FOX AIR FAIR/TSP YOUNG EAGLES REPORTS

