

THE LEADING EDGE

NEWSLETTER OF MUROC EAA CHAPTER 1000

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

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February 2011

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:



First Flights In Our Homebuilts Tuesday, 15 February 2011 1700 hrs (5:00 PM Civilian Time) USAF Test Pilot School Auditorium Edwards AFB, CA

Colleagues,

I am writing under duress. I missed my deadline for newsletter input, and **Evil Editor Zurg** is displeased. I can't see him, but somehow, I can fell his hot breath on the back of my neck. I can almost hear his raspy breath as he paces behind me, clenching and unclenching his fists to contain his rage. You know, perhaps better than I, that Chapter 1000 is unique.

Presentations and discussions about building and flying (testing) airplanes might enthrall the membership of a more typical chapter. But, these topics could easily be met at Chapter 1000 with, "Yeah, I do that, or even teach that, for a living," So, coming up with a program worthy of the constituency of the chapter that boasts the most zeros can be a daunting task. We do, however, have some things in common with all those one, two, and three digit chapters out there. We truly appreciate what I like to call "Personal Aviation." That's that tiny segment of General Aviation that isn't an air taxi service, isn't patrolling pipelines, and doesn't scout for schools of fish in the Gulf. Personal Aviation typically doesn't have more than one engine, or more than four seats. Like the rest of our EAA brethren (and sisthren?), we like to build and fly airplanes. And, we have been known to miss that base hit to left field because we were talking about airplanes during the game.

For our program this month, we are going to take a page from the more conventional chapters out there and talk about first flights. Specifically, we have had three of our own complete and fly their own aircraft within these past few years. **George Gennuso** built and flew his **Pulsar. Russ Erb** has about 120 hours on his **Combat Bearhawk**. And, as you know, **Doug Dodson** just finished his **Glasair** and has flown about 20 hours so far. We would like to recognize these accomplishments and give the gentlemen a chance to talk about the experience of flying their homebuilt airplanes.

As you have come to expect, we'll meet at the TPS. We will start in the lounge with appropriate snacks including CCCs. We will celebrate with the annual "Paying of the Dues" festival. Then we'll move to the auditorium for the more formal part of the informal discussion.

Upon an order from the **Kommandant**, we will adjourn and perform a *Project Police* inspection of the newly remodeled **Bravo Kilo Dead Cow Emporium**, perhaps better known as Burger King. I think I just heard an audible "**Harrumph**" from Zurg. I can only hope I don't get a new call sign out of this.

- Scott "Stormy" Weathers

Vice Kommandant

Pay Your Dues! Now! This Means You!

(If you have already paid your dues, please disregard this notice)



Send your cash, check, money order, or other legally negotiable instrument to any chapter officer,

or pay online by through the <u>EAA Chapter 1000 web</u> site.

Do it now and avoid the embarrassment of appearing on the **Dues Delinquent** list next month!

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

¹Simply write you 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."

First Flight Report, Glasair II-S FT N6940P

(Then at last...and you thought the Bearhawk had a long gestation period...)

Kit delivery was on 19 Oct 1991. First Flight was on 23 Jan 2011.

There are still things that weren't finished, but it occurred to me that some of those things are best done after flying the plane for a while and some others could be done before or after flying. So, I re-sequenced the work. The list got short, then longer again as I added tasks such as arranging a Tech Counselor visit, a talk with a Flight Advisor, a check to an insurance company, and a pile of paperwork for the Feds. Even that last task wasn't so much of a problem for me having spent my entire life since high school in service of different Feds, but Feds nonetheless. It really wasn't any harder to get through the arcane details of that paperwork than any given Staff Summary Sheet I did for Uncle Sam. So with that preamble, thanks Steve Irving and Scott Leifeld for the Tech Thanks Gary Aldrich for the Flight Advising. Thanks Russ Erb for versions of the forms that could be edited and saved and for the name of a DAR who was a pleasure to work with.





Up to this point I had run the engine, done a compass swing, and evaluated taxi characteristics up to 40 knots. I did find some squawks that didn't take long to fix, but were required before flying. The ignition boxes needed a

modification from Klaus to output RPM for my Dynon EMS. The B&C LR3 voltage regulator wiring required a jumper to work if the alternator out light was not used. The remaining squawks were of no real consequence.

My DAR was **Adam Valdez**. He updated my paperwork with the newest format and form numbers for the FAA himself. We made an appointment the same week I first contacted him, and the inspection was completed on Saturday, 22 Jan 2011.



I had business on Sunday so I arranged for a crew to support the flight on Monday. The weather was looking good and the crew de-conflicted their work schedules for a weekday flight. Then something happened I really don't remember ever happening in all of history. We slipped the schedule for a first flight of an aircraft...wait for it...to the LEFT! My obligation canceled. I made a few phone calls and had everyone I needed. The weather was looking good, so we planned for 0800, 23 Jan 2011.

The crew consisted of **Gary Aldrich** (chase pilot), **Scott Weathers** (test conductor), **George Gennuso** (data recorder, ground photo), **Kent Troxel** (aerial photo), and **Gail Dodson** (ground photo, catering). Everyone (except Gail who was already here) arrived to our residence at the Rosamond Skypark on time except for the chase pilot and aircraft. This was forgiven when during the briefing he had a PIREP of actual weather conditions at altitude.



After a short social session over coffee and sweet bread and a few photos, we briefed. I had flight cards for a profile I generated using my own experience as well as the guidance in AC90-89A. Each crewmember was briefed on their precise role, the profile, the data required,

certain contingencies, and certain rules of engagement for the entire event. Once everyone had asked their questions, we pushed out and strapped in.



The first event was a high speed taxi. I accelerated at full power with ¾ aft stick until the aircraft rotated. At that point I pulled the throttle, coasted for a while moving the rudder and ailerons, then applied medium braking. There were no issues so I taxied back while the chase crew started up.



Chase took off and entered closed traffic for the airborne pickup. At the direction of chase, I applied power and departed runway 08 at just before 0900. I took off with the factory recommended flap setting in less than half of the 3600 feet available. Climb was good and temps, while high, were not approaching limits. I took a few seconds to look around and cheer. Then, back to the business of seeing if the aircraft was controllable and figuring out what configuration I wanted for landing.

As part of my preparation, I had flown a very similar Glasair II-S just two days prior. Thanks to **Dean Van Oosterhout** for time in his aircraft. I had spent that time practicing the profile and doing normal landings. That hour of flying prepared me well for what was happening with my aircraft.





What was happening was nothing new. It flew just like Dean's but the rudder trim was out pretty far. That was controllable but my leg felt like I had just finished my MEL check ride. I tried several handling qualities flight test techniques at various flap settings. I also evaluated handling while approaching stall at those flap settings and got the indicated airspeed for each. N6940P was flying so much like N72400 that I skipped a few interim flap settings, and determined that I would fly the first pattern at flight manual recommended speeds and configuration.

I practiced the pattern and a go-around at altitude, again, no issues. I flew around for a few more minutes to let the engine break-in a bit and let chase in close for a clean and dry check.



One of the contingencies we briefed was doing the first landing at nearby WJF. The runway there was much wider, longer, and had a fire department. I made the decision to land at Rosamond since there was no issue with

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the handling of the aircraft, so I set up the pattern and landed normally. Sorry it wasn't more exciting...no I'm not



I credit the very successful flight to thorough planning. My Tech Counselors, Flight Advisors, support crew, DAR, friends and wife asked plenty of tough questions. Their questions prepared me, their support enabled me.



The flight was an unqualified success, but there were certainly several squawks on the airplane. The parking brake valve was leaking. I flew again that same day, but I did order the new one that same day as well. The engine was running hot, but I could keep it from reaching limits by actively managing it. Within a week I had 6.9 hours on the aircraft, had it to 90% of $V_{\rm ne}$, 3.8g, and full deflection rolls. I also repeated the stall evaluation to g-break. By the time you read this, I will have finished a full condition inspection and hope to be well on the way to completing my Phase I testing.

As a side note, notice the proximity of the date of my kit delivery to the date EAA Chapter 1000 was founded (5 Nov 1991) and to the first flight of the C-17 (15 Sep 1991). I was there for both of those events too.







The Crew



Test Pilot with Logistics Officer/Caterer



Starting the build in 1991



Hanging the engine, 1997

Last Month's Meeting

EAA Chapter 1000

Vanhoy Air Force Headquarters Mojave, CA 18 January 2011 **Gary Aldrich**, Presiding

The first meeting of 2011 was held at the Mojave Air and Spaceport hangar of Dave Vanhoy to get a first-hand look at his "Wayback Machine", a recently acquired AT-6G "Texan". Unbeknownst to us that the meeting was scheduled to start at 1800 rather than the customary 1700, **Knife** and I showed up early at the airport lobby only to find an open trench across the parking lot suitable in size to film a World War 1 movie. The Kommandant and Erbdude followed around 1730. As we were milling about smartly outside the lobby enjoying a surprisingly pleasant January evening, the local security showed up and asked us if we were going inside (obviously wanting to lock up for the evening). Using a Jedi mind-trick, the Kommandant was able to so confuse the guard that he said he would come back later ("These aren't the Project Police you are looking for. Move along").

Growing impatient, we began to generate ideas to amuse ourselves. The first that came to mind was to alter the message on the portable reader board that gave notice of the open trench. **Knife** found the compartment housing the message keyboard and we began mentally composing clever new messages like "Welcome C1000 Project Police". In a rare moment of reasonable judgment, we decided against this course of action and went inside the lobby, finding it to be a temple/shrine to all things Rutan. The gift shop even had "Rutan Rocket Fuel Hot Sauce".

Dave arrived promptly at 1800 and led the caravan to his fashionable west side hangar housing both the T-6 and the Giles G-202, a disassembled Globe Swift and a tractor large enough to tow the T-6 and/or plow the south forty. The **Vice-Kommandant** opened up the C3's, chips, salsa and sodas. Cookie and tortilla chip crumbs were quickly spread throughout the hangar.

Dave provided the following history of N717UniformPoppa:

AT-6C S/N 41-32182

Aug 1942 - Built for the US Army by North American Aviation, Dallas Division. It was accepted on Friday 14 August 1942.

Aug 1942 - Assigned to Napier Army Air Field, Advanced Single Engine Pilot School, in Dothan Alabama

Oct 1942 - Aircraft was assigned to Marianna Army Air Field in Marianna Florida

May 1943 - Aircraft was assigned to William Northern Field, Tullahoma Tennessee

Nov 1944 - Aircraft was assigned to Greenwood Army Air Field, Greenwood Mississippi

Sept 1945 - Aircraft was assigned to Kelly Army Air Field, San Antonio Texas and was placed in storage

Nov 1945 - Aircraft was assigned to Independence Army Air Field, Independence Kansas and was placed in storage

July 1947 - Aircraft was assigned to Kelly Army Air Field, San Antonio Texas and was placed in storage

May 1951 - Aircraft was assigned to North American Aviation, Downey Division, Downey California

AT-6G S/N 49-3529

Aug 1951 – AT-6C S/N 41-32182 was remanufactured for the US Air Force by North American Aviation, Downey Division [as an AT-6G]. It was accepted on Friday 31 August 1951.

Sept 1951 – Aircraft was assigned to the 3306th Pilot Training Squadron, Air Training Command, Bainbridge Air Force Base, Bainbridge Georgia.

April 1954 – Aircraft was assigned to the 3450th Technical Training Wing, Air Training Command, Francis E. Warren Air Force Base, Cheyenne Wyoming

Sept 1955 – Aircraft was assigned to the 3040th Aircraft Storage Squadron, Air Material Command, Davis-Monthan Air Force Base, Tucson Arizona

Sept 1957 – Aircraft was stricken from US Air Force records and turned over to General Services Administration (GSA)

After being excessed in 1957, S/N 49-3529 was owned by several civilians and had a couple of different N-numbers. The last 2 owners were Carl Fromhagen of Fromhagen Aviation in Florida, who bought the aircraft in May 1976, and Dennis Buehn of American Warbirds in Carson City NV, who bought the aircraft in July 2008. **David Vanhoy** acquired the aircraft in the summer of 2010.

Having depleted the munchies, "Victory" was declared, the meeting was adjourned and most proceeded to Graziano's for pizza and beer.

Most of this is true.

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



Let's see...would that be a KC-135 for the Union Pacific?

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Probably the largest airplane in EAA Chapter 1000, at least in an assembled condition...



"Blinded by the light..."



Knife's left hand is already out of the fight, with his right hand under attack by Gary's right hand and its wing-hand



Security notices a Weathers system circling the aircraft



The lesser member of the Vanhoy Air Force desperately hopes for some attention



The front office of the T-6, with radios younger than the airplane but older than anything you have

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Right sidewall, front cockpit



Left sidewall, front cockpit



Rear cockpit with greatly reduced instrument panel



Identification plate on exhaust pipe



PPOs circle in a game of Musical Chairs, but since we had no chairs, it was a short game



Dave points at the mysterious red lens next to the landing light. No one has been able to tell him what its purpose was

Kommandant's Korner

Great news
this month! Long
time Chapter 1000
Treasurer and raconteur
Doug "Houdu/Opie"
Dodson has shaved off
that fuzzy little patch of hair

around his mouth! Now that wouldn't seem like too much of a story to most folks, but for those of us in the know, it was a symbolic gesture indicating that **Glasair N6940P** was ready for flight after about 19 years of construction and multiple rides in U-Haul trucks. Without the face fuzz **Doug** reclaimed the youthful look that earned him the moniker "**Opie**"...though it appears **Opie** has added a bit of "character" over the years.

Thusly shorn, he assembled a small but professional band of flight testers on an uncharacteristically calm Sunday about two weeks ago and bravely shoved the throttle forward on the Project Police's latest Aerial Assault Vehicle. I had the privilege of providing safety and photo chase from the Fightin' Skywagon. Aerial Photog Kent "Cobra" Troxel and I were joined by crack airborne test conductor Scott "Stormy" Weathers who carefully monitored and recorded the well-planned flight test sequence. George "Knife" Gennuso manned the critical ground-based control room and recorded vital data as it streamed down from the Glasair. You will no doubt hear and read much more about this outstanding achievement in sport aviation and homebuilding so I won't divulge further details except to say that the first flight was, in balance, a bit boring...a trait for which we in the flight test biz strive because it characterizes a well planned and executed test. Please join me in congratulating Doug and Gail on a super job and wish them many enjoyable adventures in their new magic carpet. OK, Stormy, the **RV-8A** is next in the hopper...

Break, Break... Project Police Warning Order follows: The "Aluminum Overcast" will be returning to KWJF on 18 Apr for a few days to once again sample the wonderful spring weather in the Antelope Valley and afford us the opportunity to be up-close and personal to this piece of American history. The B-17G is returning after a two-year (I think) hiatus. For some reason, the Project Police had fallen from grace...or at least from the west coast tour of the famous Flying Fortress. Well, it appears all is forgiven so George Daubner and the crew will be visiting us once more. The gauntlet has been thrown, so mark your calendars and expect a call from the Chapter staff to elicit volunteer time from you to perform the various duties associated with the visit. If you haven't helped out in the past, I strongly urge you to donate an afternoon or so to sell souvenirs, answer questions from the general public or, if you're really lucky, listen attentively as a member of the Greatest Generation reminisces about the majestic old bird and how they brought Hitler to his knees. If that's not enough of an inducement, recall that the chapter will be given a few seats on the flight to the next tour stop...something for which the general public has to pay as much as \$465.





In a semi-final note, I encourage you to check out the "Plane Crazy" event at KMHV on 19 Feb. This month's event will celebrate soaring and sailplanes and will feature beautiful and graceful gliders on static display as well as a talk on mountain wave flying by Soaring Hall of Famer and part-time Project Policeman Jim "JP" Payne. Not coincidently, the following Friday is the 50th anniversary of the world altitude record flight of Paul Bikle. Mr. Bickle flew his **Schweizer 1-23** sailplane to over 46,000 feet. NASA will be commemorating the accomplishment (Bikle was Director of the Flight Research Center at the time of the record flight) with a ceremony attended by several Bikle family members AND the actual aircraft used for the record flight. Do not despair if you cannot attend the NASA event as the aircraft is tentatively planned to be displayed at Fox Airfield (launch and recovery site for the record flight) on Saturday, 26 Feb. Watch your email or contact me for details on this event as they are released.

Speaking of gliders...Give *PPTAF* Trooper Randy "Kanard" Kelly the high five next time you see him as he proved his mettle last Thursday by single-handedly (e.g. "solo") taking flight from Mountain Valley Airport in a Schweizer 2-33A sailplane. As the guy who authorized the flight I am proud (and perhaps a bit relieved) of the fine job he did while exploring the grace and beauty of engineless flight. Good Job!

Fly Safe and Check Six,

- **Gary Aldrich** Kommanding

Web Site Update

As of 5 February 2011, the hit counter showed **136431**, for a hit rate of 17 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.



JOIN US FOR

PLANE CRAZY SATURDAY!



FLY-IN AND STATIC DISPLAY

When: Saturday, February 19, 2011

10 a.m. - 2 p.m. - Free Admission!

Where: Mojave Air and Spaceport

KMHV – TWR 127.6 WX AWOS-3 (132.225) (661.824.5218) Ground 123.9 Joshua Approach 133.65 http://www.airnav.com/airport/KMHV www.mojaveairport.com

Mojave Airport Display Day Transient Parking Area – on ramp in front of Old Tower

(Ground traffic enters through airport Administration Building or airport restaurant - opens 8 a.m.)

- Static Aircraft Display
- •Art & Collectibles for Sale

- •Flightline Tours on Tram
- . Bring the Kids & Camera! Dress Warmly!

"Salute to Soaring!"

Honoring Sailplane Record Flights

50th Anniversary Paul Bikle's Altitude Record 46,267-feet Feb. 25, 1961

25th Anniversary Bob Harris Altitude Record 49,009-feet Feb. 17, 1986 Grob 102 Standard Astir III →

Steve Fossett Altitude Record 50,722-feet Aug. 30, 2006



Jim Payne – Speed and Distance Records

Recipient of the Lilienthal Gliding Medal (2001) and U.S. Soaring Hall of Fame Inductee (2009)!

"Mountain Wave: Friend and Foe" Presentation by Jim Payne at 11 a.m.

Gliders will be on display!

For more information, call: 661.824.2481 or 661.342.0604

Get "nosey" about history at: www.mojavemuseum.org

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Chapter 1000 Calendar

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

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

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

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, 5:00 p.m., Edwards AFB. USAF Test Pilot School, Scobee Auditorium. (661) 609-0942

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

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 Third Tuesday Meeting. Go to Airport Barbecue instead.

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

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

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

Jul 25-31: EAA Airventure Oshkosh. Multiple *Project Police* missions are currently in planning.

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!

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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:
MONTHLY MEETING 15 FEB @ TPS
PAY YOUR DUES NOW!!!
GLASAIR FIRST FLIGHT REPORT
B-17 COMING IN APRIL

