



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>

October 2006

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 Long Awaited Oshkosh 2006 Report

Kommandant, Erbman, and Lothar
Tuesday, 17 October 2006
1700 hrs (5:00 PM Civilian Time)
USAF Test Pilot School Auditorium
Edwards AFB, CA

Usually the **Project Police** get their update on what's happening in and around EAA HQ in August of even numbered years. However, with the chance to watch the **Jethawks** win in August and watch some classic aviation TV with **PPO Mike Machat** in September, you have all been forced to wait until October to get your update. However, the two month extension for your biennial requirement will be taken from the next biennial period. Thus, you will be due again in August 2008.

Normally the responsibilities for seeking out intelligence (sts) and reporting on it fall to **Kommandant Aldrich** and **NLE Erbman**. This year, while acting in his capacity as **O-6 Action Officer** arranging the HAVE DISCUS flight test program, **Lothar of the Project Police** and current TPS Commandant **Gerner** heard **Erbman** mention that the proposed schedule would impact their biennial Oshkosh intel gathering commitment. **Lothar** immediately pounced, inquiring as to the possibility of an available seat in the **VC-180 Fightin' Skywagon**. A special meeting was called for the **Fightin' Skywagon** crew and a quick review of the Flight Manual turned up

that there were not only 3 seats, but actually 4! **Lothar** was "in". Little did he know what he was "in" for.

Dropped into KOSH and making the "miles"-long trek to the **Zippy Hilton**, **Lothar** found himself in between two world class Oshkosh shoppers overcome with the intense desire to keep up. You'll have to come to the meeting to find out why the Biennial Oshkosh Spending Challenge was called off this year.

This year, to better cover the target-rich environment, the **Project Police** team frequently split up and attacked in parallel. You'll want to come hear what they dredged up, such as

1. The latest thing in WWII aircraft
 2. Brazilian contributions to aviation
 3. Experience a "partial eclipse"
 4. Innovative aerodynamic treatments from motorcycle engineers
 5. Has the Cessna 150 been reincarnated?
 6. Did **Opie** sneak off to Oshkosh without telling **Gail**?
 7. Ragtop trainers
 8. Insanely complicated paint jobs
 9. The **Kommandant** has serious flashbacks to the 60's
 10. A newbie is exposed to vapor propulsion
 11. Avionics worth more than the kit aircraft they are installed in
 12. Antiques that stayed in the family
 13. Why the world looks fuzzy
 14. Largest missing man formation ever seen
 15. How to decide on the best handheld radio to buy
 16. All that other stuff
- And of course, you'll want to hear about the KRAPpiest FBO in the country and where to find the all-girl FBO with the cappuccino machine. Don't forget the restaurant with no cooks!
- The usual round of schmoozing with C³s is planned for 1700 in the TPS lounge, plus the solving of aviation's toughest problems afterwards at the BK Lounge.

- **Erbman**
 for the **Schmoozemeister**

Last Month's Meeting

EAA Chapter 1000

Scobee Auditorium

USAF Test Pilot School, Edwards AFB CA

19 September 2006

Gary Aldrich, Presiding

The monthly meeting marked the return to the Edwards AFB Test Pilot School Scobee Auditorium venue. Our featured speaker was legendary artist, author and publisher **Mike "F-105 Guy" Machat**. **Mike** was transported to EAFB on board the **VC-180 "Fightin' Skywagon"**, personally piloted by **Kommandant Aldrich**. Following the customary C³'s and chips-and-dips, **Mike** entertained the assemblage with a "**Blast From the Past**" featuring vintage 1950's television shows. A "**Steve Canyon**" episode started the evening, followed by "**Whirlybirds**", and ending with an "**Ozzie and Harriet**" show where the Oz gets a back-seat ride in a brand new **F-100 Super Sabre**.

But wait, there was more! **Mike** pulled a Warner Brothers Looney Tune cartoon named "**Ceiling Hero**" out of his valise. **Opie** was happy to finally get some entertainment, not being old enough to have seen or appreciate the video's that **Mike** so aptly described as "inspiring this generation to get into the professions we hold today". There was much reminiscing about other vintage aviation related shows that have gone by the way. Shows like Sky King, The Blue Angels, Men Into Space, etc.

At this point, most of us were getting pretty depressed by the realization of how old we were getting, so the **Kommandant** declared "**Victory!**" and ordered the meeting moved to the **BK Lounge**. **M²** then undertook a supervised solo at the wheel of the "Screaming Yellow Zonker" through the dark streets of EAFB with Erbman. (Watch for his report in an upcoming issue of WINGS/AIRPOWER.) **Mike** was treated to a supersizer in recognition of another splendid evening of entertainment. There were also Kudo's for the **Kommandant** for his "Major Award".

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

Kommandant's Korner

Happy
autumn, everyone!

The leaves are turning
their brilliant hues; the
air is
crisp...wait...that's New

England, not California. Oh
yeah, the wind has turned a few degrees colder, the leaves
are staying green, the sun is more reluctant to rise and more
eager to set. This is the time of year when it's comfortable
to work in the garage or hangar. The airplane leaps more



energetically into the cooler air and the engine monitor requires less monitoring for excessive cylinder head temps. This is also the time of year when visitors (particularly from "back east") can be heard to wonder why everyone doesn't live in the Antelope Valley. Ah, but we know better.

Fall can also bring cold fronts and storms off the ocean that can easily develop within the time span of a normal aviation excursion. My recent trip to Reno to attend the Society of Flight Test Engineers symposium is a case in point. When I pushed out the Fightin' Skywagon on Monday afternoon I was greeted by a hot blast of desert wind. The ambient temperature was hovering near the century mark and on takeoff the VC-180 seemed to struggle a bit...as if it was hard to breathe. I chose to take a more circuitous route to the west and up the central California valley rather than a more direct path into the Owens valley and over Bishop. This route, while longer in miles and minutes, held the promise of smoother air and more comfortable cabin temperatures at our 9500 ft MSL cruising altitude. Of course we had to climb a bit more to jump the bumps to the southwest of Tahoe before descending into the Reno basin.

In case you haven't been there, Reno is pretty well surrounded by some good-sized rocks. My copilot for this leg of the trip, world-famous test pilot **Mark "Forger" Stucky** allowed as how RNO was one of those airports that his former employer (UAL) required special training to fly to. Sort of the "can't go there unless you've been there" thing. At any rate, this arrival was not particularly challenging except for the low level thermal turbulence. The winds were light, but the temperature was still uncomfortably warm.

We had a great time at the symposium with old friends and colleagues and really enjoyed the banquet where **Mike Fossum** gave an outstanding recap of his recent Shuttle mission to the International Space Station. All too soon it was time to saddle up for the return trip. In the ensuing time, while we were either in briefing sessions or wandering the casinos, Mother Nature had made some adjustments. By Thursday morning, the temperature had dropped from the high nineties to the mid-sixties. Low clouds boiled about the tips of the mountains and a gusty, cold, nasty wind replaced the sunshine and hot breeze. On Friday, when **Anne** (having arrived by aluminum people-tube on Wednesday) and I joined the symposium attendees for a day at the Reno Air Races, the clouds were broken at 3000 feet AGL or so and the icy wind cut right through the insufficient outerwear we had packed. At the airport all aircraft were turned away for a time in the afternoon when 35 knot crosswinds howled across the runways.

The AuSepTober schedule of events dictated an early departure on Saturday morning and we returned to the FBO to find the Skywagon covered with an impressive layer of frost. After wrestling her (the airplane, not Anne) around the ramp to maximize the exposure to the sun and speed the frost removal; I retreated to the office to warm up. Fortunately we didn't have to wait too long for nature's de-icing system to function and soon we were accelerating down runway 16R and into the cold air. The VC-180 was climbing nicely in the dense air until I was reminded by the

Carb Ice Detector that this was a totally different air mass than the one in which I had arrived a few days earlier. Despite the clear, cloudless skies the instrument was shrieking out its warning so I pulled out the carb heat button and was rewarded by a significant stutter and stumble from the big noisemaker in front. **Note to self: Warn Ms Kommandant before taking an action that makes the airplane sound like it is in danger of crashing.** Fortunately the slug of now-melted ice was quickly ingested (wow, water injection, just like the big boys at the races!) and the Continental settled back into its normal re-assuring rumble. This little play of “shriek, pull, stumble” repeated itself several more times as we attempted to climb over the high peaks to the southeast between RNO and BIH. Finally, the OAT gage read well below freezing and the ice-making appeared to cease. As we passed over Bishop and back into the Owens Valley we returned to our familiar dry desert air and the rest of the flight was enjoyable in its lack of excitement.

This story would probably raise a chorus of “**Well, Duh!**” in many parts of the country, but it served to remind me that it’s pretty easy to get complacent about our normally ice-free environment. All those lessons I had been taught by my various flying mentors about the dangers of carb ice and the propensity for it occur in deceptively nice weather came rushing back in an instant as my heart skipped the same number of beats as the engine. It’s good to be reminded once and a while of old lessons...especially if the worst outcome of the lesson is a minor scare or a moment of concern.

Fly Safe, Check Six,

- Gary Aldrich
Kommanding

Project Police Sweep Top Flight Test Awards

In September 2006, two **Project Police Officers (PPOs)** were recognized at the highest level by their flight testing peers. In Reno at the Society of Flight Test Engineers (SFTE) Symposium, **Gary Aldrich** was presented with the **Kelly Johnson Award for Outstanding Achievement in the Field of Flight Test Engineering**. This award is the highest award given on an international basis in the field of Flight Test Engineering. The initial award was presented to **Kelly Johnson** in 1973. A complete list of recipients can be found at <http://www.sfte.org>.

After graduating from the USAF Test Pilot School in 1982 (Class 82A), Gary worked on the F-16XL, A-10, and T-46 programs. However, 9 years of his 22 year Air Force career were spent on the staff at TPS in two separate tours. In 1998 he returned to the TPS staff as a civilian contractor and has been there ever since.

In his 17 years of teaching at TPS, he has personally trained, mentored, or influenced 804 student test pilots, flight test navigators, and flight test engineers, plus an untold number of other TPS staff members, AFFTC employees, contractors, and other members of the flight test community. As a result, it would be very difficult to

find any test pilots, flight test navigators, or flight test engineers working today who have not learned something of importance to their job from Gary. Even those who have not had the opportunity to attend USAF TPS have likely learned something from a colleague who learned it from Gary. Thus, the safety, efficiency, and effectiveness of Air Force flight test can be traced back to the quiet yet relentless work of Gary.

Gary was nominated for this award in a convincing essay written by fellow **PPO Erbman**. **Erbman** extracted the information required from Gary through subtle and relentless interrogation over eight years, cleverly disguised as office, lunchtime, and Skywagon conversations. The interrogation was so cleverly disguised that **Erbman** didn’t even realize he was doing it.

In the Society of Experimental Test Pilots (SETP), the corresponding top award is the Iven C. Kincheloe Award. From <http://www.setp.org>: “The purpose of the Kincheloe Award is to recognize outstanding professional accomplishment in the conduct of flight-testing by a test pilot member of the Society of Experimental Test Pilots. The presentation of the Kincheloe Award is a highlight of the annual Awards Banquet and is the most visible manifestation of the Society’s contribution to the aviation community in general.” This year’s award went to founding **PPO** (although we haven’t seen him for several years) **Norm Howell**. Details on Norm’s accomplishments are taken from the *Valley Press*, written by the **Project Police’s** favorite reporter and honorary **PPO Allison Gatlin**.

“The 2006 Iven C. Kincheloe Award was presented to Norm Howell for his work in leading the effort to recover a heavily damaged C-17 from Bagram Air Base in Afghanistan.

The damaged C-17 was temporarily repaired in Afghanistan by Air Force and Boeing personnel. Because the temporary repairs resulted in numerous limitations to the aircraft’s performance, the recovery flights to bring the aircraft stateside qualified as test flights.

A Boeing aircrew, led by Howell, flew the damaged C-17 from Afghanistan to the production facility in Long Beach over the course of five days. The recovery flight included stops in Qatar, Sicily, the Azores and Charleston, S.C.

“A combination of technical know-how and inventiveness on the part of the maintenance team, rapid and sound engineering judgment on the part of the various discipline engineers and aircrew experience, skill and rigorous risk management before and during the flights ensured a safe and incident-free recovery mission,” the award citation read.

Howell also was mission commander for the first two drop tests of an inert rocket test article as part of a program to develop a space-launch vehicle deployed from a C-17.

The test flights, from Edwards, were 100% successful and the first flight was nominated by Air Force Materiel Command for the most meritorious flight of the year. “

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Project Police at the Reno Air Races

Following the Society of Flight Test Engineers Symposium, **PPOs Kommandant, Ms Kommandant, Erbman, Lothar, and Vanhoy** attended the Reno Air Races.



The crew of *Merlin's Magic* had already found out what happens when a connecting rod breaks and starts beating against the crankcase. Look closely to see the big hole of missing crankcase.



Rare Bear was out by Friday. The crew posted this sign to answer the inevitable question of "What happened?"



This R-4360 powered Super Corsair was a participant in the first post-war air races. It sat for about 50 years, then was restored and brought back to the races. In the late 40's, a propeller blade had to be replaced and only white paint was available. Noticing the interesting strobing effect that made the propeller look like it was turning at 1/4 the RPM, the odd paint scheme was retained.



Midnight Miss III was flown by Dennis Buehn, whom you may remember as the HU-16 Albatross pilot flying with USAF TPS



Nemesis NXT was back again, and this time managed to hold everything together



Winner of the Biplane Class Gold race was *Phantom*, which sported this rather unusual shaped propeller.



Kent Pietsch of Minot ND (the “Vacation Capital of Saskatchewan”) flew this Interstate Cadet in three different acts, one of which was landing on this RV.



One of the racers also had this semi-scale B-36 model on display. The owner demonstrated starting all six engines in less than 45 seconds.



Lothar of the *Project Police*, acting in the roll of TPS Commandant, was talking to Gerry Gabe, owner of this Allison powered P-51A. As Lothar was turning to leave, Gerry asked “Have you ever sat in one of these?” and then proceeded to order him into the cockpit.



Start of the final T-6 Gold Race with Dennis Buehn in *Midnight Miss III* in second place, where he would ultimately finish



USAF Heritage flight, with two P-51 Mustangs, an F-4 Phantom and an F-15 Eagle



John Travolta flew a low altitude fly-by in his Boeing 707, but did not land. According to *PPO* Historian Mike Machat, this is a very rare model of 707, being shorter than normal and with fuel tanks for very long range, sort of like the 747SP



US Navy Heritage Flight, with an F6F Hellcat, FJ-4 Fury, and F-18 Hornet. An F8F Bearcat was intended to be included, but could not get the engine started in time



The USAF Thunderbirds performed each day, operating out of Reno International Airport. Clouds in the area forced the “Low Show” on Friday. Clear skies on Saturday and Sunday allowed the “High Show”



Jon Sharp in Nemesis NXT goes streaking by in the final Sport Class Gold race, which he eventually won



P-51 Mustang Missing Man Formation for an air race pilot who had passed away during the previous year

Piavis Does It Again

PPO Jim Piavis, founder and first President of EAA Chapter 1000 and creator of the *Project Police*, has searched around and found(ed) yet another chapter. This time from the inner workings of the dark side of the Bill Gates evil empire, **Jim** has successfully started EAA Chapter 1440, and in keeping with a great military tradition, since it was his idea, he was put in charge. That’s about all we know so far. The chapter exists but has no website. We’re wondering if the chapter logo will look anything like the infamous Chapter 1000 logo.

For Sale: Skybolt

Beautiful 260 hp Skybolt w/151 hrs TTSN on airframe and 944 TTSN on 0-540 engine. The airplane has not been flown in 8 years. The Skybolt is currently hangared at the Salem, Oregon airport. As the pictures show, it is nearly ready to fly. I have had the engine and carburetor recently inspected and reconditioned. The cam, valves, and crank are all in excellent condition. I’ve had two questionable cylinders replaced. You can use my hanger for final reassembly or remove the wings and tail and haul to your own hanger. It takes about two hours to disassemble the airplane for trailering.

Equipment includes:

- Dave Clark Headsets and Strong seat pack chutes
- Valcom 720 com, ARC transponder w/encoding altimeter
- PS noise reducing/voice activated intercom
- Cleveland wheels and brakes
- Scott tail wheel
- Christen inverted fuel and oil system
- Smoke tank (currently removed)
- New Sky Tec lightweight starter (plus old starter for a spare)
- New lightweight alternator (not installed)
- New Hartzell aerobatic prop

The airplane is very strong. Because it has not been flown for some time, plan on about 40 hours to go through the remaining systems on an annual. Re-assembly and re-rigging has taken me about 8 hours. During the last eight years my company has moved me from Oregon to Georgia and back as well as Chicago. I am currently in Salt Lake. With this amount of relocation, I've finally decided the airplane must go.

Please call me, Don Forbes, at 801-703-3294 or preferably at email jbritt.dforbes@mac.com

The Skybolt can be seen at the Salem Airport by calling my A&P, Harold Hayes 503-931-9242.

I am asking \$31,000, and I will accept offers.



Project Police Aircraft Spotters Quiz



Last month, in the style of **PPO Mike Machat**, who asked you to identify aircraft by looking at close-ups of mere parts, **Evil Editor Zurg** brought the photo seen here.

The first response came in from **PPO Nathan Davis**, who wrote "Lancaster at OSH?" He went on to write "only reason I was pretty sure, was that I stood in that exact spot looking in the exact direction....lol".

Next in was from PPO Dave Setser. "I do believe the new mystery picture is of an Lancaster bomb bay. Seems

like that's what I saw when crawling around the airplane at Oshkosh."



The only other **PPO** daring enough to respond was **Murry Rosanski**. "Hi Russ. It was good seeing you at Oshkosh. I did not get a chance to see it there so I am guessing we have the bomb bay of a Avro Lancaster. It was long but shallow. I believe some were modified for various Barnes Wallace bombs. Spinning Dam busters and anti ship, Grand Slam and earthquake bombs up to 20,000 pounds. I think the Lancaster was the weight lifting champ of WW II bombers."

The key point here was the shape of the bomb bay. B-17 and B-24 bomb bays were short but deep, reaching up the full height of the fuselage. The B-17 bomb bay was limited by the main wing spar at the front and the rear wing spar at the rear. In contrast, the Lancaster bomb bay was shallow, being completely below the wing structure. However, it was longer in length. As a result, the Lancaster was able to carry very large, long specialty bombs that would not fit in the length of B-17 or B-24 bomb bays.

Web Site Update

As of 7 October 2006, the hit counter stood at **110734**, for a hit rate of about 22 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

Oct 17: EAA Chapter 1000 Monthly Meeting, 5:00 p.m., Edwards AFB. USAF Test Pilot School, Scobee Auditorium. (661) 609-0942
 Oct 26-29: Copperstate Regional Fly-In. Casa Grande AZ (KCGZ)
 Oct 28-29: Edwards AFB Open House and Airshow
 Nov 7: EAA Chapter 49 Monthly Meeting, 7:30 p.m., General William J. Fox Field, Lancaster, CA. (661) 948-0646
 Nov 14: EAA Chapter 1000 Board of Directors Meeting, 5:00 p.m., High Cay, 4431 Knox Ave, Rosamond CA. (661) 609-0942
Nov 21: EAA Chapter 1000 Monthly Meeting, 5:00 p.m., Edwards AFB. USAF Test Pilot School, Scobee Auditorium. (661) 609-0942
 Dec 5: EAA Chapter 49 Monthly Meeting, 7:30 p.m., General William J. Fox Field, Lancaster, CA. (661) 948-0646
 Dec 12: EAA Chapter 1000 Board of Directors Meeting, 5:00 p.m., High Cay, 4431 Knox Ave, Rosamond CA. (661) 609-0942
Dec 19: EAA Chapter 1000 Annual Festivus Celebration, 6:00 p.m., Kommandant's Kwarters. Quartz Hill CA. (661) 609-0942
 Jan 2: EAA Chapter 49 Monthly Meeting, 7:30 p.m., General William J. Fox Field, Lancaster, CA. (661) 948-0646
 Jan 9: EAA Chapter 1000 Board of Directors Meeting, 5:00 p.m., High Cay, 4431 Knox Ave, Rosamond CA. (661) 609-0942
Jan 16: EAA Chapter 1000 Monthly Meeting, 5:00 p.m., Edwards AFB. USAF Test Pilot School, Scobee Auditorium. (661) 609-0942
 Feb 6: EAA Chapter 49 Monthly Meeting, 7:30 p.m., General William J. Fox Field, Lancaster, CA. (661) 948-0646
 Feb 13: EAA Chapter 1000 Board of Directors Meeting, 5:00 p.m., High Cay, 4431 Knox Ave, Rosamond CA. (661) 609-0942
Feb 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, Doug Dodson, 4431 Knox Ave, Rosamond CA 93560-6428. 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

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**

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ADDRESS SERVICE REQUESTED

**THIS MONTH'S HIGHLIGHTS:
 OSHKOSH REPORT AT TPS 17 OCT
 KOMMANDANT REDISCOVERS CARB ICE
 PPOs AT RENO AIR RACES
 PPOs RECEIVE INTERNATIONAL AWARDS**



The Leader In Recreational Aviation