



THE LEADING EDGE

NEWSLETTER OF MUROC EAA CHAPTER 1000

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

<i>President</i>	<i>Gary Aldrich</i>	<i>661-609-0942</i>
<i>Vice-President</i>	<i>George Gennuso</i>	<i>661-265-0333</i>
<i>Secretary</i>	<i>(howabout you?)</i>	
<i>Treasurer</i>	<i>Doug Dodson</i>	<i>661-256-7276</i>
<i>Newsletter Editor</i>	<i>Russ Erb</i>	<i>661-258-6335</i>

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

March 2002

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:



MILESTONES OF FLIGHT MUSEUM

Tuesday, 19 March 2002
1700 hrs (5:00 PM Civilian Time)
Milestones of Flight Museum
Lancaster, CA

This month has caught Herr Vice Kommandant flat footed (*again?*)--all of those irons in the fire have mysteriously cooled awaiting re-heating in the months ahead. But, as all good leaders and superior *Project Police* officers I will make an amazing and resounding recovery. Ahhhh, lets see...Yes, just as I had planned it all along. A return visit to the **Milestones of Flight Museum**. What? You say where is the Milestones of Flight Museum? Well, sports fans, propeller heads and purveyors of low earth orbit vehicles, it's right in our own back yard. If you glance to your left when you're on final for 24 at Fox Field you can't miss it. Yup, right there in the large hangar is the

Milestones of Flight Museum. (*For those of you more likely to use ground conveyance to travel, drive to Fox Field. Instead of turning into the terminal, follow the signs to Apollo Park. Hang a hard left right before you enter Apollo Park.*)

Our good friend **Dave Kleiman** has made arrangements for the museum curator **Jim Vancil** to give us a tour of the premises.

I can tell you that there are several noteworthy aircraft there. **Steve Ericson** has his near original **Storch** there complete with mock guns and swastikas. **Howard Hughes's** personally converted B-25 flying SUV is there along with a BT-13 that is going through restoration. I'll stop with that so I don't give away too much of Jim's presentation.

WAIT, Wait, wait...Before you guys get too carried away and start running off in the wrong direction, **we are not meeting at the TPS Auditorium this month**. Go straight to the Milestones of Flight Museum at 17:00 (or 5:00 pm, which ever time you like best). We will form up at the front gate. I'll be the one handing out chocolate chip cookies to get this meeting started. At the conclusion of the festivities we will decide which is the closest substitute for the base BK Lounge and proceed there post haste.

- George Gennuso
 Vice Kommandant



Dues Delinquents!

All right, time to play hardball! We warn you and warn you, but you just won't listen. Therefore, it is time to exercise one of the *Project Police's* most dreaded weapons—**public humiliation!** Therefore, we present the annual list of slackers in our midst:

To remove your name from the slackers list and re-establish your good credit rating, send your \$20 in to the treasurer (see back page).



Eleventh Annual Scotty Horowitz Going Away Fly-In 18 May 2002 at Rosamond Skypark

Make your plans to attend now! Volunteer your services to help out before the board assigns duties to you!

Last Month's Meeting

EAA Chapter 1000

Scobee Auditorium, Test Pilot School, Edwards AFB
1700, February 19, 2002
Gary Aldrich, Presiding

We got together and schmoozed. After the popcorn and chocolate chip cookies were gone, we moved to the auditorium where assorted members of your board fought to get the projection system working.

We watched the recently resurrected short "Tough Sledding", which was produced with the hesitant cooperation of Norair Corporation. Most of those present were convinced that the guy in the loincloth at the beginning and end of the film attempting to hit the trash-can-lid gong was our own **Vice Kommandant**.

Next was the feature presentation, Jimmy Stewart and June Allyson in *Strategic Air Command*. Those present heckled the thinly contrived plot and gawked at the gratuitous flying scenes. You'd be hard pressed to find better aerial photography of B-36s and B-47s, with an occasional KC-97.

After viewing this cinematic presentation, those present came away with 3 important lessons:

1. When your boss says your flight will have one takeoff and one landing, you may still have the opportunity to log your flight time as 24.0 hours.
2. If you should have a massive engine fire that engulfs your whole left wing, don't despair. After surviving the crash, the Curt Lemay-esque General will personally reward your loss of a huge strategic bomber by making you an aircraft commander on the newest, slickest bomber your country has to offer.
3. If you crash your bomber and survive (see #2) but hurt your throttle/throwing arm in the process, you'd better go see the Flight Doc. Otherwise that arm will eventually end both your flying career and your baseball career.

Following the salvation of Jimmy Stewart at the end of the movie, we repositioned to the local BK Lounge for a continued discussion of the movie just seen.

- **Erbman**
Pseudo-Secretary

Kommandant's Korner

(In a not-too-uncommon mis-management of effort, our illustrious Kommandant spent all of his creative energies writing an excellent recap of recent elective surgery on the Fightin' Skywagon, found later in this newsletter. Had he saved some effort to write his monthly blurb, as required (or at least highly encouraged) by National EAA bylaws, I'm sure he would have mentioned something about how the Treasurer is still awaiting your dues check, encouraged you to show up at the next meeting, asked you to volunteer to help at the fly-in in May, reminded you not to flame out T-38 engines, spend quality time with your family, and don't do nuttin' dumb. Oh, wait...those last three were the Ops Officer's standard briefing each week at TPS back in 1989. Anyway, encourage yourself to do something aviation-wise and pretend that you actually read the Kommandant's dishing out of wisdom in this space.

- *(These comments would have been written by)* **Gary Aldrich**
Kommanding



Young Eagles Update

Even though the wind was on the high side (occasional gusts over 30 knots) and somewhat across the runway for the February 23 Rally at Fox Field, seven volunteer pilots (including two in taildraggers!) braved the elements and added 43 young eagles to our total, 30 of which were Young Marines arranged through **Jim Payne**. Many thanks Jim!!

Pilot	Type	#YE
Herb Carlson	Cessna 172	14
Ed McKinnon	Mooney 231	12
Jack Schweizer	PA-28A	7
Doug Dodson	Mooney M20C	3
Ozzie Levi	Bellanca Cruisair	3
Dave Kerzie	RV-6	2
Dave Evans	PA-28-181	2

Thanks guys!!
Also helping out with the rally were the following ground crew:

Karen Steinaway	Registration
Miles Bowen	Registration
Bob Hoey	Certificate Presentation
John Bush	Certificate Presentation

Thanks to everyone for a successful rally!!

Remaining Rallies for 2002

March 16	Cal City	9:00am
April 20	Fox	8:00am
May 18	Rosamond	8:00am
June 8	Bishop	Time TBD
July 4	Tehachapi	8:00am
August 10	Fox	8:00am
September 21	Fox	8:00am
October 19	Tehachapi	9:00am
November 16	Fox	9:00am
December 14	Cal City	9:00am

- Miles Bowen

EAA Chapter 49/1000 Young Eagles Coordinator
 av_young eagles@yahoo.com
 (661)822-0806 (home)
 (661)275-6528 (work)

Fightin' Skywagon Undergoes Elective Surgery

During its most recent Annual Inspection (Condition Inspection for you homebuilders) the **VC-180 Fightin' Skywagon's** crack maintenance team (**Dave Lazerson, Russ Erb, Bill Irvine**, and your's truly) discovered that the tension on the beast's rudder cables was on the low side of the tolerance (75 ±10 lbs). Dutifully thumbing through the service manual for the adjustment procedure we identified the location of the turnbuckles...they were located at the top of the fuselage, just forward of the leading edge of the horizontal stabilizer. A quick survey of the aft fuselage revealed that reaching them through the tail would not only be cramped and unpleasant, but potentially dangerous for anyone of normal adult stature and mobility. Besides not having any floor, the tail cone was laced with various pulleys, cables, wires, and autopilot servo-actuators...reminiscent of the type of labyrinth that Indiana Jones would be crawling down. Not knowing of any dwarf/gymnast/yoga-master A&Ps, we ruled this access option out.

Option two for access to the safety-wired connections was a 4 inch access hole placed on the fuselage bottom, about 8 inches forward of the target. Since none of us have "girly-man" arms (well, except for Russ, maybe...) (*Hey!...*), using this route would require the "victim" to insert one arm, up to the shoulder, into the hole and un-safety-wire, adjust, and re-safety both turnbuckles in the blind, accompanied by the encouragement and rudimentary coaching of the rest of us peering down the fuselage from the baggage compartment. Needless to say, this option was

also discarded; though the humorous possibilities and colorful language opportunities were truly tempting.

What remained was the dread of parents and airplane owners everywhere...putting your baby "under the knife". While this sounds like a drastic act for a simple maintenance procedure, Cessna came to this same conclusion themselves. Beginning with the 1978 Cessna 180K model (one year after the birth of this Fightin' Skywagon), after 5,899 180s had flown away from Wichita; the factory began installing access panels in the upper area of the aft fuselage on either side of the dorsal fin. These roughly rectangular 4"x 6", or so, holes were placed directly adjacent to the aforementioned cable adjustments, and I'm sure the owners of the 294 remaining Skywagons greatly appreciated their convenience.

I had developed "access-panel-envy" after learning of this "factory mod" at the excellent **Cessna 180/185 Systems and Procedures Course** that the **Cessna Pilots Association** periodically presents. I had gone so far as to order the doublers and cover plates, which had been sitting in the hangar for over a year. What I didn't have was the courage to take a hole saw to the tail of my airplane. Faced with a seemingly square corner...ignore the loose cables or cut metal...and noting the gleam in the eye of **Bill "I never saw a rivet I couldn't drill out" Irvine**, we made the tough decision to proceed with the surgical procedure.

On a recent pleasant Friday afternoon, the Skywagon was parked with its tail snuggled up to Bill's loose collection of 310-o'saurus parts. She was trembling slightly in the breeze (or was that me) as Bill approached with his tin snips and a hole saw chucked in his drill.

<DIGRESSION>Of course, you're probably saying, "Hey, is this legal?" Well, I had the same question and had been asking various A&Ps, IAs, and other 180 owners their opinion. The variety of answers I got was really quite interesting. You see, Cessna did not look backward when they started putting in the panels and issue them as a Service Kit that was applicable to earlier airplanes. Nor had anyone done the expensive homework necessary to create a Supplemental Type Certificate (STC) for the mod. The opinions I got on the legal basis for doing this to N61691 ranged from "ahh, just do it and swear they were there when you bought it" to "oh boy, you're talking DERs and engineering analyses and permission from God!" Quite a few felt that there was some obscure paragraph in 14 CFR Part 43 that allowed it...even though they couldn't quite identify it. And many knew someone who'd done it but didn't know what, if any, paperwork had covered it.

So, deciding on a frontal assault, I asked Bill to ask **Gary Barnard** of the Van Nuys FSDO for his opinion. Bill has been schmoozing Gary for some time in preparation for what is likely to be the "Mother of all Field Approvals" when the 310 is complete. Gary, in a manner uncharacteristic of the Federal bureaucracy, said, "No problem, I'll approve it if a Cessna engineer signs a letter saying it's OK."

Easier said than done, said I, noting that given Cessna's recent record-breaking liability lawsuit they'd probably be unwilling to sign a letter that said the sun comes up in the East. Well, surprise again, as the Cessna Service Engineer I contacted not only knew about

THE LEADING EDGE

Skywagon access panels, but had a letter already drafted on his computer that he would send me if only I would give him my credit card number. After authorizing a \$72 charge, the letter was on my fax machine the same day! Bill attached it to a Form 337, along with the Cessna Parts Manual pages that showed the installation in the later model airplanes. After only minor changes, Mr. Barnard affixed his official stamp of approval.</DIGRESSION>

Back to the warm Friday afternoon...Since the manual's line drawing of the late-model fuselage skin with the access hole was somewhat lacking in clarity I had secured a digital picture of someone's installation. That and the pilot-drilled holes in the doubler plate gave us a rough idea of where to start cutting the hole. As the saw began gnawing into the robust skin of the tail I had visions of terrible things happening...rampant corrosion unveiled, undocumented fuel lines torn asunder, or just a Simpsons-esque spectacular explosion. Alas, we discovered, just like Geraldo Rivera, that there was nothing to fear inside. As the pictures show, we picked the right place to drill/cut and under Bill's skilled hands the hole was gradually enlarged to the proper dimensions and the doubler was fitted. Then, using an array of tools that would make Tim Taylor salivate, the rivet holes were located and back-drilled just before the sunset.

Saturday afternoon, the infamous desert winds picked up to over 40 knots. The Skywagon's trembling turned into significant shaking. I tied a wing to the trailer hitch of the Accord/tiedown anchor just to give Bill a steady enough platform to keep him from turning the other side of the tail into Swiss cheese. Despite the howling sandstorm we were able to complete the second installation, using the first as a guide. The final challenge was the requirement to fabricate tapered shims from .032 stock to fill the gaps caused by wedging the doublers under existing fuselage stringers. Bill had to buy a new tool for that one (DAMN the luck!).



Doctor, prepare the patient for initial incision

Well, the pictures tell the rest of the story. The Fightin' Skywagon is sporting enhanced tail access (don't go there...) Oh yeah, in addition to the low rudder cable tension, I discovered bushings in bellcranks and springs on the tailwheel cables that were worn beyond limits with no evidence of service since 1977. The new springs were at least an inch shorter after installation than the original springs.

Eventually, the original objective turnbuckles were adjusted and the Fightin' Skywagon was returned to service, sporting new access panels to the envy of other Skywagons everywhere.

- Gary Aldrich



Dr. Irvine opens the patient as concerned guardian Aldrich looks on



Opening up the hole to match the provided doubler





Completed access hole on left (port) side



Dr. Irvine works behind the screen while Guardian Aldrich keeps a watch out for rogue FAA Safety Inspectors

(Photos by Donna Drucker)

Gee, The Newsletter Seems A Little Light Again...

Yea, quicherwhinin'. This newsletter is being produced smack in the middle of relocation of the Offices of the EAA Chapter 1000 Newsletter Production Staff and **Project Police Propaganda Production Platoon**, not to mention all of the accumulated stuff in the NLE's house. I'll spare you the story here of how closing is over 2 weeks behind the contract date and still not completely done at press time. **Vice Kommandant Gennuso** has promised a project tour this summer so all of you can come over and check out the Bearhawk progress and the new production facilities.

Check the return address on this newsletter for the new address. Your NLE is moving to Rosamond in preparation for his impending retirement from Uncle Sam's Air Farce sometime near the end of next year.

Chapter 1000 Members Successfully Wade Into The Political Realm

Those of you who have been following the elections in Rosamond will already know that two of Chapter 1000's finest, **Jim Payne** and **Olaf Landsgaard**, have been elected to the Southern Kern Unified School District school board. Those of you who don't follow elections in Rosamond now also know. The influence of the **Project Police** continues to grow, now even to tomorrow's **PPOs**.

Save Your Chapter Some Money!

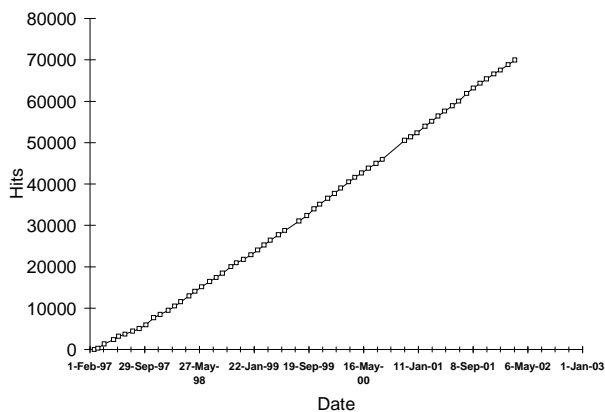
If you've been successfully receiving your newsletters by e-mail in the convenient PDF format, why not save your chapter the printing and mailing costs of the paper copy by notifying the newsletter editor to put you on the e-mail only list? You can write to the new address shown on this newsletter or e-mail to erbman@pobox.com. If you'd rather call, then call one of the other officers and they'll get the word to me, since I can't tell you yet what my phone number will be by the time you read this.

No, it won't change the amount of your dues (you have paid this year, haven't you?!), but it will allow your chapter to make better use of that money. Also, it will help prevent increases in dues in the future.

Web Site Update

As of 10 Mar 02, the hit counter stood at **69922**, giving a hit rate of 38 hits/day for the last month.

We haven't had a plot of the hit rate lately, plus I've got some extra white space to fill yet, so here's a plot of the hit rate with time:



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

Mar 16: Young Eagles Rally, 9:00 a.m. California City Airport, California City CA (661) 822-0806

Mar 19: EAA Chapter 1000 Monthly Meeting, 5:00 p.m., Milestones of Flight Museum. General William J. Fox Field, Lancaster, CA. (661) 609-0942

Apr 3: EAA Chapter 49 Monthly Meeting, 7:30 p.m., General William J. Fox Field, Lancaster, CA. (661) 948-0646

Apr 9: EAA Chapter 1000 Board of Directors Meeting, 5:00 p.m., Edwards AFB. Test Pilot School, MOL Room (661) 609-0942

Apr 7-13: Sun 'n Fun Fly-In, Lakeland FL

Apr 16: EAA Chapter 1000 Monthly Meeting, 5:00 p.m., Edwards AFB. USAF Test Pilot School, Scobee Auditorium. (661) 609-0942

Apr 20: Young Eagles Rally, 8:00 a.m. General William J. Fox Field, Lancaster, CA (661) 822-0806

May 1: EAA Chapter 49 Monthly Meeting, 7:30 p.m., General William J. Fox Field, Lancaster, CA. (661) 948-0646

May 14: EAA Chapter 1000 Board of Directors Meeting, 5:00 p.m., Edwards AFB. Test Pilot School, MOL Room (661) 609-0942

May 18: **Eleventh Annual Scotty Horowitz Going Away Fly-In**, Rosamond Skypark (L00), Rosamond CA. (661) 258-6335

May 18: Young Eagles Rally, 8:00 a.m. Rosamond Skypark (L00), Rosamond CA. (661) 822-0806

Jun 5: EAA Chapter 49 Monthly Meeting, 7:30 p.m., General William J. Fox Field, Lancaster, CA. (661) 948-0646

Jun 8: Young Eagles Rally. Bishop CA. (661) 822-0806

Jun 11: EAA Chapter 1000 Board of Directors Meeting, 5:00 p.m., Edwards AFB. Test Pilot School, MOL Room (661) 609-0942

Jun 18: 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 George Gennuso: pulsar1@qnet.com

Secretary (volunteer for this job!)

Treasurer Doug Dodson: dodsond@qnet.com

Technical Counselors: Gary Sobek gasobek@pacbell.net, Ron Wilcox rwilcox@qnet.com, Roland Harris 805-828-0857

EAA Chapter 1000 Technical Assistants

<i>Composite Construction</i>		
Doug Dodson	dodsond@qnet.com	256-7276
George Gennuso	pulsar1@qnet.com	265-0333
Brian Martinez	brianmartinez@cs.com	943-5379
Bob Waldmiller	waldmilr@qnet.com	256-0932
<i>Wood Construction</i>		
Bob Waldmiller	waldmilr@qnet.com	256-0932
<i>Aluminum Sheet Metal Construction</i>		
Miles Bowen	mbowen93561@yahoo.com	822-0806
Russ Erb	erbman@pobox.com	258-6335
<i>Welding/Welded Steel Tube Construction</i>		
Russ Erb	erbman@pobox.com	258-6335
<i>Engine Installation</i>		
Bob Waldmiller	waldmilr@qnet.com	256-0932
Doug Dodson	dodsond@qnet.com	256-7276
<i>Electrical Systems</i>		
Miles Bowen	mbowen93561@yahoo.com	822-0806
<i>Instrumentation and avionics requirements for VFR/IFR</i>		
Gary Aldrich	gary_aldrich@pobox.com	609-0942

Inputs for the newsletter or any comments can be sent to Russ Erb, 661-258-6335, 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 CORRECTION REQUESTED

**THIS MONTH'S HIGHLIGHTS:
MEETING 19 MAR AT MILESTONES
OF FLIGHT MUSEUM
SKYWAGON ELECTIVE SURGERY
DUES DELINQUENT LIST! ☹**



The Leader In Recreational Aviation

NOTE CHANGE