



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>

January 2001

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:



This 10 X 20 foot mural titled "The Golden Age of Flight Test" by aviation artist Mike Machat hangs inside the new museum.

Air Force Flight Test Center Museum

– Keepers of the "Right Stuff"

Tuesday, 16 January 2001

1700 hrs (5:00 PM Civilian Time)

(Don't be late—no schmooze time—tour starts at 1700)

At the Museum—Edwards AFB

(See map next page)

Happy New Year everyone. Hope you all had a festive holiday, I know we did. This month's program is one I know you're all going to enjoy. (*We will all pay our dues (\$20), and then...*) We will be fortunate enough to get a special tour of the **Air Force Flight Test Center Museum**. I got a glimpse of some of the stuff in the museum when I was there talking them into...ah, asking them if we could come by for a visit. **Awesome stuff!** **Doug Nelson**, the director of the Air Force Flight Test Center Museum, has generously offered to keep the Museum open after hours to give the Chapter 1000 **Project Police** and other various propeller heads a personal tour.

As I said, Doug is the Director of the AFFTC Museum and personally helped put together this museum and also the Blackbird Airpark at Air Force Plant 42 in Palmdale. The following is a little bit about the AFFTC Museum here at Edwards.

Edwards AFB is indeed the Birthplace of Supersonic Flight, for it was here (then Muroc Air Force Base) in October 1947 that Captain Charles E. "Chuck" Yeager blasted through the sound barrier in the Bell X-1 and

Hey You! Pay Up!



Yep, that's right! It's that time of year when the holiday leftovers are just about gone, Forms W-2 are in the mail, and **YOUR EAA CHAPTER 1000 DUES ARE DUE!** So pay up! That's \$20 per year for those of you who have forgotten.

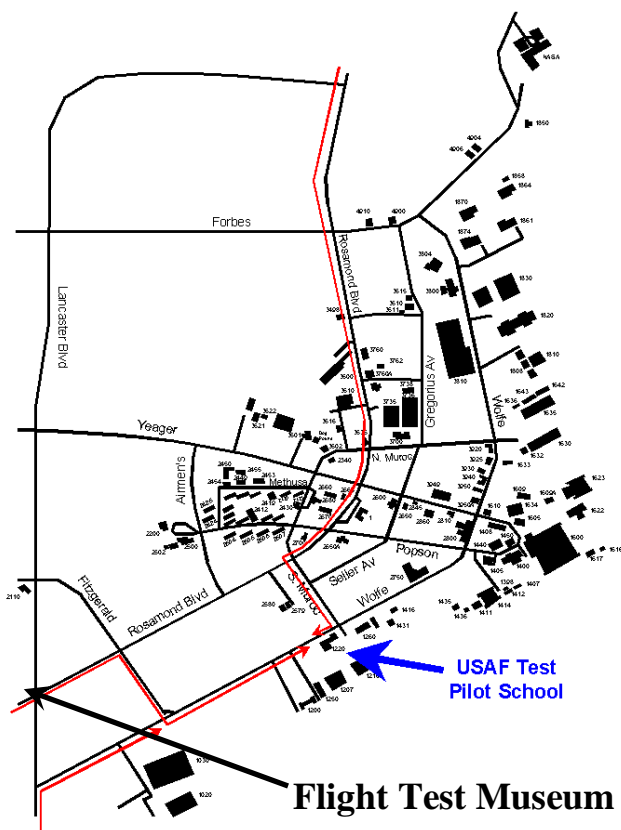
The Treasurer will be happy to take your check at the next meeting, or you can hand it to any chapter officer and we'll get it to the Treasurer. We all took an oath on Pope Paul's book saying we would turn in dues checks without skimming off the top.

If that doesn't work, you can snail-mail a check to **EAA Chapter 1000, Doug Dodson, 4431 Knox Ave, Rosamond CA 93560-6428**. Sorry, we're not sophisticated enough to accept credit cards or online payment.

Some **PPOs** have previously paid in advance. In case you've forgotten, those currently paid up and holding the coveted position of **Heroes of the Project Police, First Class** are **Norm Devereux, Mike Melville, Mauro Mezzacappa, Al Norman, and Murry Rozansky**. If your name isn't listed here, pay up soon or risk the shame and embarrassment of having your name listed here in the March newsletter as a **Dues Delinquent!**

ushered in the supersonic age. Yeager was soon followed by other courageous men who would dare to fly into unexplored regions in that laboratory in the sky above the high desert. There, for the first time, they would pilot their craft past Mach 2, 3, 4, 5, and 6, and up above 100, 200, 300 thousand feet—and into near space. For over five decades, Edwards has been the world's premier flight testing and flight research center. Much of this exciting history is now preserved and displayed in the Air Force Flight Test Center (AFFTC) Museum.

The original museum opened in 1994 and hosted over 65,000 visitors before moving to a new facility in July 2000. The new 12,000 sq. ft museum houses exhibits covering such diverse subjects as the formation of the ancient lakebeds, early homesteading, the first military



uses of Edwards, flight testing during WWII, aviation records set at Edwards, testing the X-15, and the story of Glen Edwards, for whom the base was named. Other exhibits include aircraft hardware, personal memorabilia, aviation fine art and photography, and models. A museum centerpiece is the historical mural "Golden Age of Flight Test," a 10 foot by 20 foot painting by noted aviation artist **Mike Machat** (one of Chapter 1000's finest I might add). (Note: More through luck than good planning, Mike Machat will be doing some touch-up work on the mural that day and will be in attendance at our meeting to speak to us first hand about his masterpiece)

Aircraft on display inside the museum building include the F-16B, an NA-37B, an AQM-34 Firebee drone, the X-25B concept demonstrator, and a full-scale replica of the Bell X-1. Propulsion exhibits include the YJ93 which powered the massive XB-70, and rocket engines used on the X-1, D-558-II, X-15, and the NF-104. Museum visitors can learn about the past, present, and future of flight testing in the museum's theater, and souvenirs can be purchased in the small but well-stocked gift shop.

Currently, 13 of the museum's aircraft are displayed outdoors in the museum's airpark. They include the B-52D, F-84F, F-101B, F-104A, F-105D, F-111A, NF-4C, T-28B, T-33, T-39, UC-45, YA-7D, and Gloster Meteor. (Come early to see those, as it gets rather dark after sunset) Another five are mounted on pedestals around the base, including the F-104, NF-104, P-59, T-33, and T-38.

Eventually, museum visitors will view a number of other rare aircraft on display. These include the first T-46; prototypes of the A-7F, A-9, A-10B, F-4E, and F-94; one of only two PA-48 Enforcers; the first production C-141; and a number of other one-of-a-kind aircraft.

So, as you can see a fun and informative time is to be had by all. Come on out and take note, we will meet at the Museum at 5:00 p.m., **No Schmoozing at the TPS**, and begin the tour. After the tour we will head over to the BK lounge and do some paper napkin designing and aerodynamic pontificating...you know, the usual stuff. Look forward to seeing you there.

- **George Gennuso**
Vice Kommandant

Last Month's Meeting

EAA Chapter 1000

Golden Cantina, Rosamond CA

1800, December 19, 2000

Gary Aldrich, Presiding

Schmoozing, Visitors, Announcements, Old Business, New Business

We didn't do any of that stuff, as this was a social gathering with the express objective of consuming large quantities of food and convivializing.

We did break with that rule briefly as the Kommandant handed out certificates and pins of appreciation to the chapter officers and those who have served the chapter over the past year.

A correction to the November minutes: It was **Mike Machat's** uncle, not father, who worked as a designer at Republic Aircraft. He did a lot of work in the human factors area, working with the well known **Alexander Kartveli**. Everything else was reasonably accurate.

- **Erbman**
Psuedo-Secretary

Kommandant's Korner

Happy Millenium!! (Won't you be glad when 2002 does away with that expression?) I trust everyone had a fine Holiday break and received all their wished-for toys, tools, etc from the appropriate giver of gifts. The Skywagon sat relatively idle while we flew the large (United) aluminum sausage back to the place where you have to shovel the precipitation. Yup, we were sitting on New Years Eve Day reservations out of Newark when the "worst storm in 5 years" dumped 18 inches of the (heavy) white stuff all over the runways and roads. Not to fear though...the airline simply cancelled our return flight (as they had the outbound one weeks earlier). The good news was that the airport opened late the evening before and just three seats remained on the first plane out...necessitating an O-dark-hundred drive over some very slick and slippery roads to earn the privilege of standing in line for 2 hours to check our bags. Oh, how I yearned for the first class accommodations of the Cessna 180! Ultimately we staggered off the plane into 65 degree sunshine and commenced thawing our chilled bodies.

Enough of my adventures, I'm looking forward to a final year as your President. My platform for the

remainder of my term remains much the same...get more of the membership involved in the monthly gatherings and continue to encourage sport aviation activities in our sphere of influence. Once more, I'd encourage your criticism...constructive or otherwise. The board has a couple of new faces and I'm hoping that will stimulate some suggestions for activities and renewed chapter spirit.

Last year brought our second "first flight" and I hope this pace is an indicator of more projects turning into airplanes in the coming months. We also tried a "social-only" gathering for our December meeting which was well attended and brought some of our family members into our activity schedule. Please pass your feedback to me or any Chapter officer and let us know if we should continue with this type of activity.

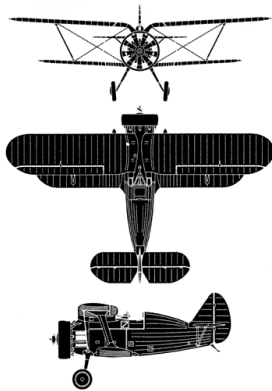
Here's hoping you have a prosperous and enjoyable 2001 "odyssey"!

Fly Safe, Check Six, and see you at the gathering!

- Gary Aldrich
Kommanding

Project Police Aircraft Spotters Quiz

Boy, you guys just aren't trying. Even the vaunted **Jim Piavis**, the only **PPO** to successfully identify previous quiz aircraft, didn't bother to hazard a guess on this one. So we're going to try it again, but here's a clue: It's a Russian design. Note the distinctive gull wing in the upper wing. Send your guesses to the newsletter editor at erbman@compuserve.com or by any other usual means.



Mike Machat Web Site Coming!

Secret intelligence gained at the ribbon cutting for the newly renovated Boyd Hall (TPS building) has revealed that soon **Mike Machat** will be launching a web site for all of his outstanding aviation artwork. Launch date is expected sometime next month (February 2001). Watch for a prominent link from the Chapter 1000 Web Site.

Carbon Fiber Construction

(The following is an e-mail received at PPHQ...)

I read your info on the web site pertaining 1st, 2nd, 3rd and 4th generation composite aircraft. (<http://www.eaa1000.av.org/technicl/composit/composit.htm>) Interesting.

I am familiar with fiberglass construction and it's methods, however I am looking for a resource book as to carbon fiber construction methods, such as the type used in Indy car and Formula 1 car construction. I know it's not done with black magic, But it is done through a certain type of manufacturing process.

I am a qualified metal fabricator (building monocoque car chassis) and have built some riveted aluminum car chassis as well as wings used in auto racing. But I would like to expand on that as far as utilizing carbon fiber.

Do you know of any video which I can purchase which would be helpful?

Thanx for your time.

- Cal Wendlandt

I suggest that you get a copy of "FIBERGLASS & COMPOSITE MATERIALS" by Forbes Aird. Also recommended is "COMPOSITE BASICS" by Andrew Marshall. Aircraft Spruce and Specialty Co and Fiberglast have some very good Internet catalogs; and both offer great training videos. If you don't have the time to just screw around and learn it yourself, then there is an outfit up in Reno, Nevada that has some very in-depth composite training from fiberglass through carbon pre-preg...vacuum bagging and autoclave. It is a little pricy, but you will come away trained.

Carbon is cool stuff. It is, however, not perfect for every application. If you create a part and find it is so light that you end up having to add extra weight to it for balance purposes, you probably could have done it in glass...for a lot less. If you decide to start sanding carbon, be advised that you had better put a suit on with full goggles and respirator. Unlike glass, once carbon fiber gets imbedded it doesn't want to come out and it likes to fester. This is also something else to consider as a crashworthiness issue when you decide to put vast amounts of it around people.

Carbon also doesn't like tap testing with a quarter...for highly stressed parts the tap test practice can be the start of tiny micro-cracks leading to delams and failure.

- Brian M. Martinez

Web Site Update

As of 6 January 2001, the hit counter stood at **52379**, for a hit rate of 35 hits/day for the last month. Our web site is hosted by Qnet (<http://www.qnet.com>).

Chapter 1000 Calendar

Jan 16: EAA Chapter 1000 Monthly Meeting, 5:00 p.m., Edwards AFB. AFFTC Flight Test Museum. (661) 609-0942

Jan 20: EAA Chapter 49 Awards Banquet. (661) 949-7214

Feb 7: No EAA Chapter 49 Meeting

Feb 13: EAA Chapter 1000 Board of Directors Meeting, 5:00 p.m., Edwards AFB. Test Pilot School, MOL Room (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

Feb ??: Operation Rubidoux Sundown IX, Flabob International Airport. (661) 258-6335

Mar 7: EAA Chapter 49 Monthly Meeting, 7:30 p.m., Sunnydale School. 1233 W. Ave. J-8, Lancaster, CA. (661) 949-7214

Mar 13: EAA Chapter 1000 Board of Directors Meeting, 5:00 p.m., Edwards AFB. Test Pilot School, MOL Room (661) 609-0942

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

Apr 4: EAA Chapter 49 Monthly Meeting, 7:30 p.m., Sunnydale School. 1233 W. Ave. J-8, Lancaster, CA. (661) 949-7214

Apr 10: EAA Chapter 1000 Board of Directors Meeting, 5:00 p.m., Edwards AFB. Test Pilot School, MOL Room (661) 609-0942

Apr 8-14: Sun 'N' Fun EAA Fly-In, Lakeland FL.

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

For Sale:

Sonerai IIL project. Fuselage and wings 95% complete. Modified for A65 engine. Engine torn down for overhaul but complete with a great many spare engine parts. Includes instruments. Hydraulic brakes. All excellent work. Call Fletch Burns 760-373-3779

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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Vice President George Gennuso: pulsar1@qnet.com

Secretary (volunteer for this job!)

Treasurer Doug Dodson: 73773.1546@compuserve.com

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Inputs for the newsletter or any comments can be sent to Russ Erb, 661-258-6335, by e-mail to erbman@compuserve.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 CORRECTION REQUESTED

THIS MONTH'S HIGHLIGHTS:

MEETING 16 JAN AT FLIGHT TEST MUSEUM

DUES ARE DUE! PAY UP! \$20

SECOND CHANCE AT AIRCRAFT QUIZ

DISCUSSION OF CARBON FIBER

