



THE GRAPEVINE



EAA CHAPTER 663 Livermore, California Vol. XXVII, No. 3, March, 2008

There is a very fine line between "hobby" and "mental illness."

OFFICERS

PRESIDENT	RALPH CLOUD	449-1048
VICE PRES	DON SMITH	785-5824
TREASURER	MARK PALAJAC	454-0627
SECRETARY	BRUCE CRUIKSHANK	510-416-0889
PROGRAM CO-ORD	DON SMITH	785-5824
TECH COUNSELOR	GORDON JONES	447-1549
TECH COUNSELOR	BOB SINCLAIR	935-7465
NEWS LETTER	JOHN MEYER	455-1631
FLIGHT ADVISOR	BARRY WEBER	454-0627
FLIGHT ADVISOR	BOB FARNAM	449-1513
YOUNG EAGLES	ERIC HELMS	373-0137
LIBRARIAN	ALAN THAYER	582-7274
WEB EDITOR	BRAD OLSON	866-9289

BOARD OF DIRECTORS

SCOTT ALAIR	416-0889
HARRY CROSBY	485-9358
DAVE DENT	447-8055
BOB FARNAM	449-1513
DICK JENNINGS	862-2345
BOB COWAN	373 0555

MEETING AND PROGRAM

Our March meeting will take place at 7:30 P.M. on the 6th of March in the Terminal Building at the Livermore Airport. The program will be a presentation by Gordy Jones on airplane construction details (instrument choices)

MINUTES: GENERAL MEETING, EAA CHAPTER 663, 2/7/2008, 7:30 PM, LVK TERMINAL BUILDING LVK

Chapter president Ralph Cloud called the meeting to order.

Four guests were introduced, Dave and Trina Anderson's aunt and uncle, Rob Pearson (RV-7 builder from Fremont) and friend Walt.

The minutes of the January meetings were approved as printed in "The Grapevine".

Treasurer Mark Palajac reported \$4,769 in chapter funds.

Business: The annual chapter dinner was reviewed. All had a good time. There were great pictures of the Grand Canyon and tales of flying and airplanes.

The money donated by Jean Bunce honoring her husband Bill will go towards a plaque which will have space for individual name plates of chapter members that have passed to the great blue beyond.

Brad Olsen gave an update on his tweaking of the chapter web site.

Ralph reminded those who haven't to renew their chapter membership. For \$30 you get access to all features of the chapter website, chapter tools, and much more. Cough up.

Announcements: Next board meeting will be Thursday 2/21/08 at Ralph's place. Next meeting will be 3/6/08.

Members Forum: Don Smith asked for a show of hands to show preference for possible future programs.

Break and then Program: Flight advisor Bob Farnam, with an assist from Barry Weber, gave a presentation on flight testing your homebuilt .

Meeting adjourned for pie.

(Thank you, Scott Alair and Ralph Cloud, who supplied notes for the above as your secretary was not present.)

MINUTES: BOARD OF DIRECTORS MEETING, 2/21/08, 7:40 PM RALPH'S PLACE

Ralph called the meeting to order. Ralph Cloud, Dick Jennings, John Meyer, Mark Palajac, Bob Cowan, Bruce Cruikshank were present. Don Smith arrived just a bit later.

Mark reported \$5,395.67 in chapter funds. There was some discussion of getting more members to receive their newsletter on line to save the chapter money.

Business: Harry Crosby has confirmed aviation columnist Lauren Paine Jr. for speaker for the 2009 annual dinner. There was brief talk of where to have the dinner; the place we used seems to be the best option.

Trailer talk: Someone lifted the license plate off the chapter trailer and put in on another trailer. Go figure. The plan is to build a custom trailer. Eric Helms has offered to weld it up. All we need is drawings and materials. . . .

The chapter web site is constantly improving. (Take a look. Send pictures of your project to Brad at n1tm@pacbell.net).

Eric Helms has set tentative dates for this year's Young Eagles Rallies. They are the last Saturday of each month from April through October.

Don Smith has talked Technical Counselor Gordy Jones to give a presentation on airplane construction details (instrument choices) for our March program. Don has contacted Allan Brown, aerodynamicist and one of the designers of the F-117, for a future program.

John Meyer mentioned that Scott Alair has promoting Mar 15 as a fly out date to Furnace Creek, Death Valley (see website). The fly out for April is a BIG MYSTERY. (See page 5. Ye ed.)

Meeting adjourned for pie.

Respectfully submitted, Bruce Cruikshank,
Secretary

TALES FROM THE REALLY OLD DAYS

By Bob Hartunian

I'm recently retired from Boeing, Huntington Beach, and saw this photo of the early B & W bi-plane which reminded me of a true story you

In 1976 or so, I worked at Douglas Aircraft Co in Long Beach as an engineer in a Mfg. R&D dept. One day an hourly employee was assigned to the dept. for a few months prior to his retirement as he was turning 65 soon. (Unfortunately, I can't recall his name now). We got to be friends and he asked me if I'd be interested in seeing old airplane photos he had taken during his career.

The next day, he came into work with a shoebox full of black and white pictures. He reached into the box and started pulling each one out and commenting on where and when they were taken. One photo was of a farm field and a barn building with a hitching post for horses outside. He told me this was the original Curtis or Chance factory in Downey, California, where he was a wood worker making aircraft structure around 1928.

Photos he had taken inside the factory showed men dressed in vests and caps and women in long skirts, stretching sheets of fabric for application to exterior plane surfaces. They would ride horses to work and race them at lunchtime. This barn building became North American Aviation where the Apollo was made.

Then he reached into the shoebox, took out a photo and looked at it sadly. Tears almost came to his eyes and he showed me the picture. There were three people in the photo taken on a beach with water behind them and moored in the water a few feet away was a biplane on floats. There was a small boy around 7 years old and on one side was a man with his arm around the boy's shoulders, and on the other side was a taller man dressed in a long coat with a leather helmet and goggles on his forehead.

He told me that his family lived in Seattle around 1917 and he was the boy in the picture. The man with his arm on the shoulder was his Dad who had since passed away, hence his sadness. Then he asked me whether I recognized the man with the long coat, which I didn't. "Oh that's my Uncle Bill, you know, Bill Boeing, and he had just that day given me a ride in his first airplane". It turned out that Bill Boeing was a close family friend, played cards with his Dad and my friend was probably the first boy to ever ride in a Boeing plane, piloted by Boeing himself. I'm sure the plane was the B & W.

I never saw the photo again and will try to recall my friend's name but sometimes in life, you come across such interesting history by the odd chance.

The B & W was the first Boeing product, named after the initials of its designers, William Boeing and Navy Lt. Conrad Westervelt.

The first B & W, completed in June 1916, was made of wood, linen and wire. Similar to the Martin trainer that Boeing owned, the B & W had, among other improvements, better pontoons and a more powerful engine.

The two B & Ws were offered to the U.S. Navy. When the Navy did not buy them, they were

sold to the New Zealand Flying School and became the company's first international sale. The B & Ws later were used for New Zealand express and airmail deliveries, set a New Zealand altitude record of 6,500 feet on June 25, 1919, and made that country's first official airmail flight on Dec. 16, 1919.



THE B & W PLANE

PROPELLER DRIVE SYSTEMS AND TORSIONAL VIBRATION

By Donald P. Hessenaur

Don brings his unique experience in testing of aircraft to these pages. A graduate of Northrup University and life long interest in new aeronautical concepts, his concerns for safety and progress of auto engine conversions prompted this article. For the rest of the story, see <http://www.prime-mover.org/Engines/Torsional/contact1/contact1.html> .

As aircraft engine prices continue to rise beyond the reach of most who would like to build and fly their own aircraft, many are turning to alternate power sources. This is not a new phenomena. From the Wright brothers on, many have designed, built or converted engines to aircraft use. At one time or another engines have been

used from automobiles, motorcycles, outboard motors and even snowmobiles, with varying degrees of success or failure.

AUTO ENGINE CONVERSIONS

Today many automotive engine conversions are appearing on the aviation scene. They are definitely a viable alternative. The automotive engine today is very advanced technically and relatively low in cost when compared to Lycomings and/or Continentals. Unfortunately, automotive engines are designed and optimized for the automobile and not for aircraft. Generally auto engines operate at a much higher RPM. The torsional vibration characteristics of a given engine, connected to a transmission, drive train and wheels, are quite different from that of the same engine, connected to an aircraft propeller. The damping action of the tires on the road and the inertia effects of the mass of the automobile are not even close to the damping/inertia effects of a propeller turning in air.

TORSIONAL RESONANCE

In recent years, I have developed a concern that many of the individuals and/or companies involved in the development of auto conversions do not seem to have an understanding of the problem of torsional vibration. I'm not saying that this is true in every case. Some appear to have a profound knowledge of torsional vibration but others seem to dismiss it as a minor problem. They feel all they need to do is just stick in a rubber damper, freewheel clutch or some other quick fix and maybe the problem will go away. My experience has been that torsional vibration just doesn't go away. It can be the life or death of an entire project, not only technically, but it can also lead to a financial black hole for the individuals or company involved! The potential for success in such a project would be much higher if the individuals involved knew what they were dealing with and would use valid air-

craft engineering procedures during the design and development of an engine. Creativity and experimentation should be encouraged but one must also realize that 9 times out of 10, what was thought to be a new and original solution to a problem has probably been tried by a number of people in the past. The same laws of physics, dealing with torsional vibration, are still in effect today, as they were 20 to 50 years ago. I would be the first to admit. I do not have all the knowledge on vibration in rotating systems. Nevertheless, I have had some unique experiences with torsionals and other associated vibration problems. It is my hope that by relating them, someone will be saved from some grief. The March Chapter fly out will be to the Furnace Creek airport (L06) in Death Valley on Sunday, March 16th. We will meet on the ramp, -210 ft. below sea level at 10:30 am for a 3 mile van ride to the Furnace Creek Inn for a Sunday Brunch that cost \$25.00 per person. I have been told the food and the Inn are excellent! They require reservations for Brunch, so phone me at 925-321-1723 so I can have an accurate head count. Some of us will be spending the night at the (furnacecreekresort.com) at \$350.00 per night or at the Furnace Creek Ranch for \$200.00 per night. Those of us who have to be at work on Monday will fly home Sunday afternoon. If you are staying the night call 800-236-7916 to make your reservations. The Furnace Creek airport is 248 nautical mi. from LVK or about 1.5 hrs RV time. The average high temp for March is 80 deg. and I am hopeful we will be able to see the spring flowers.

Life's short, Fly fast.
Scott Alair

PREVIEW OF THE APRIL FLYOUT, HOMEWARD BOUND PHASE! YEEEE, HAW!!!



EAA CHAPTER 663 MEMBERSHIP APPLICATION/RENEWAL FORM

NAME _____ NEW () RENEWAL () DATE _____

ADDRESS _____ CITY _____ STATE _____ ZIP _____

E-MAIL ADDRESS _____ HOME PHONE _____ WORK PHONE _____

FAX# _____ WORK FAX# _____ EAA# _____ RATINGS _____

PROJECT _____ IS IT FLYING? _____ HOURS _____

SKILLS, PROGRAMS, I CAN GIVE, ETC. _____

NEED A NAME TAG YES () NO () NAME TAG INFO _____

HANGAR No. _____ AIRPORT _____ SPOUSE'S NAME _____

Please give or send this completed form with a \$30 check (**No cash**, please) to:
Mark Palajac
25 Jacaranda Drive
Fremont, CA 94539



EAA CHAPTER 663
11700 Tesla Road
Livermore, CA 94550
JMeyerEZ@ewnet.net
eaa663.org