



THE GRAPEVINE



EAA CHAPTER 663 Livermore, California

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

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MEETING AND PROGRAM

Our June meeting will take place at 7:30 P.M. on the 3rd of June in the Terminal Building at the Livermore Airport. The program will be a presentation by personnel from Direct To Avionics, dealer for Chelton Flight Systems.

MINUTES: GENERAL MEETING, EAA CHAPTER 663, MAY 6, '04, 7:32 PM LVK TERMINAL BUILDING.

Prior to the meeting several members took advantage of an opportunity to inspect special guest speaker Peter Garrison's Melmoth 2 parked in front the terminal.

Chapter president Ralph Cloud called the meeting to order.

Several guests introduced themselves.

Ralph congratulated **Scott Alair** on the first flight

of his Lancair Legacy April 3rd. All were pleased with his accomplishment.

The minutes of the April general meeting were approved as printed in "The Grapevine".

Business: The first barbecue of the year is coming up Sunday, May 16th, at 1 PM. The event will be relocated to Brian Motta's hangar. The hangar has the best view of the runways in the north east corner.

Bob Cowan reviewed the last **Young Eagle Rally** where 11 pilots were on hand to fly 10 foreign students! First time in memory there were more pilots than riders. All seemed to enjoy their flights.

Roger Hansen was on hand to help members with any problems they were having with the **web site**.

Bob Farnam has completed and submitted his application for **flight advisor**.

Announcements: The next board meeting will be May 20 at Ralph's place. Airport tenant appreciation barbecue is coming up on May 27 from 11:30 to 1:30 hosted by the airport staff. Golden West Fly-in will be June 18-20.

Break and then Program: Bill Jepson introduced aviation writer, airplane designer, and builder Peter Garrison. Peter gave us a brief history of how he got involved with aviation and his motivation for building Melmoth and Melmoth 2. This led to a wide ranging discussion covering aircraft engineering, flying over oceans, the accomplishments of Burt Rutan and other topics. Thank you Peter for an entertaining evening.

MINUTES: BOARD OF DIRECTORS MEETING. EAA CHAPTER 663, May 20, '04, 7:30 PM, AT RALPH'S PLACE.

Nine persons were present with the initials RC, BC, GJ, JM, SC, JC, EH, BC, and GT.

Treasurer Sharon Constant reported a total of \$2751.12. Her report was unanimously approved.

Business: Sharon led a discussion on selling adds in "The Grapevine". Sizes, prices and likely advertisers were thrown about.

The next chapter barbecue will be June 12 back in the usual location in Bob and Bob's hangar in the northeast corner of the northeast hangars at 4 PM. The July barbecue will be on July 4th again.

Bob Cowan set the next Young Eagle Rallies for June 5 and June 26. Bob and the chapter are looking for another rally coordinator.

It was unanimously decided to send Bob Farnam's application for Flight Advisor on to the EAA.

The program for the June 3rd general meeting will apparently be Direct To Avionics, dealer for Chelton Flight Systems.

Respectfully submitted,
Bruce Cruikshank Secretary

GOOD STUFF FOR SALE!!!

Garmin 295 Color GPS receiver, last updated in August, 2003. Comes with all accessories. To see what a great unit this is, go to the Garmin web site <www.garmin.com/products/gpsmap295/> or just call **Jim Patillo** on his cell phone at (510) 468-4891 He's asking \$899

COCKPIT ETIQUETTE AND OTHER STUFF

From Leland Collins

The only three things a wing man should ever say are:

1. Two's up.
2. Lead, you're on fire.
3. I'll take the fat chick.

...and in a multi-place aircraft, there are only three things the copilot should ever say:

1. Nice landing, Sir.
2. I'll buy the first round.
3. I'll take the fat chick.

As a new copilot on American Airlines, I was told to say these three things, and otherwise keep my mouth shut and not touch anything:

1. Clear on the right.
2. Outer (marker) on the double (indicator)
3. I'll eat the chicken. (Crew meals consisted of one steak and one chicken to avoid possible food poisoning of both members of the cockpit crew).

About Pilots

1. As an aviator in flight you can do anything you want--as long as it's right. And the FAA'll let you know if it's right *after* you get down.

2. You can't fly forever without dying.

3. As a pilot, only two bad things can happen to you and one of them will be:

a. One day you will walk out to the aircraft *knowing* that it is the last time you will fly an airplane

b. One day you will walk out to the airplane *not knowing* that it is the last time you will ever fly an airplane.

4. Any flight over water in a single engine airplane will absolutely guarantee abnormal engine noises and vibrations, especially at night.

5. There are Rules and there are Laws. The rules are made by men who think that they know better how to fly your airplane than you do. The Laws (of Physics) were made by the Great One. You can, and sometimes should, suspend the Rules but you can never suspend the Laws.

6. More about Rules:

a. The rules are a good place to hide if you don't have a better idea and the talent to execute it.

b. If you deviate from a rule, it must be a flawless performance. (e.g., If you fly under a bridge, don't hit the bridge.)

7. The pilot is the highest form of life on earth.

8. The ideal pilot is the perfect blend of discipline and aggressiveness.

9. About check rides:

a. The only real objective of a check ride is to complete it and get the bastard out of your airplane.

b. It has never occurred to any flight examiner that the examinee couldn't care less what the examiner's opinion of his flying ability really is.

10. The medical profession is the natural enemy of the aviation profession.

11. The job of the Wing Commander is to worry incessantly that his career depends solely on the abilities of his aviators to fly their airplanes without mishap and that their only minuscule contribution to the effort is to bet their lives on it.

12. Ever notice that the only experts who decree that the Age of Pilots is over are people who have never flown anything? Also, in spite of the intensity of their feelings that the pilot's day is over I know of no such expert who has volunteered to be a passenger in a non-piloted aircraft.

13. It is absolutely imperative that the pilot be unpredictable. Rebelliousness is very predictable. In the end, conforming *almost all the time* is the best way to be unpredictable.

14. He who demands everything that his aircraft can give him is a pilot; he that demands one iota more is a fool.

15. If you're gonna fly low, do not fly slow! ASW pilots know this only too well.

16. It is solely the pilot's responsibility to never let any other thing touch his aircraft.

17. If you can learn how to fly as a Lt. and not forget how to fly by the time you're a Lt.Col you will have lived a happy life.

18. About night flying:

a. Remember that the airplane doesn't know that it's dark.

b. On a clear, moonless night, never fly between the tanker's lights.

c. There are certain aircraft sounds that can only be heard at night.

d. If you're going to night fly, it might as well be in the weather so you can double count your exposure to both hazards.

e. Night formation is really an endless se-

ries of near misses in equilibrium with each other.

f. You would have to pay a lot of money at a lot of amusement parks and perhaps add a few drugs, to get the same blend of psychedelic sensations as a single engine night weather flight.

19. One of the most important skills that a pilot must develop is the skill to ignore those things that were designed by non-pilots to get the pilot's attention.

20. When all is said and done, know that the controllers, ops supervisors, maintenance guys, weather guessers, and birds were all trying to kill you and your job is to not let them!

21. The concept of "controlling" airspace with radar is just a form of FAA sarcasm directed at pilots to see if they're gullible enough to swallow it. Or to put it another way, when's the last time the FAA ever shot anyone down? (Wait until Homeland Security gets control of the FAA!)

22. Remember that the radio is only an electronic suggestion box for the pilot. Sometimes the only way to clear up a problem is to turn it off.

23. It is a tacit, yet profound admission of the preeminence of flying in the hierarchy of the human spirit, that those who seek to control aviators via threats always threaten to take one's wings and not one's life. (See 21 above!)

24. Remember when flying low and inverted that the rudder still works the same old way but hopefully your IP never taught you "pull stick back, plane go up".

25. Mastering the prohibited maneuvers in the Natops Manual is one of the best forms of aviation life insurance you can get.

26. A tactic done twice is a procedure. (Refer to unpredictability discussion above)

27. The aircraft G-limits are only there in case you are planning another flight by that particular airplane. If subsequent flights do not appear likely, there are no G-limits.

28. One of the beautiful things about a single piloted aircraft is the quality of the social experience.

29. If a mother has the slightest suspicion that her infant might grow up to be a pilot, she had better teach him to put things back where he got them.

30. The ultimate responsibility of the pilot is to fulfill the dreams of the countless millions of earthbound ancestors who could only stare skyward and wish.

PROTECT OUR PLANES (POP) *GEARS UP* FOR FLIGHT LINE SAFETY

Oops, poor choice of words--see below

Volunteer Opportunities

EAA AirVenture Oshkosh 2004

People from around the world come to EAA AirVenture Oshkosh for primarily one purpose: to look at thousands of aircraft that converge on Wittman Regional Airport. To protect these airplanes - and spectators - the POP (Protect Our Planes) Team monitors flight line activities to make sure visitors abide by the time-tested Oshkosh rules: no smoking except in designated areas, and no food or drink within 10 feet of any airplane.

POP is now seeking volunteers to join its team from Monday, July 26th (the day before the convention) through Sunday, August 1st. POP patrolers must be at least 14 (ages 14-17 need a parent/guardian with them) and enthusiastic. No experience is necessary - all you need is a smile - and there's a place for people of all fitness levels. It's a great way for families and/or groups to enjoy EAA AirVenture "from the inside." If you're interested in volunteering, please e-mail: <ProtectOurPlanes@yahoo.com or visit <http://groups.yahoo.com/group/ProtectOurPlanes>.

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EAA'S ALUMINUM OVERCAST'S B-17

The Big Guy won't be visiting an airport near you for a long while as the result of a slight wheels-up landing in Van Nuys. Apparently the wheels were down at touchdown but subsequently did an elfo, getting all four props with consequent sudden stoppage of the engines plus collateral dam-

age to the underside of the airframe. This looks like a Megabuck repair job and the bird could be a write-off.

Of the many accident reports that I have read involving gear "failure" on the ground, the most popular cause involves the pilot or copilot moving that big lever with the replica of a tire on it to the UP position--usually followed by "Oh, SH**, I meant to raise the flaps." or words to that effect. That's why rule No. 1 of flap retraction is "Wait until you are clear of the runway (and have time to look and see what you are grabbing.) Besides, this doesn't block a perfectly good runway others might plan on using.

This applies even in cases where there is an interlock to prevent such occurrences. Psychologists have found that flight crew personnel are often so well trained in performing a complex sequence of manual tasks that they can perform them automatically, without having to refer to a checklist and in a moment of brain fade they just call up the wrong sequence from the old databank.

Gear down and welded isn't such a bad idea on homebuilts after all.

MARAUDER MAN, By Ken Brown A BOOK REVIEW, SORT OF

A Quaker by birth and a pacifist by nature, Ken Brown nevertheless volunteered for service in the United States Army Air Forces because he saw fascism as a greater evil than a war to destroy fascism. Opting to be trained as a bombardier and navigator, Cadet Brown was a budding scientist who completed the required training and took his precision of thought to England, where he and his B-26 crew were assigned to the Ninth Air Force's veteran 391st Bombardment Group. In due course, Lieutenant Brown moved up to become one of a handful of lead navigators who guided the 391st Groups bombing formations to and from their targets, often in bad weather.

Ken Brown's admiration for the Martin B-26 Marauder has been carried down through the years since World War II, and his retirement from the world of science cleared the way for him to fill what he feels is a wide gap in the readily available historical record of that remarkable airplane. This he accomplishes with chapter-long asides describ-

ing the development of the B-26 in record time, its early deployment to the Pacific (where a mere four Marauders delivered an attack arguably decisive to the outcome of the Battle of Midway and, thus, of the Pacific War), and its important role in the air campaign run out of England against all manner of targets in occupied western Europe, most notably in preparation for D-Day.

Marauder Man is a precise yet sensitive account of combat life in an aircraft Ken Brown came to respect and even love; a memoir often unique in its perspective and insight.

Mr. Brown's book joins the fray just before his group moved to an advance airfield in France and follows through to the end of the war by way of his own observations and experience. Along the way he describes aerial combat from the perspective of a non-pilot with two vital roles to play in the tactical bombing in Europe.

Kenneth T. Brown used the G. I. Bill to complete his undergraduate education at Swarthmore College in Pennsylvania and then obtain a doctorate in physiological psychology. After further training under postdoctoral fellowships, he had a long career as a distinguished professor of neurophysiology at the University of California Medical School in San Francisco. In retirement he remains in San Francisco, where he designs and makes furniture for his family and friends. Ken Brown has received accolades from a variety of book reviewers like retired USAAF historian Walter J. Boyne who wrote, "Brown has written a literate, exciting and accurate book, one that will be of interest to everyone, not just Marauder fans."

The B-26 Marauder was a twin-engine medium bomber with a streamlined fuselage of circular cross-section and a relatively small shoulder wing. It was difficult to handle because of its small wing and consequent high wing loading, but it also gave high performance. The initial version was nicknamed "The Flying Prostitute" because it had "no visible means of support." It started life with high accident rates due to its high technical demands placed on the pilots. It was known to be a "hot" aircraft with a relatively fast landing speed, around 152 mph. If an inexperienced pilot, and most trainees were, brought it in too slow it would stall and spin with little room to recover. With proper pilot training it later proved to be a

safe and effective aircraft with the lowest combat loss rate of any bomber. Many crews grew to appreciate its speed, agility and strong defensive armament. With the B-25 Mitchell, it formed the US medium bomber forces in W.W.II. These flew mainly daylight raids, called Ramrods, against such targets as railroad stations, coastal gun batteries, important factories, and bridges. There were 4863 built.

THE GURNEY FLAP

by Tim LoDolce

These trim/lift devices are called many names such as Wickerbill, Gurney Flap and G-Flap. From my research I believe they were first discovered as an effective form of lift or downward pressure, whichever you prefer, by the British, hence the name "wickerbill". These devices got widespread recognition when the Dan Gurney's Indy Car race team installed them on their race cars rear wing.

These little devices were found to do the same job the manual trim tabs were doing with about 2/3rd's less drag. Since then they are widely called "Gurney Flaps" or G-Flaps. Here's what I found to work on my Vari Eze and I know they work on just about any wing. In my case I had two minor problems that needed help.

First, my right wing was heavy and I needed a rather large 2 inch wide x 7 inch long trim tab glued under the trailing edge of the wing. This did the job but looked ugly and if someone bumped it by accident I would have to play with it to get working right again. I removed this trim tab and installed an equivalent length (approx. 7 inches) of 1/8" heat shrink tubing (not shrunk) on the underside of the trailing edge of my right wing as far out toward the wing tip as possible. I used a bead of silicone to attach the tubing. After the silicone cured I flew the plane and found I now had a heavy left wing. I trimmed off about 1 inch after each flight (inboard side) and flew the plane until the trim was perfect. Mine turned out to be about 4 inches long. The result is I no longer have that goofy looking trim tab. I have no idea if it actually gave me more speed but it probably did if you measure in milliseconds, which many races are won by.

Problem number two is quite common with our EZ's which is a lack of nose down trim at higher than normal cruise speeds. Again, in my case I had added new pitch springs of greater than

normal tension in conjunction with additional (unwanted) weight in the nose. Later that year at the Reno Air Races I noticed Klaus had a couple "G-Flaps" silicomed to the inboard bottom of the trailing edges of his elevators. He told me this allowed less weight in the nose while accomplishing the same thing that weight and heavy springs do. Weight is something we need to truly watch on our EZ's if you want a fast, efficient airplane. I installed 1/8" tubing about 4 inches long on the bottom trailing edge of each side of my elevators. I found I trimmed off about 1 inch on each side and that did the job at the end. I now have enough downward pitch trim even at my highest level flight power setting. Another question posed was could you install them on the ailerons and the answer is.....NO! Klaus specifically warned me that the G-Flaps should NEVER be installed on the ailerons. Hope this answers your questions.

If not, feel free to ask for a more definitive explanation and I'll give it a shot. Tim LoDolceVÉZE
Truckee Tahoe EAA Flt Advsr/TecCounslr

(Editor's note: Before you install something like this, contact the source. You can contact Tim at <tiger@telis.org > or *try* getting help from Klaus Savier at <lightspeedengineering.com>)

THIS SPACE FOR SALE OR RENT

In an effort to balance the chapter checkbook, provide funds for BBQ goodies and in general provide more work for our already overworked treasurer, the Board has decided to sell ad space in the N/L. Price and other details still not settled.



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