THE GRAPEVINE

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

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MEETING AND PROGRAM

Our February meeting will take place at 7:30 P.M. on the 5th of February in the Terminal Building at the Livermore Airport. Our program for the evening will be a presentation by John Rutkosky (JR) who will tell us all we need to know--and then some--about pitot static systems and transponders.

MINUTES: GENERAL MEETING, EAA CHAPTER 663, JANUARY 8, '04 7:35 PM, TERMINAL BUILDING KLVK.

Chapter president Ralph Cloud called the meeting to order.

No guests identified themselves.

Ralph announced the first flight of Pete Bodie's RV-6A on December 17th. Congratulations Pete.

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

In the treasurer's absence, a total of $4,163.71 in chapter funds was reported. This reflects collections for dues for 2004 and the expenses for the annual dinner.

Business: First item was the annual dinner on January 24th. Festivities are to start at 5:30 with dinner at 6:30. There will be plenty of food and at least one berry pie for dessert. Brian Shul, former SR-71 pilot and author of the book SLED DRIVER, BLUE ANGLES A PORTRAIT OF GOLD, and other books, will be the featured. Cost to attend is $20 per person. A sound system is needed for the speaker.

The search is on for additional Flight Advisors and Technical Advisers. Ralph reviewed the experience requirements for these positions. Greg Triplett was nearly drafted for one of the positions.

Young Eagles coordinator Bob Cowan set the first organized rally of 2004 for April 10th. Pilots with planes are needed.

Bob Farnam reported frequent use of the new scales. The aerodynamics video prior to the meeting seemed to have increased interest.

Ralph made an appeal for annual dues ($30/year) and the coming dinner. He would take your money at the break.

Break and Program: Chapter member Carl-Erik Olsen was introduced and gave us account of his aviation experience. Close listening was required to get through his Danish accent, and part of the problem was the amazing nature of his tales. First was being escorted in and out of the Czech Republic by a Hind attack helicopter simply because his Cessna 172 could not keep up with a couple Grumman Tigers on an approved flight plan. He also related teaching himself how to fly a tail dragger with his wife watching. His freshly rebuilt KZ VII may be seen on or near the Livermore airport. If you get behind him in

the traffic pattern beware, the KZ VII was designed by the guy who designed the Fieseler Storch. Carl-Erik can go very SLOW!

Meeting adjourned for pie.

MINUTES: BOARD OF DIRECTORS MEETING, EAA CHAPTER 663, JANUARY 22,'04 7:40 PM, RALPH'S PLACE.

Members with the initials RC, DJ, BC, GJ, BF, LF, BS, BC, SC, BJ, and GT were present.

Details of the dinner were discussed. Because the count had grown to 88 attendees, Ralph suggested renting 6 heaters, all concurred. Bob Cowan will get the wine. Larry Fish will get the pies.

Brian Shul's fee was set at $550. J.J. Miller has secured a sound system.

First flight awards will go to Don Farrand, Cash Copeland, and Pete Bodie; Barry Weber will receive a Perseverance Award.

A discussion of new Flight Advisers and Technical Counselors followed.

Bob Cowan set a second Young Eagles date for April. On the 24th we will be flying a group of international students.

Bob Cowan expressed interest in organizing future fly outs. Maybe setting up a schedule so the word gets out, and empty seats can be filled.

Sharon Constant reported a total of $5483.71 in chapter funds, reflecting receipts for the dinner and dues.

Tools: Bill Jepson reported that Dell Computer is offering a digital projector for $825. This will be on the agenda at the next meeting.

Bill Jepson covered future programs. Peter Garrison is still on for some time in the spring or summer.

The schedule for coming chapter events will be discussed at the next meeting.

Meeting adjourned for pie.

Respectfully submitted,
Bruce Cruikshank Secretary

VP VIEWPOINT.
ARE WE WORKING WAY TOO HARD?

Well, are we? I often wonder why most of us seem to be trying very hard to make our jobs more difficult. I am going to refer to several things that I have been seeing lately. Since I went ahead and started an RV-10, the first is specific to riveted aluminum airframes.

Heated rivets! The rational is that aluminum age hardens and annealing the rivets will make them less likely to crack in the shop formed head. While it is true that aluminum age hardens, in an AN quality rivet this would take about 15 years. This is not a problem to the average kit builder. The rivets supplied by Van's won't age harden in any typical build time. I have heard of several builders of high quality aircraft that have used this process. I talked to Van's about this. To properly anneal an aluminum rivet, you must have a very good furnace to hold the rivet at 930° for the right length of time and then use the heated rivets within about 4 hours or you wasted your time.

The much more likely situation is that you will WEAKEN the rivet. The guys at Van's said this comes up about every 2 or 3 years. They strongly advise against it! When I was riveting race car chassis together we would use an adhesive as well as the rivets going for the strongest joint. (And also some vibration resistance) The RV, Thorpe, Sonex, and Zenith airframes are designed to not need this extra measure of strength.

I am really glad these procedures aren't needed, as they both are truly a pain in the ass.

The second hair shirt procedure going around is not specific to aluminum airframes, but applies to all aluminum, steel frame and fabric, and even composite planes since even those have aluminum and steel parts. Engine mounts, bell cranks, tubular push rods etc.… The point is that some parts need protection, and others don't. Most of the RV builders prime the parts of their wing and tail internals with a metal etching primer. The funny thing is that almost all of these parts are Alclad. (coated with a plated layer of pure aluminum) The purpose of cladding is to eliminate the need for paint. I find the need to disassemble everything, set up the paint area, and finally assemble and rivet a truly tedious task. Most builders mean well here, they want to prevent corrosion in their plane. This is not a proce-

dure, like the hot rivets, that's likely to cause a problem. The result most common is to build a heavy plane.
As a reference, Cessna doesn't prime the internals of its aircraft. I would like to point out that many of the rentals we all got our tickets in are 20 years old or older. They haven't disintegrated to dust.

On steel parts you WILL need to prime and paint of course. Powder coating has become very popular as well. I have had varied experience with the powder coaters in the bay area. When you bring in a steel part, be sure to tell them that the part will likely see flex in use. A thin coat of a flexible material is best. Some of the thicker powder coats can be so thick that flex will cause them to crack. This usually happens at the joints, the worst possible area. The thing to watch out for with powder coating is rust prior to bringing in the part. Some coaters can dip your parts to clean them but then you need to provide drain holes so the etch can get out.

Building an aircraft is tough. There are often times when we will be intimidated by what lies ahead of us. What I am pointing out in this column is that we sometime are too tough on ourselves. If we impose artificial limits on ourselves it can make the task even tougher. Build well, but don't try to gold plate everything. Be informed and FOLLOW THE DIRECTIONS that come with your kit, or on your plans! If building is a hobby, go ahead, do everything to 99.9999 % perfect. Remember, though, that the idea hopefully is to have a flying airplane while you are still able to enjoy it.

Fly safe,
Bill Jepson

PILOT OK AFTER OCEAN RESCUE (1-19-04)

By Karen Blakeman
Honolulu Advertiser Staff Writer

A commercial pilot flying his private airplane from O'ahu to Kaua'i crashed yesterday about 25 miles southeast of Lihu'e.

Bob Justman of Hawaiian Airlines was in stable condition yesterday at Wilcox Memorial Hospital. His RV8 experimental aircraft, which he had been flying alone, sank.

In a statement released by his family yesterday, Justman said he was flying to Lihu'e to visit an ill relative. Shortly after 8 a.m., the 56-year-old pilot began having engine problems. He contacted air traffic controllers in Honolulu and kept them informed as his plane lost power. He was just 200 feet over the water when he last communicated with them. Then the plane went in.

"After impact," Justman said, "the canopy closed and the aircraft inverted under water, trapping me in the cockpit."

Justman got out of his safety harness and struggled with the canopy, which was stuck.

"Miraculously, the canopy partially opened after I continued working with it," he said. "I was able to eject myself from the cockpit just before the aircraft sank." Justman then swam around, grabbing for pieces of debris.

Meanwhile, when air traffic controllers were unable to resume communications with Justman, they called the U.S. Coast Guard, giving them his last location from radar.

Lt. j.g. Harry Greene was among the 4-person crew of the HH-65 Dolphin helicopter that had been on routine patrol when it got the call.

Greene, piloting alongside Lt. Kevin Quilliam, the aircraft commander, said the Dolphin crew headed toward Justman's last known location, followed by a Coast Guard C-130 Hercules from Barbers Point.

At the coordinates, the Dolphin began to circle, Greene said, each of the four crew members keeping an eye out for the downed pilot.

"It can be like looking for a needle in a cornfield," Greene said. "Even when the ocean is calm there are still whitecaps, and you can easily lose them behind a swell."

Clutching a small piece of white wreckage, Justman had been treading water for 40 minutes. When he saw the helicopter overhead, he waved the debris frantically, splashing water with his arms.

Petty Officer 1st Class Ronnie German, the crew's rescue swimmer, spotted him, about a mile off the coordinates provided by the air traffic controllers and about a quarter-mile off the right side of the Dolphin.

"He was doing a great job of attracting our attention," Greene said.

The helicopter veered off to jettison excess fuel so that the Dolphin could take on the extra weight of another person. They returned flying low, and German jumped in the sea, helping Justman to swim while Petty Officer 2nd Class Mike Harrell, the flight mechanic, lowered a rescue basket.

Harrell hoisted Justman up in the basket, then dropped a hook for German. Greene and Quilliam radioed ahead for an ambulance and, once Justman was settled, flew to Lihu'e.

"He was saying things like, 'Thank God you guys are here; I love you guys,' " Greene said.

Eleven minutes after hoisting him out of the ocean, the Coast Guard turned Justman over to American Medical Response paramedics at Lihu'e airport, who took him to Wilcox Memorial Hospital where he was treated in the emergency room then admitted to the hospital for observation.

THE MORAL OF THE STORY

I suspect that although the article doesn't mention it, this commercial airline pilot was probably on a flight plan filed with Honolulu before he departed. Being on ATC frequency when one's engine starts to go south makes it much easier to contact then; no look-up is required at an very awkward time. Being a flight of one meant that he had to do everything necessary to save his own butt, no wing man to call for help while he tried to keep Mr. Lycoming running. At least he didn't have to look for an open area in which to land.

Does this apply to our flights here on the mainland? Of course it does, whenever we head out on moderate -to-long cross country flights and we aren't being escorted by a gaggle of buddies, we face the same sort of predicament; the details are different, but the basics apply.

We have to admit we have a problem and then communicate that we do to *SOMEONE*. Don't have the ATC freq. dialed in? How does 7700 grab you?

Pick out your impact point and fly towards it. If your problem is your engine (isn't it always?) fiddle with that after you have the landing dialed in--just in case you can't get the engine to behave and take you home.

If you can, turn your fuel off; tighten your straps--tighter than you ever have before; and if your plane is so configured, lock your canopy open before touchdown. (Maybe now is the time to figure out how you can do that in your home built.)

Am I kidding, we're talking about dry land here on the mainland, aren't we? Well, yes--and no. A guy in a Vari Eze lost power and landed short of the runway at Palo Alto, flipped and drowned in very shallow water. Also, you don't want to be trapped in a bent-up plane that is leaking 100LL and it's thinking of going up in flames. Bad Karma!

Other considerations: Survival gear. Was this airline pilot who lived in the Islands really prepared to go swimming? I read no mention of him inflating his Mae West. When you're beyond gliding distance of the beach, your FEET *ARE* WET and you had better have a Mae West on, not just in the aircraft. NO EXCUSE for not having one on, none, no way, Jose!

More on water: We have some very arid land here in the West, are you packing water? If not, why not? Headed east across Nevada and western Utah there are lots of places you can find to crash which don't have running, potable water, at least not within walking distance, especially on HOT summer days.

SOME DAYS ARE BETTER THAN OTHERS

Paul Reinders, Ch 124

I had rented a Beechcraft T-34 in Arkansas and had a relatively pleasant (warm) trip through southern Texas and a few enroute locations. However, Iowa and Minnesota were somewhat cooler. The high temperatures were averaging 20 degrees below zero Fahrenheit in January, 1962.

The Continental 0-470 absolutely refused to start at any temperature below zero degrees unless it was preheated for a minimum of forty-five minutes. Any attempt to start without preheat resulted in a frost bridge on the spark plugs and no luck whatsoever in the ignition department. The landing gear operation was also somewhat less than totally satisfactory at the same temperatures. Although the landing gear never failed to lock down, it would refuse to lock up unless it was encouraged with a little negative Gs. Consequently, I had developed the habit of bringing

the gear handle up immediately after takeoff before the speed had built up excessively, counting to three, and pushing forward on the stick to "go negative" just as the gear approached the uplocks. The procedure had worked well for quite a number of flights and was unnecessary in warmer temperatures.

I had decided to take my mother on a flight from central Iowa to Omaha, Nebraska, hardly more than an hour away. My mother never hesitated to accompany my brother or me when we asked if she would like to fly with us. Her rather conservative older neighbors often asked her if she wasn't afraid to fly "with the boys" who had a habit of making low level tours of the area to let their friends know they were back when they returned every year or so. My mother always answered, "They haven't killed themselves yet, and I don't think they will do it just because I am with them." We never did.

I called the FBO and had the T-34 preheated for an hour before I arrived. Temperature: a balmy 22 below zero. Weather: Clear and forever. Beautiful day to fly. The Continental fired up easily, but the extreme cold caused a problem in getting the fuel to vaporize sufficiently for really good ignition. Consequently, the engine would not idle below 1800 RPM. That was a problem on the icy ramp and taxiways because the taxi speed was "excessive". I solved the problem by using the electric priming system on the Continental. I set the throttle and then hit the primer every few seconds.

The engine would surge up to 2000 Rpm and immediately begin to drop. At about 700 RPM, before the engine died completely, I would give it another shot of prime and the engine would again surge to 2000 RPM. With these intermittent bursts of power I could control the speed sufficiently to taxi safely(?) to the runway.

Runup completed including numerous cycles of the propeller to get warm engine oil circulating through the system, I took the runway and accelerated very quickly to lift off speed due to the power available in the super-cold temperatures. Airborne, I immediately pulled up the gear, counted to three and "went negative"... something I had already warned my mother about. Due to that maneuver, I was only a few feet in the air when the gear locked up, but I was accelerating very rapidly. Normally, I would not have reduced power at such a low lever, but with the excess power available in those temperatures, I reduced throttle to climb power, and glanced at the tachometer as I pulled the prop back to a climb setting.

Immediately below the tach was the oil pressure gauge and at that moment the needle slowly leaned over and ultimately registered zero pressure. Not good. Omaha was not at option at that point. I pulled back on the stick and throttle simultaneously while I mashed the intercom button and told my mother in the back seat that I was going to land to check out an item with which I was not happy. Whatever! She was just along for the ride.
I continued to pull until the a/c appeared to approach the vertical, but was probably at about a 60 degree angle of pitch. Just before the stall, I stomped rather firmly on the left rudder, came around in a hammerhead, and slapped the gear and flap handles to the Down position. At this point I was just off the end of the 4000 foot runway, on centerline, and probably about 300 feet in the air with nose down severely. To my surprise, at the far end of the runway was the only other soul in Iowa brave enough to fly that day, and he was just lifting off in an Aeronca Champ. Since the T-34 was well silhouetted against the sky, and was obviously coming his way, the unknown pilot broke right and continued his departure... possibly somewhat upset but in no danger as we passed each other on reciprocal headings.

Halfway down the runway the landing gear locked down, I cut the switches, and landed. As the propeller spun down through about 800 RPM, the oil pressure gauge began to rise. I immediately switched back ON and taxied clear of the runway. With the oil pressure indicating normal, another good runup completed, including a half-dozen more propeller cycles, and no indications of oil leakage on the exterior of the aircraft, we departed for an uneventful trip to Omaha.

My mother never mentioned the incident at any time during our visit in Omaha or later whenever her friends asked about her flights. It was just a routine flight on a cold but beautiful day for sightseeing.

In all probability, the engine never lost oil pressure, but instead lost only the indicator when sludge from the cold propeller hub finally moved
after the full power takeoff. The hour of preheat had thoroughly warmed the plugs in the engine allowing the start, but the propeller was still 22

degrees below zero and the cycles during runup had not yet moved that sludge any great distance in the system.

Being thoroughly familiar with the T-34 performance in low level maneuvers, the return for landing was a completely safe maneuver considering my position at the time, and a good example of why pilots should take the time to really learn how to fly their aircraft. Good radio operators are rather irrelevant at that point.

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