

JETSTREAMS

AHART AVIATION SERVICES

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 July 2005

Since August of 2002 we have held an annual Customer Appreciation Day BBQ on the anniversary of my purchasing Ahart Aviation. This is my way of saying thank you to all of Ahart's customers and employees. These past three years have included some incredibly difficult times as well as many wonderful times and I feel privileged to be surrounded by such supportive people. (I know, enough of the mushy stuff!).

Many of you followed James and Kristle's adventurous trip across the country and James' trip across the Atlantic and into the United Kingdom. They both made it back safe and sound and have lot's of stories to share. If you did not follow along, Bill Komanetsky was good enough to create a web-page with details of their crossing and pictures. To see the photos please go to our website and click on the link on the front page.

Happy and safe flying,

~Lysa Wollard

June Achievements

Lori Costello
 Solo
 James Hubbard

Cameron Newton
 Solo
 Lysa Wollard

Paul Peterson
 Solo
 James Hubbard/Spencer Thomas

Stephen Cech
 Solo
 Dave Gregory

Stefan Oechsner
 Solo
 Dave Gregory

Katherine Ramos
 Private
 Lysa Wollard

Mike Beckley
 Private
 Rob Goldman

Tommy Hayes
 Private
 Rob Goldman

Casey Topalian
 Private
 Sean Wilson

Daniel Mercer
 CFI
 Ash Pawla

Jack Douglas
 CFI
 Ash Pawla

David Sawczyn
 Comm/MEL/Inst
 Rob Goldman

Lysa Wollard
 Sing Engine Sea Plane
 James Hubbard

Beth Duff
CHIEF FLIGHT INSTRUCTOR
Part 141

CFI OF THE MONTH
David Gregory

**You are cordially invited to attend our annual
 Customer Appreciate Day BBQ!!**

Where Ahart Aviation office location, 186 Airway Blvd
When Sunday July 31, 2005, 1PM to 4PM
RSVP on SchedulePointe or call the front desk 925-449-2142

Rwy Gradient and Aircraft Performance

By Terry Lankford

The upslope or downslope of the runway—runway gradient—is a consideration, especially when runway length and takeoff distance are critical. Upslope retards acceleration, resulting in a longer ground run on takeoff. Downslope decreases deceleration, resulting in a longer ground run on landing. But, how much? Many, if not most, airplane flight manuals fail to address the issue of runway slope. It would seem that for most practical purposes runway gradient is in the same category as moisture in the density altitude equation. It has an effect, but the effect is almost negligible.

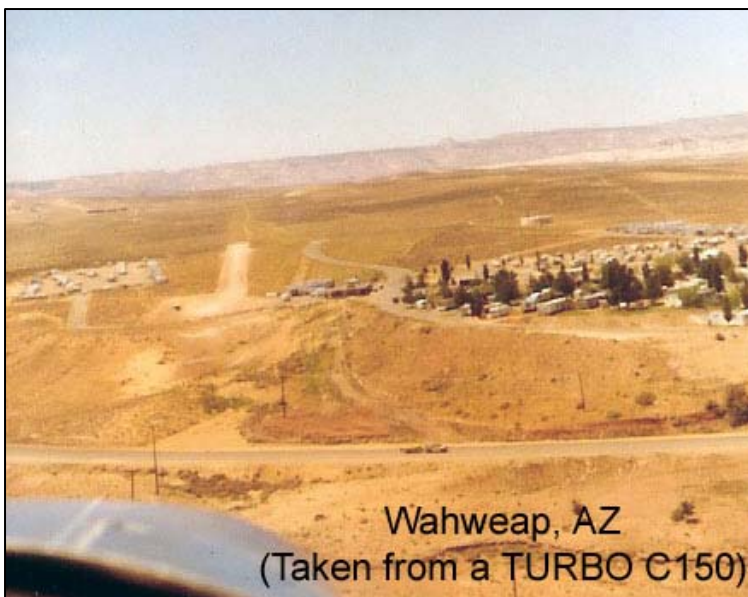
14 CFR 91.103 Preflight action speaks to runway slope, but only for aircraft without an approved flight manual. So how critical is this parameter? According to the FAA: "In the case of an upslope, the additional drag and rolling friction caused by a 1% upslope can result in a 2% to 4% increase in the takeoff distance and subsequent climb."

When available, gradient is published in the *Airport/Facility Directory* for those airports with an FAA approved instrument approach procedure. Slope is shown when 0.3% or greater. For example, at Aspen, Colorado runway 15-33 has a 2% *upgrade* toward the southeast.

Rule of Thumb:

Increase takeoff distance by 10% for a 2% upgrade.

Increase landing distance by 10% for a 2% downgrade.



In the Aspen example: increase takeoff roll by 10% departing runway 15; increase landing roll by 10% landing runway 33.

Like high density altitude operations, determine airplane performance based on airplane weight, elevation, pressure, temperature, and wind, and factor in runway slope. Determine an abort point where the airplane can be safely stopped on the runway. If power or airspeed are not as predicted, abandon the takeoff!

Flying Gourment

By Jim Jellison

I have flown more makes of aircraft in the last couple of years than I have in the preceding twenty. I'm not sure if that makes me a better pilot than just sticking with one type and gaining a lot of experience in it, but it sure is fun. Several months ago I wrote about my Mooney experience and now I'd like to tell you about the Diamond-40. When I first saw the Diamond on the line I didn't know what make of plane it was. But after I met her owner, Cindy Smith, and found out it was available for rent, I just had to give it a try. My first impression was that it reminded me of a boat, not by the way it looked but by its construction. I knew it had to be fast simply because there were no rivets, which made her as smooth as a baby's you know what. Of course the most unique features of "Norma Jean" are the pop-up canopy, your mode of entry into the cockpit, and the control stick.

I flew from Livermore to Watsonville the other evening to have dinner at Zuniga's. The evening was a little breezier than I would have liked, but lately you have got to take what you can get in the weather department. As I climbed to 3,500 feet and proceeded to pass behind Mission Peak I noticed that you get a good bit of wing rock in turbulence. It wasn't really an uncomfortable ride and I attributed it to her long, narrow, glider like wings. She handles well and I was surprised that I wasn't over controlling her as I thought I might with a control stick. My biggest problem was holding a constant altitude as there is so much forward visibility that I sense that I'm nose down and want to pull back into a climb. I was able to overcome this feeling during my second hour in the air. In Watsonville the wind was blowing off-shore so runway 2 was in use. Once I slowed her down to under 100 knots and was able to drop the first notch of flaps the approach and landing were just like I knew what I was doing. I parked right in front of the restaurant, being mindful of her almost 40 foot wing span.

Zuniga's is really a neat place to go for lunch or dinner and on weekends they are even open for breakfast. The food is good and like most Mexican cuisine the price is very reasonable. Any aircraft lover will enjoy the décor, large aircraft models suspended from the ceiling and aircraft done in stained glass. Taking off on runway 20 just at sunset, watching the sun disappear into the Pacific as you climb out, is alone worth the trip to Watsonville. By the way, the Diamond is the perfect aircraft for this. Back at Livermore, as I banked left to enter left base for 25 right, I saw the lights of the city as I have never seen them before. The view was almost like being suspended from a parachute. It was one of those moments when you know why you became a pilot.

Watsonville is 45 nautical miles from Livermore on a heading of 165 degrees as the crow flies. However, this crow went around San Jose Class C airspace which added another 10 nm to the journey.

Making a lower case for flying by Rob Goldman

While most student pilots feel satisfied and pleased with their skills at say, 50 hours, they often express mild frustration that they are not better; perhaps as good as they imagine they will be after 150 hours. Unfortunately, there is no way to get from 50 to 150 hours without flying those hours. Sounds silly, but there is no shortcut or accelerated program.

These 100 hours will be filled with (lowercase) adventure, excitement, exhilaration, beauty, accomplishment, fun, insights and nervousness and perhaps, fear.

There is a difference between Excitement and excitement. It is a matter of degree and newly-minted pilots need to dip their toes in the water, slowly expand their personal minimums and venture farther away in small increments. One of my favorite expressions is, "Good judgment comes from experience and experience comes from bad judgment."

Pilots should not just fly in clear weather when the winds are light and right down the runway, because when you find yourself in worse conditions, you'll be uncomfortable and unprepared. You need to get out. Weather report is marginal? Go see and be prepared to turn around, or execute plan B at any time. Your little Cessna 152, at 105 mph can outrun a hurricane. (Hurricanes often move 10-20 mph.) If the weather or turbulence slowly gets worse, turn around and it will slowly get better. Really does work that way.

Don't get your license and fly to Denver, unless you're on United. Don't get your license and transition to a Bonanza, or a Lancair. Are those things possible? Sure. A good idea...not really. (For a reality check as to whether it is a good idea or not, check with your insurance company...if the number they give you buckles your knees and takes your breath away, that is a clue.)

You will no doubt take family and friends up for rides and trips. I suggest that you do not show them stalls, or steep turns, or dead stick landings. While you are justifiably proud of your skills, those maneuvers were designed as a means to an end and not something to show non-pilots. Not like a secret handshake...if asked you could demonstrate a power-off stall, but if you find yourself saying the often-deadly phrase, "Watch this!," trouble lies ahead. Sure, you can recover quite safely, but you may not get the reaction you were expecting and you may lose a passenger for life.

First flights with family and friends should be almost dull (for you). They will be plenty excited and nervous seeing you pull the plane forward to look at the tires. They think, "This thing that is 1/2 as light as my car is going to keep us up in the air?" Most people don't understand lift. Many, many people are freaked by turbulence. What may be a small bump to you could seem much worse to passengers. Even though they sit through many more bumps during a normal car ride, in the air they take on more ominous portent.

Where was I? Oh, right, getting from 50 hours to 150 hours and what you can expect. So, I've drawn a rough sketch of what those hours could and possibly should be like. Your mileage may vary. Your experiences will be all over the place. One word of advice: if you think you may be interested in an Instrument Rating, make your excursions at least 50 NM so you build your cross-country time. Not only will this help your "experience base" but if and when you decide to get your next rating, the 50 hours of cross-country experience will not hold you back.

Have safe, exciting, fun, adventures...all lowercase.

Make that PIC Call by Steve McEachern

Well there you are, excitement building up for your next aerial adventure while you pre-flight your trusty bird. You carefully go through the checklist examining the specific items hoping everything is right so you can hop in and get going. You pull out the oil dipstick and find the oil level just above 4 quarts (*ding1*). Hey, that seems quite a bit low as you ponder over the thought of getting your hands dirty adding a couple quarts. Wait a minute, although not initially observed, you discover a wide sheet of light colored oil fanning back diagonally out of the middle right side of the cowl toward the bottom co-pilot door (*ding2*). No oil was observed on the ground underneath the plane though. Not even the usual drips of oil coming out of the crankcase vent tube. As you pre-flighted, you watched/heard aircraft taking off and you could just taste the pleasures of flight. You want to go.

Pilot in Command (PIC) calls can be tough. A student and I recently encountered the above situation. However, we didn't let our desire to get off the ground overcome sound PIC judgment. We focused on the problem. Low oil and oil streaking out along the side of the fuselage from the cowl may be related somehow. We asked ourselves what could have caused the two symptoms. Maybe oil was spilled into the engine compartment when being added last time? Was there a break or hole in the oil lines or Oil Cooler? Maintenance had already gone home for the day so there was no one to open up the cowl to investigate. We chose to ground the plane and squawk the subject condition.

You probably have heard that when you trace backwards from an accident quite often there is a chain of events that finally lead up to that accident. Breaking the chain (*ding1* and *ding2* in my story) by using sound decisive PIC judgment can save the day. When Maintenance inspected our grounded plane the next workday, they found a small hole in the oil cooler spurting out toward the side of the cowl. The hole was not a gusher but under pressure may have opened-up during flight (potential engine failure). Phew, good call and lesson learned. Keep alert to items not on the checklist (e.g., unusual oil streak on fuselage). If you are on a solo flight and not sure about something on the preflight, call the office and ask an instructor or mechanic to come over and take a look at the plane. A couple of minute delay is worth avoiding a potential emergency situation.

High Altitude Ground School

We are offering a unique opportunity to expand your knowledge and flying skills to a higher level - above flight level 250, that is. If you ever wanted to know how it feels up in Airline County on jet airways, planning descents 100 miles from target, this ground school with checkout and endorsement opportunity is for you. The FAA requires per FAR 61.31(g) ground school and flight training in order to act as PIC in an aircraft with a service ceiling above FL250.

The ground course (2.5 hrs) qualifies for the knowledge portion of the 61.31(g) high altitude endorsement and covers high altitude aerodynamics and weather, physiology, aircraft systems and operations, and emergency procedures. Special course materials will be provided.

The fight and operations part is based on the Cessna 340 aircraft, and if you feel adventurous, you can complete a 61.31(g) check flight in a great RAM-VI modified C-340 through our affiliation with Vienna Air International. Our instructor in this course is Bernhard Rupp, a veteran CFII and ATP with Citation CE-500 and Boeing B-737 type ratings, who is also conducting the optional C-340 high altitude check flights.

The class will be held on Saturday, July 9th from 9 AM to 11:30 AM and the cost of the course is \$75.

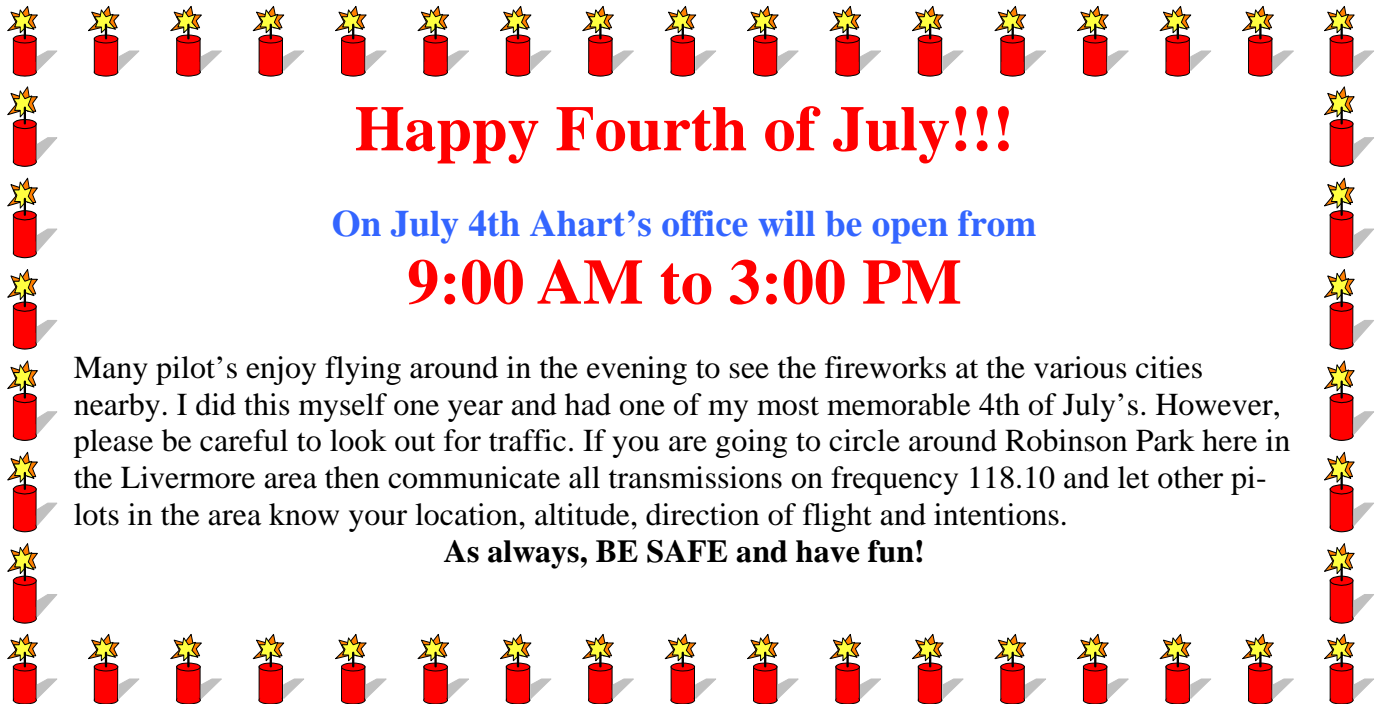
You can register on schedulepointe or call the front desk at 925-449-2142.

LVK Master Plan Update

The Coalition for the Livermore Airport a group of supporters of the Livermore Airport held a meeting on June 28th in Hangar 150. There were about 70 pilots, business owners, tenants and mechanics who turned out for the meeting. Leander Hauri, the Airport Manager began the meeting by discussing the progress being made on the Noise Monitoring system requested by the Livermore City Council. The manager and his staff have been working hard to prepare documents and suggestions for the noise monitoring options as well as showing good faith documentation of steps being taken to reduce the noise complaints in the area.

This Good Neighbor policy involves putting into effect the Voluntary Noise Abatement Policy which encourages pilots not to fly between the hours of 10:00 PM and 6:00 AM. This policy is voluntary and is generally aimed at the larger Jet aircraft that fly in over the city. However we can certainly do our part in keeping with the Good Neighbor relationship by limiting night flying and entering from Brushy Peak for a right base entry as opposed to coming in on a straight in approach.

There will be another City Council Meeting on July 11th regarding the Livermore Airport and we need all of the supporters we can muster up to attend. Please visit the Coalition's website at www.lvk1200.info for more details.



Happy Fourth of July!!!

On July 4th Ahart's office will be open from
9:00 AM to 3:00 PM

Many pilot's enjoy flying around in the evening to see the fireworks at the various cities nearby. I did this myself one year and had one of my most memorable 4th of July's. However, please be careful to look out for traffic. If you are going to circle around Robinson Park here in the Livermore area then communicate all transmissions on frequency 118.10 and let other pilots in the area know your location, altitude, direction of flight and intentions.

As always, BE SAFE and have fun!