

# JETSTREAMS

## AHART AVIATION SERVICES

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JANUARY 2007

*Happy New Year! This year promises to be one of the best yet. I am pleased and excited to announce that we have entered into a new partnership. As of January 1st, Bill Komanetsky is an equal partner in Ahart Aviation. Bill has been an active member of the Ahart community since he began his flight training 3 years ago. Since then he has put two aircraft on leaseback with Ahart, become a flight instructor and built our website (among many other accomplishments). Please join me in welcoming Bill as a part owner!*

*We are also excited to be adding Nick Beesley to our list of highly qualified instructors while at the same time saying goodbye to Dave Sawczyn who is now an FO with ExecJet Airline.*

*Our remodel is going well, but again, please excuse our mess!*

*Happy and safe flying,*

*~Lysa Wollard*

## December Achievements

**Dan Dunkly**

Solo

Brian Dreger

**Michael Whitby**

Private

Bill Komanetsky

**Kuk Hwi Jung**

Private

Derek Sellers

**Matthew Bowers**

Private

Derek Sellers

**Ed Bradberry**

Instrument

David Gregory

**Chris Pita**

Instrument

Derek Sellers

**Evan Williams**

MultiEngine

Heather Wagner

Alian Lin

Multi-engine Commercial/ Instrument

Brian Dreger

Nick Beesley

Flight Instructor

Neal Beurman

**CFI of the Month**

**Derek Sellers**

## Private Pilot Ground School

Ahart Aviation is pleased to announce the Winter Private Pilot Ground School. Classes will be held on Mondays and Wednesdays from 6:30 PM to 9:30 PM beginning Monday January 22nd and lasting for 11 weeks.

The course is designed to fully prepare students for the Private Pilot written and oral exams and will cover the Jeppesen Private Pilot manual and written study guide. A cross country flight plan including weather interpretation and services will be completed in class.

You may register for the class by calling the front desk or through schedulepointe.

The cost is \$300.

## Instrument Rating Ground School

The Instrument Rating Ground School will begin on January 16th and be held every Tuesday and Thursday from 6:30 PM to 9:30 PM for 10 weeks. Bill Komanetsky will be teaching the course again and brings with him years of teaching experience. The course will cover the Jeppesen Instrument/Commercial manual and study guide and prepare students for the written and oral instrument rating exams.

The cost of the class is \$300 and once you have registered and paid for the class you may take it as many times in the future as you would like at not additional charge. Please register via schedulepointe.com or call the front desk.

## Cold Weather Operations

by Terry Lankford

Like summer flying, winter operations—especially in the mountains—presents additional, specific hazards. If your planning a flight this time of year, here are some things to consider.



Are you prepared to spend a night or two in below freezing temperatures? Should your engine fail appropriate clothing and survival gear must be on board. This is easy to overlook, especially when flying from coastal areas or low valleys. But remember, these flights often take us over high mountains and high deserts—where it can get extremely cold, especially at night.

Higher elevation airports may have snow and ice covered runways, especially immediately after storm passage. The airport may be closed! Be sure to check and understand airport NOTAMS. For example, what does this mean?

SFF...4 IN LSR 9 IN DRFT

How about your experience and training? Are you comfortable landing on a runway with snow and ice, with braking action poor or nil? How much clearance will you have with an airplane equipped with "wheel pants"?

Consider your departure. The surface may be icy. Rule of Thumb: If you can't walk on it, you can't taxi on it! Most likely the airplane does not have a winterization kit. The airplane may be kept outside, in well below freezing temperatures, with snow and ice. It is *imperative* that every bit of snow and ice be removed from the airplane before takeoff! Pay particular attention to the crankcase breather in cold weather. A number of engine failures have resulted from frozen crankcase breather lines which caused pressure to buildup, sometimes blowing off the oil cap or rupturing a case seal, causing loss of oil. If the aircraft is parked in an area of blowing snow, special attention should be given to openings in the aircraft where snow can enter, freeze solid, and obstruct operations.

The engine will be difficult to start. Pull the engine through several times, before attempting the start. Considerable priming is usually required. Follow the recommendations in the POH. As the temperature drops battery performance and charge decrease. The use of auxiliary power may be required. If possible, have a qualified person standby with a fire extinguisher. Where available, hangar the airplane or use an *approved* aircraft preheater.

During taxi avoid areas of standing water. Mud and slush can freeze in wheel wells and interfere with the operation of retractable landing gear. Brakes can freeze, locking wheels. Be aware that airplane controls can freeze while taxiing or waiting for takeoff.

Winter can be one of the best flying seasons, with its cool temperatures and usually excellent flying weather between storms. But, like the summer, winter flying operations pose their own set of unique hazards.

## The Flying Gourmet

by Jim Jellison

While perusing my "Pilot's Guide to California Airports" I came across the Two Niner Diner located on the field at Petaluma. Sounded like rather a catchy name for an airport diner so I put it on my list of places to visit. It was on the list for a very long time since it doesn't open until 9 AM during the week and it didn't fit into my early morning, before work, breakfast schedule.

I have found that just about every airfield has an interesting and little known history and Petaluma is no different. On February 17, 1911 the first flight with mail was made in California. This flight was piloted by Fred Wiseman who flew his self-constructed plane from Petaluma to Santa Rosa, a distance of 20 miles. Fred only made this one historic trip but considering it was 1911 and he flew a home built it was quite a feat!

The diner itself is really cute and reminds me of a 50's style hamburger joint. It has a black and white checkered floor, white walls, and black chairs and tables. The restaurant is located in the corner of a much larger building that contains several businesses and a hangar. Since they occupy the corner they have a wrap around patio on two sides where you can enjoy the sun and fresh air. The fresh air was a little cool the day I was there, so I decided to enjoy my lunch inside.

The menu, as you might imagine, is geared toward aviation with the Dawn Patrol breakfast and Junior Pilot selections. The diner boasts that they have a "famous burger", (don't they all)! Well, I tried it and it was pretty darn good served on a toasted bun with fries.

To go along with the 50's decor there is one complete wall that is covered with black and white historic aircraft photos and more than a dozen very well done aircraft models (all WWII) suspended from the ceiling. The real hit for me was the discovery of the nose art pictures that were right over my head on the outboard wall above the windows.

The Two Niner Diner is located on the flight line and seems to be a very popular place for lunch. The service was good and the food delicious. The only things inconvenient about the place are the restrooms. They are located in the same building but at the exact opposite end of the larger building.

The restaurant is located next door to "The Prop Stops Here" pilot shop. I found it well stocked with everything a pilot could want including those two wheel Segway electric scooters. Another interesting business is the "Spirits Up" open air flying school. They sell motorized hang gliders and teach flying in both hang gliders and ultra lights. I talked to a guy who had been on a coastal flight and said it was a thrill of a lifetime. Sounds a little too thrilling to me - I like my wings bolted on!

Petaluma (O69) is approximately 52 nautical miles northwest of LVK.

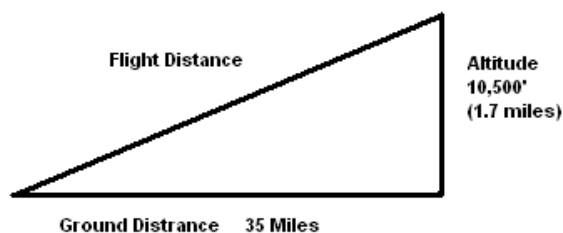
# Instructor's Corner: Cross Country Flight Planning

By: Jordan Miller

Last month's Instructor's Corner looked at the importance of an accurate navigation log. The next series of articles will look at developing an accurate flight plan from Livermore, CA to Portland, OR using performance from a Cessna 172P. This article will navigate the preliminary work necessary to develop a nav log and finding a top of climb point.

Before most performance calculations can be performed, the pilot must have some basic information: how far is the flight, can the flight be done in one stop, are there terrain or airspace restrictions? The route distance to Portland is a little less than 500 miles and there are some large mountains that will be crossed. By looking at the range profile chart on page 5-19 (C-172P POH) I can determine what power setting will produce sufficient range for the trip. According to the chart only 55% power will result in over 500 miles of range. Ideally I would want to use an altitude that would require full throttle to produce 55% power. This altitude will result in the highest TAS for the power setting. For the C-172P this altitude is so high it is not practical because of oxygen requirements and climb performance. The heading to Portland will be mostly northwesterly; accounting for terrain and performance, possible altitudes are 8,500 or 10,500. Usually winds would help decide between these two altitudes, let's plan for 10,500'.

Once the cruise altitude is selected, performance must be figured for the climb to that altitude. The climb performance is found on the Time, Fuel, and Distance to



Climb chart found on page 5-17 in the C-172P POH. The chart gives the indicated airspeed to use in the climb, Vy. The chart also gives the distance and time necessary; in this case it will take 26.5 minutes and 35 miles to climb to 10,500' pressure altitude. Since speed is distance over time, a no wind groundspeed of 80 knots can be found by converting 26.5 minutes into .44hrs and dividing by 35 miles (no wind GS = 35/(26.5/60)). The no wind ground speed is used for the climb instead of the true airspeed, as during cruise, because the airplane actually flies the hypotenuse of a triangle between the ground and altitude. The no wind GS must be found in order to find the GS for the climb and the actual top of climb (TOC) point.

Next a decision has to be made about what wind forecast to use for the climb. A general rule of thumb is to use an altitude that is 2/3rds of the climb altitude. The

reason for using 2/3rds of the climb altitude is that rate of climb decreases as altitude increase; therefore approximately half of the time spent climbing is the first 2/3rds of the altitude and half the time spend is the last 1/3<sup>rd</sup>. In this case 2/3<sup>rd</sup> of 10,500' is 7000'. Therefore the 6000' winds should be used (for improved accuracy, one can interpolate the winds aloft for 7000'). Let's assume there is a tail wind for the climb. After putting the no wind GS and wind into the flight computer, the actual ground speed is 95 kts. Now the actual TOC can be established by multiplying the speed by the time to climb in hours (95\*(26.5/60) = 42 miles). The TOC is 42 miles from take-off.

Once the TOC is found it should be used as a checkpoint on the flightlog. Although there might not be any good physical landmarks to identify the 42 mile point, the TOC will mark the transition from climb speed to cruise speed. The difference between climb and cruise speeds can be over 35 knots. Not accounting for the speed difference can lead to large errors in flight planning. Errors in initial flight planning limit the usefulness of dead reckoning and fuel planning. Also, the indicated airspeed for the climb should be marked down; 76 KIAS during the initial climb decreasing to 70 KIAS at 10,500'. Finally, the fuel used to this point is 4.6 gallons plus 1.1 gallons for start, taxi and take-off.

The first portion of accurate flight planning is complete. The pilot knows what indicated airspeed should be used for the climb from the time, fuel, distance to climb table, the resulting groundspeed and the fuel burn. By flying the correct indicated airspeed during the climb, the pilot knows he should arrive at the actual TOP at the marked TOC point. If TOC is not at the TOC point the pilot can recognize a change from the plan and start analyzing the cause. In next month's Instructor's Corner cruise and descent planning will be discussed.

Training flights for a pilot's license seldom test the range limits of an airplane, the C-172P can go well over 400 miles on a single tank. But some of the most fun places to fly, such as Palm Springs, San Diego, Redmond and Portland, are at the limits of the range.

## FAA Safety Seminar "Winter Weather Hazards"

Winter can be one of the best flying seasons, with its cool temperatures, usually excellent flying weather (between storms), and spectacular scenery. But, like mountain flying in the summer, winter presents its own unique hazards.

Mark January 17<sup>th</sup> at 7 pm in your PDA. That is when the staff at Ahart Aviation and Abrams Aviation Seminars invite area pilots and CFIs to attend Terry Lankford's informative Winter Weather Patterns and Hazards Seminar.