

The WFC Flyer

April 2011



March Quiz Answers (AOPA Safety)

1. What is the best angle of climb (V_x)?
74 MPH
2. What is the stalling speed in landing configuration (V_{so})?
56 MPH
3. What is the maximum demonstrated crosswind capability of the Cherokee?
17 KTS

Important Dates

General Meeting

April 14, 2011
7:00 PM Clubhouse



April Quiz Questions (R172K)

1. What is maximum useful load?
2. What is the maximum flap extension speed V_{fe} .
3. What is the best glide speed

Board Meeting

May 5, 2011
7:00 PM Clubhouse

From the President

Winter has released its grip (hopefully) and good weather is upon us. Sign up and fly! Effects of world events will soon be upon us.

Club Officers

President

Duane Sims
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Vice President

Chris Karpenko
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Treasurer

Bob Herloski
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Secretary

Bob Cournoyer
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We have had some new members join our ranks some who already fly and others who are just starting out. In either case, please take a moment to introduce yourself and welcome them to the club.

Member volunteers are our greatest asset and with many hands and minds working towards a goal, the job can be performed much smoother. For example, the member turnout for last year's breakfast grill set up was outstanding. The job was done in no time. Some upcoming projects within the club such as the painting of the fuel farm and compass rose are excellent additional opportunities for volunteering and member fellowship. Lets see if we can achieve the same type of participation as we did for last year's grill set up.

I know that Bill Bach will state in detail items for the upcoming breakfast, but I will state this now: please make note of Sunday, May 15th. Everyone's participation is definitely needed and the more hands and minds that are present allow the job go by much smoother and safe.

Directors

Bill Bach
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Tom Henderson
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Jake DeGroot
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Secretaries Note

It is again "time to fly". After a long and difficult winter for flying and just about everything else the weather appears to be breaking for the better. Your currency may need attention. Take the time now to burn a few holes in the air; it will make anyone feel that Spring is springing. To aid with this the BoD is holding aircraft rates constant for a short time even though we are facing a substantial fuel cost increase. So don't delay, if you haven't noticed rising gas prices then you must be riding a horse. Take advantage of the current AC rates now before the inevitable increase occurs.

Annual Breakfast

This year the pre-sale tickets for Active and Permanent members will be mailed to all individuals. There will be no tickets at the April general membership meeting. If you need additional tickets they will be available at the Club House starting about the middle of the month. I will send a note to everyone when they are ready.

The duty roster will be posted on the Breakfast Forum shortly. If you are on the list and have any questions please contact your committee chairperson. If you are not on the list please contact me via email and we will get you on one of the groups.

Flight Rx by Dr. Pam Tarkington

Spacial Disorientation – Part II

As a result of unreliable or unavailable visual references, there may be a false sense of rotation. Next we will go over the graveyard spiral and spin, the leans and the Coriolis Illusion.

The graveyard spin: this happens when a pilot goes into a spin (intended or not). The pilot will know (thank God) that a spin is occurring and will know the correct direction of the spin. The problem happens when the spin continues; the pilot will sense that the spin is lessening. If the spin is to the left, the pilot will apply right rudder to stop it. The pilot will believe that the spin is in the opposite direction (right) and the pilot will apply left rudder. If the left rudder is applied to correct the sensation of a right turn, the plane will go back into a left spin. If the pilot trusts his body sensation the left spin will get worse and the plane will rapidly meet the earth. What should the pilot do to avoid a crash? Simply, trust the instruments: they will tell the pilot that the plane is in a left turn although the body is sensing a right turn.

Graveyard spiral: generally with a moderate degree of bank, the pilot has the plane in a prolonged turn. The vestibular sense will fatigue (wear out) after 30-45 seconds in the turn; hence, the pilot will no longer perceive the angular acceleration of the turn. The semicircular canals do not respond to a constant angular velocity and stabilizes. If the turn continues, it will not be sensed by the brain as such; instead, the brain will perceive (falsely) as no turn or that the turn has stopped. When the rotation stops, the pilot will believe that the turn is in the opposite direction. What happens is that the endolymph will continue to move in the direction in which it has stabilized hence, it is perceived that rotation is in the opposite direction. The pilot will try to stop this false sensation by returning to the direction of the original turn. The pilot thinks he is going in the right direction but not the real direction - the pilot believes it is straight and level but in reality it is a slow descending turn.

The aircraft descends while in the turn. The pilot will increase power and pull back on the yoke. What happens is that the turn increases as does the spiral and rate of descent. The spin will increase and the plane will crash.

The leans: the most common illusion that occurs during flight. What happens is that the plane is in a gradual and prolonged turn unnoticed by the pilot and is suddenly returned to level flight. This happens because a gradual turn of 2 degrees or less cannot be detected by the semicircular canals. When the wings are leveled there is the illusion that the plane is turning in the opposite direction. The pilot will then lean in the direction of the original turn in an attempt to have a correct posture.

The Coriolis Illusion: this happens in a turn if the pilot moves his/ her head forward, backward or sideways: this is sensed as though the plane is rolling, yawing and pitching all at the same time. The pilot will become disorientated and may not be able to properly control the aircraft.

How does the pilot overcome spatial disorientation?

1. The FAA has a fantastic course on spatial disorientation in Oklahoma City.
2. Obtain an instrument rating and remain current. If you do not want to get the rating, you might want to get some instrument experience with one of our fantastic instructors.
3. If you are VFR qualified, pay attention to the weather so that you are not flying in unsuitable conditions.
4. If you are flying at night, maintain night currency.
5. If you experience an illusion do trust your instruments and not your senses.

On April 14th

In 1837 The earliest known aeronautical experiment in Canada is conducted by schoolteacher John Rae. He successfully launches a paper balloon able to carry weight. Its lift is provided by heating of its blackened surface by the sun.

In 1926... Lindberg becomes chief pilot for Robertson Aircraft Corp, flying a Saint Louis to Chicago mail route.

In 1969 The Royal Norwegian Air Force is the first European air service to take delivery of the Lockheed P-3B Orion.