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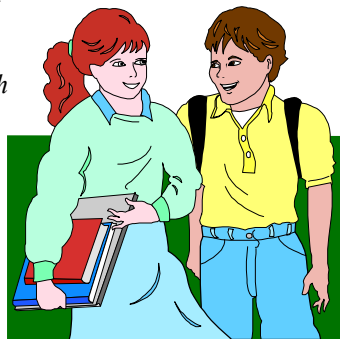


The Quarterly Newsletter for the Pilot Who "Knows that Memley Aviation Loves Them" QTR 1-2009

BE MINE!

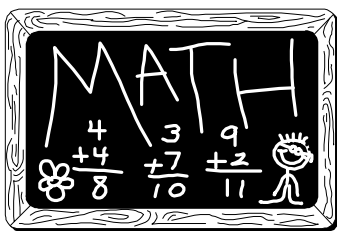
by: Alan Memley

Valentine's Day is one of those mysterious 'holidays' that can be very traumatic. My earliest experiences with this event took place in elementary school. I kind of figured out that it was to be a boy-girl thing. Only problem was that most of the trauma came when a boy would get a "Be My Valentine" card from another boy. My big wish was to get cards from *both* Susan's in the class (man... were they cute!). Of course, my luck was that *Clifford* got cards from them, while I got one from *Fred!* Don't get me wrong. Fred was a nice guy, and all... but, it just didn't seem quite right to my 8 year-old mind.



Later, as teachers became more politically-correct (they hadn't heard of the term at the time... but, it was just the same as today's version), they asked that each student make cards for every other student in the class. That really confused the issue. Finally, *no one* could be sure just who was wanting whom. Valentine's Day became another homework assignment. Really creative kids began looking to other classes to send cards that meant something. Others, like myself, resigned themselves to going through the meaningless motions.

Flight planning... the classical kind of planning... is a *reverse* of the Valentine's Day ordeal. When we are new students, we are told to fill out the flight planning sheet down to the last knot and second. "Figure those



winds... and make sure that you've got the very latest. Did you write down all the frequencies, radials, checkpoints, and airport information?" Man. I've watched students spend 2 hours planning a 20 minute flight. Might as well walk. Could have been there by now.

But, then comes the Private Pilot Certificate. Suddenly, flight planning becomes so much easier. Draw a line on the chart (usually from Chandler to Harris Ranch for the obligatory steak), measure it with our fingers, estimate how much fuel will be burned on the 16 minute flight, and then insist that we have full tanks for the flight! (You just never know when you might run into headwinds!) In other words, the "flight planning" that we did when we were students was for the purpose of *understanding* the principles of the plan. Now, we

GETTING CROSSED-UP

Springtime is just around the corner. For you procrastinators, by the time you get around to reading this newsletter, it may just *be* springtime! The weather in the Spring is very erratic. Winds pick up, and one day is cold and rainy with the next being warm and dry. Like television, Spring weather bears watching. **Crosswind takeoffs and landings** become likely as the weather undergoes its change between Winter and Summer. So, let's look at the proper techniques for the crosswind operation.

During our private pilot training we learned of the affects that a crosswind had on our plane. Rectangular courses, turns around a point, and s-turns taught us the affects of wind on our ground track. Compensation was made by 'crabbing'. Well, on the crosswind takeoff and landing, we cope a little differently.

Most aircraft don't have casters for landing gear. Each takeoff and landing must be made with the longitudinal axis of the airplane parallel to the centerline of the runway (i.e. lined-up with the runway). If no effort is made (and believe me... it requires *effort*) to keep the aircraft aligned properly, excessive side-loads can occur on the landing gear. That's bad. A pilot needs to maintain a frame-of-mind when making a crosswind takeoff or landing. The technique defies what has been previously drummed into the student's mind. Coordination is the key word... up until the crosswind landing is introduced, that is.



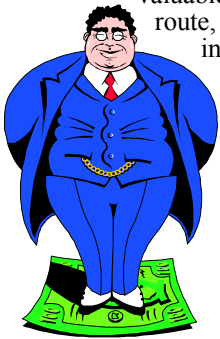
"...It becomes a dance routine of sorts. I call it the **Rudder Shuffle...**"

For a crosswind takeoff, the pilot should hold a generous amount of aileron into the direction of the wind during the takeoff roll. As airspeed increases, the amount of aileron deflection can be reduced according to the strength of the wind. Directional control is maintained with rudder, continuing throughout the rotation and initial climb. In other words, the airplane will remain aligned with the

can ball-park the figures for most of our local flights (within 100nm). Longer flights, and those to parts unknown, will require more detailed planning than the trip to Harris Ranch.

Flight planning for Private pilots should concentrate on more important aspects of the flight such as, weather, weight and balance, and aircraft performance. These factors are the 'killer' ones... ignore these and you're bound to have trouble sometime down the road... or, rather airway. Whether or not you get to the first checkpoint a minute early or a minute late will not amount to a hill of beans.

Getting Valentine's Cards from both Susan's was unlikely... but a nice thought, nevertheless. Having the whole bunch send cards to the rest of the whole bunch was ludicrous. Don't waste time on minutes and seconds. Let DUAT plan your flight (about 3 seconds to spit it out). Spend *your* valuable time assessing the weather along your route, the weight of the passengers (not too good in these days of Big Mac hamburgers), and making sure that you have enough fuel for the trip... keeping in mind that you're not crossing the Atlantic. You'll discover that you have enough time leftover to prepare a Valentine's Day card for the Real Someone Special.



How come...

- ...a compass correction card doesn't "correct" the compass?
- ...a compass rose is not really a rose?
- ...pilots say they are "taking" the runway... but, they always end up leaving it there?
- ...it's called a "landing gear"... but it's also used for taxiing and takeoff?
- ...we still use terms like "downwind" even when there is no wind blowing?
- ..."fronts" are described as cold and warm... when, in fact, they are cold and warm on the *back*?
- ...it's easier to start a '57 Chevy than a '76 Piper?
- ...there are better locks for bicycles than for airplanes?
- ...on a Cherokee, the flap handle comes "up" to put the flaps "down"?
- ...pilots have to wear sunglasses that make them look like bugs?
- ...Memley keeps coming up with these stupid questions?

Getting Crossed-Up (cont.)

centerline of the runway while initially climbing in a slip. Once safely airborne, the pilot should re-coordinate to a normal climb, maintaining a crab angle, as needed, to track across the runway centerline.

The proper procedure for a **crosswind landing** is to align the aircraft with the runway centerline by using the rudder. Then, in order to prevent turning, crank aileron into the direction from which the wind is coming, while *keeping* the rudder pressure to maintain alignment. A common error that students (and even certificated pilots) commit is to rhythmically release rudder pressure, drift, then reintroduce rudder pressure, and on and on. It becomes a dance routine of sorts. I call it the *Rudder Shuffle*. All that is needed is the music! Rather, we need a *state of mind* that is prepared to find the right amount of cross-control and stick with it. It's okay, and necessary, to land on one wheel (the main wheel, that is). Once the first tire touches down, then the other can be gradually set down on the pavement. Allow the nose wheel down, keeping in mind that just before it touches the runway, you'll need to center it to avoid swerving off centerline. Maintain aileron control into the direction of wind until clearing the runway.



When I was just a wee lad, I would supplement my flight training by practicing crosswind landings during my US History class. My teacher figured I was nuts, watching me "land" my desk on the left, rear leg, only to lower the right, rear leg once safely on the "ground". Well, at least the chicks thought it was cool! You, too, can be nuts.... I mean... can practice crosswind landings from the safety and comfort of your own home. Pull up a chair (a four-legged variety), and imagine the flare and slip. Raise the chair (without falling backwards and suing me) onto its back leg (right or left, depending on the direction of the wind), then gently lower the others as you "slow down". Imagine yourself putting in the right amount of rudder and aileron pressure throughout the maneuver. Say! That was a great job! Now, I'm calling Bellevue to come and get *you* (too)... you nut!

