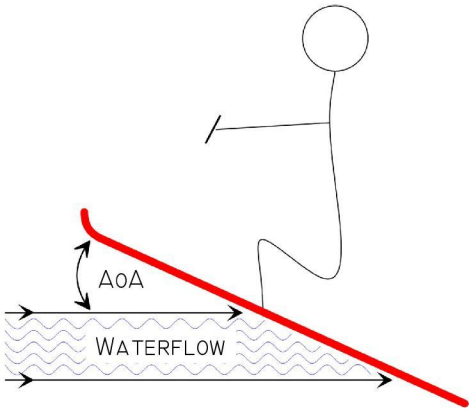




# Flying Sideways

Obscuring clouds absent over northern Negros, I seized the opportunity to peak into the deep throat of Kanlaon Crater. The resulting photos were well received on a subsequent Facebook posting revealing a vertical pipe captured by banking the aerobatic Super Decathlon 90°, one wing up, one down, right over the crater.

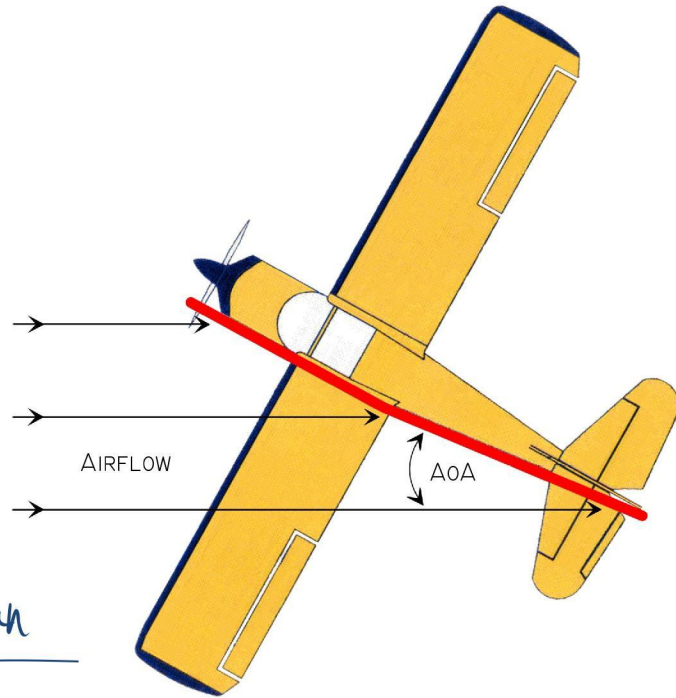
With the effect of the wings neutralized, how exactly did my little airplane create lift flying sideways and evade an unrecoverable death drop into the volcanic abyss?



The secret lies, once again, in flying the Angle of Attack (AoA), see 'Feeling the AoA', [f/camiguinaviation](https://www.facebook.com/camiguinaviation), HANDOUTS Section. Except that this time you are dealing with an AoA between the relative airflow and the fuselage, not the wing. You heard right, the aircraft's mid-section takes on the role of the wing and is now creating lift. Airplanes are awesome!

Here's how it works: A surfboard stays afloat by onflowing water creating a lift force that pushes it upwards. In the case of a sideways flying airplane, this lift-force is created by the onflowing air pushing up on the fuselage, keeping the airplane flying. In both cases, the surfer and the pilot have to maintain a specific AoA for that purpose.

In aerobatics, flying sideways is also known as the *Knife-Edge* maneuver. Roll the airplane sideways 90°, simultaneously apply lots of UP-rudder and you'll be flying sideways.



Scenic Flying!

*Capt. Sean*

