**Gordy's Travels #6**

Ten Tips That You Have Found Lift!

Pretty often during my travels to your flying sites, I notice that pilots are often launch through lift, fly through lift, fly away from lift or circle on the edge of lift. That's okay if I am flying against them in a contest but, mostly it's frustrating because I know I have done it for years myself.

With all my flying you'd think that I would never miss my times or a landing, but in fact, like most of us mortals, sometimes I head the wrong way too or do a dumb thumb on approach.

But one of the benefits of flying so often is that my frustration inspired me to identify cues and hopefully be able to explain them to the rest of us..not something the soaring legends are good at. They're great sailplane pilots but not very often talkers.

So let's talk!

Devise a flight plan:
Prior to launching (and this assumes you have read and put in to practice the things I have written prior about trim, balance and its effects on reading air) take a look around the flying site. Look for the obvious signs like birds circling, dust devils, big dark clouds, or one group of trees moving on a tree line. Look for that one tilled black field, or that one big building that might be collecting heat. Duh, look at what other planes are doing, but don't count on them to go to lift. Watch their travel path to see what kind of air they are passing through, as in did you see them wobble, or perk up their tails or get sluggish and droop tailed? Take the wind speed into consideration too, it could mean that once in lift, you will have to aggressively bank and crank, tight moving circles to stay in core.

Once you have noticed all you feel you can, make a search pattern plan and follow it. It's a big duh if the plane before you went left and it sunk like a rock, pretty much assured of a spectacular one minute flight, for you to choose a right turn off of launch.

If there is a gaggle of planes in great lift, definitely do a turn and burn off of the launch to get over that way. Once there, don't be in a rush to get right in with them. Move past them to see if they are really just on the front edge of the core, or the back edge. If heading to a gaggle, do not take your eyes off of your plane, and advise your timer to do the same. It's easy to loose which model is which.

Recognizing lift:
If you read my previous articles this part is redundant, but important. If your model is balanced (as opposed to ÒI set the CG according to the plane with a micrometer) then when it is in lift it will signal and confirm. It will signal via the tail

popping up and the controls getting really lively. Once you feel that is the case, then by simply hitting your rudder either direction your plane will circle upwards if there is lift, or downwards if you are in sink. Your controls get lively because there is air (energy) rushing up underneath for your plane to slide forward off of. They become sluggish because there is cold air dropping on top of your plane's tail, sticking the nose up, slowing air moving over the control surfaces.

If your model is set dead on the CG according to the plan' chances are it will not signal or confirm anything other than the fact that you will be getting skunked on that flight.

Launching into lift:
You can tell that you launched into lift because your wings ripped off. You can tell you launched into lift by the sound of the winch really laboring. You can tell you launched into lift because your launch was really vertical and your altitude seems really good.

When you hit lift on a launch, don't lay on the pedal! Kite your model up instead taking all the line in, more line out for more altitude on release. Fast, short duration tapping, just to keep the line taught (sort of like keeping beat with your foot to a fast Polka ☺.

Only stand on the pedal at the very top of the launch, then let off and just pull your plane up AFTER you let off the pedal Ð do not bother with going in the bucket with a big dive and pull up.

Once off, circle search the area for a signal, then ask for confirmation by hitting rudder. I know that rudder thing has you freaked because you've never touched it except for accidentally, but you paid a thousand dollars for what you think is the most trick airframe design out there, loaded it up with really expensive servos, yet don't use one of the most important parts of it, the rudder. So get your thumb on that stick left stick and leave it there! Force yourself to go back and re-read my article on Balance, and Hang Tail and Return to Balance and Trim, then start looking for lift leading with your model's rudder. You paid for your whole radio, start using it.

Finding the Core:
When your model indicates lift, don't just stop and turn, search the shape and edges of that thermal. Doing so will tell you which direction it's moving or if it's moving at all. That means taking a few seconds to fly flat and straight till your model gets sluggish, then turning 90 to see what's over that way. Once you feel that you have felt it out, then dig back into the core area.

Use ALL of your Radio!

Once in lift, get to work with switches and levers. Since you paid for your trim levers its silly to just set them and then let them rust in place. They get lonely and need lots of attention just as both control sticks do.
One question I always ask a pilot I am timing for is this, Wouldn't you rather your plane was falling upwards instead of downwards while in thermal turns? Too often guys are doing a bow-tie pattern of circling because they don't take advantage of their elevator trim lever. Why not crank in some up trim when you hit lift, then control your model's nose by working in the needed down stick to keep your plane from slowing too much, but all the time working up?
Camber too! There's never a better time to dirty your plane up with about a 1/8Ó of full trailing edge camber than when you are in lift. Like I said, just watch the nose to keep your plane moving along, instead of porpoising.
You'll be surprised how you suddenly start adding a minute to every flight!
When it's time to head down for your landing approach, take that added up trim and camber out in fact add a click of down trim in for landings, it's a lot easier to fly through a ground thermal than it is to correct for a surprise nose pop up on approach.

Lift is:
Energy, same as jet fuel, with it your model is active, responsive, nimble, perky, quick and FUN.
Sink is:
Iron poor blood, sloth-y, un-responsive, weird acting, tail hang-y, stall-y, slow, up for sale.

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You know you have found lift when your model tells you. IF you have your model balanced for flying versus some misguided lead filled nose idea that a model is more stable when it has a snoot full of lead, its tail can pop up when the slightest amount of lift blasts up under its tail. But even with a perfectly balanced model, YOU need to be watching for that invisible rising energy that will super charge your controls (go back and read my article on The Hunt).
That means as you fly along you can't just sit there and hope lift hits you on the noggin, you have to be looking and testing all the way away. Bumping rudder to see if there is a response.
What happens if your rudder doesn't seem to do much on YOUR model? Your expert friends would advise you to put a bigger rudder, but don't! It's the lead in the nose that stops your rudder from having the strength to move your plane's nose. Get your model balanced, reduce your control throws to settle the improved reaction and watch your plane tell you the Ten Tips That You Have Found Lift!

See you next trip!