

THERMALLING IN COMPANY

Thermalling in company is not emphasized in the basic glider curriculum on the path to a rating. Since we are getting more interest in XC flying, thermals occupied by more than one glider will become common. Sunday, I got urgent reports of problems from Saturday flying. This is deadly serious as this is where almost all of the glider-glider midairs occur.

JOINING THE THERMAL.

As you approach "The Cloud", realize it may already be occupied, and there may be others eyeing it too. So, heads up out of the cockpit, listen to audio, and count the gliders. If you see some, don't lose track. Note the direction of turning, and make sure you do the same. I got some reports of violation of this rule Saturday.

Approach the thermal from the outside, and spiral in like the links on a bicycle chain. (Thanks for the metaphor, Fernando). Find a place to enter, and as a glider goes by, aim as his tail and slide in. Ideal arrangement is equal spacing. 2 gliders, 180 deg apart . 3 gliders, 120 deg apart. Etc.

MAINTAINING SPACING.

So you have made it into the circle without trading paint with someone. Next task is to, as Scott said, "guard your six". As a corollary, don't encroach someone else's six. I have reports of this happening Saturday. You have two ways of changing relative position in the circle. You can adjust speed or bank angle, or both. If you are creeping up on someone, you could slow down. Of course, you should already be pretty slow, and you don't want to stall. There may be someone in the next "layer" below. Also, there may be someone improperly positioned behind you. So, decrease the bank angle a bit-this will reduce your angular velocity, but keep your airspeed. And, this is best done with a bit of rudder, rather than aileron. Bottom line---fine tune angular position with bank. BTW May 2020 issue of Soaring Mag has article by Dale Masters explaining this nicely.

Passing someone in the thermal is generally a big NO-NO! Yes it is done by experts occasionally. In general, in a gaggle, (a multi occupied thermal), it is "follow the leader", and accept the diminished climb. A gaggle is a great centering tool, but a poor climbing tool. If our "slow climber" is flying a giant circle---about a 1000 ft radius and barely climbing, it can be possible sometimes to pass him while retaining angular position, by flying a tighter circle. BUT NEVER LOSE SIGHT OF HIM, AND DON'T LET HIM LOSE SIGHT OF YOU! If you make a habit of that, you will be known as "That Guy". A famous That Guy, after numerous admonitions, was banned from racing, period.

INTERSECTING CIRCLES.

It sometimes happens that large clouds have several cores feeding them. They are like the trunks of a Banyan tree. They tend to converge about 2/3 of the way up the thermal. You can be nicely centered, and look over 1500 feet, and there is someone else also centered. Hopefully you are both going in the same direction! Your circles will eventually join, whether you like it or not. If you are being outclimbed even a little, go over and join him. If he is a bit higher, go over and join. If no action is taken, a midair surprise could happen. If you are climbing better, expect him to join you. Yes, I'm told this one happened Saturday as well.

LEAVING THE CIRCLE.

Do not use the Witek method George Moffat describes in “Winning”! Just clear to the outside, gradually reduce bank and leave on course to the next great thermal, while accelerating through the anticipated sink. Or, not so fast, frequently there is a “tail” of lift along the wind line.

You should be clearing to the outside frequently, as someone joining may not have seen you. I have experienced more threats from the outside, by far. Keep track of the number of ships in the thermal, so anyone “missing” may become a threat.

Lastly, these “rules” are generally referred to as “Thermal Etiquette”. IMO, Etiquette refers to polite social behavior. This is way more important than that. Don’t become “That Guy”

Hartley Falbaum
MGSA Safety Officer.