**MID-GEORGIA SOARING ASSOCIATION**

HOW TO SURVIVE AT CHILHOWEE

General Info: BENTON , TN (92A), Atlanta Sectional

- GPS coordinates: N 35 deg 13.59 min, W 084 deg 35.10 min.
- Elevation: 770 msl.
- Pattern Entry: 1770 msl (1000 feet AGL).
- Runway 3/21, length 2600 feet.
- CTAF 122.9 (**a few planes may not use radio at all - eyes out!**).
- Runway 21 uses RIGHT traffic and Runway 3 LEFT traffic, meaning that you could meet someone head-on on the downwind leg of your pattern and AGAIN on landing! At the pilot's meeting, landing direction is determined each day by winds. Updates to the landing direction will be provided on the radio on 122.9 if the conditions warrant a change.
- **ATTEND THE PILOTS MEETING,** generally between 10:00 AM and 11:00 AM daily.

Finding the Field:

- As usual take a GOOD look around just off tow and REMEMBER what you see.
- The ridge with the antennae is 2nm SE of the field and is about 2200 ft tall (~ 3000 msl)
- The river comes through the gap north of the ridge and runs about west to the field and turns to parallel west of the runway.
- Some visual clues like the old silos are gone now!
- If you need more than this, Read the Map!

Flying the Ridge:

- If you have lots of experience elsewhere, just do your thing. Note from the map there is a powerline at the south end of the tall short ridge. Sarah says this powerline is now below tree height. Still be aware and use caution.
- If you have little or no ridge experience, believe this. IT IS DIFFERENT from flatland flying.
- Therefore, get a ride with someone who knows how! Pay attention to what is done and what is NOT done.
- Do NOT circle anywhere near the ridge if the ridge is working UNLESS you are well above ridge height.
- Do make figure-eights below ridge height. These are turns always away from the ridge. BELOW RIDGE HEIGHT ALL TURNS ARE AWAY FROM THE RIDGE!
- Maintain at least 10 kt extra airspeed above best L/D for maneuvers. This is no time for a stall/spin.
- Turn around as the lift increases, not in sink.
- Turn away from the ridge if you encounter major sink.
- Don't pass except on the ridge side.
- When meeting head-on the plane with the left wing toward the ridge moves out to the right. That is, give way to the right. The plane with the ridge on the right can't go to the right!
- You will be crabbed away from the ridge- It will look wrong. Just keep the yaw string straight.
- If you get caught behind and below the ridge (i.e. downwind) you won't make it back. **DON'T DO THIS**. Options in the forest are few. None really.

- You won't contact ridge lift reliably below the top third of the ridge. If you don't connect quickly, head for the field, and don't dawdle. This is no place for flying minimum sink airspeed.

Explanation of Above Rules:

Assume a glider is thermalling in a 10 kt wind (a weak ridge day or maybe not a ridge day at all) This wind is enough to trigger slope thermals and can provide good lift to above the height of the ridge. Let us assume the pilot starts his circle 1000 ft horizontally from the terrain, at 52 kt and a 30 deg bank, that sounds pretty conservative, Right? OK gang, how much longer does this pilot have to live? Let's crunch the numbers and see. Rate of turn will be 13 deg/sec so a 360 takes 27 sec. The gentle 10 kt breeze is 1000 ft per min. His turn radius is 420 ft. So for one full circle he is 450 ft closer to the ridge. With his second circle he is 100 ft from the ridge. We have used 54 seconds. Unless he does everything right at the right time he will crash in the next 15 seconds!

It is granted that world class experts can get away with this maneuver most of the time. It is done by remembering the Commercial Pilot test maneuver called "turns around a point." Don't try to learn it under these conditions. Also, I point out that Helmut Reichmann and Klaus Holighaus met their untimely end In the mountains flying ridges.

You Are Not a Silver Badge Holder:

If the winds at altitude are not favorable, the ridge may not be working at all times. You must stay within gliding range of the airport. We leave it to you to compute "gliding distance" but assume the following in your calculations. Wind-15 kt on the nose. K21 glide ratio is 24:1 @ best L/D in still air (don't count on the full 32:1 when your butt depends on it) but into a 15 Kt headwind requires increasing speed to 62 kt at least so make it 20:1 in air. Calculate your glide ratio across ground. Don't forget to leave some pattern height—minimum is 1000 ft AGL. Get out your sectional (Atlanta) and your plotter and your E6B, use windex to remove the mold and dust and start calculating how far you can go based on your height above ground. Make a chart for yourself -- NM per 1000 ft for heights from 1000 to 5000 ft (AGL) then TAKE it WITH YOU in the plane and USE IT! You'll need to mark the Sectional with circles at 2 NM intervals so you can tell where you are.

Flying in Chaos:

I understand that Mike Reisman did not allow student solos during Oktoberfest. The chaos requires alertness and having plan A, B, & C ready. Typically planes will launch on Runway 3 and towplane and others will land on Runway 21, conditions permitting. There is room to land on the left and right of the main runway (plan B & C?). Mornings present a great opportunity for some dual while things are more quiet.

On takeoff follow the terrain. Let the towplane climb a bit before you go up with him. This makes it easier for him to climb. Mike liked you to have the towplane a bit above the horizon on tow.

There is no really good option for rope break on Runway 21. There are good fields to the right for Runway 3. If the wind is from the East you may need more altitude before you can turn around and land on the runway. This is because of a downwash from the ridge. ASK about this if the wind is strong and Easterly.

Landing on grass is nice but braking action is less-- allow for it.

The “L” in USTALL means REALLY look around and there is NO SUBSTITUTE for active eyeballs and a quick mind. Always have another plan.

Fly Safely & Have Fun
Hartley

*This article was a newsletter item in 2002 but still holds true. Minor edits have been made to address current operational rules.*