

## U1

- Cloth ageing: how to characterize it, what are the typical alerts, what is the life span of a paraglider, what are the main ageing agents, how do you care for your paraglider cloth.
- Lines aging: what are the two main line aging problems your glider may encounter, what materials are concerned in each of these cases. My glider lines are made of sheathed aramid, what should I do to control the aging, what are the criteria, what is the control frequency?
- My glider has 4 row (a, b, c, d), 5 bottom lines on each A riser, max total flying weight is 100kg. What is the max load per A bottom line in a stabilized straight line? What is the airworthiness criteria?  
Same question for a 2 liner with 3 A on each A riser
- Explain what is the trim of a glider, how can I change the trim in flight. Aging: what line material could cause the trim change, usually in what way does it move? What are the typical alerts of a wing out of trim? How do we proceed to control the trim, what are the criteria? What should I do prior to flying once the trim has been corrected?
- Reserve: 5 cases when you must throw your reserve directly. 3 family of situation you can encounter when it's time to throw, what throwing technique do you use in each case. How do you care for your reserve, what is the best technique to fold it?
- Should I fly my glider in the top, middle, or bottom of the weight range?  
My glider is B certified at the top of weight range and C certified at bottom of weight range, what could be the explanation? what is the connection with security in flight?  
My new tandem is 105-220kg certified, what should I pay attention to?  
My student has now 50 hours, he wants to buy a B glider (AR 6) "to progress", what should I explain him?
- How to set up a harness for a student? What are the benefits and disadvantages of pod harnesses?

## U2

- How does a paraglider fly? Explain aerodynamic force, lift, different drags, pressure center, global equilibrium of paraglider + pilot. Explain angle of attack and its limits
- What characterizes a stable and an unstable profile? Draw and explain. In turbulent conditions, as safety position I pull the brakes "contact +20% of brake travel". Advantages, disadvantages, conclusion. What simple guideline can I give to explain what is "active piloting"
- Pitch: what is aerodynamic and pendulum movement, draw the 3 sequences of pitch, the two borders, explain how to stop a pitch movement. Explain how to create and increase a pitch movement
- How does the paraglider turn. Drawing and explanation.
- Fine piloting: explain the 3 parameter that characterize wing movement, the 4 parameter that characterize command action. When the goal is to damp the movements of the glider, how should be the command be released? What is spiral neutrality, what to do?
- What are the 3 families of piloting mistakes? What are the possible reasons, consequences, and remedies?
- Negative wind gradient on landing, using vectors explain what are the 2 situations that can happen, what to do to prevent? How to react in both situations

### U3

- Explain the mechanism that creates wind on the globe scale. Explain breeze at the local scale
- Explain the birth of a thermal bubble and what happens when it rises in the atmosphere 1,2,3,4,5,6,7
- Analyzing a given skew-t, tell me about the situation, ceiling, cloudbase, development. What strategy would you adopt in flight, What can you say about that model?
- Explain the phenomenon of katabatic cascade, the Föhn phenomenon, the prisoner effect. Cases where they are dangerous?
- Explain what is the risk. What is the risk homeostatis? What actions can I take to lower the risk in my own practice? If I want to give a student or fellow 3 advices for safety what would they be? At the level of my flying community (club) what actions can I develop to improve safety.
- Stress: 3 stages, 4 strategy (coping), 3 times to deal with the stress
- Accident: main cause? Typical risky situations? Your Individual risk management strategy? . In flight I witness an accident, what should I do? I am about to land in the trees // in the water what should I do?
- Airspaces rules, visual flight rules?
- Using polar curve of the glider, explain the best air glide, best sinkrate. Explain best ground glide with face wind, with sink. How to figure out the best ground glide speed in flight?
- Transition strategy in XC, what defines the limits of the speed range I should use. What is the conclusion
- How can I evaluate my drift in flight? Using vectors explain what to do if I want to cross a valley with a good breeze, and arrive as high as possible on the other side no matter where I arrive?

### U4

- tandem operating: Responsibilities, insurances, obligations
- Main points of your tandem procedure
- mime Gear up passenger and pilot, give briefing (no wind, or strong wind), the 4 last steps before take off
- Influence of load on speed range. trim use at take off, in flight, at landing
- APPI rules tandem. My pilot harness has no seatboard, what is the point I should particularly check

### U 5 & 6

- Development, organizing and conducting courses, Pedagogy
- Takeoff guiding, landing guiding and instructor position
- Where does the instructor look depending on the situation
- APPI system questionnaire