IPPI levels. P3/P4/P5 evaluations
Please read and select the level that best represents your skills.

Stage 3 (P3) Active Flying ,Green
Active flying is maintaining the normal flying mode in turbulent air. It includes keeping the angle of
attack within the limits, managing pitch and roll movements, preventing and recovering from collapses, tucks and stalls, and quick descent techniques.

- Skill Requirement :

● Take-off: Stop-line awareness and decision before accelerating for take-off
● Speed control: Minimum sink speed, best glide angle including with lift/sink or wind
● Turns: Ordinary speed and at minimum sink, coordinated, no sign of stall
● Pitch and roll control: Simulation and dampening swings (stabilizing the glider), speed bar
● Big ears: Collapsing wingtips, holding them, recovering them; big ears and weight shift turns; big ears plus speed system; other descending techniques
● Asymmetric collapse: Like a one side big ear or slightly bigger if possible – inducing, holding, recovery
● Precision approach and landing: Safe and inside an area decided by the instructor, figure 8 and standard aircraft patterns
● Tandem with instructor (gentle manoeuvres not needing a lake): Asymmetric collapse, spiral dive (optional)
● Emergency parachute deployment: Simulation (optional)

- Knowledge Requirement:

<u>Pilot</u>
● Psychological factors: Mental strength factors, factors interacting with stress (motivation, emotions, concentration, personality), actions to lower stress, stress and self-confidence measurement
● Learning process: Description, objectives, individual progress, safety
● Judgement: Insight, evaluations, decisions, actions, being ahead of the game, awareness and tracking of other gliders
<u>Aircraft</u>
● Removing debris from inside canopy
● Awareness of trim checking
● Cleaning canopy and harness
<u>Aerodynamics</u>
● Pitch and roll movements: Creation by outside influence (glider reaction), glider stability, control inputs
● Big ears: Way to descend and increase glider stability by increased wing loading and decreased aspect ratio, dangers
● Collapse: Creation by outside influence (glider reaction), glider stability, control inputs
● Spin: At take-off, turning, spin recovery, wind gradient, in landing
● Spiral, skid and slip
● Stall: In turbulence, unexpected lift, turns, gradient, downwind, dangers
● Load: Weight, G-force, in turns, pull-outs, wind and lift gradients, gusts and turbulence
● Emergency parachute: Aerodynamic brake, pulling in glider canopy

Meteorology

● Turbulence, gusts - Mechanical: Behind or lee of obstructions, trees, buildings, hills, wind gradient - Wind shifts and shears: Description, dangers - Thermal: Tends to build as the day progresses until late afternoon

● Deteriorating weather as a source of turbulence: Fronts, cumulonimbus, high winds, gusts, strong lift

● Breeze: Difference from wind, creation, sea, mountain, valley, strength, effects

Rules

● Third party liability insurance, when available

● School and training

● Airspace: Local airspace limitations

Critical situations

● Preparation: Causes, recognition, avoidance, corrections, training (simulation)

● Poor take-off: Sight downward, poor wing control, overly aggressive or weak acceleration, wing shooting forward, turn back into hill, getting into harness too soon

● Knowing how to take and release wraps (shortening brake lines) when needed

● Stall: In turbulence, unexpected lift, turns, gradient, downwind, dangers

● Unusual attitudes: Turbulence, pitch ups and downs, collapse recovery

● Poor approach and landing: Unstructured, no clear plan, over landing field, low turns, slow flight close to terrain

First aid

● In accordance with Red cross recommendations

Experience Requirement:

● Basic elements of SIV course suggested if appropriate site and instructor are available.

● Emergency parachute opening clinic recommended

● At least 3 successful flights with the above-mentioned exercises: pitch and roll control, big ears, asymmetric collapse

Attitude Requirement:

The instructor shall be convinced that the student is able to take care of his own and others' safety

within applicable rules and regulations, recommendations and code of good practice, while operating alone.

STAGE 4 (P4) Soaring , Blue

- Skill Requirement :

● Take-off in wind: Types, with assistance, instructions, reverse position

● Manoeuvring in lift band: Figure 8 pattern, drift and gradient corrections, no sign of stall, manoeuvring according to terrain and traffic, keeping a good lookout

● Ridge soaring: Best lift zone, best speed along the ridge, managing priorities, crossing gaps and low areas, maintaining easy reach of landing options

● 360° turns: From minimum sink to steep bank, correcting drift

● Thermal soaring: Finding and following thermal cores, choosing exit direction

● Speed range: Exploring medium speeds

● Landing in wind: Positioning according to wind strength, traffic control, ground handling

- Knowledge Requirement:

Pilot

● Psychological factors: Confidence/overconfidence, group or self-pressure, approval, self-discipline, giving up (flight, remaining in a drifting thermal...)

Aircraft

● Clothes: For endurance, altitude and cold

● Harness selection and tuning: Types, rating, experience, comfort, organization, water, radio, all wires inside harness, emergency parachute handle access

● Glider selection: Size, handling, experience, type of flying, ambitions, for maximum performance in the prevailing conditions

● Instruments: Variometers, altimeters, settings

● Performance: Minimum sink, maximum glide and speed, penetration, manoeuvrability

● Maintenance: Daily and periodical inspections and care, trim control and repairs, inspection after repairs

Aerodynamics

● Stability: Positive pitch, reflex, wing twisting, sail distribution versus centre of gravity

● G-loads: Speed in turbulence, aerobatics, structural failures, loss of control

● Airworthiness: Design and certification standards, purpose and need, load, weight, speed and manoeuvring range, stability, stall characteristics, rating

● Design factors: Aerofoils, area, aspect ratio, arch, openings, effects

● Parasitic and induced drag: Wing tip vortices, ground effect

Meteorology

● Ridge lift - Factors: Shape and gradient of slope, wind direction and velocity - Components: Horizontal, vertical, gradient, acceleration - Zones: Strongest lift, strongest headwind, turbulence, lee, rotors

● Thermals - Factors: Uneven heating, instability, lapse rates, contrasts, light to medium winds - Types: Radius, strength, dry thermals, dangers - Signs: Temperature drop with altitude, lulls and gusts, clouds

● Weather: Heat and pressure differences, global circulation, Coriolis effect - Air masses, fronts: Stability/instability, signs, convergence - Measuring: Wind, pressure, humidity and stability - Clouds: Types, associated weather and conditions

● - Reports: Actuals (METAR), warnings (TAF), area (IGA), maps, interpretation

Rules

● Ridge and thermal soaring rules (priorities)

● VFR rules: Minimum visibility and distances from clouds

● Government or other official authorities

Critical situations

● Unfamiliar situations: With site, equipment, manoeuvres or tasks, priorities, conditions

● Poor Judgement: Overestimating own ability, underestimating site, conditions, equipment or task

● Ground handling in high wind: Dragged by wind, reactions

● Critical manoeuvres: Flying close to terrain and obstructions, slow flight, 360° turns, returning to lift band, top landing, collapse/spin recovery

● Emergency procedures: Unexpected wind or turbulence, collapses, hillside/tree/water landing, rough terrain, obstructions, power lines

● Reduced visibility: Flying close to clouds, reactions

● Accidents: Assistance and reports

First Aid: regular update.
Experience Requirement :
● SIV course recommended if appropriate site and instructor are available.
● At least 25 successful flights from 3 different sites
● At least 15 flying hours, including in thermal soaring
Attitude Requirement :
The pilot shall be considered to be able to take care of his own and others' safety while flying at this
stage, also during displays, demonstrations, local/friendly competitions and wherever this stage is
required.

STAGE 4A (P4A) Accuracy Landing:
P4A pilot will be mandatory to compete in Cat 1 accuracy events and is recommended for other
accuracy events

- Skill Requirement :

● Taking off with less than ideal conditions, both foot and tow launching
● Ease to turn both directions
● Controlling altitude and position through safe manoeuvring
● Managing: - Frontal or asymmetric collapse - Spiral dive - Autorotation, stall
● Low speed landing

- Knowledge Requirement:

● Analysis: Of competition rules, weather sounding, task briefing
● Strategies, techniques and dangers flying upwind, crosswind and downwind
● Use of the full extent of the wing's polar curve
● Equipment follow-up: Lines' length, canopy control, emergency parachute folding

- Experience Requirement:

Experience with the EN category equipment used

- Attitude Requirement :

● Managing stress, emotions, concentration
● Assessing conditions before the flight
● Construction of flight plan and flight tactics
● Remaining safe when target is not chosen with proper safety margins
● Criticism about own awareness under competitive pressure (assessing group or own decisions with regard to threats)

Stage 5 (P5) Senior Pilot
The senior pilot is fully autonomous and shows good flying experience. He is able to take care of his own and others' safety while flying. He is able to operate his paraglider in a wide range of terrains and conditions.

- Skill Requirement :

● Special launches - Crosswind: Maximum 45°, weak side component - Cliff launch: In moderate to strong wind, assistance - Towing (if possible): Winch
● Adapting cruising speed to conditions
● Speed range: Exploring higher speeds in smooth air, use of the full polar curve extent
● Turbulence, gusts: Glider control

● Rear risers handling
● Out landings: Selection of the landing field, control of speed and glide angle, precision approach to unknown landing area

- Knowledge Requirement:

Pilot
● Adequate physical fitness
● Awareness: Analysing, staying ahead, giving up, keeping energy for landing
● Adaptation to changing conditions and terrain
Aircraft
● Maintenance: Recognition of cloth/lines aging, line tuning, replacing a damaged line
Aerodynamics
● Speed polar curves: Air and ground speed, minimum sink, best glide angle, influence of lift/sink, of head/tail wind, turns, wing loading, air density
Meteorology
● Frontal lift: Cold front description, thunderstorms - Signs: Towering clouds, squall lines, wind shift, temperature fall - Dangers: Cumulonimbus, high winds, gusts, strong lift, turbulence, escaping
● Lift lines - Cloud streets, blue streets - Convergence
● Wave - Signs: Terrain, wind direction and velocity, stability, lenticular clouds - Dangers: Rotors, low penetration, strong lift, high altitudes, hypoxia, cold
Planning
● •Procedures: Signals, retrieval, warning, search after missing pilots
Rules
● Controlled airspace: Air corridors, terminal areas, control zones and airports, airways, Air Traffic Control, VFR/IFR traffic patterns, rules of operations
● Uncontrolled airspace: AFI, other airfields, dangers, restrictions, prohibited areas, information zones and services, VFR/IFR traffic patterns, rules of operations
● Military traffic: Training areas, photographing from the air
● Other airspace: Restricted, dangerous and prohibited areas
● Information sources: ICAO maps, publications, AIC, AIP, manuals, NOTAMs, information service, local airports and clubs, schools

- First aid

● Regular updates

- Experience Requirement :

● SIV course strongly recommended if appropriate site and instructor are available, and as a minimum: big angle pitch and pitch control, collapse control, autorotation and exit, stall, tail sliding and exit
● At least 100 flights or 50 flying hours, on 5 different sites

- Attitude Requirement :

● The pilot is able to assess the risk in all situations, taking into account not only the probability of incident, but also the consequences for him and others (remote position, poor access, medical coverage...) and eliminates unnecessary risk.

STAGE 5B (P5 B) Cross Country
Additional requirement for flying away from the local site.

- Skill Requirement:

● Bringing the required equipment: GPS, first aid/survival equipment, oxygen, live

tracker
● Choosing the best launch with regard to the weather analysis
● Taking off with less than ideal conditions, both foot and tow launching, managing traffic
● Ease to turn both directions in a thermal, alone or in traffic
● Sustaining flight in very weak conditions while maintaining a good safety margin (close to terrain, with limited landing fields, in glider traffic, etc.)
● Thermalling in strong wind while maintaining safety with drift and elusive lift
● Using the MacCready theory, choosing thermal exit time and speed to fly
● Thermalling in gaggles: This practice should be acquired gradually, with first one, then more pilots at the learner's level
● Managing: - Accelerated asymmetric collapse - Amplified pitch with dampening, with front collapse, amplified roll - Autorotation, stall
● Choosing the best landing field while in flight and setting up a precision approach for a short field with possible barriers
● Landing with other gliders at the same time
- Knowledge Requirement :
● Analysis: Of competition rules, weather sounding
● Using maps: Airspace, desert areas, hazards, landing areas, alternative routes
● Strategies, techniques and dangers flying upwind, crosswind and downwind
● Knowing when to remain with a group and when to strike out on one's own
● Efficient use of radio with a team
● Equipment follow-up: Lines' length, canopy control, emergency parachute folding
- Experience Requirement :
● Experience with the EN category used
● At least 5 cross-country flights (flying only along the same ridge does not qualify)
- Attitude Requirement :
● Managing stress, emotions, concentration
● Assessing conditions before the flight
● Construction of flight plan and flight tactics
● Understanding when to change gears and flying style according to the day's progress and changing conditions, as well as on different days
● Crossing cloud streets, blue holes or other lift compromising areas
● Detouring around unlandable areas
● Remaining safe when the course line is not chosen with proper safety margins
● Stopping or detouring a flight when thunderstorms are along the course line
● Criticism about own awareness under competitive pressure (assessing group or own decisions with regard to threats)

STAGE 5 C (P5 C) Racing
This additional rating shows that the pilot masters the specific skills needed to fly racing competitions with a large number of pilots in challenging and directed tasks. This rating can be qualifying to enter CIVL first category competitions.
- Skill Requirement :
● Taking off with less than ideal conditions, both foot and tow launching, managing dense traffic
● Ease to turn both directions in a thermal, alone or in traffic

● Sustaining flight in very weak conditions while maintaining a good safety margin (close to terrain, with limited landing fields, in glider traffic, etc.)
● Thermalling in strong wind while maintaining safety with drift and elusive lift
● Using the MacCready theory, choosing thermal exit time and speed to fly
● Thermalling in gaggles of at least ten pilots in close proximity. This practice should be acquired gradually, with first one, then more pilots at the learner's level
● Managing: - Accelerated asymmetric collapse - Amplified pitch with dampening, with front collapse, amplified roll - Autorotation, stall
● Choosing the best landing field while in flight and setting up a precision approach for a short field with possible barriers
● Launching and landing with multiple gliders at the same time

- Knowledge Requirement:

● Analysis: Of competition rules, weather sounding, task briefing
● Strategies, techniques and dangers flying upwind, crosswind and downwind
● Achieving turnpoints without landing at them (strategies related to drift)
● Knowing when to remain with the gaggle and when to strike out on one's own
● Final glide matters: Safe altitudes and flying speeds with turbulence, sink and possibly limited landing options
● Efficient use of radio with the team
● Equipment follow-up: Lines' length, canopy control, emergency parachute folding

- Experience Requirement :

● Experience with all EN categories including 2 liners
● Making at least 3 goals in national/CIVL second category racing tasks

- Attitude Requirement:

● Managing stress, emotions, concentration
● Assessing conditions before the flight
● Construction of flight plan and flight tactics
● Understanding when to change gears and flying style according to the day's progress and changing conditions, as well as on different days
● Remaining safe when turnpoints are not chosen with proper safety margins
● Stop or detour of a flight when thunderstorms are along the course line
● Criticism about own awareness under competitive pressure (assessing group or own decisions with regard to threats)

STAGE 5D (P5 D) Aerobatics
This additional rating shows that the pilot masters the specific skills needed to fly aerobatics, including in competitions. This rating can be qualifying to enter CIVL first category competitions.

- Skill Requirement :

● Taking off with less than ideal conditions, both foot and tow launching
● Ease to turn both directions
● Controlling drift (from take-off to the box and during evolution in the box
● Managing: - Safety margin to the public and terrain - Spiral dive with brake exit, deep spiral with dynamic exit in less than 90° - Full stall, tail slide and symmetric recovery - Spin, helico, safe recovery (using stall/full stall) - Wingovers - SAT
● Landing with other gliders at the same time

- Knowledge Requirement:

● Analysis: Of competition rules, weather sounding
● Attending task briefings and following instructions
● Not trying new manoeuvres in a task
● Equipment follow-up: Lines' length, canopy control, emergency parachute folding

- Experience Requirement:

● SIV course completed
● Experience with the EN category used
● At least 20 flights featuring aerobatic manoeuvres with the competition wing before the event (with video evidence)
● Several flights under pressure (demonstration, local competition, evolution over ground) to confirm experience and self-control

- Attitude Requirement :

● Managing stress, emotions, concentration, over-motivation
● Assessing conditions before the flight, taking appropriate decisions
● Managing the risk, doing only mastered manoeuvres
● Remaining safe when conditions do not ensure proper safety margins
● Respecting judges decisions before the claim time
● Criticism about own awareness under pressure (assessing group or own decisions with regard to threats)