



## USPPA/USUA Solo & Instructor Ratings Program

These are the solo, and non-flight instructor instructor ratings available for powered paraglider pilots. Differentiation is provided for wheel launch and foot launch—only the items required for the launch skill sought must be demonstrated. For information on the Tandem Program, please refer to the TandemProgram.PDF document.

### **Definitions:**

**Flight:** A flight consists of inflation, launching, flying at least 360 degrees of turn, then landing and bringing the wing down.

Revision 2009-11-03

# PPG1 Rating

This first step establishes the skills, knowledge and experience for the pilot who gets to take his first two flights. He is far from ready to venture out on his/her own but has made a significant milestone.

## Ground Requirements

- 1.PPG1:PFDP Proper layout and pre-flight check of canopy and motor (including harness).
- 2.PPG1:GSU Had successfully completed a basic ground school.
- 3.PPG1:BDD Understanding of proper canopy packing, storage and care.
- 4.PPG1:SCD Site analysis including wind direction and velocity, terrain shape, obstructions and engine-out planning.
- 5.PPG1:GHD Proper canopy handling and kiting skills.
- 6.PPG1:MSU Explains motor, propeller, and fueling safety.
- 7.PPG1:MOU Understands basic operation the motor including at least two ways to shut it off and what to look for on preflight runup.
- 8.PPG1:CGC Explains the significance of Center of Gravity and wing connection location on the harness or cart frame (if applicable)
- 9.PPG1:ROL Explains the cause and cure to rollover-type accidents (wheel launch only)
- 10.PPG1:WRI Has passed the USPPA/USUA PPG1 written exam.

## Flight Requirements (Launch/Landing/Inflation)

- 1.PPG1:FID 2 forward inflations with visual canopy check each time.
- 2.PPG1:RID 2 controlled reverse inflations with proper surge dampening (foot launch only).
- 3.PPG1:CKD Half-minute of controlled kiting overhead in a steady wind (foot launch only).
- 4.PPG1:CKW 15 seconds of controlled kiting while stationary or rolling (wheel launch only) without ever lifting off.
- 5.PPG1:HID Demonstrates a method of establishing proper connection to the wing, with cleared lines and risers, just prior to inflation.
- 6.PPG1:TKO Demonstrates two unassisted (except via radio) flights with at least two 90 degree turns during each flight.

## PPG1 Limitations

These recommended limitations are intended to provide a guide for those at this skill level to remain within their ability. Obviously there are other things that should be considered before flying but this is a good starting point.

- 1.PPG1:ELR Only exceed these limitations after mastering all PPG1 tasks and after acquiring a full understanding of the potential problems and dangers involved in exceeding them.
- 2.PPG1:DSR All flights should be under the direct supervision of an instructor
- 3.PPG1:WSR Max wind, including gusts of 12 mph
- 4.PPG1:WDR Should only launch directly into the wind
- 5.PPG1:CTR Uses canopy rated for beginner (DHV 1 or 1-2 or equivalent other rating).
- 6.PPG1:LZC Takeoff and landing area should allow unimpeded climb and landing approach without maneuvering below 100' AGL

Change notes:

2006-08-16 reformat, added wheel launch requirements, made some foot-launch only.

## Ratings: PPG2

This rating gets the individual out on his/her own. At this level the pilot should be able to fly either under instructor supervision or in good conditions with fairly wide-open launch/landing areas. Supervision can be as simple as having your instructor approve the location where you plan on flying and going over conditions that would be appropriate there.

### Ground Requirements

- 1.PPG2:JMD Pilot uses good judgment and have a level of Maturity commensurate with the rating.
- 2.PPG2:PPU All witnessed flights must be pre-planned by the pilot and discussed with the instructor.
- 3.PPG2:AGU Attends a minimum of 8 hours of ground school.
- 4.PPG2:PFU Setup and preflight the glider, harness and reserve (if used)
- 5.PPG2:SCU Verbal analysis of general site conditions including a flight plan (flight path, avoidance areas, obstacles, wind effects)
- 6.PPG2:PLD Demonstrates proper and effective PLF technique.
- 7.PPG2:CRU Explain the basics of airspace as it pertains to PPG and how to determine legal flight areas from sectional charts including how to obtain a weather briefing.
- 8.PPG2:RDD Demonstrate reserve deployment while hanging in a harness in simulated turbulence or malfunction conditions. This may be done without an actual reserve if none is available.
- 9.PPG2:SWE Explains proper strong wind landing procedures and how to keep from being dragged back.
- 10.PPG2:CCE Explains correct canopy maintenance.
- 11.PPG2:PLE Explains how to shorten and lengthen flight path with no power.
- 12.PPG2:GEA Explains speedbar and trimmers, their use and limitations.
- 13.PPG2:RWE Explains the right of way traffic rules.
- 14.PPG2:CME Explains how to maintain directional control during and correct for an asymmetric wing fold of 25% of the wing span
- 15.PPG2:WRI Has passed the USPPA/USUA PPG2 written exam

### Flight Requirements (Launch/Landing/Inflation)

- 1.PPG2:FID Completes 3 out of the last 4 forward inflations with visual canopy check each time.
- 2.PPG2:RID Completes 3 out of the last 4 controlled reverse inflations with proper surge dampening (foot launch only).
- 3.PPG2:CKD 2 minutes of controlled kiting overhead in a steady wind (foot launch only).
- 4.PPG2:CKW 30 seconds of controlled kiting while stationary or rolling (wheel launch only) without ever lifting off.
- 5.PPG2:CWD 2 cross-wind ( $> 15^\circ$  cross to takeoff path) launches in light wind ( $\leq 5$  mph).
- 6.PPG2:NWD 2 no-wind (0-2 mph) inflations/launches.
- 7.PPG2:HWL 2 high-wind (10-15 mph) launches and landings (foot launch only).
- 8.PPG2:LPD 5 safe, smooth, power-allowed landings within 25' of a target and into the wind. Pilots with more than 50 logged flights can meet this by demonstrating 2 out of the last 3 landings as described.
- 9.PPG2:LND 5 safe, smooth, power-off landings, within 40' of a target and into the wind. Pilots with more than 50 logged flights can meet this by demonstrating 2 out of the last 3 landings as described.
- 10.PPG2:GCD Brief and instruct ground crew for assisted launch
- 11.PPG2:IRD 2 clean inflations/reversals.

- 12.PPG2:HID Demonstrates a method of establishing proper connection to the wing, with cleared lines and risers, just prior to inflation
- 13.PPG2:AVD Flights with smooth variation in airspeed and throttle to maintain level flight from just above min sink to fast flight on a constant heading
- 14.PPG2:STD Alternating 'S' turn (at least 90° heading change) flights along a planned path. Heading change < 45° into wind.
- 15.PPG2:HOD Hands off flying with smooth transition to climb and descent using throttle only.
- 16.PPG2:HTD Hands off flying with turns using weight-shift (if available) and rear riser turns.

## **Logged Flight Experience**

- 1.PPG2:FLL 25 flights except that, for USHPA P2 or higher rated paraglider pilots, 15 nono-powered flights can be used to count towards the 25 flight requirement.
- 2.PPG2:FDL 5 flying days.

## **PPG2 Limitations**

These recommended limitations are intended to provide a guide for those at this skill level to remain within their ability. Obviously there are other things that should be considered before flying but this is a good starting point.

- 1.PPG2:ELR Only exceed these limitations after thoroughly mastering all Novice tasks and after acquiring a full understanding of the potential problems and dangers involved in exceeding these limitations.
- 2.PPG2:CRL Max peak thermal strength 200 fpm.
- 3.PPG2:WSR Max base wind of 12 mph, peak gusts 15 mph.
- 4.Max gust rate of 5 mph in 5 seconds
- 5.PPG2:WDR Should not launch with the wind aligned more than 25 degrees from the takeoff path.
- 6.PPG2:BAR Avoids using of brake beyond 2/3 of full travel (stall).
- 7.PPG2:TBR Max bank angle of 30 degrees.
- 8.PPG2:DHR Avoid flying downwind less than 150' above the ground.
- 9.PPG2:CTR Uses canopy rated for beginner (DHV 1, 1-2 or equivalent other rating).
- 10.PPG2:LZC Takeoff and landing area should allow unimpeded climb and landing approach without maneuvering below 100' AGL

### **Change notes:**

2006-08-16 Moved "Explanation Requirements" to "Ground Requirements" for standardization. Added wheel launch kiting requirement, made reverse inflation foot-launch only.

2008-10-30 added definition of flight, changed minimum flights for a PPG2 to 25 with 15 flights credit for P2 USHPA pilots.

## Ratings: PPG3

This rating builds on the knowledge and skills from the PPG1 & PPG2, only additional areas are included here.

The pilot should have a thorough understanding of the knowledge items required of those ratings. He/she should be able to judge and safely fly from any launch site within his skill level. Launches should be consistently successful with the ability to easily steer during the launch run as well as control the flight path immediately from liftoff.

### Ground/General Requirements

- 1.PPG3:JMD Pilot uses good judgment and has a level of Maturity commensurate with the rating.
- 2.PPG3:PPU All witnessed flights must be pre-planned by the pilot and discussed with the instructor or observer.
- 3.PPG3:URU Has received training in and understands collapses, stalls, spins, and turbulence-induced collapses, is familiar with the canopy owner's manual and the USPPA incident reports.
- 4.PPG3:SWU Explains characteristics of impending stall or spin and the recovery technique for each.
- 5.PPG3:PLE Explains how to shorten and lengthen flight distance by adjusting speed, height and the relationship of headwind/tailwind in doing so.
- 6.PPG3:CME Explains how to maintain directional control during and correct for an asymmetric wing fold of 50% of the wing span.
- 7.PPG3:NEU Has passed the USPPA PPG3 written exam.

### Flight Requirements (Launch/Landing/Inflation)

- 1.PPG3:SLD All landings are safe, smooth, on the feet, in the desired touchdown area and in control.
- 2.PPG3:NWD Successfully completes 3 out of the last 4 no-wind (0-2 mph) inflations/launches.
- 3.PPG3:CKD Good canopy control while doing turns of at least 20 degrees while on ground running (or walking) with the wing overhead.
- 4.PPG3:LPD 5 safe, smooth, power-allowed landings within 5' of a target and into the wind. Pilots with at least 150 logged flights can meet this by demonstrating 2 out of the last 3 landings as described.
- 5.PPG3:LND 5 safe, smooth, power-off landings, within 15' of a target and into the wind. Pilots with at least 150 logged flights can meet this by demonstrating 2 out of the last 3 landings as described.
- 6.PPG3:GAD Demonstrates smooth transition from descent to climb in a go-around maneuver with minimum surging.
- 7.PPG3:IRD Successfully completes 3 out of the last 4 inflations/reversals followed by launch.
- 8.PPG3:HID Demonstrates a method of establishing proper connection to the wing, with cleared lines and risers, just prior to inflation.
- 9.PPG3:LCD Demonstrates proper airspeed control on landing approach when descending through a gradient.
- 10.PPG3:STD Alternating 'S' turn (at least 90° heading change) flights along a planned path. Heading change < 45° into wind.
- 11.PPG3:AVD Flights with smooth variation in airspeed and throttle to maintain level flight from just above min sink to fast flight on a constant heading
- 12.PPG3:HOD Demonstrates dampening surges using throttle only.
- 13.PPG3:180D Linked 180° turns along a predetermined ground track showing smooth controlled reversals and coordination at various speeds, throttle settings and bank angles.
- 14.PPG3:360D 360° turns in both directions and at various speeds, throttle settings and bank angles.
- 15.PPG3:ASD Demonstrates ability to use Trimmers or Speed Bar if installed on wing.

16.PPG3:VDD Significant asymmetric tip folds and big ears (25% each side, 50% total) or other canopy reduction method to increase descent rate.

## Logged Flight Experience

- 1.PPG3:FLL 90 flights.
- 2.PPG3:FDL 30 flying days.
- 3.PPG3:P2L Has had USPPA PPG2 rating or equivalent for at least 120 days.
- 4.PPG3:FHL 20 solo airtime hours.

## PPG3 Limitations

These recommended limitations are intended to provide a guide for those at this skill level to remain within their ability. Obviously there are other things that should be considered before flying but this is a good starting point.

- 1.PPG3:ELR Only exceed these limitations after thoroughly mastering all Novice tasks and after acquiring a full understanding of the potential problems and dangers involved in exceeding these limitations.
- 2.PPG3:SFR Follows safe flying guidelines.
- 3.PPG3:WSR Max base wind of 15 mph, peak gusts 18 mph.
- 4.Max gust rate of 5 mph in 5 seconds.
- 5.PPG3:TBR Limit turns to bank angles recommended by the manufacturer, Smoothly exit any spiral turn that is becoming steeper or accelerating.
- 6.PPG3:TFR Should not fly in thermals where peak climb rates exceed 500 fpm or where significant cloud development exists.
- 7.PPG3:BAR Avoids using of brake beyond 3/4 of full travel (stall).
- 8.PPG3:STR Avoid steep banks close to ground.
- 9.PPG3:DHR Avoid flying downwind less than 100' above the ground.

### Change notes:

2006-08-16 Moved "verbal explanation requirements" to "ground requirements" for standardization, removed duplicate airspace requirement and other duplicates.

# Instructor

These requirements are meant to insure flight instructors have the requisite experience and skills necessary to safely instruct. This is for an instructor who is not tandem qualified but does instruction using other means.

The Minimum Training Standards, as well as the Instructor Commitment are meant to help insure students receive safe and effective training. These recommendations come from experienced instructors who have found they minimize the risk during training.

## Ground/General Requirements

- 1.INS:JMD Pilot uses good judgment and has a level of Maturity commensurate with the rating.
- 2.INS:PPU All witnessed flights must be pre-planned by the pilot and discussed with the examining instructor.
- 3.INS:CLU Successfully passed USPPA/USUA Instructor Certification Clinic given by an instructor administrator or completed 20 hours of apprenticeship with a USPPA/USUA PPG Instructor administrator.
- 4.INS:NEU Successfully passed USPPA/USUA Instructor Written Test.
- 5.INS:AID Successfully completed First Aid and CPR class. Acceptable versions are from the Red Cross, American Heart Association (click here and choose the "Heartsaver First Aid Course") and CPRToday (Enter the BCLS discount code given by your instructor administrator for a 10% discount on the fee).

## Experience and Minimums

- 1.INS:FYL 1 year of flying using a paramotor.
- 2.INS:FLL 120 flights using a paramotor.
- 3.INS:FDL 45 flying days using a paramotor.
- 4.INS:P3L Has had a USPPA PPG3 rating for at least 180 days (may be waived).
- 5.INS:FHL 50 solo airtime hours.
- 6.INS:MTS Agrees to apply minimum training standards prior to student instruction, flight and other areas as appropriate.
- 7.INS:MTT Adheres to "commitment letter" whenever doing instruction for USPPA rating.

### Change notes:

2006-08-16 Reformatted, removed the BCLS price, changed name from "Flight Instructor" to "Instructor" to avoid confusion with a Tandem Instructor.

2006-02-27 Added "administrator" to clinic and apprenticeship.

2004-11-01 Listed approved First Aid & CPR to include Online.

# Instructor Administrator

These requirements are meant to insure Instructor Administrators have the requisite experience and skills necessary to safely certify new instructors. It is important that any issuance of instructor ratings be based solely on the applicants ability to evaluate potential instructors so as to ensure our program is administered fairly.

This status is appointed by the Training committee and is reviewed annually to ensure quality. Any appointment requires a majority approval by the training committee.

A list of Instructor Administrators is available at the bottom of Officers and Committees.

An administrator's status will be reviewed by the training committee annually and can be revoked by a majority vote of the committee. The intent is to insure that these individuals are adhering to the program and policies, being fair and not compromising quality. Any revocation must be by a majority of the training committee and may be appealed to the officers. A majority of the officers must agree with the revocation for it to stand.

## Requirements

Instructor Administrator applicants must have

- 1.ADM:FYL 1 year as a USPPA instructor.
- 2.ADM:STU been the primary instructor for at least 5 students and given them their PPG2 ratings within the last year. Primary instructor means giving at least 90% of all the instruction to each student, including their first solo flight and testing for the PPG2 rating. Up to half of this requirement can be met with other instruction of equivalent value, such as for free flight, at the discretion of a majority of the training committee.
- 3.ADM:REC Be recommended by a USPPA instructor Administrator.
- 4.ADM:COM Be approved by a majority of the training committee.

### Change notes:

2009-11-04 Increased requirement to have taught qualifying PPG2 pilots from start to finish., recommendation required by admin.

2006-08-16 Reformatted.

2005-04-27 Removed expired grandfather clause..

2002-04-23 Added page.