

Indian National Paramotor Pilot Rating System



Overview of the Paramotor Ratings Process

The PPG ratings are adopted from USPPA (United States Powered Paragliding Association) syllabus with official consent and have been ratified by the Managing Committee of PAI.

Given below is the process to recognize your flight skills through PAI PPG pilot ratings. A new pilot seeks out a PAI registered School for paramotoring training. That School will describe their training program and charges. Upon completion of any skill for rating the pilot submits his PAI rating application along with the instructor's signature. Rated Pilot will receive a card indicating his rating within 30 days.

Existing pilots wanting a PPG 1 through PPG 3 rating can go to any PAI registered Schools for paramotoring rating. All tests must be passed because they build on each other, so an experienced pilot wanting to demonstrate knowledge and skills to a PPG 3 level must go through the PPG 1, 2, & 3 syllabi and tests. For an appropriately skilled, knowledgeable pilot it can be done over a weekend. We are sure that pilots who do undergo this will enjoy the process and report learning some new things even if they've been flying for years.

These levels & ratings are equivalent to international standards as per chart given below.

PAI National Rating System (INDIAN)	BHPA (U.K)	USPPA (USA)	APPI (Generic)
Novice Pilot (PPG1)	Club Pilot (Novice)	PPG1	Pilot
Pilot (PPG2)	Pilot	PPG2	Advance Pilot
Advance / Tandem (PPG3)	-	PPG3	Assistant Instructor
PPG Instructor (PPG4)	-	PPG Instructor	Instructor
PPG Instructor (PPG5) Examiner/Administrator	-	PPG Instructor Administrator	Master Instructor

Novice Pilot: PPG 1 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 gained basic knowledge and skill, a significant step to pursue the sport as a hobby or profession.

PPG 1 General Requirements (TL = Trike launch)

1. Proper layout and pre-flight check of canopy and motor (including harness).
2. Has successfully completed a basic ground school.
3. Understanding of proper canopy packing, storage and care.
4. Site analysis including wind direction and speed, terrain, obstructions and emergency landing zone in case of engine failure.
5. Proper canopy handling and kiting skills.
6. Explains motor, propeller, and fueling safety.

7. Understands basic operation of the motor including at least two ways to shut it off and what to look for during preflight run up.
8. Explains effects of Center of Gravity and wing connection location on the harness or trike frame.
9. [TL] explains the cause and cure to rollover-type accidents. (TL = Trike launch)
10. Has passed the PPG1 written exam. Pilot has completed 4 solo flights.

PPG 1 Flight Requirements (Launch/Landing/Inflation) (FL=foot launch)

1. Two controlled forward inflations with visual canopy check each time.
2. [FL] Two controlled reverse inflations with proper surge dampening.
3. [FL] Half-minute of controlled kiting overhead in a steady wind.
4. [FL] 15 seconds of controlled ground handling without lifting off.
5. Demonstrates a method of establishing proper connection to the wing, with cleared lines and risers, just prior to inflation.
6. Pilot has completed 4 solo flight including two unassisted (other than radio) flights.

PPG 1 Limitations for TL and FL

These recommended limitations are intended to provide a guide for those at this skill level to remain within their ability. Obviously there are other considerations before flying but this is a good starting point. Only exceed these limitations under instructor supervision.

1. All flights must be under the supervision of an instructor.
2. Max wind, including gusts of 12 kmph
3. Launch and land directly into the wind
4. Use canopy rated for beginner (DHV 1, 1-2, EN-A, EN-B or equivalent other rating).
5. Takeoff and landing area should allow unobstructed climb and landing approach without maneuvering below 100' AGL.

Pilot: PPG 2

This rating signifies that the pilot should be able to fly on his/her own within the limits specified below. It is the beginning of an enjoyable learning process and progression to next level

PPG 2 General Requirements for FL and TL

1. Pilot uses good judgment and has a level of maturity commensurate with the rating.
2. Attends a minimum of 8 hours of ground school / theory session.
3. Explains correct canopy maintenance.
4. Setup and preflight the glider harness and reserve. (Reserve may be explained if not equipped)
5. Verbal analysis of general site conditions including a flight plan (flight path, avoidance areas, obstacles, wind effects)
6. Demonstrates proper and effective PLF technique (FL)
7. 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.

8. 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 from MET department.
9. Explains proper strong wind landing procedures and how to avoid being dragged back.
10. Has received training in and understands collapses, stalls, spins, and turbulence-induced collapses, is familiar with the canopy owner's manual and the incident reports.
11. Explains how to shorten and lengthen flight path with no power.
12. Explains speed bar and trimmers, their use, risks, and limitations, including for reflex wings.
13. Explains the right of way traffic rules.
14. Explains how to maintain directional control during asymmetric wing fold of 25% of the wing span and procedure to correct /recover.
15. Has passed the PPG2 written exam and reviewed incorrect answers with instructor.

PPG 2 Flight Requirements (Launch/Landing/Inflation) FL and TL

1. Consistently succeeds at no-wind (0-2 mph/5kmph) forward inflations.
2. [FL] consistently succeeds at controlled reverse inflations with proper surge dampening.
3. Demonstrate two minutes of controlled kiting overhead (foot launch only).
4. [TL] 30 seconds or 100 feet of controlled taxiing without lifting off.
5. Two cross-wind (> 15° cross to takeoff path) launches in light wind (<= 5 mph).
6. Landings are consistently smooth, power-on landings within 15' of a target and into the wind.
7. Landings, after reducing thrust from at least 300' height, are consistently within 100' of a target (40' for the Precision Landing special skill).
8. [TL] Brief and instruct ground crew for assisted launch.
9. Demonstrates smooth variation in airspeed and throttle to maintain level flight from just above min sink to fast flight on a constant heading
10. Alternating 'S' turn (at least 90° heading change) flights along a planned path.
11. Hands off (or up) flying with smooth transition to climb and descent using throttle only.
12. Hands off (or up) flying with turns using weight-shift (if available) and rear riser turns.

PPG 2 Minimum Logged Flight Experience FL and TL

These are minimums. It is common to need 40 or more flights before attaining PPG 2 skill levels.

1. 25 flights except that, for PG P2 or higher rated paraglider pilots, 15 non-powered flights can be used to count towards the 25 flight requirement.
2. 5 flying days.

PPG 2 Limitations both for FL and TL

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.

Only exceed these limitations after thoroughly mastering all PPG 2 tasks and with full understanding of the potential problems and dangers involved in doing so.

1. Max peak thermal strength 200 fpm.
2. Max wind speed of 11 mph/18kmph.
3. Max gust rate of 4 mph/7kmph in 5 seconds
4. Should not launch with the wind aligned more than 25 degrees from the takeoff path.
5. Avoid using of brake beyond 2/3 of full travel (stall).
6. Max bank angle of 30 degrees.
7. Avoid flying downwind less than 150' above the ground (except in landing zone)
8. Use canopy rated for beginner (DHV 1, 1-2, EN-A, EN-B or equivalent other rating).
9. Takeoff and landing area should allow unobstructed climb and landing approach without maneuvering below 100' AGL

Advance / Tandem Pilot: PPG 3 for FL and TL

This rating builds on the knowledge and skills from the PPG1 & PPG2, only additional areas are included here. These are minimums. It is common to need 100 or more flights before attaining PPG 3 skill levels

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.

PPG 3 Ground/General Requirements for FL and TL

1. Pilot uses good judgment and has a level of Maturity commensurate with the rating.
2. Explains characteristics of impending stall or spin and the recovery technique for each.
3. Explains how to shorten and lengthen flight distance by adjusting speed, height and the relationship of headwind/tailwind in doing so.
4. Explains how to maintain directional control during and correct for an asymmetric wing fold of 50% or more of the wing span.
5. Has passed the PPG3 written exam and reviewed incorrect answers.

PPG 3 Flight Requirements (Launch/Landing/Inflation) FL and TL

1. All landings are safe, smooth, on the feet (FL) both rear wheel touch simultaneously (TL), in the desired touchdown area and in control.
2. Consistently succeeds at no-wind (0-2 mph/5kmph) inflations/launches.
3. Good canopy control while doing turns of at least 20 degrees while on ground [FL]

running or [TL] rolling with the wing overhead and under power.

4. Consistently makes power-on landings within 5' of a target and into the wind.
5. Consistently makes power-off (from 300') landings within 15 feet of a target and into the wind without falling.
6. Demonstrates smooth transition from descent to climb in a go-around maneuver while controlling the surge.
7. Demonstrates smooth, single-swing dampening of surges using throttle only.
8. Demonstrates smooth, single-swing dampening of left/right oscillations.
9. Linked 180° turns along a predetermined ground track showing smooth controlled reversals and coordination at various speeds, throttle settings and bank angles.
10. Demonstrates ability to use Trimmers and Speed Bar setup and use. (Gives explanation if not installed on wing)
11. Significant asymmetric tip folds and/or big ears (25% each side, 50% total) or other canopy reduction method to increase descent rate.

PPG 3 Logged Flight Experience for FL and TL

1. 100 flights either with dead weight or experienced pilot in passenger seat. It is common to need 100 or more flights before attaining PPG 3 skill levels.
2. 30 flying days.
3. Has had PPG2 rating or equivalent for at least 120 days.
4. 20 solo airtime hours.

PPG 3 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 considerations before flying but this is a good starting point.

1. 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. Follows safe flying guidelines issued by PAI.
3. Max peak wind speed of 15 mph (25kmph) without high-wind add-on.
4. Max gust rate of 6 mph (10kmph) in 5 seconds.
5. Limit turns to bank angles recommended by the manufacturer, smoothly exit any spiral turn that is becoming steeper or accelerating.
6. Should not fly in thermals where peak climb rates exceed 500 fpm or where significant cloud development exists.
7. Avoid using of brake beyond 3/4 of full travel (stall).
8. Avoid steep banks close to ground.
9. Avoid flying downwind less than 100' above the ground(except on landing zone)

For tandem rating please refer to the tandem paramotoring safety guidelines for Trike and foot launch methods. A separate exam/clinic may be conducted by the instructors for tandem endorsement.

PPG Instructor

These requirements are meant to insure instructors have the requisite experience and skills necessary to take responsibility of a student by correct instructions at the right time. This is for an instructor who may or may not be tandem qualified.

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.

PPG Instructor Ground/General Requirements

1. Pilot has good judgment and a level of Maturity commensurate with the rating.
2. All witnessed flights must be pre-planned by the pilot and discussed with the examining instructor.
3. Successfully passed Instructor Certification Clinic given by an instructor administrator or completed 20 hours of apprenticeship with a PAI PPG Instructor administrator.
4. Successfully passed Instructor Written Test
5. Successfully completed First Aid and CPR class

PPG Instructor Experience and Minimums

1. Completed one year of flying using a paramotor.
2. 120 flights using a paramotor.
3. 45 flying days using a paramotor in span of one year.
4. Has had a PPG3 rating for at least 180 days (may be waived).
5. 50 solo airtime hours on a paramotor.
6. Agrees to apply minimum training standards prior to student instruction, flight and other areas as appropriate.
7. Adheres to "commitment letter" whenever doing instruction for PAI rating.

PPG Instructor Administrator /Examiner

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 applicant's ability to evaluate potential instructors so as to ensure our program is administered fairly.

Instructor Administrator is our most important position and is subject to annual review of the training committee. These individuals are responsible for selecting competent Instructor Candidates who:

1. Embrace PAI standards
2. Are willing to work with the PAI instructor community,
3. Operate first and foremost in the success of their students,

4. Represent and support our training program in a way that reflects well on the profession and organization.

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:

1. Have at least 4 years as PAI instructor or should have been teaching for over 5 years.
2. Have been the primary instructor for at least 10 students and given at least 5 PPG 2 ratings within the last year as primary instructor. 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. Commit to giving at least 1 instructor clinic per year that accepts any qualified applicant regardless of brand or school relationship.
4. Be recommended by either a) two PAI instructor Administrators or b) one PAI Instructor Administrator and two experienced PAI instructors (2+ years as PAI Instructor)
5. Pass a review of the training committee.

Process

Here is the submission process.

1. The recommending instructor administrator submits an email to the training committee, indicating the desire to certify a new Instructor Administrator and that he meets all requirements.
2. The applicant sends an email from explaining his/her desire to become an administrator commitment to the program's beliefs as long as he maintains his administrator status. Further that he understand that the rating is subject to annual review by the training committee and officers.
3. The two emails are forwarded to the training committee and officers.
4. If there is no objection by either group within 30 days of the email submission then the rating gets approved.

5. Denial by the training committee requires a majority saying the applicant is not appropriate for one of the listed reasons.
6. Denial by the officers requires that at least two officers say the applicant is not appropriate for one of the listed reasons.
7. Reasons for denial are: a) attitude incompatible with our mission, b) history of student incidents or non-compliance as an instructor, c) other.
8. Any disapproval requires an explanation of the reason, remedy, and when a re-application may be made.