

Introductory Tandem Instructor (ITI) Syllabus

Wheel Launch (WL)

United States Powered Paragliding Association

Purpose:

This syllabus for use by **Instructor Administrators** and defines the process to educate and evaluate those pilots meeting the requisite certification and experience requirements to become Wheel Launch Introductory Tandem Instructors and operate under the USPPA Tandem Exemption program.

Introduction:

Introductory Tandem Instructor (ITI) is a certification that allows highly competent USPPA PPG3 Wheel Launch Pilots with excellent safety records and risk management skills to become certified to provide instructional introductory tandem flights to passengers expressing interest in learning about our sport, without the need to become a fully certified USPPA beginner instructor. The organization believes this rating will allow competent ITI (WL) certified pilots to inspire candidates interested in our sport with an introductory tandem flight, whereupon later the candidate can later seek a fully qualified beginner instructor if they desire to learn the sport from the ground level.

Prerequisite Requirements for ITI Candidates:

- PPG3 (WL) certified.
- Minimum 1-year flying experience.
- Minimum 100 hours flying experience
- Minimum 50 hours in last 12 months flying experience
- Excellent history of aeronautical decision making, judgment, maturity and risk management
- Passion to safely introduce others to the sport
- Passed a Fundamentals of Instruction Written Test
- Passed ITI written test
- Completed a ground school program given by the Administrator that covers part 103 requirements, tandem exemption legal requirements, tandem flight risk management vs solo flight, weight and balance, weather, passenger safety and comfort.
- Completed all items contained within this syllabus to standard as determined by solely by the supervising administrator.
- Signs and agrees to ITI commitment letter contained herein.

Course Outline: This is intended be be a *general* outline of your course of instruction. Your training progression will be tailored by the Administrator to match your physical abilities, aptitude and attitude along with existing weather conditions during your course.

Administrator: I have given the training listed in this syllabus Applicant: I have received the training listed in this syllabus

Print Admin Name

Admin Signature

Date

Student Name:	
Date:	

Module 1 - Introductory Training	Date	Initial
Introductions / Goals & Expectations / Releases / Payments		
Introduce ITI Written Test / FOI Written Test		
Review Tandem Training Equipment / CG / Load Ratings / Power Plant / Trike Design Tandem Glider Design and Load Certification, Equipment Pre-Flight Procedures		
Review Introductory Tandem Flight Syllabus & Passenger Briefing Guide (appendix)		
Conduct Intro Tandem Flight w/student as passenger and Admin as Pilot		

Module 2 - Solo Trike Skills - 1 to 4 sessions	
Preflight Procedures / Glider Layout	
Solo Taxi Practice - Demonstrate consistent inflations, glider check, reduction to taxi power, glider control, S-turns during taxi, and proper glider disinflation	
Multiple Solo Flight and Touch and Go's on trike demonstrating PPG3 WL Skill Level	
Crosswind Launch / Land / Taxi	
Emergency Procedures and oscillation control including simulated engine out landing	
Video Debrief on Solo Skills	
Prep for ITI & FOI Test	
Weight and balance demo in hang simulator	

Module 3 - Tandem Flight - 2 to 4 sessions	Date	Initial
Provide Passenger Briefing to Admin as per guide in syllabus appendix		
Demonstrate tandem preflight and glider layout		
Demonstrate proper analysis of weather condition prior to tandem flight		
Demonstrate proper analysis and adequacy of the LZ		
Provide minimum 5 complete passenger briefings and tandem flights with Admin as passenger who is role playing as student. Conduct flight according to Introductory Tandem Syllabus attached in the syllabus appendix		
Demonstrate tandem taxi skills and S-Turns		
Demonstrate safe landing from a simulated motor out as tandem PIC		

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Theory & Classroom Work	
Weight & Balance Demo In Hang Test Simulator with Tandem Trike	
USPPA Tandem Exemption Legalities	
Weather Conditions for Providing Introductory Tandem Flights	
Loading, Thrust, Weight, Glider and Performance Considerations	
Minimum Standards for LZs	
Liability Release and LLC considerations for Providing Tandem Flight Instruction	
Preventing Distractions by passenger during tandem flight set-up and use of checklists	
Maintenance and Equipment Condition for Tandem Flights	
How to present yourself to your tandem passenger from introduction through the end of the flight experience and how to make them confident with you and comfortable during the entire experience	
What IS NOT considered an instructional introductory tandem flight (eg skydiving, shooting animals, joyriding friends and family)	
Importance and utilization of properly rated reserve parachute	

* Actual training may not take place in the exact order listed, or in the time period specified.

APPENDIX

Tandem Passenger Briefing Guide	
Introduce yourself to student	
Ask about related experienced (skydiving, small plane) and try and relate to the flight	
Describe your experience and training	
Ensure student has signed a waiver	
Provide general overview of the tandem equipment and glider, describe generically how it works together	
Review in flight intercom communications and procedures in event intercom fails	
Review passenger seating position, buckles, and where feet and hands go	
Ensure passenger pockets have no loose items that could be lost or cause equipment damage	
Review Launch Procedure (inflation, taxi, takeoff) and describe abort conditions and what an abort would feel like	
Review altitudes and areas you intend to fly	
Inform student that the entire flight will be conducted over land-able terrain for their safety. Inform the student that if at anytime during the flight they feel sick or uncomfortable you will immediately return for a safe landing	
Review procedures for passing the controls, and give student general overview of how to steer the glider. Tell student you will be with them on the controls as necessary, and will ensure they are completely comfortable before giving over steering controls. Instructor will be solely on the controls for takeoff, landing, and all flight below 300' AGL	
Inform student that the equipment is not inspected or certified by the FAA because it is under 254 lbs, <5 gallons of gas. Inform the student that you personally inspected the equipment prior to each flight and know it to be airworthy	
Inform student that the flight is conducted under a part 103 exemption by the FAA and that the flight is only conducted for instructional purposes	

Introductory Tandem Flight Syllabus	
Equipment Set-Up and Pre-flight	
Launch Procedure	
Climb out and level off.	
Shallow turns (<20 degrees, smooth in, smooth out)	
Effect of power changes in flight	
Effect of trimmer changes in flight	
Pass controls to student and have them demonstrate shallow turns (<20 degrees) with instructor assistance as required.	
Review importance to see and avoid other air traffic	
Demonstrate oscillations and oscillation dampening to student (<30 degrees)	
Put glider into <30 degree oscillation, have student attempt to dampen and stop with instructor assistance as required.	
Demonstrate touch and go landings	
Demonstrate Full Stop Landing	

Introductory Tandem Instructor Commitment Letter

I, ______, as a USPPA Introductory Tandem Instructor and protector of the USPPA Part 103 tandem exemption, commit to the following:

- 1. I will always employ the highest level of aeronautical decision making, risk management, and safety when conducting introductory tandem flights.
- 2. I will only conduct tandem flights during the most benign weather conditions to ensure my student's comfort and safety, and only ever from LZs appropriate for tandem launch and landing.
- 3. I will always maintain position and altitude so in the event of a power loss I can safely land on appropriately smooth terrain.
- 4. I will fully brief each student/passenger in accordance with the briefing contained herein.
- 5. I will always employ an appropriately rated reserve when flying student/passengers.
- 6. I will never make aggressive maneuvers when flying tandem. Climbs and descents will be gentle and turns shall be limited to 30 degrees angle of bank. I will never conduct any high loading maneuvers such as wingovers.
- 7. I will thoroughly inspect my equipment prior to each tandem flight and conduct all maintenance at recommended intervals.
- 8. I will conduct hang checks to ensure CG is appropriate for the size of the passenger I am flying.
- 9. I will never fly a passenger whose weight puts at risk the CG, takeoff or climb performance of my equipment.
- 10. I will never fly a passenger whose weight puts the system over or under the certification load limits of my glider.
- 11. I will have my tandem glider inspected every two years, or every 100 hours, whichever comes first, and always after it incurs any damage.
- 12. I will always follow the introductory tandem flight syllabus contained herein.
- 13. I will never conduct "joy rides."
- 14. I will follow all Part 103 regulations and other local ordinances that pertain.
- 15. I will not fly a passenger for the purpose of anything other than an introductory tandem flight (including not conducting flights for purpose of skydiving, transport, filming, demonstration, or shooting animals).
- 16. I acknowledge with evidence indicating I have not followed the tenets of this commitment letter or any evidence of general recklessness, my Introductory Tandem Instructor rating may be immediately revoked by vote of the USPPA training committee.