

Enchanted Air Paragliding LLC

TRAINING SYLLABUS

Foot launched paragliding

Introduction

This syllabus is set out in two main sections; Ground-school and Practical.

A. Ground school

1. Equipment

1.1 The Canopy, harness, helmet

1.2 Clothing

1.3 Instruments

2. Weather

2.1 General Weather and wind assessment

2.2 Weather patterns and forecasts

2.3 Weather, local

2.4 Weather in XC Situations

3. Theory

3.1 Theory of Flight - General

3.2 Theory of flight - Paraglider

3.3 Airmanship

3.4 Air Law FAR Part 103 and SOP 12-02 (pilot proficiency system)

B. Practical

4. Practical

4.1 Flight

4.2 Flying Experience

4.3 Qualifying for ratings

General:

A pilot under training will fly under direct instruction from the instructor at all times.

A pilot under training will fly only either within sight of or in pre-arranged radio contact with a designated instructor unless he is performing a declared cross country task.

No student may fly until the required ground/kiting skill levels have been fully demonstrated to the satisfaction of the instructor.

All paragliding shall be taught in accordance with guidance and regulations as produced by the USHPA.

A. GROUND SCHOOL

1. Equipment

1.1 The Canopy

1.1.1 Daily checks and pre-flight checks

The student will demonstrate daily and pre-flight checks and demonstrate his knowledge of the materials and methods used in the construction of the canopy.

1.1.2 Maintenance

The student will demonstrate his knowledge of the need for regular inspections and maintenance of his canopy the harness and the emergency parachute including emergency parachute re-packing requirements.

1.2 Clothing

The student will demonstrate knowledge of the need for appropriate clothing including helmet, gloves, flying suit etc. No scarves - jacket drawstrings - long hair secured!

1.3 Instruments

The student will demonstrate the use of an altimeter, variometer and will be able to demonstrate his knowledge of the circumstances in which these should be used.

2. Weather

2.1 General Weather

The pilot under training will demonstrate a general understanding of weather patterns, and associated wind direction and strength.

2.2 Weather Patterns and forecasts

The pilot under training will demonstrate an understanding of how weather systems affect flying conditions. An understanding of the following will be demonstrated:

2.2.1 Forecasts.

2.2.2 Cloud recognition.

2.2.3 High and low pressure systems and fronts.

2.2.4 Unstable weather, turbulence & gust fronts.

2.2.5 Stable weather, effect on visibility and inversions.

2.2.6 Stable/unstable conditions.

2.3 Local Weather

The student will demonstrate an understanding of how the following affect flying conditions.

2.3.1 Airflow on and around hills and other obstacles. Catabatic flow.

2.3.2 Wind gradient.

2.3.3 Turbulence, venturi effect and gusts.

2.3.4 Sea-breezes.

2.3.5 Thermal cumulus cloud development.

2.3.6 Standing waves and their effect.

2.4 Weather in XC Situations

The student will demonstrate an awareness that paragliders can fly in locations and at heights where conventional aircraft are typically not flown. The need to maintain an awareness of overall wind direction and its effect in mountain and valley situations will be discussed and wind gradient in different topographical situations considered.

The student will demonstrate the ability to assess suitable flying weather.

3. Theory

3.1 Theory of flight - General

The student will demonstrate knowledge of:-

3.1.1 Principles of flight including drag, airflow over the wing, angle of attack, wing loading, glide angle & sink speed.

3.1.2 Effect of speed

The effect of brakes on angle of attack and speed (Paraglider). The effects of flying too slowly (the stall).

3.1.3 Air speed - wind speed - ground speed.

3.1.4 Emergency and safety procedures.

3.2 Theory of flight Paraglider

The student will demonstrate knowledge of:-

3.2.1 Forces in turns and the effect on stall speed.

3.2.2 Trim.

3.2.3 Speed Systems.

The effect of speed systems on a paraglider.

3.2.4 Canopy Loading.

The effects of weight on flying speed, stall speed/flare and the need for weight checks.

3.2.5 The effect of flying too slowly.

3.2.6 Emergency and safety procedures.

3.3 Airmanship

The pilot under training will demonstrate knowledge of:-

3.3.1 Dangers - power lines, trees, obstructions, water.

3.3.2 Turbulence and its consequences.

3.3.3 Flying with others, anticipation..

3.3.4 The emergency parachute.

3.3.5 Takeoff and Landing

The choice of safe flying sites including takeoff site and landing areas.

Considerations for flight path clearance, takeoff v. ground conditions, turbulence generators, obstructions areas, including landing out options and controlled airspace areas.

3.3.6 Assessment of meteorological and topographic conditions for flight.

3.3.7 Safe areas for spectators.

3.3.8 Congested areas.

3.3.9 Take-off abort procedures.

3.3.10 Techniques for safe flying.

Know how to avoid and recover from collapses, stalls and spins.

3.3.11 Methods of navigation.

Creating a flight plan for every flight.

3.3.12 Emergency and safety procedures.

3.4 Air law

The pilot under training will demonstrate a thorough knowledge of air law (FAR part 103) and regulations applicable to foot launched gliders including:-

3.4.1 Collision avoidance rules and Right of Way rules.

3.4.2 Landing patterns.

3.4.3 Night (definition of)

3.4.4 Congested areas.

3.4.5 Visual flight rules.

3.4.6 Controlled, Prohibited, Restricted and Danger Areas.

3.4.7 Notams, Airmets and Sigmets

3.4.8 Incident reports.

3.4.9 Sectional Charts.

3.4.10 Thermal and Ridge soaring rules.

3.4.11 Air space Classes

B. PRACTICAL

4. Practical

4.1 Flights

N.B. These flights must be supervised by Instructor (Hill or Tow) in the appropriate discipline.

4.1.1 Demonstrate an effective PLF (Paraglider)

4.1.2 Correct pre and post flight routines.

4.1.3 Demonstrate the ability to plan a flight and execute the plan.

4.1.4 Demonstrate inflation, deflation and kiting control.

4.1.5 Demonstrate consistently good launch technique. (Forward and reverse).

4.1.6 Demonstrate safe airspeed control.

4.1.7 Demonstrate good flying control, including safe and effective turn control of the glider.

Flights from a site with at least 100 ft. ground clearance, with unassisted take-off runs, smooth 45 deg. left and right turns including good airspeed and finish with stand-up landings including full controlled deflation of the canopy between flights.

4.1.8 Landings

Complete 5 landings within 50 ft. of a defined spot in winds of less than 5 mph.

Complete 5 landings within 50 ft. of a defined spot in winds of more than 10 mph.

4.1.9 Consistently demonstrate clean take offs, good flares and accurate landing into wind.

4.1.10 Flying time.

Minimum of 10 flights logged (including full deflation and inflation of canopy between flights (Paraglider).

4.1.11 Tow Launch Emergency.

Demonstrate release from tow an 'S' turn flight plan so that a safe landing can be made (Tow).

Explain lockouts, how they happen and how to recognize, avoid and recover (release).

4.2 Flying Experience

(Tow) Complete a minimum of 15 flights and attain self release from a safe height for a standard landing pattern on each occasion.

(Hill) Complete a minimum of 15 flights with at least 100 ft. ground clearance.

4.2.1 Stall Recognition

Demonstrate emergency collapses (Paraglider on the ground)

4.2.2 Experience take offs in winds less than and greater than 5 mph.

4.2.3 Demonstrate safety and emergency procedures.

4.2.4 Demonstrate launch abort.

4.2.5 Flying in Company.

Display the ability to fly safety with others, maintaining a good Look Out, complying with the Rules of the Air and exhibiting good Airmanship, and demonstrate an ability to maneuver Paraglider safely, considerately and in accordance with air traffic rules.

4.3 Qualifying for Ratings.

4.3.1 Must have satisfactorily demonstrated all witnessed tasks and requirements of USHPA P-2 rating.

4.3.2 Satisfy the Instructor that the pilot has the correct attitude to continue a flying career both safely and competently.

4.3.3 Pass the USHPA P-2 written exam.