

## **United States Hang Gliding & Paragliding Association, Inc.**

### ***PART 104 - PILOT PROFICIENCY SYSTEM***

#### **INTRODUCTION**

USHPA pilot ratings are issued to reflect completion of WITNESSED tasks. Some tasks may seem to require excessive precision or attention to detail, but the practice preparing for them will prove beneficial. A rating gives a pilot an introduction to local people at a different site. Flying sites are labeled according to the approximate skill level required to fly there safely. A pilot may fly the hill only if the local people feel he is capable of doing so.

*It is recommended that all pilots maintain a flight log.*

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#### **104.13 BEGINNER PARAGLIDING RATINGS**

##### General Description

A Beginner pilot has the knowledge and basic skills necessary to fly and practice under direct instructor supervision and within significant operating limitations. The pilot understands the USHPA paragliding rating systems and recommended operating limitations.

##### 13.01 Beginner Rating - Foot Launch - Required Witnessed Tasks

- A. Attends and completes a basic ground school.
- B. Layout and preflight of canopy and harness.
- C. Demonstrates canopy handling skills sufficient to launch from a training hill under control.
- D. With each flight, demonstrate method(s) of establishing that pilot is properly connected to the canopy, with cleared lines and risers, just prior to inflation.
- E. Launch unassisted showing:
  - 1. Aggressive inflation and run.
  - 2. Pendulum control during launch.
  - 3. Directional control.
  - 4. Smooth transition from running to flying, during launch.
- F. Airspeed recognition and control,
  - 1. Two flights, predetermined to show:
    - a. Constant airspeed.
    - b. Smooth straight flight towards a pre-selected target.
    - c. Safe, smooth landing, on feet, into wind.
  - 2. Two flights, predetermined to show:
    - a. Confident, slight variation in airspeed showing awareness of control inputs and pendulum control.
    - b. Smoothly increasing airspeed, and smoothly slowing airspeed showing good control.

c. Safe, smooth landing, on feet, into wind.

G. Shows the ability to recognize and understand how different wind conditions at this site will affect their flights.

1. Wind direction.
2. Wind velocity.
3. Terrain shape.
4. Obstructions.

H. On each flight, demonstrates proper post-landing procedure, to include, but not limited to:

1. Canopy deflation.
2. Canopy immobilization.
3. Checking traffic.
4. Removal of canopy from landing area.
5. Disconnection from the canopy.

I. Demonstration of understanding of the importance of proper packing, storage, and care of the canopy.

J. Has read and understands USHPA statements regarding good judgment and maturity.

K. Must pass the USHPA Beginner Paragliding written exam.

L. Must agree to all the provisions of the USHPA standard waiver and assumption of risk agreement for the Beginner rating and deliver an original signed copy to the USHPA office.

### 13.02 Beginner Rating - Tow Launch - Required Witnessed Tasks

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### 13.03 Recommended Operating Limitations for Beginner Pilots:

- A. Should exceed these limitations only after demonstrating complete mastery of the required Beginner paragliding tasks (above), and only after acquiring a full understanding of the potential problems and dangerous situations which may arise from exceeding these limitations.
- B. All flights be made under the direct supervision of a USHPA Certified Basic or Advanced Paragliding Instructor.
- C. Should fly only in steady winds of 12 m.p.h. or less.
- D. Should foot launch only on slopes of 3:1 - 4:1, where wind is within 15° of being straight up the slope.
- E. Should launch only when there are no obstructions within 60° to either side of the intended flight path.
- F. Should fly appropriate sites for this skill level.
- G. Should fly a canopy recommended by the manufacturer as suitable for Beginner or Novice pilots.

## **104.14 - NOVICE PARAGLIDING RATING**

### General Description

A Novice paraglider pilot has the knowledge and basic skills necessary to fly and practice without direct instructor supervision but within significant operating limitations. The pilot understands the USHPA paragliding rating systems and recommended operating limitations.

The pilot shall use good judgment and have a level of maturity commensurate with the rating. Pilots must demonstrate Beginner level skills and knowledge before obtaining the Novice rating. All witnessed flights must be pre-planned by the pilot and discussed with the Instructor or specially qualified Observer.

### 14.01 Novice Rating - Foot Launch - Required Witnessed Tasks

#### A. Logged Requirements

1. Attends a minimum of 8 hours of ground school.

#### B. Demonstrated Skills and Knowledge

1. Demonstrates layout and preflight of the canopy, harness, and backup reserve parachute.
2. Gives a reliable analysis of general conditions of the site and self, and a flight plan including flight path, areas to avoid in relation to the wind flow, and obstacles to stay clear of.
3. Demonstrates 5 consecutive forward inflations with a visual check of the canopy each time.
4. Demonstrates 5 consecutive controlled reverse inflations with proper surge dampening.
5. Demonstrates controlled kiting of a glider overhead for 2 minutes in a steady wind.
6. Demonstrates 2 clean, smooth reverse inflations/reversals prior to launch.
7. With each flight, demonstrates a method of establishing that the pilot is properly connected to the glider, with cleared lines and risers just prior to inflation.
8. Demonstrates 2 successful, aggressive, confident inflations/launches, where the wind is at least 15° cross to straight up the hill in wind not exceeding 5 m.p.h.
9. Demonstrates 2 no-wind (0-5 m.p.h.) inflations/launches.
10. Demonstrate how to brief and instruct a ground crew and explain when an assisted launch is necessary.
11. Demonstrates 2 high-wind (10-15 m.p.h.) inflations/launches.
12. Demonstrates flight with smooth variation in airspeed, from above minimum sink to fast flight, while maintaining a heading.
13. Demonstrates flight showing the ability to comfortably and precisely slow the glider to minimum sink and smoothly increase to normal airspeed while maintaining a heading. The pilot should not slow the glider to near the stall speed.
14. Demonstrates flight(s) along a planned path alternating 'S' turns of at least 90° change in heading. Flight heading need not exceed 45° from straight into the wind. Turns must be smooth with controlled airspeed, ending in safe, stand up landings on a heading.
15. Demonstrates 180-degree turns in both directions, and at various speeds and bank angles.
16. Demonstrates hands-off flying, one handed flying skills, weight-shift turns, and rear-riser turns.
17. Demonstrates symmetric and asymmetric tip folds for increased descent rate.
18. Demonstrates the ability to judge and allow for proper clearance from a ridge and other aircraft.
19. Demonstrates 5 landings within 25' of a target, safe, smooth, on the feet and into the wind. The target must be sufficiently close to launch such that turns are required to set up an approach and avoid over-flying the target. The target should be at least 100' below the launch point.
20. Explains proper strong wind landing procedures and how to keep from being dragged back.
21. Explains correct canopy maintenance.
22. Explains how to lengthen and shorten the flight path.

23. Explains the right of way traffic rules.
24. Demonstrates the proper use of a speedbar / accelerating system.
25. Demonstrates reserve deployment while hanging in a harness in simulated turbulence or malfunction conditions.
26. Gives a thorough verbal demonstration of knowledge of how to:
  - a. Maintain directional control during and correct for an asymmetric wing fold of 25% of the wing span.
  - b. Fly at minimum sink while precluding any chance of inadvertent stall or spin, particularly when flying through lift, sink or in conjunction with making turns.
  - c. Increase descent rate and/or forward speed.
27. Demonstrates proper and effective PLF technique.
28. Must pass the USHPA Novice Paragliding written exam.
29. Must agree to all the provisions of the USHPA standard waiver and assumption of risk agreement for the Novice rating and deliver an original signed copy to the USHPA office.
30. Acknowledges and understands the need to become familiar with site-specific restrictions and launch or landing access limits, consistent with preservation of flying privileges at a site.

#### 14.02 Novice Rating - Tow Launch - Required Witnessed Tasks

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#### 14.03 Recommended Operating Limitations for Novice Paragliding Pilots

- A. Should exceed these limitations only after thoroughly mastering all required tasks, and after acquiring a full understanding of the potential problems and dangers involved in exceeding these limitations.
- B. Maximum base wind of 12 m.p.h.
- C. Maximum peak gusts to 15 m.p.h.
- D. Maximum gust rate of 5 m.p.h. in 5 seconds.
- E. Should not fly in thermal lift where peak climb rates exceed 200 fpm.
- F. If foot launching, should launch only on slopes steeper than 4:1, where the wind is within 25° of being straight up the slope.
- G. Visual contact with the landing zone.
- H. Avoid application of either brake beyond 2/3 of the way from slack to stall position.
- I. Limit turns to 30° of bank, limit speed in turns to 1.5 times the straight line, brakes off, cruise speed, and smoothly exit any spiral turn which shows a tendency to steepen or accelerate.
- J. Should fly a canopy recommended by the manufacturer as suitable for Beginner to Intermediate pilots.