

## NOTICE TO PG/HG AIRMEN

# Safety Information and Recommended Site Protocol for Green Point and the Sleeping Bear Dunes National Lakeshore Flying Sites

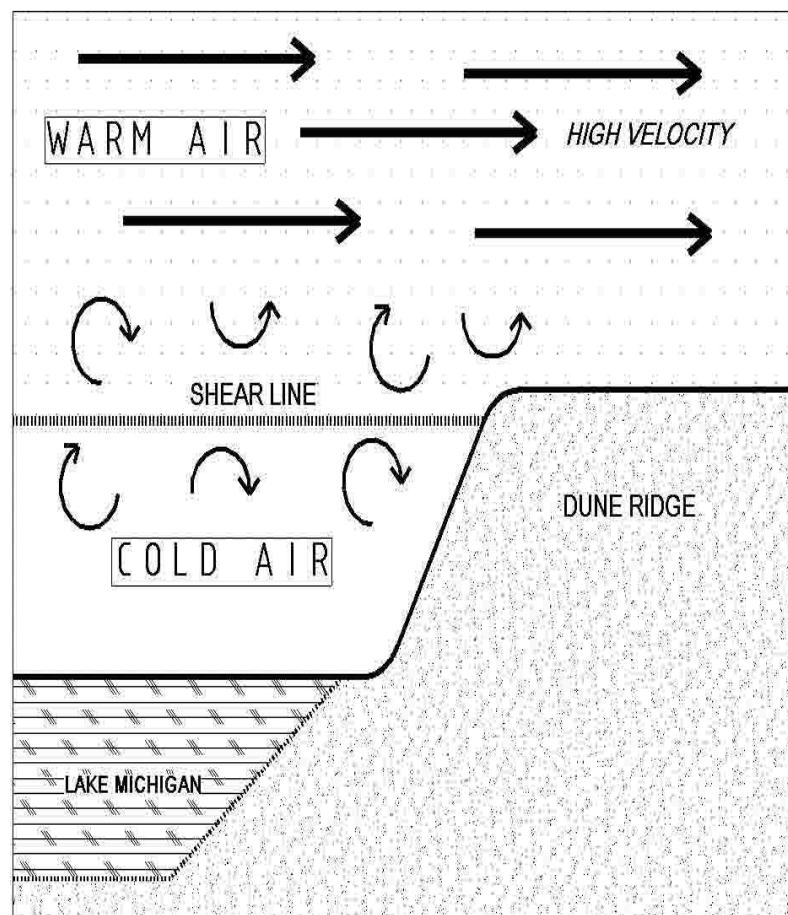
### Recommended Site Protocols

1. Pilots new to these flying sites (and landing areas) should be checked out on hazards, conditions and proper use of these sites by knowledgeable local pilots before flying.  
Contact Keith Riemersma 616-283-1798, Craig Carlson 231-313-4466, Dave Embertson 231-920-0335
2. Pilots should review and understand the posted 'Rules of the Ridge' and Pilot required ratings and weather condition limitations posted on the front and Back sides of the Green Point Kiosk before flying.
3. All pilots must wear a helmet (conforming to EN 966 standards is recommended) and reserve parachute that has been repacked according to the manufacturers recommendations.
4. All pilots shall carry a hook knife that is within easy reach from the piloting position in the harness (not in a remote back zipper pocket).
5. All flight activities must comply with USHPA part 100 and FAA FAR part 103.
6. Pilots shall be respectful of others airspace, not everyone is comfortable with close proximity pattern flying or low flybys (Ramp Buzzing).
7. Tandem flights must comply with current USHPA and FAA regulation. All conditions of the current USHPA tandem exemption must be met.
8. Pilots planning to fly the Sleeping Bear Dunes National Lakeshore sites must apply for a special use permit at the Park Headquarters Office in Empire before flying.
9. HG Pilots shall have USHPA special Skill signoff of AWCL for ramp launch. PG pilots need the RS special skill signoff.

### Evaluating Flying Conditions

The geography of NW Michigan appears to be perfect for flying hang gliders and paragliders and there are occasions when the conditions here are very user-friendly. However, during spring months and sometimes well into the summer there can be a temperature differential that occurs between the water and the air that creates what local pilots call 'spring conditions'. Warm land air coming across from Wisconsin rides up and over the colder dense air of Lake Michigan. This condition can occur when the temperature difference is as low as 5-10 degrees. The larger the temperature difference, the greater the flying risk. As shown in the diagram below, the resulting shear line generally has turbulence below and significantly stronger winds above. Sometimes this 'line' is positioned just below launch so that on launch it can feel soarable but the lift vector is small because only a small portion of the bluff is in the lift zone. In this situation a launching pilot will quickly find himself/herself in sinking turbulent air often with

minimal control. If the shear line is lower on the bluff, the pilot may be able to soar but may also be quickly lifted into much stronger wind velocity than what was measured at launch. Paragliders in particular can lose penetration and suddenly find themselves in the rotor zone behind the launch zone. It is important to watch soaring birds to help evaluate the possibility of the temperature difference. If the wind coming in and the birds below launch height are flapping or being rocked by turbulence while birds above launch are easily soaring then it can be assumed that the dreaded 'spring condition' exists. The water texture is another clue. If the wind on launch is 12+ mph and yet there are no whitecaps on the lake surface or there is a noticeable change in lake texture between near shore and approximately 300 or more feet from shore, this also indicates a greater possibility of a significant temperature difference between the water and the air. This 'spring condition' does not just offer a quick sled ride to the beach, but often the turbulent air can be trying to push the pilot into the side of the bluff and sometimes even push the pilot into Lake Michigan.



**Diagram 1: Cross section of a typical 'spring condition' at Lake Michigan dune ridge sites**

(The shear line may not be stable. It can migrate upward or downward within a short period of time)

## Flying the Sleeping Bear Park Sites

The flying privileges at the Sleeping Bear National Lakeshore sites are very sensitive due to the launch sites being located within the spectator viewing areas and the landing zones being located on populated beaches. The SB Park sites have additional requirements regarding USHPA rating qualification, launch/landing locations and the number of pilots allowed in the air at one time. All pilots planning to fly the SB sites must check in and review the park flying rules at the SB Park Visitor Center in Empire and apply for the SB Park's special use permit before flying. Renew your permit each calendar year, they all expire at the end of December even if your document shows it is good for 12 months from the time of original registration.

1. The SB Park sites can be very crowded with spectators during the summer months especially on weekends and even more so during the major holidays. Pilots should not aerially perform for the spectators or increase risk in any manner.
2. For Sleeping Bear, HG pilots are encouraged to set up in the grass zones near the parking area, hook into their glider and then walk their glider along the sidewalk to the launch location. HG and PG pilots should not leave their equipment unattended at any time.
3. PG pilots should not practice kiting at the SB Park launch sites. PG and HG pilots should launch as quickly and safely as possible after set up is complete to minimize possible ground-based risks to spectators.
4. During some years the beaches can be minimal or non-existent. Pilots should evaluate the landing area physical conditions before launching.
5. Pilots launching at Sleeping Bear Overlook should only launch to the south (left) at a zone clear of spectators to the sides and below. If spectators or wind direction is prohibitive, north of wood overlook can be used.
6. Any wind streamer or tell-tale planted in the launch area should be removed by ground crew shortly after launching.
7. Since the visitor numbers at the SB Parks sites are increasing each year it is recommended to consider not flying during the busy holidays. On Memorial Day weekend, July 4<sup>th</sup> and Labor Day weekend there can be 150+ spectators at the launch area (Sleeping Bear especially) and it can be difficult to clear the launch area for a safe launch.
8. Safety first! And check your intended LZ before launch as things change.

Posted bulletins at the Green Point site in the Kiosk

# **Green Point Flyers Association**

## **Board of Directors and flying site contacts:**

Keith Riemersma	President	616-283-1798
Bill Fifer	Vice President	231-922-2844
Craig Carlson	Secretary	231-313-4466
Dave Embertson	Safety Director	231-920-0335

## **Address of this flying site for 911**

2826 Rudy's Trail  
Elberta, Michigan 49635-0247

Everyone, Owners, Pilots, Family, and **Visitors** shall complete a Green Point Waiver of Liability and Registration document for each season.

## **If you do not complete a waiver you are trespassing!**

Waivers are located at the utility building in the hanging mailbox. Complete the waiver and place it in the deposit box slot in one of the provided envelopes or it can be mailed to Keith Riemersma 564 W21 street Holland Mi 49423

Pilots shall be current with USHPA (*Before Flying*)  
Everyone shall be current with GPFA dues and fees **upon arrival**.

Fees: (see full fee list for details)

Note:

Temporary member fee is **30 days** (expires at midnight) and is **due on arrival**.

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# GREEN POINT FLYERS ASSOCIATION SITE RULES AND FLYING REGULATIONS

## GENERAL

1. All users of Green Point shall be respectful of the property and others.
2. Shareholders and Members shall be in "good standing" (PAID UP) and have a signed liability waiver on file for the current year before flying.
3. ALL users of Green Point (pilots, launch assistants, campers, family members, friends, visitors, etc.) **SHALL** sign a Green Point Liability waiver each year before using property.
4. Green Point Landowners reserve the following rights/privileges:
  - a. First choice of campsite location
  - b. The right to fly first if site is crowded
  - c. Owners may revoke memberships, with Board of Director's approval, for unsafe flying or activities on property or disrespect for property or others.
5. Pilots (hang gliding or paragliding) **SHALL** be current, card-carrying, FULL U.S.H.P.A. members, and be able to prove it. Text the USHPA# to 719-387-4571 to check status
6. Pilots shall wear helmets & parachutes and carry a hook knife.
7. ALL equipment shall be in good working order. Owners/members reserve the right to not allow substandard or dangerous equipment to be used.
8. ALL instructors and instruction **SHALL** comply with U.S.H.P.A. and Green Point rules and regulations. All instructors shall be current Certified U.S.H.P.A. Instructors and a full member of Green Point. Students shall be a U.S.H.P.A. members and a member of Green Point.
9. Witnessed Hook-in/Hang Check is mandatory.
10. Radio usage is **highly recommended**. Frequency is 151.625. Call Sign is WPRY420.

All Green Point Rules and Regulations will be strictly enforced by Shareholders and the Board of Directors.

ANYONE FOUND TO BE IN NON-COMPLIANCE WITH ANY OF THE GREEN POINT RULES WILL BE SUBJECT TO DISCIPLINARY ACTION BY THE GREEN POINT FLYERS ASSOCIATION, BOARD OF DIRECTORS.

## **HANG GLIDING REQUIREMENTS**

1. All pilots shall be a minimum of Hang 2 / Novice. Hang 1 / Beginner pilot shall be accompanied by a U.S.H.P.A. Certified Hang Gliding Instructor.
2. All students shall be accompanied by a U.S.H.P.A. Certified Instructor.
3. Any pilot or student may be asked to produce his/her flight log book and/or U.S.H.P.A. membership card at any time to verify experience.

## **RAMP LAUNCHING**

- a. Ideal minimum 8 mph, sled ride minimum 6, if less use blowout launch.
  - b. Ideal soaring 12-19 mph
  - c. Ideal max 28
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- |                    |   |
|--------------------|---|
| B) Winds 6-17 mph  | Minimum of <u>one</u> launch assistant required on ramp.    |
| C) Winds 18-25 mph | Minimum of <u>two</u> launch assistants required on ramp.   |
| D) Winds 25+ mph   | Minimum of <u>three</u> launch assistants required on ramp. |

## **BLOWOUT (Self Launching)**

- a. Ideal minimum 0 mph,
  - b. Ideal soaring 10-18 mph
  - c. Ideal max 18 if over 18mph use ramp takeoff or assistants.
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- |                   |                                 |
|-------------------|---------------------------------|
| A) Winds 0-17 mph | Hang 3 / Intermediate required. |
| B) Winds 17+ mph  | Hang 4 / Advance required.      |

## **PARAGLIDING REQUIREMENTS**

1. All pilots shall be a minimum of Para 2 / Novice. Para 1 / Beginner pilot shall be accompanied by a U.S.H.P.A. Certified Paragliding Instructor.
2. All students shall be accompanied by a U.S.H.P.A. Certified Instructor.
3. Any pilot or student may be asked to produce his/her flight log book and/or U.S.H.P.A. membership card at any time to verify experience.
4. Mini wings / speed wings shall only be flown by rated pilots with mini wing

signoff.

5. No paraglider ramp launching.
6. Winds 0-15 mph      Para 2 / Novice required (or instructor supervision).
7. Winds 16 + mph      Para 3 / Intermediate required.

### **TANDEM FLYING**

1. Pilot in command shall meet U.S.H.P.A. Tandem requirements (U.S.H.P.A. member and certified Tandem Instructor). Pilot shall also be a Green Point (current) member.
2. Passenger shall be a U.S.H.P.A. member and Green Point (current) member.

### **OTHER**

ALL PILOTS (HANG GLIDER AND PARAGLIDER) SHALL FOLLOW RULES OF THE RIDGE AND RIGHT OF WAY GUIDELINES.

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911 ADDRESS  
2826 Rudy's Trail  
Elberta, MI 49635

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# Green Point Flyer's Association Rules of the Ridge

Image 1

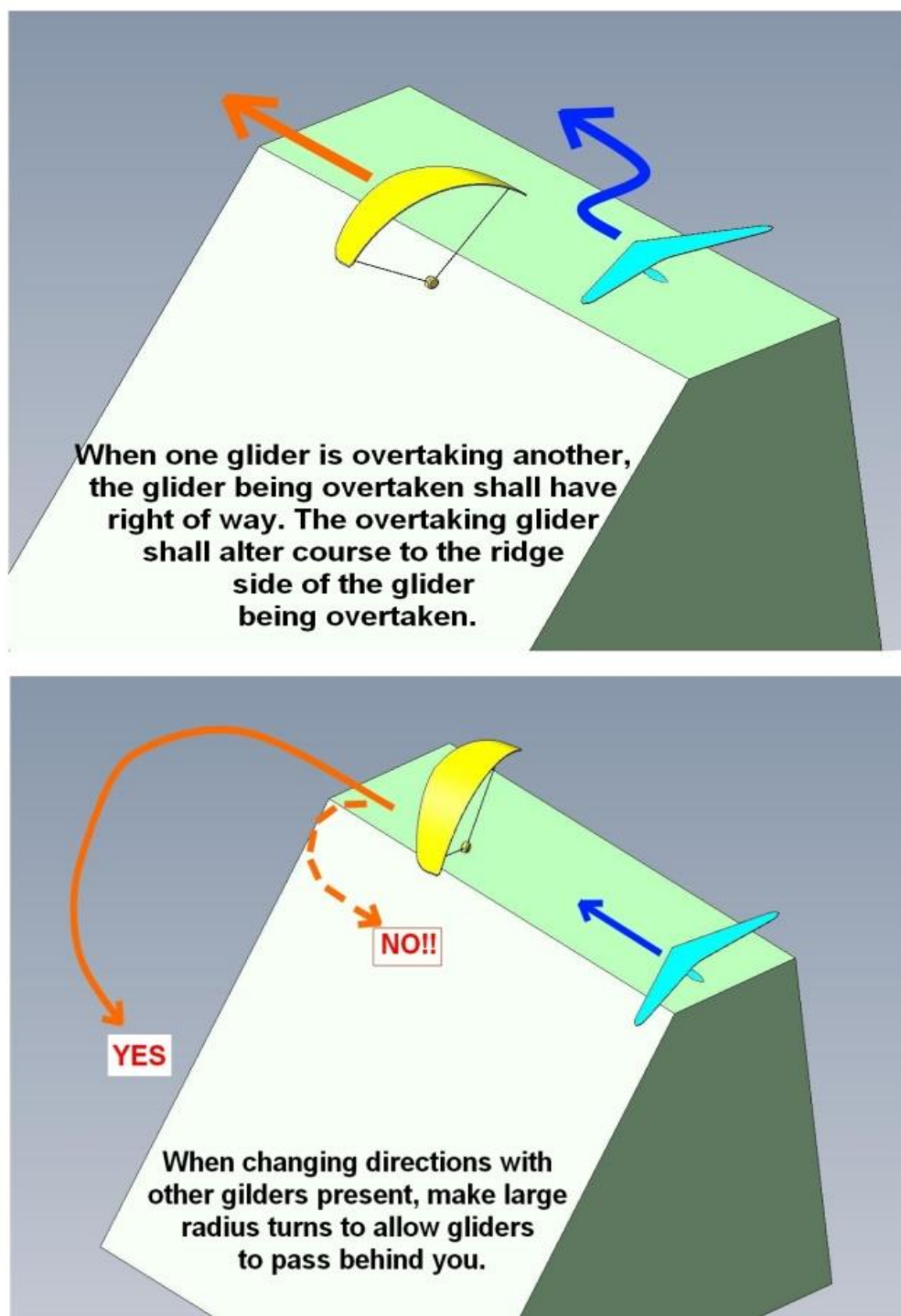
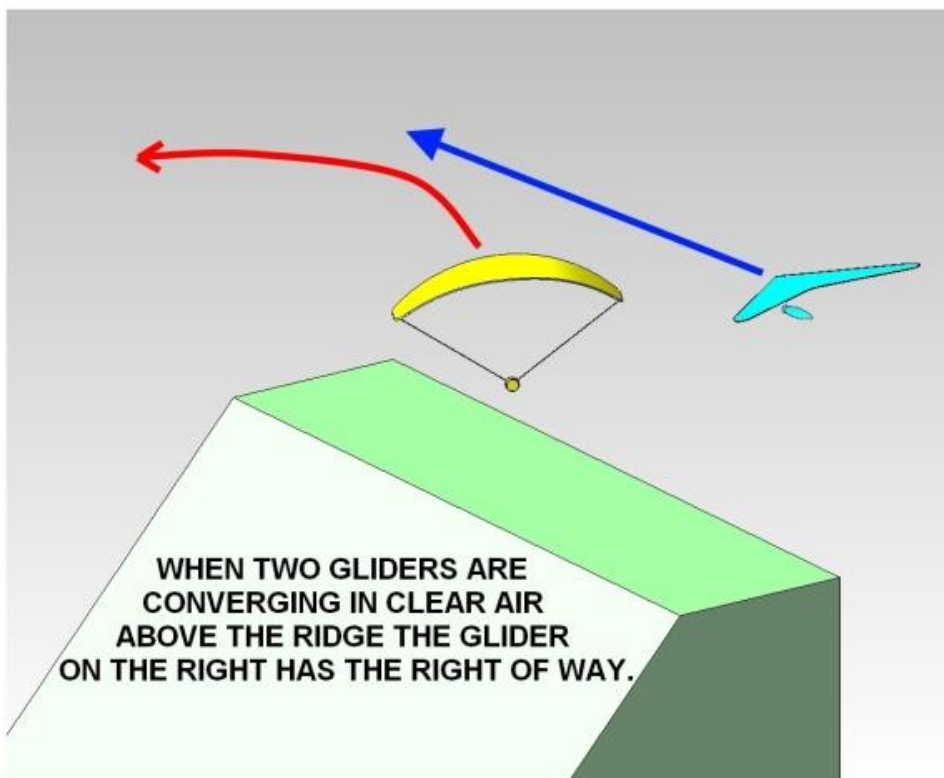
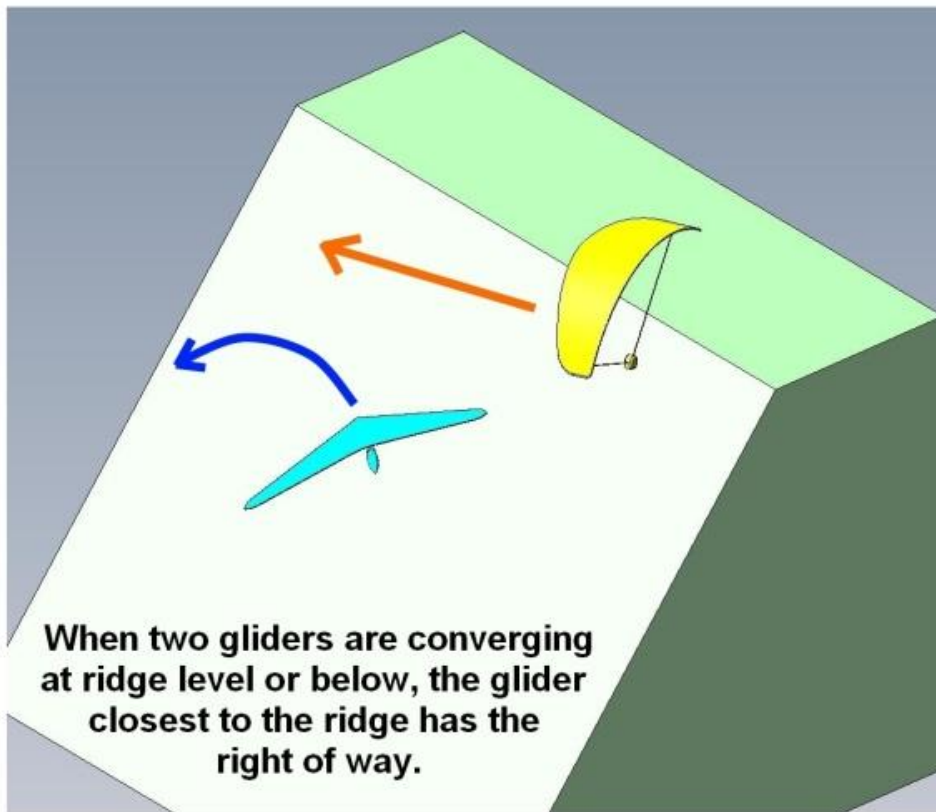
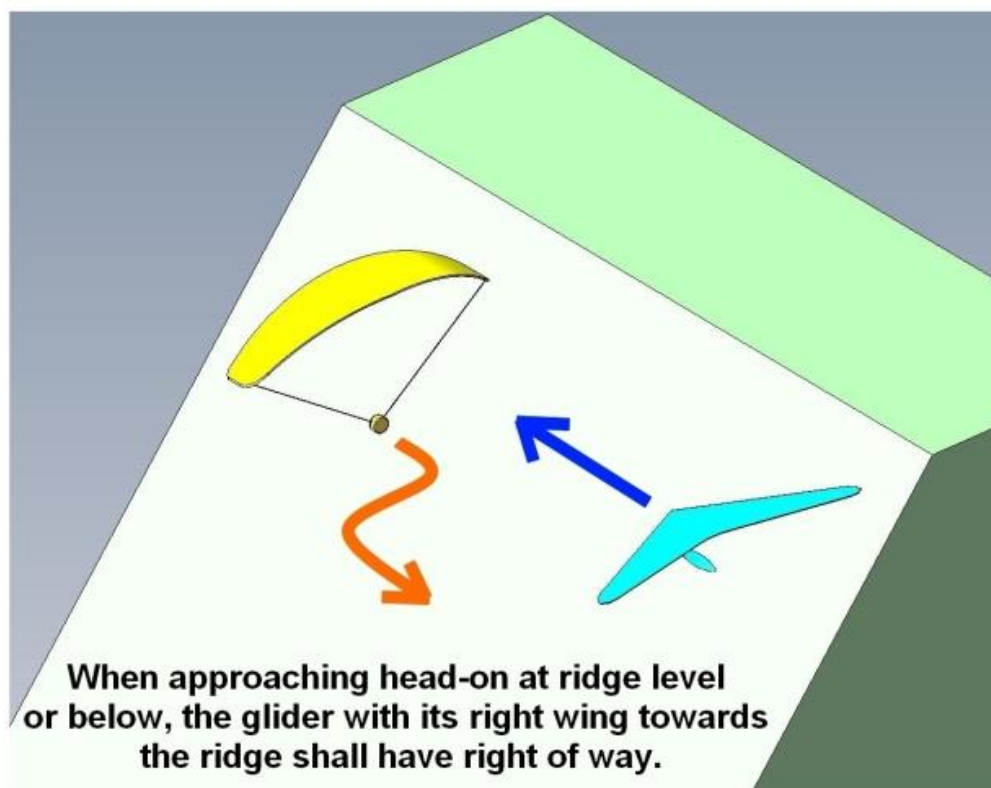
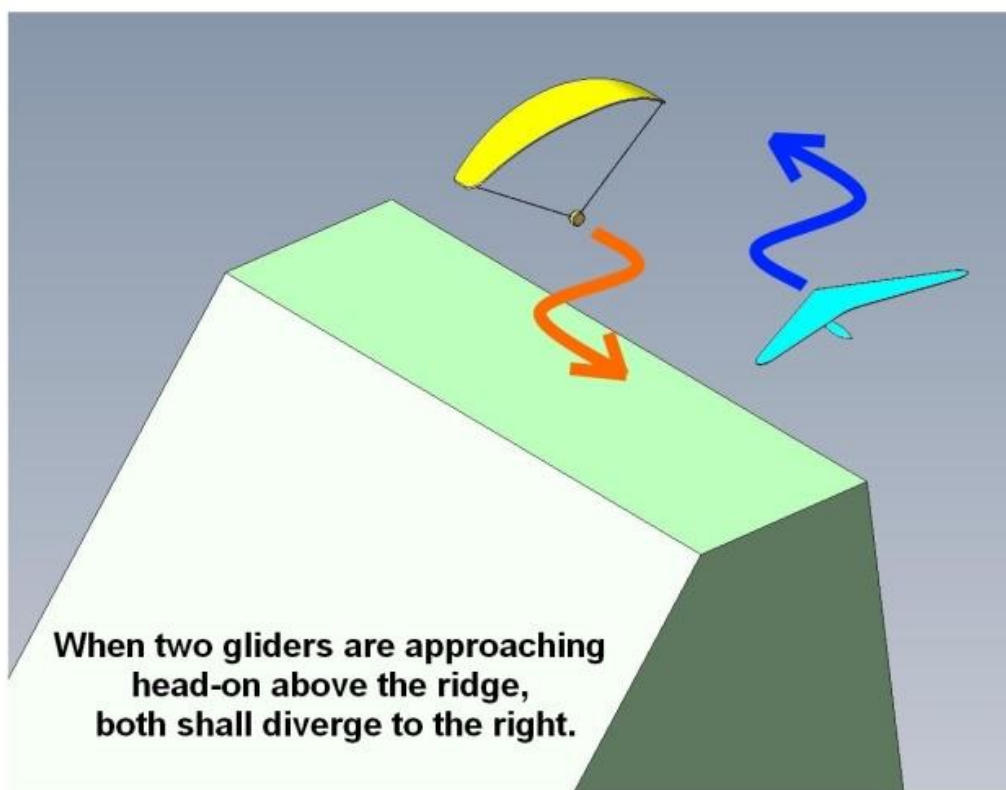




Image 2



### Image 3



General Flying Rules When two gliders are approaching at different heights, the lower glider has the right of way. Do not follow another glider closely or remain in the other pilot's blind spot. At all times maintain a reasonable separation from other gliders according to conditions. Do not pass over, under or cross in front of other gliders unless well clear. Avoid abrupt changes in direction and speed when other gliders are present. Fly in such a manner that no other pilot is required to take evasive action.

Thermal Flying Rules When joining a thermal, turn in the same direction as the glider that is already circling. When two gliders are sharing the same thermal, the lower glider has the right of way. Pilots above a climbing glider must clear the thermal to let the lower glider with restricted vision climb through.

Please Remember Clear all of your turns and obey right of way rules. Always look carefully for traffic. Hang gliders and paragliders fly at different speeds, have different fields of vision and in general have different turning rates. Slower gliders should maintain awareness of and make room for gliders that are required to pass on the ridge side. Please take these into account and make right of way course changes sooner rather than later.

Flying with a radio can make air traffic significantly safer for everyone. Frequency: 151.625.

A MID-AIR COLLISION IS PERHAPS THE GREATEST RISK WE  
FACE WHEN SOARING THIS FINE RIDGE SITE.  
NEVER ASSUME THE OTHER PILOT SEES YOU AND WILL  
GIVE YOU THE RIGHT OF WAY!